

Effect of Relational Bonds on Consumer Engagement Via Affective Commitment on E-Commerce Live Stream Shopping in Indonesia

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ABSTRACT

Lately, Live streaming is one of the entertainment activities that can enhance consumers' shopping experience. As many as 29% of internet users often watch the live streaming from influencers on social media, and 80% of them tend to buy the products offered. Ranked first globally, 88.1% of internet users in Indonesia use e-commerce services, with e-commerce transaction volume reaching IDR 266 trillion in 2020. However, not much research has been done on live streaming shopping, especially on Indonesian e-commerce. Based on the stimulus-organism-reaction framework, this study examines the effect of relational bonds on consumer engagement via affective commitment in live stream shopping e-commerce Indonesia. Using 266 valid online survey responses, researchers used AMOS software to evaluate measurement & structural models. The study results found that social bonds indirectly affect consumer engagement through an affective commitment to broadcasters. Meanwhile, financial & structural bonds only affect affective commitment to the platform but do not affect consumer engagement. This study provides insight for e-commerce operators in Indonesia to increase consumer engagement by developing social bonds in live streaming shopping.

Keywords: *Live Stream Shopping, Financial Bonds, Social Bonds, Structural Bonds, Affective Commitment, Consumer Engagement, E-Commerce*

1. INTRODUCTION

Live streaming has emerged as entertainment activities that can enhance consumer's shopping experience [1]. With more and more consumers shop online due to the COVID-19 pandemic, the shift from physical stores to digital stores globally has accelerated for about five years [2]. As many as 29% of internet users often watch live streaming from influencers on social media, and 80% of them tend to buy the products offered [1]. Thus, selling live streaming is one of the keys to staying relevant and prominent in the retail world, which increasingly prioritizes online interaction. Ranked first globally, as many as 88.1% of Indonesian internet users used e-commerce services to buy products [3]. Three of Indonesia's four major e-commerce platforms have implemented the live stream shopping feature to enhance consumers' shopping experience.

Studies done related to live streaming mainly focus on motivation and user experience for entertainment and knowledge sharing purposes [4] [5]. One study that examines streaming as a medium of buying and selling online (live stream shopping) is conducted by [6]. In the research, it was found empirically that relational bonds can affect consumer engagement via affective commitment. However, this research has only been carried out in one country and only on one platform, namely the Taobao platform in China. [6] suggest seeing if there are differences in the phenomenon of live stream shopping in e-commerce in countries with cultural differences. This study aims to investigate Indonesian e-commerce further to complement and fill the limitations of previous research, the effect of relational bonds on consumer engagement via affective commitment on live stream shopping on e-commerce platforms in Indonesia.

Table 1. Assessment of Measurement Model

Variable	Indicator	Factor Loading	Composite Reliability	Average Variance Extracted (AVE)
Financial Bonds (FB)	FB-1	.669	.736	.483
	FB-4	.771		
	FB-5	.639		
Social bonds (SOB)	SOB-1	.791	.801	.503
	SOB-2	.650		
	SOB-3	.755		
	SOB-4	.629		
Structural bonds (STB)	STB-1	.777	.798	.499
	STB-2	.781		
	STB-3	.611		
	STB-4	.641		
Affective commitment to Broadcaster (AB)	AB-1	.724	.769	.527
	AB-2	.657		
	AB-4	.791		
Affective commitment to Platform (AP)	AP-1	.739	.814	.524
	AP-2	.657		
	AP-3	.767		
	AP-4	.727		
Consumer engagement (CE)	CE-1	.866	.907	.584
	CE-2	.804		
	CE-3	.786		
	CE-4	.722		
	CE-5	.737		
	CE-6	.649		
	CE-7	.766		

2. LITERATURE REVIEW

2.1. E-commerce & Live Stream Shopping

Electronic commerce (e-commerce) is defined as the process of buying and selling products, information, and services, via computer networks [7]. Some of the characteristics of e-commerce are; consumer relations generally interact individually and independently, the interaction system is only one-way, has the business goal of maximizing shopping efficiency [8], [9].

