

Explore Moderated Mediation of Trust in Social Commerce on Links Between a User's Perceived Past Negative Experiences and Social Commerce Engagement

Ying-Chieh Yang

Economics and Management College, Zhaoqing University, Zhaoqing, China

Email address:

yingchiehyang@gmail.com

To cite this article:

Ying-Chieh Yang. Explore Moderated Mediation of Trust in Social Commerce on Links Between a User's Perceived Past Negative Experiences and Social Commerce Engagement. *Advances in Materials*. Vol. 11, No. 3, 2023, pp. 122-129. doi: 10.11648/j.ijsts.20231103.15

Received: April 7, 2023; **Accepted:** April 25, 2023; **Published:** May 10, 2023

Abstract: Due to the impact of the pandemic (COVID-19) crisis and the inflation threat, not only do companies change their production models, but also their operating modes. The purchase mode of consumers, moreover, are changed. These changes make social commerce (SC) more popular. However, there exist problems in SC. Therefore, not only is the purpose of this study to examine the role of a user's perceived past negative experience (PPNE) in social commerce (SC) and the impact of trust in SC on a community user's social commerce engagement (SCE), but is also to explore the moderating effects of perceived information credibility (PIC) on the relationship between a user's PPNE and trust in SC. 349 valid samples were collected from the target population in Taiwan and analyzed data by AMOS 22 and SPSS PROCESS to examine a conceptual model and three hypotheses. Of the three hypotheses, all hypotheses were supported. The findings not only confirmed the psychological perception and effects of a user's PPNE on trust in SC and the impact of trust in SC on user's SCE, but also identified PIC as the moderating role in a virtual user's PPNE – trust in SC chain. Besides the need for empirical confirmation of the hypotheses given, finally, there are several practical implications for social marketers and future research directions for scholars.

Keywords: Perceived Information Credibility, Social Commerce Engagement, Perceived Past Negative Experiences

1. Introduction

Not only do the pandemic (COVID-19) crisis and the inflation threat force all industries to rebuild different business landscape, but also markedly changes the consumption behaviors of consumers in the world. This is because consumers feel safer shopping from the confines of their homes and soon many realize that this saves them considerable time, effort, and even money based on a massive surge in social commerce resulting in a paradigm shift [2, 14]. Social commerce (SC) is the combination of social media and e-commerce, which is used for selling and promoting products and services. The market is primarily driven by the growing number of social media users, along with rising built-in e-commerce projects [19]. A new report from Accenture predicts social commerce will grow three times as fast as traditional e-commerce, more than doubling from \$492 billion worldwide in 2021 to \$1.2 trillion in 2025 [23]. In 2022, this report furthermore points out US social commerce sales are

expected to reach \$45.74 billion, with more than a half of the country's adults making a purchase on social media. On the other hand, those who hadn't made such a purchase cited a variety of reasons, including preferring to deal with a retailer via face-to-face, distrusting platforms with payment information, being unsure if the products shown were legitimate [23], and suffering from a lot of disputed transactions (e.g. fraud, service failure, and service recovery failure etc.) emerging in SC [31, 38]. Virtual community users' past negative experiences from SC lead these users to cause psychological contract violation (PCV) and further to discourage from engaging in SC [31]. Prior studies, however, also indicate that transparent and credible information on SC platforms is able to reduce uncertainty and anxiety of users while engaging in SC [16, 25].

Very few studies, however, deeply probed the past negative experiences of a virtual user as an antecedent of his/her trust in SC and identified perceived information credibility as the moderator between his/her perceived past negative

experiences and trust in social commerce. The purpose of this study, therefore, is to bridge the gap and reach the following research objectives:

- 1) Explore the moderating effect of perceived information credibility (PIC) on the relationship between a community user's perceived past negative experiences (PPNE) and his/her trust in SC. That is, this study hypothesize that higher PIC reduces the negative impact of a community user's PPNE on his/her trust in SC.
- 2) Explore the negative impact of a virtual user's PPNE on his/her SCE through trust in SC. Then, combination of the two questions is to identify the moderated mediation of trust in SC link between a virtual user's PPNE and SCE.

To accomplish these objectives mentioned above, therefore, this study is organized as follows: first, the paper develops research hypotheses and a conceptual model based on literature review and integration in several relevant fields. Next, this study adopts software AMOS 22 and SPSS PROCESS to analyze the valid data collected from the target population in Taiwan. Finally, the findings are presented, followed by conclusions and discussions of the findings including several practical implications and future research directions.

