A Mediation and Moderation Model of Social Support, Relationship Quality and Social Commerce Intention

Md. Alamgir Hossain 1, Nusrat Jahan 2 and Minho Kim 3,*

1 Department of Management, Hajee Mohammad Danesh Science and Technology University, Dinajpur 5200, Bangladesh; shamimru@gmail.com
2 Department of Management Studies, Rabindra University Bangladesh, Shahjadpur 6770, Sirajgonj, Bangladesh; njdishabd@gmail.com
3 Department of International Trade, Jeonbuk National University, Jeonju 54896, Korea
* Correspondence: kimmh@jbnu.ac.kr; Tel.: +82-632-703-049

Received: 12 October 2020; Accepted: 23 November 2020; Published: 26 November 2020

Abstract: This study examines the antecedents of social commerce intention by conceptualizing a model that includes two exogenous variables; relationship quality and social support, and an endogenous variable; social commerce, along with a mediation effect of relationship quality and moderation effect of cultures. This research model is tested by survey data collected in the United States and Korea, analyzed by a structural equation model. The results reveal that relationship quality generates the social commerce intention through commitment, satisfaction and trust, and becomes a maiden study with its mediating effect on social commerce intention. Social commerce intention is highly representative of social sharing and social shopping on social media. The social support is measured through emotional and informational support, proving to be a stronger predictor of relationship quality and social commerce intention. In addition, social support articulates differences in respect to the cultural differences. The model offers valuable insights to researchers and practitioners that aims to improve social commerce intention.

Keywords: relationship quality; social support; social sharing intention; social shopping intention; culture

1. Introduction

In compliance with the pervasiveness of social media, e-commerce has inevitably advanced to a new form of value-added online business model commonly known as social commerce or s-commerce. Social commerce is a stream of e-commerce that involves using social media technologies to assist in e-commerce transactions and activities [1]. Customers tend to move from e-commerce to s-commerce, when they feel psychologically present, feel close to others, receive support from others, and helping them disclose personal information to establish personal identity [2]. The development of s-commerce tinkles due to the popularity of social media technologies and platforms, having a foundation with social media application, e-commerce and Web 2.0 technologies [1,3]. With the benefits of Web 2.0 technology, s-commerce adopters can involve in transaction processes through dissemination and they can share information by dropping their own review, comment, and content as well as rating products and services [4]. Such digital interaction with social media users creates word-of-mouth that increase sales thereby offering unlimited opportunities for businesses [5]. Electronic word-of-mouth increases online group buying intention by increasing customer value and minimizing fear of risk [6]. S-commerce intention is a notable consequence of vendor trust achieved through characteristics of s-commerce providers and the perception of the platform [7]. S-commerce has grown at an astounding rate over the past 10 years, representing the massive implementation of s-commerce strategies and
practices [8], and changing e-commerce platforms as product-based view to consumer-based view [9,10], thereby altering bargaining power from seller to buyer [4]. CM Commerce [11] forecasts, s-commerce revenues will exceed approximately 165 billion dollars in 2021, where the top 500 retailers brought about 6.5 billion dollars in 2017. Smart insights [12] reports that globally 87% of online shoppers believe social media helps them to make shopping decisions, 30% of them take purchase decisions and 40% of firms use social media to generate sales. The United States s-commerce sales will be estimated at 84.2 billion dollars that will contribute 7.8% in the share of e-commerce [13].

Many of the s-commerce research restrained s-commerce intention by its constructs, relational quality and social support [3–5,8] which claims that s-commerce constructs, relationship quality and social supports in s-commerce community can greatly influence people’s intention toward s-commerce. While studies argue the significant importance of social support, relationship quality and s-commerce intention, very fewer attentions have paid these constructs as multidimensional. Despite the huge interest in identifying factors affecting s-commerce intention, no researches have focused on mediation effect of relationship quality. In addition, cultural aspects, as a moderator, have considerable influence on people’s interactions and s-commerce intention, yet are less emphasized. These research gaps with noteworthy contributions in e-commerce, provides unique opportunity to examine s-commerce intention in a more comprehensive manner.

Therefore, the current study aims to examine the diverse antecedents to relationship quality, social support and s-commerce intention and their effects in a multi-cultural context. Through this extension, this study addresses these research questions: (1) Does relationship quality assessed by trust, satisfaction and commitment, influence s-commerce intention measured by social sharing and social shopping intention? (2) Does social support measured by emotional and informational support influence s-commerce intention? (3) Does relationship quality mediate the association between social support and s-commerce intention? (4) How does culture play a moderating role on two distinct cultures (USA vs. Korea) in s-commerce intention and its predecessors?

The current study makes the following contributions. First, the study endorses the significances of relationship quality in terms of its representative dimensions of trust, satisfaction and commitment. This provides an accurate and complete understanding on strength and closeness of relationship that transform indifferent consumers into loyal ones. Accordingly, it examines social support and s-commerce intention by their recurring dimensions. These offers insights on how social support brings value to members in terms of being cared for and, helped and by reduced psychological stress, and thereby builds a sustainable relationship in social sharing and shopping. Second, the study validates the model with mediation effect of relationship quality on social support and s-commerce intention, which provides a maiden contribution to the knowledge of s-commerce intention. Third, culture as a moderator is an added value by comparing data collected in Korea and the USA, which clarifies the rationale for applying different s-commerce strategies in different cultural contexts. Overall, the current study with a multidimensional conceptualization provides a basis for new theoretical models and offers companies to take dynamic strategies to engaging customers in s-commerce.