Buying and selling activities and transactions using live streaming media can be called live streaming commerce [10], (live stream shopping). In general, live stream shopping activities are usually used to sell products by broadcasting videos in real-time to show different views of the product and encourage viewers to buy it [6], [11], [12]. By watching live stream shopping, consumers can get dynamic and accurate product information, develop social relationships with fellow consumers and broadcasters while entertaining themselves while watching interesting broadcasters [13].

2.2. Stimulus-Organism-Response (SOR) model

The SOR model was introduced by Mehrabian & Russell [14] and later updated by Jacoby [15]. Stimuli can trigger a person's cognitive and emotional processes (organisms) and then lead to certain behaviors (responses) [16]. Many studies use SOR to explain consumer behavior in shopping contexts ranging from the retail, online shopping, website impulsive purchases, and intention to purchase in online retailing[17]–[20].

2.2.1. Relational Bonds

There are three types of relational bonds that are often the main focus in the literature: financial, social, and structural bonds [6]. Financial bonds (FB) are closely related to financial incentives such as price discounts, promo prices, and loyalty points. Social bonds (SOB), focus on interpersonal interactions such as interacting with live streams and identifying loyal buyers [21]. Structural bonds (STB) provide services that can add value to the live stream, such as providing information that is difficult to obtain elsewhere.

2.2.2. Affective Commitment

As a long-term desire to maintain a relationship, affective commitment plays an important role in building and developing a relationship [22]–[24]. There are several aspects involved in affective commitment in the context of retailing, namely brands, sellers, shop assistants (broadcasters) and online marketplaces (Platforms) [6]. This research focuses on two aspects, namely broadcasters (AB) and platform (AP), because these two aspects directly affect the consumer experience when following live streaming [6].

2.2.2. Consumer Engagement

Streaming feature for online shopping (Live Streaming Shopping) on e-commerce platforms (Tokopedia, Shopee, Lazada, etc.). The sampling technique was purposive sampling. Measurement model analysis was performed using confirmatory factor analysis (CFA), and structural analysis (hypothesis analysis) using structural equation modeling (SEM) with AMOS software. The total valid samples obtained in this study were 276 consumers who had watched live stream shopping on Indonesian e-commerce platforms.

3.2. Questionnaire & Measures

The data in this study were obtained by providing

Table 2. Path Analysis Result

Hypotheses	Path	Coefficient	t-value	p-value	Result
H1a	FB → AB	.038	0.38	.705	Not supported
H1b	FB → AP	.236	2.47	.013	Supported
H2a	SOB → AB	.864	3.89	<.001	Supported
H2b	SOB → AP	-.253	-0.98	.327	Not supported
H3a	STB → AB	-.089	-0.43	.670	Not supported
H3b	STB → AP	.451	2.26	.024	Supported
H4	FB → CE	-.013	-0.19	.851	Not supported
H5	SOB → CE	.019	0.1	.919	Not supported
H6	STB → CE	.119	0.79	.432	Not supported
H7a	AB → CE	.724	4.98	<.001	Supported
H7b	AP → CE	.162	1.56	.120	Not supported
H8	AB → AP	.518	3.5	<.001	Supported

FB: financial bonds, SOB: social bonds, STB: structural bonds, AB: affective commitment to broadcaster, AP: affective commitment to platform, CE: consumer engagement

Consumer engagement (CE) is the level of consumer participation and relationship with seller's offer or activity [12]. CE focuses on consumers and their needs, intending to provide more value than competitors by generating, disseminating, and responding to consumer needs. CE can also be used when trying to build trust and commitment in customer relationships [25]. CE also includes consumer involvement in various activities, not limited to searching, evaluating, and purchasing, or all consumer interactions with companies, but also consumer interactions with other consumers related to brands/companies [12].

online questionnaires which were distributed to e-commerce platform users who had used the live stream shopping feature in the last three months. Respondents were then asked to evaluate the level of related variables using a five-point Likert scale measured with (1) “strongly disagree” to (5) “strongly agree.” All measurement items have been pre-tested, and adapted to the context of live stream shopping on an e-commerce platform. Fourteen items of measurement of relational bonds were adopted from [26]–[28], eight items measuring affective commitment were adopted from [23] [29], seven items measuring consumer engagement were adopted from [12] [30].