2. Literature Review

In the social commerce context, not only is virtual community users' social commerce engagement (SCE) defined as the degree to which users engage in commerce activities (e.g. payment services and purchasing products) on social media [4], but is also defined as the degree to which consumers engage in a variety of user-centered and paid business activities through social media [31]. SCE of virtual users is able to significantly promote an increase in the number of transactions, because the objective of SC is to increase business benefits through social networks [22, 29].

2.1. Trust in SC and SCE

In the commitment-trust literature, not only is trust defined as "the willingness of a person to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor another party" [28, p. 312], but is also the most important variable in social [31, 32] and relational exchanges [21]. In the study, therefore, trust in SC is defined as a user's belief that future transactions with sellers in SC will occur in a manner consistent with their confident expectations. Previous studies indicate that trust is able to influence consumer decisions and behaviors on account of trust as a psychological state interpreted in terms of perceived probabilities, confidence, or expectations in relation to the other party [7]. Therefore, not only can trust reduce the uncertainty of transactions and complexity of communication with virtual sellers, but can also further prompt the success of transactions [34]. Findings of the empirical studies, for example, point out the higher the level

of trust in community of sellers, the stronger consumer SCE [31, 33, 39]. In the study, therefore, the impact of trust on SCE must be replicated and the hypothesis is framed as follows:

H₁: trust in SC positively influences virtual users' SCE.

2.2. A Virtual User's Perceived Past Negative Experience (PPNE) and Trust in SC

Based on psychological contract violation (PCV), if virtual users previously encountered problematic transactions with individual sellers on SC platforms, then the experiences more likely result in hostility toward the individual sellers on SC platforms, followed by probably discouraging users from engagement in SC again [31]. Prior studies indicate that psychological contracts are a set of reciprocal duties supposedly performed by consumers in return to a satisfying platform's experience [22]. Therefore, the perceived past negative experiences (PPNE) of a virtual user on SC platforms increase his/her suspicion, fretfulness, and displeasure while engaging in SC, followed by distrusting virtual sellers and preventing him/her from SC engagement. In this study, a community user's PPNE is defined as the level to which the user perceives previous problematic transactions with particular sellers on SC platforms. In other words, the level of a user's PPNE basically depends on his/her perception.

Prior studies, moreover, indicate that a virtual user's PPNE originates from main problematic transacting sources in SC, including fraud, product misrepresentation, contract default [24], and double deviation (service failure and recovery failure) [6, 9, 13]. Not only can PVC ruin users' beliefs that sellers will behave in a manner consistent with their confident expectations, followed by eroding the initial trust of users in the virtual sellers [12, 27], but can also invoke a sense of betrayal and unfair treatment, followed by causing virtual users to pay more attention to potential adverse outcomes related to new and potentially opportunistic sellers and decrease trust of users in transactions with the virtual sellers while engaging in SC [20, 31]. In the social commerce context, therefore, the following hypothesis is proposed:

H₂: a virtual user's PPNE negatively influences trust in SC.

2.3. Moderator: Perceived Information Credibility (PIC)

In the information system literature, perceived information credibility (PIC) is considered a crucial driver of receiver information, because PIC is the message receivers' perception on the credibility of a message [5, 26]. In social networking context, PIC is the degree to which the virtual user perceives claims made about the information in social commerce to be truthful and believable [25]. Information produced through social media can reflect a mechanism to provide credibility of the information, then further builds trust and reduces risk perception. The influence of this information is greater than offered by companies or individual sellers [17]. This is because credibility is

trustworthiness based, reflecting an information providers' ethical traits ensuring that this person provides valid information [36]. Prior studies also indicate that the more authentic and accurate information by community members enables users suffering from problematic experiences to more likely believe in SC transaction mechanisms, followed by reducing their hostility toward community sellers [17, 31]. That is, the more credible information from social media, the lower the perceived risk level of a virtual user with PPNE in SC and further the lower his/her PCV toward community sellers. Prior studies, however, used to consider PIC [17, 26] as an antecedent of trust in SC, but rarely conducted study from the point of view as a moderating variable. This research, therefore, proposes that PIC is a moderating

variable to make up for the research gap and obtain deeper research understanding. This study, therefore, proposes the hypothesis as follows:

H₃: high PIC will mitigate the negative effect of a virtual user's PPNE on trust in SC.