The rest of the article is as follows. The next section articulates the theoretical background and research framework. Sections 3 and 4 presents research methodology and results with brief discussions, respectively. The final section concludes the paper with valuable implications and future research guidelines.

2. Theoretical Background and Hypothesis Development

The first theory underpinning the current study is relationship quality, an important relationship marketing phenomena referring to the relationship closeness or relationship strength that is likely to improve customer loyalty [14]. It is one’s overall evaluation of service providers focusing on one’s attitude toward service providers and service delivery mechanisms, and different forms of web-site quality [15]. The relationship tightness and strength performs an important role in compelling customer loyalty which is called relationship quality [16]. It is recognized as multidimensional
in nature comprising trust, satisfaction and commitment [3,4,15]. Trust refers to believing that a service provider is honest and benevolent which becomes a central issue in social or economic transactions [4,17,18]. Morgan and Hunt [17] argue that trust exists when one has confidence in an exchange partnership’s reliability and integrity. Trust is a fundamental issue in s-commerce [3–5], and stimulates informational and normative social influences that are likely to have an impact on impulsive purchase behavior [7,19]. Trust has a long track record with information sharing activities in social media and has a significant influence on s-commerce satisfaction and buying intention [20,21]. Satisfaction is one’s emotional stance inspired by the evaluation of interactive experiences with a service provider [17,18]. It is a consumer’s prior expectations and experiences with shopping which inspires other interactions [22]. Gustafsson et al. [18] argue that satisfaction is an emotional assessment of product or service performance incurred by a customer. Commitment refers to the ongoing desire to sustain a long-term relationship with the buyer and seller [22]. Commitment is the psychological state incurred in an ongoing relationship with a view to guaranteed maximum efforts to maintain this ongoing relationship [17,18]; this indicator of relationship quality establishes the significances of the relationship with business [18]. These three dimensions of relationship represent one’s overall attitude toward s-commerce service providers [3–5,15]. Accordingly, the current study adopts relationship quality as multidimensional with these indications.

Empirical evidence from the literature suggests that the relationship quality significantly influences s-commerce intention [3,4,15,22]. Liang et al. [15] argues that customers will keep communicating as long as the relationship quality is high between customer and service provider. These communications among peers and service providers, combined with the support users receive, encourage them to recurrent use of the system and affect their s-commerce intention [4]. Commitment, satisfaction and trust are the primary dimensions of relationship quality which has an impact on s-commerce intention [4]. In line with them, Sheikh et al. [3] also notes that social communication creates supports for peer and business, and is likely to increase relationship quality that positively affects s-commerce intentions. In addition, several researchers validate an important mediation effect of social support in s-commerce context, but there is none with relationship quality. Al-Tit et al. [23] shows social support dimensions have a mediation effect on s-commerce constructs and s-commerce. Ng [8] validates the mediation effect of social support on s-commerce intention via trust. This study conceptualizes, along with the direct effect of relationship quality on s-commerce intention, that it also has a mediation effect too on s-commerce intention. Therefore, the research postulates the following hypotheses.

**Hypothesis 1 (H1).** Relationship quality has significant direct (H1a) and mediation (H1b) effect on s-commerce intention.

Social commerce intention refers to the commercial opportunities performed on social media with the relationships in networks and online communities to gain commercial advantages [15]. These commercial advantages are measured by increased transactions (e.g., sharing commercial information) or higher customer loyalty. Lim [24] validated that consumer characteristics such as price sensitivity, variety seeking and compulsive buying behavior particularly affect utilitarian and hedonic shopping value, which ultimately affects online group buying intention. Hajli [4] argues that social relationships among customers encourage them to participate in online activates, including commerce. Chen and Shen [25] argues that s-commerce is a two-dimensional phenomenon, including social sharing and social shopping, and should be paid special attention to a consumer’s motive to engage in s-commerce activities from both sides. Social sharing and social shopping are different from online community based study, relating to experience and knowledge consumption. Thus, social sharing and social shopping are commerce-oriented [15]. Thereby, a trustworthy and reliable relationship among exchange partners is required as a basis for s-commerce success [15,25]. Accordingly, the current study adopts that s-commerce is multidimensional with these two indications.
Social support is one’s experiences of being cared for, responded to, and helped by others in that one’s social settings [26] and social value of s-commerce notably affects behavioral intention to s-commerce [27]. When customers need specific information for decision making, such as experience of purchasing products or special products, they rely on s-commerce sites for product reviews and recommendations [2]. Social support receives considerable attention in different disciplines and viewing that with strong social support members would perceive as being helped or cared for. Liang et al. [15] argue that in social settings, one may feel social support is indebted to be mindful of the needs of others, thereby stimulating strong relationships. Several scholars note social support as multidimensional. House [28] presents four types of social support such as informational, emotional support, instrumental and appraisal supports. Many of the scholars validate social support as informational and emotional support [4,15,23,28]. Informational support offers individuals with useful information, and advice of guidance to help them solve problems that generates good decisions [15]. Emotional support involves individuals with care, understanding or empathy that generates trustworthiness and new ideas [28].