3. RESEARCH METHOD

3.1. Sampling

The population is Indonesian e-commerce platform users who have used the live stream shopping feature. The criteria for respondents from this study are 18 years or older and have watched the Live

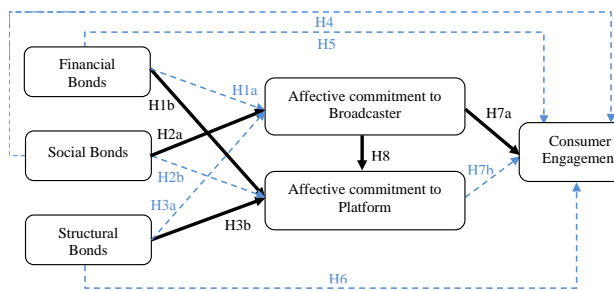


Figure 1. Result of structural model, Solid and dashed lines denote supported and unsupported hypotheses respectively

All path coefficients and hypotheses are summarized in Table 2.

SOB have a positive effect on AB, but not on AP. It supports H2a and rejects H2b. FB and STB have no effect on AB, rejecting H1a & H3a. However, FB and STB have a positive effect on AP, supporting the hypothesis H1b & H3b. All aspects of relational bonds (financial, social, & structural) have no effect on CE, thus rejecting H4, H5, and H6. The test results also show that AB has a significant effect on CE and also on AP, thus supporting H7a and H8. Meanwhile, AB has no effect on CE, rejecting H7b. The results of the

Table 3. Result of Mediation Analysis

Total effect			Indirect effect				
Path	Loading factor	p value	Path	Loading factor	p value	Result	
FB → CE	.121	.547	H9a	FB → AB → CE	.049	.749	Not supported
			H10a	FB → AP → CE	.068	.198	Not supported
SOB → CE	.676	.001	H9b	SOB → AP → CE	.929	.011	Supported
			H10b	SOB → AP → CE	-.061	.277	Not supported
STB → CE	.055	.586	H9c	STB → AP → CE	-.123	.646	Not supported
			H10c	STB → AP → CE	.140	.250	Not supported

FB: financial bonds, SOB: social bonds, STB: structural bonds, AB: affective commitment to broadcaster, AP: affective commitment to platform, CE: consumer engagement

4. RESULT & ANALYSIS

4.1. Measurement Model

By calculating the loading factor, composite reliability (CR) and average variance extracted (AVE) values, the measurement model is estimated. 0.5 was chosen as the threshold value that determines the validity of the item [31] [32], and there were 4 items that were deleted. In addition, only with CR alone, the researcher can conclude that the convergent validity of the construct is sufficient, even though the AVE is less than 0.5 which is the cause of error [33]. Because the CR value of the two variables is above 0.7, the internal reliability of the measurement can be accepted. All assessment related to the measurement model are presented in Table 1.