2.4. The Conceptual Model

Through integrating related literature mentioned above, the conceptual model is developed in this study not only to examine the impact of a user's PPNE on SCE through trust in SC but also to explore moderating effects of PIC on the relationship between a virtual user's PPNE and trust in SC (see Figure 1).

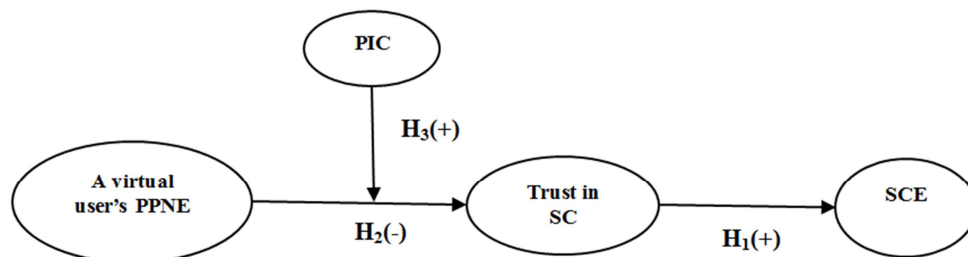


Figure 1. The conceptual model.

3. Methodology

3.1. Sampling and Procedure

In this study, People in Taiwan are selected as the research target population according to the following reasons. First of all, Taiwan owns the advanced Internet infrastructures. Second, Taiwanese prevalently adopt social media (e. g. Facebook, YouTube, Line, Messenger, and Instagram, etc.) to interact with each other. In 2018, based on the report by SlideShare (2019), there were 19 million active community users, accounting for 80% of the total number of people in Taiwan [35]. Of these users, 18 million users are used to social media on mobile phones. Users in Taiwan adopt not only these social media to interact with their friends, family, and colleagues, but also them to purchase products or services. However, third, disputedly transacting with virtual community sellers leads a lot of users to reluctantly engage in SC. For example, some community users view a service failure as a malicious violation.

As to sampling, convenient sampling was applied in this research cited a variety of reasons, including the high rate of adopting social media in Taiwan, reducing time cost, and increasing response rate. Moreover, two special municipalities, including Tainan and Taichung in Taiwan were selected due to the total population of these two municipalities accounted for about 20% of the population of Taiwan [8]. Based on the store size, therefore, 1,000 questionnaires were distributed at three department stores, two shopping malls, and two hyper markets in Tainan and Taichung, respectively. During over a two-month period

from October 1, 2021 to November 30, 2021, the face-to-face questionnaire was conducted. Before doing that, the researcher explained the purpose of this study to the target participants and solicited their intent to participate. At the end of the data collection process, of 392 completed participants, the final number of usable questionnaires was 349, for a response rate of 34.90%. Of the 349 participants, 185 (53.0%) are female and 164 (47.0%) are male. Moreover, the age of 327 (93.7%) is less than 40 and the rest (6.3%) is at least 40 or above. The average age and month income of the 349 participants is 29.5 years and about US\$1152.5 based on the US\$/NT\$ exchange rate of NT\$30.37. This study adopted AMOS 22 and SPSS PROCESS to analyze a measurement model and a structural model to establish validity of the instrument and examine the path analysis.

3.2. Measure

A personally administered questionnaire was used to collect the data from the target population. A total of 21 items makes up the questionnaire containing five parts: demographic information, PIC, PPNE, trust in SC, and SCE. Personal characteristics (6 items) included gender, age, education, occupation, month income, and marital status. An instrument measuring four constructs were designed according to previous studies. For example, four items measuring PIC were adapted from Li and Suh (2015) [26]. Trust in SC (4 items) and a virtual user's PPNE (3 items) were measured using the scales adapted from Pavlou and Gefen (2005) [31]. Three items, finally, is adapted from Rehman et al. (2019) to measure SCE [33]. Table 1 shows the questionnaires of the four constructs.

Table 1. The questionnaires of the four constructs.