Liang et al. [15] note that social support has significant positive impact on s-commerce intention and relationship quality, also seen as a notable moderator between s-commerce vendors’ characteristics and trust [7]. Customer communication in social media which approves a brand positively can affect their s-commerce intention with their relational quality [4]. Al-Tit et al. [23] validate the strong relationship of social support in s-commerce intention. However, Sheikh et al. [3] finds significant relations with s-commerce intention but not with relationship quality. Therefore, the current study assumes that social support is multidimensional with the above mentioned indications and conceptualize that it has positive impact on relationship quality and s-commerce intention by proposing the following hypotheses.

Hypothesis 2 (H2). Social support has significant direct influence on relationship quality (H2a) and s-commerce intention (H2b).

Given the global growth and massive social nature of social media, variations in cultural orientations of customers may be reflected in their social support, relationship quality and s-commerce intentions. National culture plays a great role in social interactions and s-commerce intention [5,8]. Ng [8] notes that people with higher collectivism, put more value to their social relationships, generating higher level of trusts to each other. Social support is one of the important motivators of using social media in the USA and Korea [29] and has significant impact on s-commerce intention [8]. Qin [5] posits, due to the importance of friends, family and group affiliation in collectivistic cultures, people in those cultures such as in Korea tend to emphasize familiarity, and people in individualistic cultures such as the USA empathize shared value. Countries with high uncertainty avoidance more likely limit their online activities unless they find that transaction is trustworthy and safe [8]. Therefore, relationship quality and social support are therefore, an important issue in cross-cultural s-commerce intention [5,8]. Accordingly, the current study proposes that due to the higher perception of social support, reciprocity and cultural variability, the impact of relationship quality and social support in s-commerce is not similar between the USA and Korea, leading to the following hypotheses.

Hypothesis 3 (H3). Culture has moderation effect on social support to relationship quality (H3a), relationship quality to s-commerce intention (H3b) and social support to s-commerce intention (H3c).

Figure 1 summarizes the conceptual research model and hypotheses.
3. Research Methodology

3.1. Study Design and Data Collection Procedure

The survey method is used to collect primary data from s-commerce users. The target population of this study includes s-commerce customers of the USA and Korea, which are highly distanced countries in cultures. The USA displays higher level of individualism and Korea shows higher level of collectivism, and the USA importantly outperforms Korea in uncertainty avoidance [5,29]. To be eligible for the current study, all respondents were required to have experiences in s-commerce transactions. A pilot study was conducted on 20 samples for each country, which shows content and face validity testing. The final self-administered questionnaire is operationalized in online by Mturk and Dooit, a renowned research-based organization for the USA and Korea data, respectively. The final survey was conducted from 25 December 2018 to 10 January 2019.

3.2. Measurement

A seven-point Likert scale ranging from ‘1 = strongly disagree to 7 = strongly agree’ is used as the data collection tool. Measurement items are generated from the literature review in respect to the corresponding constructs, see Sheikh et al. [3], Hajli [4], Liang et al. [15], Al-Tit et al. [23], Chen and Shen [25] and Appendix A. Aiming to minimize the low reliability and validity, this study used the measuring instrument from the previous studies mentioned above. All measurement items are modified to fit the s-commerce context. Having the pre-test and pilot test examinations, minor modifications of the measurement scale are made to ensure effective data collection and research objectives.

3.3. Participants

Randomly, a total of 550 samples are collected but 39 are removed due to outliers and normality issues. Finally, 511 samples (USA = 232 and Korea = 279) are analyzed using SPSS and Amos version 24. As shown in Table 1, the participants in the two samples have somewhat different profiles. Gender
distribution is relatively the same in the two samples. Respondents in the age group 20–30 years is higher in the USA samples, while 31–40 years are higher in Korean samples. In the USA sample, 37.76% of respondents have been in s-commerce for more than five years, meanwhile, in Korea, fairly low percentages (32.3%) have used social networking sites (SNSs) for more than five years.

Table 1. Profiles of participants.

| Characteristics | Full Sample (n = 511) | USA Sample (n = 232) | Korea Sample (n = 279) |
|-----------------|-----------------------|----------------------|-----------------------|
| Gender          |                       |                      |                       |
| Female          | 257 (50.29%)          | 103 (44.4%)          | 151 (54.1%)           |
| Male            | 254 (49.70%)          | 129 (55.6%)          | 128 (45.9%)           |
| Age group       |                       |                      |                       |
| 20–30           | 174 (34.05%)          | 101 (43.53%)         | 71 (25.44%)           |
| 31–40           | 188 (36.79%)          | 91 (39.22%)          | 114 (40.86%)          |
| 41–50           | 116 (22.70%)          | 33 (14.22%)          | 65 (23.29%)           |
| Above 50        | 33 (6.45%)            | 7 (3.01%)            | 29 (10.39%)           |
| Experience      |                       |                      |                       |
| Less than 6 months | 28 (5.47%)          | 14 (6%)              | 14 (5%)               |
| 6 months to 1 year | 75 (14.67%)         | 37 (15.9%)           | 38 (13.6%)            |
| 1–3 years       | 106 (20.74%)          | 43 (18.5%)           | 63 (22.6%)            |
| 3–5 years       | 109 (21.33%)          | 35 (15.1%)           | 74 (26.5%)            |
| More than 5 years | 193 (37.76%)         | 103 (44.4%)          | 90 (32.3%)            |