4.2. Structural Model & Hypotheses Testing

The results of the structural model analysis are described in Figure 1. From the model, it can be seen that in the dependent variable, the coefficient of determination (R²) is 0.659 for affective commitment to broadcasters, 0.698 for affective commitment to platform and 0.906 for consumer engagement. For simplicity, we dashed insignificant paths in the figure.

mediation hypothesis test show that from the two aspects of affective commitment, only AB has a mediating role. It mediates only in the relationship of SOB to CE. These results support hypothesis H9b, and reject hypotheses H9a, H9b, H10a, H11a, and H11b

5. DISCUSSION

This research studies the phenomenon of live stream shopping on Indonesian e-commerce platforms as one of the activities that can improve consumers' online shopping experience. This research was conducted to expand the scope of previous research [6] by examining the effect of relational bonds on consumer engagement on live stream shopping activities on the Indonesian e-commerce platform. We found that SOB have an indirect effect on CE through affective AB. Meanwhile, FB & STB only affect affective AP but have no effect on CE.

It is found that AB is influenced by SOB. This is in line with research [6]. [34] found that SOB have a positive effect on affective commitment. FB and STB were found to have no effect on AB, contradicts [6]. Commitment to salesperson is only influenced by interpersonally specific aspects of the seller [35]. In live stream shopping, FB is not one of them. STB can increase consumer trust [36], [37], including live stream shopping, [6]. Another study found that

consumer trust can increase affective commitment to the seller [35] [38]. It is possible that STB have indirect influence on the AB mediated by trust.

AP is influenced by FB and STB, in line with [6] [39] [40]. SOB have no effect on AB, contradicting previous research [6]. It is possible that the motivation of consumers to visit the e-commerce platform is to find the product you want to buy, and determine which seller to choose [41]. Socializing is not included in this motivation, thus is not associated with the platform. Consumer engagement is not directly affected by relational bonds, whether FB, SOB, & STB. FB does not directly affect CE, in line with research [6] [42]. This may be because most of the goods sold are experience goods, and are hard to judge just by their price [6] SOB & STB do not have a direct influence on CE, in line with previous studies [43], which found that personalization and responsiveness were not directly related to consumer engagement. In live stream shopping, SOB are closely related to personalization, and STB are also closely related to responsiveness, [27] [28] [43] [44] [45]. So, it can be concluded that SOB and STB do not directly influence CE in live stream shopping.

CE is influenced by AB, in line with [6], [46]. Meanwhile, is not influenced by AP, contradicts [6] [39] [40]. In the context of a live stream, the level of consumer relationship with the platform cannot lead to the consumer's desire to interact and participate in platform activities. It shows that consumer engagement is more social and interpersonal in live stream shopping on e-commerce platforms. Affective commitment to broadcaster has a significant positive effect on affective commitment to the platform, consistent with research [35] [47].

Almost all of H9 hypotheses are rejected, except for H9b. These results are in line with research [6]. Meanwhile, AB does not mediate between FB & STB on CE. Perhaps the commitment to the salesperson will only be influenced by interpersonally specific aspects [35], and financial bonds are not included in the relationship. In addition, the possibility of affective commitment to broadcaster can only be influenced by structural bonds through indirect relationships such as consumer trust. [35] [36] [37] [38]. The H10 mediation hypothesis test result showed that H10a, H10b, and H10c were rejected, contradicting [6]. It can happen because AP does not have a significant positive effect on CE. It causes the effects of relational bonds not to be transmitted to CE.

6. CONCLUSION

This study examines the effect of relational bonds on consumer engagement via affective commitment in Indonesian e-commerce live stream shopping. Using 266 valid online survey responses, the study found that SOB indirectly affects CE through AB. Meanwhile, FB & STB only affect AP but does not affect CE. The results of this study provide great insight for e-commerce operators, especially in the COVID-19 pandemic era where online shopping is on the high.

7. LIMITATION & FUTURE RESEARCH

As a relatively new phenomenon in the Indonesian e-commerce environment, it is necessary to conduct further research related to live stream shopping. Future research is suggested to use experimental or longitudinal forms to get a complete picture of the existing phenomena. This study generalizes e-commerce platforms but has not seen the differences on each platform specifically. [9] argues that consumers' intention to visit a commerce site depends on the features offered. Thus, it is recommended that further research be conducted to study further the role of feature moderation in live stream shopping

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