Construct	items
Perceived information credibility (PIC)	In general, I think information on social media is believable. In general, I think information on social media is factual. In general, I think information on social media is credible. In general, I think information on social media is trustworthy.
Trust in social commerce	Sellers in social commerce are in general reliable. Sellers in social commerce are in general competent. Sellers in social commerce are in general honest. Sellers in social commerce are in general trustworthy.
A virtual user's perceived past negative experience (PPNE)	My past experience in social commerce was negative. In general, I have been not satisfied with the sellers in social commerce community. Sellers in social commerce community did not do a good job in the past.
Social commerce engagement (SCE)	There is a strong likelihood that I will engage in activities on social media (i. e. buy products/services on social media). I would like to recommend social commerce to my friends or family. I intend to use social media to engage in any activities frequently over the next 1-2 years.

The study adopted a five-point Likert scale for measurement items, with “1” representing strongly disagree and “5” representing strongly agree. All items originally in English were translated into Chinese and back-translated into English to ensure equivalent meaning [3]. The questionnaire was also pre-tested using undergraduate business students with social commerce experiences. The feedback from the pre-test was used to improve the readability and the questionnaire. Moreover, a reliable sample size was a minimum of five respondents per survey item [15]. Due to the 20-item questionnaire in this study, this meant that the minimum number of respondents for factor analysis for this study should be 200, and a total of 349 respondents completed the questionnaires.

4. Findings

4.1. Reliability and Validity Analysis

In this study, validity including convergent validity and

discriminate validity is examined. Based on the study by Hair *et al.* (2006), convergent validity assesses the extent to which items designed to measure the same construct are related, while discriminate validity assesses the degree to which items designed to measure different constructs are related. Through confirmatory factor analysis, the result shows an acceptable model fit to the data: $\chi^2 / df = 1.986$ ($p < .001$); RMSEA = .053 ($< .06$); RMR = .049 ($< .06$); GFI = .945 ($> .90$); AGFI = .922; CFI = .983 ($> .90$); NFI = .966 ($> .90$); TLI = .977 ($> .90$); IFI = .983 ($> .90$) (Hair *et al.*, 2006). It was found that standardized factor loadings of all items measuring the same constructs are over .63 and significantly related ($p < .001$) (see Table 1). As shown in Table 2, Cronbach alpha and the composite reliability (CR) for all constructs are larger than .70, which the internal consistency and stability of the instrument is acceptable [30]. Moreover, the average variance extracted (AVE) for all reach constructs of this study exceeded .50. Therefore, convergent validity is established [10].

Table 2. Standardized loadings and reliabilities.

Construct	Indicators	Standardized loadings	AVE	CR	Cronbach's α
PIC	PIC1	0.865***	0.839	0.954	0.957
	PIC2	0.909***			
	PIC3	0.947***			
	PIC4	0.941***			
Trust	Trust1	0.722***	0.693	0.899	0.910
	Trust2	0.711***			
	Trust3	0.919***			
	Trust4	0.950***			
PPNE	PPNE1	0.642***	0.623	0.830	0.823
	PPNE2	0.905***			
	PPNE3	0.798***			
SCE	SCE1	0.873***	0.684	0.866	0.862
	SCE2	0.784***			
	SCE3	0.821***			

Note: *** $p < .001$; Goodness-of-fit indices ($N = 349$); $\chi^2 (348) = 135.021$ ($p < .001$); RMSEA = 0.053; RMR = .049; GFI = .945; AGFI = .922; CFI = .983; NFI = .966; TLI = .977; IFI = .983; PIC = perceived information credibility; PPNE = perceived past negative experience; Trust = trust in social commerce; SCE = social commerce engagement.

Discriminant validity is tested by comparing the shared variance among indicators of a construct with the variance shared between constructs. The test for discriminant validity is met when the square root of AVE for the construct is greater

than its correlations with other constructs. As a result, absolute correlation values of all items measuring different constructs are significantly low and range from .00 to .63 (see Table 3), and discriminant validity is established [10].

Table 3. Correlation among Constructs and the Square Root of the AVE.

	PIC	PPNE	Trust	SCE
PIC	<i>.916</i>			
PPNE	.001	<i>.789</i>		
Trust	.627**	-.130*	<i>.833</i>	
SCE	.458**	-.034	.454**	<i>.827</i>

Not.: * $p < .05$; ** $p < .01$; Diagonal elements (in italics and bold) are the square root values of AVE; PIC = perceived information credibility; PPNE = perceived past negative experience; Trust = trust in social commerce; SCE = social commerce engagement.