Source: Survey results

3.4. Method Bias Test

The Harman single factor test was performed to test for common method bias following the guidelines of Podsakoff et al. [30]. Since data were collected from the same source, problems with the common method could lead to either over or under estimation of the relationship between regressive and explanatory variables. Thus, following the guidelines of Podsakoff et al. [30], we provided clear directions and proximally separated independent and dependent variables, keeping participant and researcher anonymity. We then tested for bias statistically. The results with unrotated factor solution showed that several factors have eigenvalues greater than 1 and the largest factor explained variance 36.6%, which is less than 50%. Therefore, results show that there is no problem with method bias.

4. Analysis and Results

This study used structural equation model (SEM), which can simultaneously test measurement and structural model. As suggested by Hair et al. [31], SEM helps to examine how the constructs in the research model are measured by observable items along with measurement indicators such as validity and reliability. Additionally, it specifies the direction and relationships among variables along with explanatory power.

4.1. Measurement Model Test

Factor and reliability analysis are performed to know whether the items show good construct reliability and validity. As shown in Table 2, the factor loadings are in line with its acceptable limit 0.70 [32]. Cronbach’s alpha for each construct are higher than the cited minimum of 0.70 [32], and the composite reliability (CR) exceeds its threshold value 0.60 [33]. Average variance extracted (AVE) shows by each construct are above the critical value of 0.50 [32]. Table 2 additionally presents a review of Kurtosis values that reveals no item to be substantially kurtotic.

The measurements discriminate validity is shown in Table 3, indicating that the AVE extracted between the constructs are higher than the shared variance of constructs. The mean values and standard deviation of each construct are in a good manner. In addition, overall model fit indices
represents good model fit of the measurement model. Therefore, the measurement model contains sufficient validity and reliability [32,34].

Table 2. Reliability and validity statistics.

| TR  | SAT | COM | EMS | IMS | SS | SSP | Kurtosis |
|-----|-----|-----|-----|-----|----|-----|----------|
| tr1 | 0.867 |       | -0.389 |     |    |     |          |
| tr2 | 0.845 | 0.598 | 0.005 | 0.165 |    |     |          |
| tr3 | 0.843 | 0.084 | -0.262 | 0.309 |    |     |          |
| tr4 | 0.820 | 0.016 | -0.287 | 0.008 |    |     |          |
| tr5 | 0.758 | 0.353 | 0.685 | 0.265 |    |     |          |
| sat1 | 0.865 | 0.598 | 0.309 | 0.265 |    |     |          |
| sat2 | 0.868 |       | -0.016 | -0.287 |    |     |          |
| sat3 | 0.858 |       | 0.008 | 0.043 |    |     |          |
| sat4 | 0.827 |       | 0.016 | -0.287 |    |     |          |
| sat5 | 0.804 |       | 0.016 | 0.043 |    |     |          |
| com1 | 0.789 |       | -0.287 | 0.181 |    |     |          |
| com2 | 0.698 |       | 0.008 | 0.043 |    |     |          |
| com3 | 0.733 |       | -0.287 | 0.016 |    |     |          |
| ems1 | 0.765 |       | 0.016 | -0.287 |    |     |          |
| ems2 | 0.817 |       | 0.043 | 0.016 |    |     |          |
| ems3 | 0.848 |       | -0.287 | 0.043 |    |     |          |
| ims1 | 0.879 |       | 0.016 | -0.287 |    |     |          |
| ims2 | 0.882 |       | 0.043 | 0.016 |    |     |          |
| ims3 | 0.847 |       | -0.287 | 0.043 |    |     |          |
| ss1 | 0.855 |       | 0.016 | -0.287 |    |     |          |
| ss2 | 0.731 |       | 0.043 | 0.016 |    |     |          |
| ss2 | 0.860 |       | 0.016 | -0.287 |    |     |          |
| ss2 | 0.831 |       | 0.043 | 0.016 |    |     |          |
| ss2 | 0.873 |       | -0.287 | 0.043 |    |     |          |
| Multivariate | 94.814 |       | 0.016 | -0.287 |    |     |          |

Cronbach’s alpha
Composited reliability
Average variance extracted

Notes: TR = trust, SAT = satisfaction, COM = commitment, EMS = emotional support, IMS = informational support, SS = social sharing intention, SSP = social shopping intention.

Table 3. Discriminant validity.

| Constructs | Mean | Std. Deviation | TR | SAT | COM | EMS | IMS | SS | SSP |
|------------|------|----------------|----|-----|-----|-----|-----|----|-----|
| TR         | 4.653 | 1.174          | 0.83 |     |     |     |     |    |     |
| SAT        | 5.147 | 1.008          | 0.60 | 0.85 |     |     |     |    |     |
| COM        | 5.079 | 0.980          | 0.68 | 0.64 | 0.74 |     |     |    |     |
| EMS        | 5.153 | 0.990          | 0.59 | 0.78 | 0.66 | 0.81 |     |    |     |
| IMS        | 4.719 | 1.304          | 0.74 | 0.75 | 0.66 | 0.63 | 0.87 |    |     |
| SS         | 4.897 | 1.134          | 0.70 | 0.73 | 0.63 | 0.60 | 0.71 | 0.77 |     |
| SSP        | 4.897 | 1.096          | 0.65 | 0.64 | 0.56 | 0.69 | 0.66 | 0.71 | 0.86 |

Model fit indices: $\chi^2$/d.f. = 2.739, GFI = 0.899, AGFI = 0.869, CFI = 0.960, NFI = 0.939, IFI = 0.961, TLI = 0.953, RMSEA = 0.058. Note: Bold diagonal values are the square root of AVEs.

The second-order model for relationship quality, social support and s-commerce intention are designed to examine the relationships with their respective sub-dimensions. Table 4 presents the second-order model statistics. All the diagnostic tests including factor loadings, alpha values, CR and AVE outperform their suggested value, indicating that the model fits the sample data sufficiently. These results refer that relationship quality is mainly based on commitment, satisfaction, trust and s-commerce customers. Social support is a formation of emotional and information support. Similarly, social shopping and social sharing intentions are the primary dimensions of s-commerce intention.
Table 4. Second-order models of reliability and validity statistics.

| Constructs | Relationship Quality | Social Support | S-Commerce Intention |
|------------|----------------------|----------------|---------------------|
| TR         | 0.87                 |                |                     |
| SAT        | 0.92                 |                |                     |
| COM        | 0.96                 |                |                     |
| EMS        |                      | 0.96           |                     |
| IMS        |                      | 0.87           |                     |
| SS         |                      |                | 0.83                |
| SSP        |                      |                | 0.94                |
| Cronbach’s alpha | 0.885      | 0.822           | 0.912               |
| Composite reliability | 0.941     | 0.885           | 0.867               |
| Average variance extracted | 0.842 | 0.723           | 0.688               |

Source: Compiled from data analysis results.

4.2. Structural Model Test

The results of structural model with standardized path coefficient between constructs are shown in Table 5. Relationship quality significantly and positively influences s-commerce intention (\( \beta = 0.385, t = 1.894, p < 0.01 \)), which is corroborating the results of Hajli [4] and Sheikh et al. [3] among many others. They note that relationship quality generates support for peers and enterprise, which is likely to increase relationship quality and has a positive impact on s-commerce intention. In addition, social support generates positive impact on relationship quality (\( \beta = 0.872, t = 17.704, p < 0.001 \)) and s-commerce intention (\( \beta = 0.412, t = 2.007, p < 0.01 \)), these results are similar to the study findings of Liang et al. [15] and At-Tit et al. [23]. These results show that social support is obliged to be aware of the needs of stimulating relationship and s-commerce intention. Therefore, hypotheses \( H1a, H2a \) and \( H2b \) are supported.

Table 5. Hypothesized results.

| H          | Path                             | Path Coefficient | t-Value     | Results |
|------------|----------------------------------|------------------|-------------|---------|
| \( H1a \)  | Relationship quality \( \rightarrow \) S-commerce | 0.385            | 1.894 *     | Support |
| \( H2a \)  | Social support \( \rightarrow \) Relationship quality | 0.872            | 17.704 ***  | Support |
| \( H2b \)  | Social support \( \rightarrow \) S-commerce | 0.412            | 2.007 **    | Support |

Model fit indices: \( \chi^2/d.f. = 2.897, GFI = 0.89, AGFI = 0.862, CFI = 0.954, NFI = 0.932, IFI = 0.954, TLI = 0.948, RMSEA = 0.061 \). Notes: *** \( p < 0.001 \), ** \( p < 0.01 \), * \( p < 0.05 \).

4.3. Mediation Model Test

As a post-hoc analysis, the current study performs bootstrapping to assess the mediation effect of relationship quality on social support and s-commerce intention (e.g., indirect effect of social commerce on s-commerce), according to the suggestions of Baron and Kenny [35]. Table 6 shows that with a 95% confidence interval both the bias-corrected model and percentile model related to the indirect effect of social support via relationship quality (\( \beta = 0.318, p < 0.001 \)) do not include zero, representing that a significant mediation exists, therefore, \( H1b \) is supported.

Table 6. Mediation results.

| Variables | Estimate | Error | Bias-Corrected 95% CI | Bootstrapping Percentile 95% CI |
|-----------|----------|-------|------------------------|----------------------------------|
|           |          |       | Lower                  | Upper                            | p-value | Lower          | Upper          | p-value          |
| Indirect effect Social support | 0.318    | 0.095 | 0.135                  | 0.510                           | 0.001   | 0.136          | 0.511          | 0.001            |

Notes: Two tailed significance is supported for both the Bias-corrected and Percentile model with 95% confidence interval (CI). Process is repeated 5000 times.
4.4. Moderation Model Test

Furthermore, the current study performs multigroup moderation analysis to examine the moderating effect of culture (USA vs. Korea) by following the suggestions of Steenkamp and Baugartner [36]. By satisfying the partial metric invariance, we performed moderation analysis. A significant $\chi^2$ difference between the constrained and unconstrained models with respect to degree of freedom implies that the path coefficient is statistically different between the two groups. Table 7 shows that culture has a moderation effect in the paths of social support to relationship quality ($\Delta \chi^2 = 4.281, p < 0.01$) and social support to s-commerce intention ($\Delta \chi^2 = 7.383, p < 0.001$). Additionally, the path coefficient for the USA sample is significantly higher than that for the Korea sample ($\beta = 0.849, t = 13.497, p < 0.001$), ($\beta = 0.571, t = 5.125, p < 0.001$), respectively. Therefore, this study finds moderation effect of culture in the two country samples, supporting H3a and H3c.