4.2. Path Analysis and Moderation Effects

Table 4. Comparison of the Mean and Std. Deviation Scores for Variables.

Variable	Levene's test for equality of variances		t-test for equality of means	
	F	Sig. (p)	t	Sig. (p)
PPNE	1.610	.205	.874 ^a	.382
Trust	.288	.592	-.573	.567

Note.: Adjusted t -test formula for unequal variances; PPNE = perceived past negative experience; Trust = trust in social commerce; the number of age with less than 20 is 184; the number of age with 20 or above is 165.

Table 5. Comparison of the Mean and Std. Deviation Scores for Variables.

Variable	Levene's test for equality of variances		t-test for equality of means	
	F	Sig. (p)	t	Sig. (p)
PPNE	.707	.401	-1.392 ^a	.165
Trust	.457	.499	.964	.336

Note.: Adjusted t -test formula for unequal variances; PPNE = perceived past negative experience; Trust = trust in social commerce; the number of female is 185; the number of male is 164.

Table 6. Path Coefficients and t Value.

Predictor	Moderator: PIC	
	β	t value
PPNE	-.259*	-2.4311
PIC	.916***	8.7128
PIC \times PPNE	.128***	3.6908
Adjust R^2	.433***	

Note. * $p < .05$; ** $p < .01$; *** $p < .001$; PIC = perceived information credibility; PPNE = perceived past negative experiences; dependent variable = trust in social commerce.

Under no moderation effects, next, this study adopts AMOS 22 to examine the relationship between a user's PPNE and trust in SC. Findings indicated indices: $\chi^2 / df = 1.396$ ($p < .001$); RMSEA = .034 ($< .06$); RMR = .048 ($< .06$); GFI = .975 ($> .90$); AGFI = .958 ($> .90$); CFI = .994 ($> .90$); NFI = .979 ($> .90$); TLI = .991 ($> .90$); IFI = .994 ($> .90$). Moreover, it is found the negative impact of a virtual user's PPNE on trust in SC ($\beta = -.152$, $p < .05$), and H_2 is supported. Due to the positive impact of Trust in SC on SCE ($\beta = .488$, $p < .001$), H_1 is supported. The two findings lead a virtual user's PPNE to negatively

Before conducting path analysis, this study attempts to reduce the observed relation suffering from an omitted variable bias. The prior study indicates that gender and age of consumers likely cause an omitted bias [6]. The study, therefore, adopts an independent t -test to examine whether gender and age lead to an omitted bias. Of the 349 participants, moreover, the number of the participants with at least 40 or above only is 22, so the two group (20-39 and 40 or above) are combined to reach enough sample number (165). The findings reveal that gender and age are unable to cause any bias [15] and show in Table 4 and Table 5.

influence SCE ($\beta = -.084$, $p < .05$) via trust in SC. Third, the moderation effect of PIC on the link between a user's PPNE and trust in SC was examined through Hayes's (2013) PROCESS (Model 7). Prior studies point out PROCESS is an appropriate data analytic strategy for studying moderating variables in this study [18]. As shown in Table 6, findings identify as the interaction of PIC and PPNE on trust in SC. That is, PIC buffers the negative effect of PPNE on trust in SC. Therefore, H_3 is supported. On further examining Table 6, findings indicate that PPNE has negative impact on trust in SC. That is, under PIC moderation effects H_2 is supported. Moreover, trust in SC positively impacts SCE ($\beta = .561$, $p < .001$) and H_1 is supported.

On further examining the conditional effect of a user's PPNE on trust in SC at values of the moderator PIC, finally, PIC are divided into three low, medium, and high groups respectively according to means and one standard deviation of PIC. Findings point out PPNE has significant impacts on trust in SC for medium-/high-PIC groups (Table 7). In other words, the higher the degree of PIC, the lower the negative impact of PPNE on trust in SC.

Table 7. Conditional Effect of PPNE on Trust at Values of Moderator PIC.

PIC	PPNE \rightarrow Trust	SE (Boot)	BootLLCI	BootULCI
Low	-.0021	.0309	-.0609	.0612
Medium	.1071	.0222	.0191	.1061
High	.2164	.0273	.0738	.1808

Note: Low-PIC = 2.0154; Medium-PIC = 2.8718; High-PIC = 3.7281; 95% bootstrap confidence interval [BootLLCI, BootULCI]; PIC = perceived information credibility; PPNE = perceived past negative experiences.