Table 7. Multi-group moderation results.

| Paths | The USA | Korea | $\chi^2$ Difference Test | Results of Multi-Group Comparison |
|-------|---------|-------|--------------------------|----------------------------------|
| Social support -> | 0.849 | 0.791 | $\Delta \chi^2 = 4.281$ ** | USA > Korea (H3a) |
| Relationship quality | (13.497) *** | (13.497) ** | | |
| Relationship quality -> | 0.252 | 0.494 | $\Delta \chi^2 = 0.518$ n.s. | USA = Korea (H3b) |
| S-commerce | (2.364) ** | (5.085) *** | $\Delta \chi^2 = 7.383$ *** | USA > Korea (H3c) |
| Social support - > | 0.571 | 0.280 | | |
| S-commerce | (5.125) *** | (3.029) *** | | |

Notes: $\chi^2$ difference between unconstrained and constrained model is, $\Delta \chi^2 = 69.371, p < 0.001$, coefficients are standardized values, t-values are in parentheses. *** $p < 0.001$, ** $p < 0.01$, n.s. = not significant.

5. Discussion and Implications

S-commerce becomes a rapidly growing phenomenon in e-commerce that inevitably requires urgent attention by marketers and researchers. The study thus purposes and validates a model based on a multidimensional concept of relationship quality, social support and s-commerce intention with a mediation and moderation effect analysis. Figure 2 shows that a large proportion of the variance in s-commerce (62%) and relationship quality (90%) are explained by social support-relationship quality theory. This study results in several important implications.

Figure 2. Structural model. *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, n.s. not significant.
5.1. Theoretical Contribution

First, the results reveal that relationship quality, measured by trust, satisfaction and commitment, has significant influence on s-commerce intention. Among the three relationship quality dimensions, commitment is the strongest predictor followed by satisfaction and trust. This indicates that in order to increase s-commerce intention through quality relationship, customers should have enough situations to interact with the seller directly. Through the interactive contacts customers share their value with peers or buyers in a network, leading to reduce uncertainty and to build trustworthy relationships thereby making them mutually beneficial and satisfied. Second, results reveal that relationship quality mediates the path of social support to s-commerce intention in the model, signifying it as an incredible factor in the s-commerce field. This allows customers to generate content and help others by compassionately sharing product or shopping-related information which creates purchase decisions to other customers and value to businesses. An improved customer-relationship is developed through close interactions between customer and seller that ultimately affects a customer’s s-commerce intention.

Third, the study validates s-commerce on the basis of social sharing and social shopping and posits that s-commerce is highly dependent on relationship quality and social support. Results indicate that in social shopping settings, shoppers become involved in social interactions and shopping decisions which are influenced by a shopper’s relationship with others and the community. In social sharing, one’s relationship with the social community as a whole is responsible for the degree to which he/she shares shopping or consumption experiences in the s-commerce community. Fourth, the study results reveal that social support, measured by emotional and informational support, is a great factor in building relationship quality and enhancing s-commerce intention. In relationship marketing, relationship and interactions are regarded as a key foundation of s-commerce community to grow and expand. Moreover social support, in this regard, provides a supportive environment where consumers are likely to freely interact aiming to mutually benefit and make long-lasting relations. In regards to informational support, s-commerce community is formed and advanced with a view to exchanging commercial information and solving shopping-related problems, whereas emotional support enhances community commitment and members’ trust through community caring and compassion that results in building strong relations in community. Fifth, culture as a moderator discovers a significant difference between the USA and Korea samples. Results show that the effect of social support to relationship quality and s-commerce intention is stronger for the customers of the USA, although effect of relationship quality to s-commerce intention across two countries is identical. Developing and maintaining the s-commerce community requires investment of resources such as time, information or even costs, which should be proportional to return. Since, the USA is culturally an individualistic country, customers aims to add value in their social community collaboration on a reciprocal basis; on the other hand, Korean customers are already in a relationship with shared value, thus their focus is moderate on it. From the uncertainty avoidance perspective, USA customers merely focus on trust or commitment in s-commerce settings, since they have efficient knowledge on information technology, have control over their feelings and are pushed through an ever-busy life leading them to higher dependency on s-commerce implications.