5. Discussion and Future Research Agenda

5.1. Contributions and Conclusions

This study provides some insight into the role of a community user's perceived past negative experience (PPNE) and the way in which perceived information credibility moderates the effect of a user's PPNE on his/her affective reaction (trust in SC).

The findings based on data analysis draw several discussions and conclusions. Under no moderation effects, first of all, a user previously undergoing negative experiences will reduce his/her trust in SC. This finding is in line with the studies by Pavlous and Gefen (2005) as well as Yang and Lin (2021). Moreover, the higher level of community users' trust in SC, the higher level of their SCE. This finding indicates that users with more trust in SC will more likely engage in social commerce. On the other hand, a user's PPNE negatively influences his/her SCE via trust in SC. In other words, the combination of H_1 and H_2 supported, therefore, indicates that community users with more PPNE will more loathly engage in SC via reducing their trust in SC. This is because an individual undergoing previous negative experiences has less confidence in SC and further is more reluctant to engage in SC.

Under the moderation effect of PIC, second, the negative impact of PPNE on trust in SC is buffered or reversed (in Table 7). For example, H_3 supported demonstrates that if users with PPNE obtain more credible information from social media, then the negative effect of PPNE on trust in SC is mitigated. This is because the β weight value of .128 ($p < .001$) for the interaction term between PIC and PPNE indicates that the slope of the regression of trust in SC on PPNE at levels of PIC increased by .128 unit for every one unit increase in PIC [1]. Table 7, finally, shows that more credible information from virtual community can not only buffer the negative impact of PPNE on trust in SC but also reverse the negative into the positive [16, 38]. This is because receiving more authentic information from SC platforms reduces doubts and anxiety of users with PPNE and further increase their trust in SC [38].

5.1.1. Contributions to Practice

In terms of theory building and data analysis, findings provide several practical implications to virtual sellers. Based on the PCV theory, first of all, this study is one of the first studies identifying the level of a user's PPNE as his/her psychological perception and having the negative impact on trust in SC. In other words, if community sellers provide service failure or recovery failure to users, these users produce psychological violation, followed by losing trust in SC. While having less confidence in SC, moreover, community users are more reluctant to engage in SC. That is, previous negative experiences of community users indirectly have the negative impact on SCE via trust in SC. Therefore, virtual retailers endeavor to avoid providing service failure or recovery failure

to community users. In case virtual retailers provide service failure to their customers, not only should these retailers immediately make a sincere apology to the customers, but should also offer intact compensation. Second, the main contribution of the present study is to explore a moderating role of PIC on the relationship between PPNE and trust in SC.

Based on H_3 , once community users encounter problematic transactions with some sellers in SC, followed by producing PCV towards virtual sellers, virtual retailers are able to adopt the other strategies to reduce users' hostility, besides compensation and apology. For example, virtual retailers can encourage community members to more frequently share purchase experience and product/service information with each other. In other words, information produced through social media is reflecting a more effective mechanism to provide more credible information, then further establish trust and reduce risk perception. The influence of the information is greater than offered by companies or individual sellers [17]. Moreover, not only can virtual retailers provide more reliable information about products, services, and transaction regulations, but can also provide more credible using experiences of members. This is because higher PIC can lessen the impact of PPNE on trust in SC, even reverse users suffering with negative experiences towards rebuilding trust in SC.

5.1.2. Conclusions

Based on data analysis mentioned above, this paper provides a deep understanding of the process to lead a virtual user undergoing problematic transaction experiences to engage in social commerce. The findings of this study also point out previous negative transaction experiences discourage virtual users from social commerce engagement via a decrease in trust on social media platforms. Additionally, community retailers attempt to reduce the psychological contract violation of the users transacting with them through service recovery. The community retailers have to not only provide more reliable information about their services and products but also encourage members interact each other on social media.