5.2. Practical Contributions

Furthermore, the study highlights the key features of s-commerce to practitioners who plan to leverage to reaping future benefits. First, commitment, satisfaction and trust are leveled as fantastic building blocks for building relationship quality in s-commerce context. Practitioners should focus on how to develop and sustain a trustworthy and beneficial relationship with a view to enhance s-commerce intention. In order to enhance s-commerce community bonding and smooth interactions, a trustworthy and comfortable environment in a group is essential. Reliable and prompt services would enhance trust among customers in online and offline thereby reaching satisfaction. Second, social sharing and social shopping are leveled as the important dimensions of s-commerce, thus practitioners should pay sufficient attention to both of these dimensions. Particularly, practitioners may incorporate
more convenient sharing functions and encourage customers to generate and share value-added contents by incentivizing them with discounts or coupons. Aiming to promote social shopping, practitioners may track a customer’s shopping history and browsing data which will help them to push hot and relevant topics or products to their customers. Third, social support with informational and emotional support dimensions confirm the building of a quality relationship and increase s-commerce intention, thus, practitioners should carefully consider these. In a supportive, caring, friendly, problem solving or accommodative environment, one’s can be easily accustomed with others and build good relationships, thereby, practitioners should try to provide such an environment in order to make them loyal. Fourth, the findings could also be useful for the cross-cultural context, as it examines the important differences between collectivistic and individualistic cultures. Findings reveal that the effect of social support to relationship quality and s-commerce intention is higher in individualistic culture than collectivistic culture, therefore different strategies can be employed for different cultures. Social support is positively associated with relationship quality and s-commerce intention therefore, practitioners should be concerned with value-based aspects such as reliable problem solving, supporting, caring and empathetic atmosphere in an individualistic culture context. Therefore, the results of the study should inspire s-commerce vendors to incorporate this model, which could take into account the psychosomatic characteristics of customers in order to improve relationship quality, social support and s-commerce intention.

6. Limitations and Future Research Guidelines

Although the current study offers several useful contributions for theory and practice, the study still faces a few limitations. First, the current study considers relational and support factors in the model, consequently, other factors related to s-commerce such as system quality and after sales service may advance further research. Future researchers may advance their studies by incorporating s-commerce constructs as well into this model, which could improve understanding of customer behavioral intentions. Second, the participants’ age, as being mainly between 20–40 years old, may prove to be quite different among other age groups. Although this age group is mainly available in s-commerce transactions, the results of this study are still constrained by problems of representativeness. Future research could therefore examine different age groups to validate the model in all age groups. Third, it would be interesting if future research could replicate this model with different cultural or regional-based dimensions such as Western countries vs. Middle Eastern countries.

Author Contributions: M.A.H. generated the research idea, wrote the manuscript and designed the survey. N.J. and M.K. suggested research idea and contributed to revision of the manuscript. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no funding from any source.

Conflicts of Interest: The authors declare that there are no conflict of interest.

Appendix A

Trust [4,23]
The performance of my SNS meets my expectations.
My SNS can be counted on as a good SNS.
My SNS is a reliable SNS.
I believe that SNS keeps my personal data safe.
SNS is trustworthy to shop.

Satisfaction [3,4]
I am satisfied with using my favorite social networking site.
I am pleased with using my favorite social networking site.
I am happy with my favorite social networking site.
My social networking sites fulfil my needs
Overall, I feel satisfied in using my social networking site over others.
Commitment [4]
I am proud to belong with my SNS
I feel sense of belonging to my SNS
I care about long-term success of my SNS

Emotional support [23]
My friends on SNS encourage me in difficult situations.
My friends on SNS take care of me in difficult situations.
My friends on SNS listen to my private feelings.

Informational support [1]
On SNS, some people would offer suggestions when I needed help.
When I encountered a problem, some people on SNS would give me information to help me overcome the problem.
When faced with difficulties, some people on SNS would help me discover the cause and provide me with suggestions.

Social sharing intention [1]
I am willing to share my own experiences with my friends on SNS
I am willing to recommend a product that is worth buying to my friends on SNS.

Social commerce intention [1,23]
I am willing to buy the products recommended by my friends on SNS.
I consider the shopping experience of my friends on SNS when I want to shop.
I intend to ask my friends on SNS to provide me with their suggestions before I go shopping.

References
1. Liang, T.-P.; Turban, E. Introduction to the Special Issue Social Commerce: A Research Framework for Social Commerce. Int. J. Electron. Commer. 2011, 16, 5–14. [CrossRef]
2. Li, C.-Y.; Ku, Y.-C. The Power of a Thumbs-Up: Will E-commerce Switch to Social Commerce? Inf. Manag. 2018, 55, 340–357. [CrossRef]
3. Sheikh, Z.; Liu, Y.; Islam, T.; Hameed, Z.; Khan, I.U. Impact of social commerce constructs and social support on social commerce intentions. Inf. Technol. People 2019, 32, 68–93. [CrossRef]
4. Hajli, N. The role of social support on relationship quality and social commerce. Technol. Forecast. Soc. Chang. 2014, 87, 17–27. [CrossRef]
5. Qin, L. A Cross-Cultural Study of Interpersonal Trust in Social Commerce. J. Comput. Inf. Syst. 2020, 60, 26–33. [CrossRef]
6. Lim, W.M. The Influence of Internet Advertising and Electronic Word of Mouth on Consumer Perceptions and Intention: Some Evidence from Online Group Buying. J. Comput. Inf. Syst. 2015, 55, 81–89. [CrossRef]
7. Ben-Yahia, I.; 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]
8. Ng, C.S.-P. Intention to purchase on social commerce websites across cultures: A cross-regional study. Inf. Manag. 2013, 50, 609–620. [CrossRef]
9. Liu, L.; Cheung, C.M.; Lee, M.K.O. An empirical investigation of information sharing behavior on social commerce sites. Int. J. Inf. Manag. 2016, 36, 686–699. [CrossRef]
10. Leong, L.-Y.; Hew, T.-S.; Ooi, K.-B.; Chong, A.Y.-L. Predicting the antecedents of trust in social commerce—A hybrid structural equation modeling with neural network approach. J. Bus. Res. 2020, 110, 24–40. [CrossRef]
11. CM Commerce. Available online: https://cm-commerce.com/academy/5-handy-steps-to-optimize-your-social-revenue/ (accessed on 24 March 2020).
12. Smart Insights. Social Commerce Trends for 2020. Available online: https://www.smartinsights.com/ecommerce/social-commerce/social-commerce-trends-for-2020-you-need-to-look-out-for/ (accessed on 24 March 2020).
13. Business Insider. Social Commerce Market Report: How Social Media Is Driving Economic Sales in 2020. 2020. Available online: https://www.businessinsider.com/social-commerce-report (accessed on 24 March 2020).
14. Hennig-Thurau, T. Relationship Quality and Customer Retention through Strategic Communication of Customer Skills. *J. Mark. Manag.* 2000, 16, 55–79. [CrossRef]

15. 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]

16. Palmatier, R.W.; Dant, R.P.; Grewal, D.; Evans, K.R. Factors influencing the effectiveness of relationship marketing: A meta-analysis. *J. Mark.* 2006, 70, 136–153. [CrossRef]

17. Morgan, R.M.; Hunt, S.D. The commitment-trust theory of relationship marketing. *J. Mark.* 2006, 58, 20–38. [CrossRef]

18. Gustafsson, A.; Johnson, M.D.; Roos, I. The effects of customer satisfaction, relationship commitment dimensions, and triggers on customer retention. *J. Mark.* 2005, 69, 210–218. [CrossRef]

19. Hu, X.; Chen, X.; Davison, R.M. Social Support, Source Credibility, Social Influence, and Impulsive Purchase Behavior in Social Commerce. *Int. J. Electron. Commer.* 2019, 23, 297–327. [CrossRef]

20. Shirazi, F.; Adam, N.A.; Shanmugam, M.; Schultz, C.D. The importance of trust for electronic commerce satisfaction: An entrepreneurial perspective. *Br. Food J.* 2020. [CrossRef]

21. Bugshan, H.; Attar, R.W. Social commerce information sharing and their impact on consumers. *Technol. Forecast. Soc. Chang.* 2020, 153, 119875. [CrossRef]

22. Zhang, K.Z.; 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]

23. Al-Tit, A.A.; Omri, A.; Hadj, T.B. The driving factors of the social commerce intention of Saudi Arabia's online communities. *Int. J. Eng. Bus. Manag.* 2020, 12, 1847979019899746. [CrossRef]

24. Lim, W.M. Untangling the relationships between consumer characteristics, shopping values, and behavioral intention in online group buying. *J. Strat. Mark.* 2016, 25, 547–566. [CrossRef]

25. Chen, J.; Shen, X.-L. Consumers’ decisions in social commerce context: An empirical investigation. *Decis. Support Syst.* 2015, 79, 55–64. [CrossRef]

26. Cobb, S. Social Support as a Moderator of Life Stress. *Psychosom. Med.* 1976, 38, 300–314. [CrossRef] [PubMed]

27. Hsiao, M.-H. Influence of interpersonal competence on behavioral intention in social commerce through customer-perceived value. *J. Mark. Anal.* 2020, 1–12. [CrossRef]

28. House, J.S. *Work Stress and Social Support*; Addison Wesley: Reading, MA, USA, 1981.

29. Kim, Y.; Sohn, D.; Choi, S.M. Cultural difference in motivations for using social network sites: A comparative study of American and Korean college students. *Comput. Hum. Behav.* 2011, 27, 365–372. [CrossRef]

30. Podsakoff, P.M.; MacKenzie, S.B.; Lee, J.Y.; Podsakoff, N.P. Common method biases in behavioral research: A critical review of the literature and recommended remedies. *J. App. Psych.* 2003, 88, 879. [CrossRef] [PubMed]

31. Hair, J.F.; Anderson, R.E.; Tatham, R.L.; William, C.B. *Multivariate Data Analysis*; Prentice Hall: Upper Saddle River, NJ, USA, 1998.

32. Hair, J.F.; Babin, B.; Anderson, R. *Multivariate Data Analysis*, 7th ed.; Prentice Hall: Upper Saddle River, NJ, USA, 2010.

33. Fornell, C.; Larcker, D.F. Evaluating structural equation models with unobservable variables and measurement error. *J. Mark. Res.* 1981, 18, 39–50. [CrossRef]

34. Hu, L.-T.; Bentler, P.M. Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Struct. Equ. Model. A Multidiscip. J.* 1999, 6, 1–55. [CrossRef]

35. Baron, R.M.; Kenny, D.A. The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *J. Pers. Soc. Psychol.* 1986, 51, 1173–1182. [CrossRef]

36. Steenkamp, J.E.M.; Baumgartner, H. Assessing Measurement Invariance in Cross-National Consumer Research. *J. Consum. Res.* 1998, 25, 78–107. [CrossRef]

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

© 2020 by the authors. 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 (http://creativecommons.org/licenses/by/4.0/).