5.2. Limitations and Future Research

This study provides some insight into the role of a community user's perceived past negative experience (PPNE) and the way in which perceived information credibility moderates the effect of a user's PPNE on his/her affective reaction (trust in SC), but it has several limitations for future research directions. First of all, the results are limited due to convenient sampling and sample size weakening the results of this empirical study. Data collection from 349 usable social participants sufficiently establish model validation in this study, but findings might be unable to generalize to the entire SC population. Consequently, it is recommended that future studies are needed to examine and validate the generalizability of the findings to more social user data. Second, this study identifies the moderating effect of PIC on the link between a

user's PPNE on his/her affective reaction (trust in SC), but there exist other variables buffering the impact of PPNE on trust in SC. Prior studies, for example, point out secure transaction mechanism and social identification among community users probably reduce hostility of users with PPNE toward community sellers, followed by enhancing their trust in SC [11, 37]. Finally, a user's PPNE may further result in buyer bad behaviors (e.g. spreading bad WOM and revenge). Therefore, future studies should explore virtual user behavior in SC after undergoing negative experiences.

References

- [1] Aiken, L. S., & West, S. G. (1991). *Multiple regression: testing and interpreting interactions*. Thousand Oaks, CA: Sage.
- [2] Algamash, F. A., Mashi, M. S., & Alam, M. N. (2022). Understanding the antecedents of use of e-commerce and consumers' e-loyalty in Saudi Arabia Amid the COVID-19 pandemic. *Sustainability*, 14 (22), 14894; <https://doi.org/10.3390/su142214894>
- [3] Brislin, R. W. (1980). Translation and content analysis of oral and written material. In H. C. Triandis, & J. W. Berry (Eds.), *Handbook of Cross-cultural psychology*: 389-444. Boston, MA: Allyn and Bacon.
- [4] Busalim, A., Ghabban, D, Hussin, A. R. C. (2021). Customer engagement behaviour on social commerce platforms: An empirical study. *Technology in Society*, 64 (3). DOI: 10.1016/j.techsoc.2020.101437.
- [5] Cheung, C. M. K., & Thadani, D. R. (2012). The impact of electronic word-of-mouth communication: a literature analysis and integrative model. *Decision Support Systems*, 54 (1): 461-470.
- [6] Chih, W.-H., Chiu, T.-S., Lan, L.-C., & Fang, W.-C. (2017). Psychological contract violation Impact on perceived justice and behavioral intention among consumers. *International Journal of Conflict Management*, 28 (1), 103 – 121.
- [7] Delgado-Ballester, E., Munuera-Aleman, J. L., & Jesús-Yagüe, M. (2003). Development and Validation of a Brand Trust Scale. *International Journal of Market Research*, 45 (1), 35-56.
- [8] Dept. of household Registration. (2018). Statistics. Retrieved August 02, 2019 from <https://www.ris.gov.tw/app/en/3910>.
- [9] Fang, Y.-H., & Chiu, C.-M. (2014). Exploring Online Double Deviation Effect from Psychological Contract Violation, Emotion, and Power Perspectives. *Pacific Asia Journal of the Association for Information Systems*, 6 (1), 39-65.
- [10] Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measure error. *Journal of Marketing Research*, 18 (1): 39–50.
- [11] Gefen, D., Karahanna, E., & Straub, D. W. (2003). Trust and TAM in online shopping: an integrated model. *MIS Quarterly*, 27 (1): 51-90.
- [12] Goles, T., Rao, S. V., Lee, S., & Warren, J. (2009). Trust violation in electronic commerce: customer concerns and reactions. *Journal of Computer Information Systems*, 49 (4), 1-9.
- [13] Grégoire, Y., Laufer, D., & Tripp, T. M. (2010). A comprehensive model of customer direct and indirect revenge: understanding the effects of perceived greed and customer power. *Journal of the Academy of Marketing Science*, 38, 738-758.
- [14] Gu, S., Slusarczyk, B., Hajizada, S., Kovalyova, I., & Sakhibieva, A. (2021). Impact of the COVID-19 pandemic on online consumer purchasing behavior. *Journal of Theoretical and Applied Electronic Commerce Research*, 16, 2263–2281. <https://doi.org/10.3390/jtaer16060125>.
- [15] Hair, J. F. Jr., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2006). *Multivariate Data Analysis* (6th Ed.). Upper Saddle River, NJ: Pearson Prentice Hall.
- [16] Hajli, N. (2018). Ethical environment in the online communities by information credibility: a social media perspective. *Journal of Business Ethics*, 149: 799-810.
- [17] Hajli, N., Lin, X., Featherman, M., & Wang, Y. (2014). Social word of mouth: how trust develops in the market. *International Journal of Market Research*, 56 (5): 673-689.
- [18] Hayes, A. F. (2013). *Mediation, moderation, and conditional process analysis*. New York: The Guilford Press.
- [19] Herrando, C., Jimenex-Martinez, J., & Hoyos, M. J. M.-D. (2019). Social commerce users' optimal experiences: stimuli, response and culture. *Journal of Electronic Commerce Research*, 20 (4), 199-218.
- [20] Hill, J. A., Eckerd, S., Wilson, D., & Greer, B. (2009). The effect of unethical behavior on trust in a buyer-supplier relationship: the mediating role of psychological contract violation. *Journal of Operations Management*, 27 (4), 281-293.
- [21] Hunt, S. D., & Lambe, C. J. (2000). Marketing's contribution to business strategy: market orientation, relationship marketing and resource-advantage theory. *International Journal of Management Reviews*, 2 (1): 17-43.
- [22] Hussian, 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.
- [23] INSIDER INTELLIGENCE. (2022). Social commerce 2022: social media and ecommerce convergence trends bring growth opportunity for brands. <https://www.insiderintelligence.com/insights/social-commerce-brand-trends-marketing-strategies/>
- [24] Koh, C., Ang, S., & Straub, D. (2004). IT outsourcing success: a psychological contract perspective. *Information Systems Research*, 15 (4): 356-373.
- [25] Lai, I. K. W., & Liu, Y. (2020). The effects of content likeability, content credibility, and social media engagement on users' acceptance of product placement in mobile social networks. *Journal of Theoretical and Applied Electronic Commerce Research*, 15 (3), 1-19.
- [26] Li, R., & Suh, A. (2015). Factors influencing information credibility on social media platforms: evidence from Facebook pages. *Procedia Computer Science*, 72: 314-328.
- [27] Malhotra, N., Sahadev, S., & Purani, K. (2017). Psychological contract violation and customer intention to reuse online retailers: exploring mediating and moderating mechanisms. *Journal of Business Research*, 75, 17- 28.

- [28] Mayer, R. C., Davis, J. H., & Schoorman, F. D. (1995). An integrative model of organizational trust. *Academy of Management Review*, 20 (3): 709-734.
- [29] 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.
- [30] Nunnally, J. C. (1978). *Psychometric Theory*. New York: McGraw-Hill.
- [31] Pavlou, P. A., & Gefen, D. (2005). Psychological contract violation in on line marketplaces: antecedents, consequences, and moderating role. *Information Systems Research*, 16 (4), 372-399.
- [32] Rahardja, U., Hongsuchon, T., Hariguna, T., & Ruangkanjanases, A. (2021). Understanding impact sustainable intention of s-commerce activities: the role of customer experiences, perceived value, and mediation of relationship quality. *Sustainability*, 13 (20), 1492; <https://doi.org/10.3390/su132011492>
- [33] Rehman, S. U., Bhatti, A., Mohamed, R., & Ayoup, H. (2019). The moderating role of trust and commitment between consumer purchase intention and online shopping behavior in the context of Pakistan. *Journal of Global Entrepreneurship Research*, 9 (43). <https://doi.org/10.1186/s40497-019-0166-2>
- [34] Shanmugam, M., Sun, S., Amidi, A., Khani, F., & Khani, F. (2016). The applications of social commerce constructs. *International Journal of Information Management*, 36 (3): 425-432.
- [35] SlideShare. (2019). Digital 2019 Taiwan (January 2019) v01. Retrieved August 24, 2019 from <https://www.slideshare.net/DataReportal/digital-2019-taiwan-j-anuary-2019-v01>.
- [36] Sussman, S. W., & Siegal, W. S. Informational influence in organizations: An integrated approach to knowledge adoption. *Information Systems Research*, 14, 1 (2003), 47–65.
- [37] Wu, Y. L., & Li, E. Y. (2018). Marketing mix, customer value, and customer loyalty in social commerce: a stimulus-organism-response perspective. *Internet Research*, 28 (1), 74-104.
- [38] Yang, Y.-C., & Lin, I.-H. (2021). Explore buffering effects of social media interactivity and perceived information credibility on a user's perceived past negative experiences. *International Journal of Organizational Innovation*, 14 (2), 55-67.
- [39] Yin, X., Wang, H., Xia, Q., & Gu, Q. (2019). How social interaction affects purchase intention in social commerce: a cultural perspective. *Sustainability*, 11, 2423. <https://www.mdpi.com/2071-1050/11/8/242>