The relationship between e-trust and e-loyalty: The mediating role of e-satisfaction

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ABSTRACT

This investigation proposes to verify the effect of e-satisfaction and e-trust on e-loyalty and the impact of e-trust on e-satisfaction. Besides, it attempts to prove e-satisfaction as the mediating variable. Therefore, this investigation applies the quantitative design by formulating the hypotheses. Additionally, the users of Shopee, one of the e-commerce platforms in Indonesia, become the population in this investigation. Because its accurate number is unknown, this study uses snowball sampling. As a result, this technique can acquire 175 respondents from some cities and regencies in Indonesia. Because of hypothesis verification, this research applies the covariance-based structural equation model (CBSEM) to check the causal relationship based on the first, second, and third premises. Besides, this study employs the Sobel technique to prove the e-satisfaction mediating impact. After checking the hypotheses, this study effectively verifies three substances. Firstly, the more electronically satisfied and trusting the users are, the more electronically loyal they are. Secondly, the more virtually they believe, the more virtually they are gratified. Finally, e-satisfaction can partially mediate the association between e-trust and e-loyalty. Expressively, e-trust is the driver of e-satisfaction, causing e-loyalty; therefore, as an implication, this study suggests that this platform needs to keep e-trust by providing safe transactions and privacy data protection for the users.

Contribution/Originality: This study successfully finds that e-satisfaction partially mediates the relationship between e-trust and e-loyalty by using the CBSEM and Sobel techniques and looking at it from the point of view of Indonesian Shopee users. This condition is supported not only by the significant indirect effect of e-trust on e-loyalty through e-satisfaction but also by the substantial direct impact of e-trust on e-loyalty.

1. INTRODUCTION

Consuming products has become one of the human physiological needs (Robbins & Judge, 2022). To meet this need, traditionally, consumers buy goods directly from retailers in the market (Aryani et al., 2021). Nowadays, along with technological development, they purchase products on the e-trade displaying site (Aryani et al., 2021; Faraoni, Rialti, Zollo, & Pellicelli, 2019). The use of this display place has some benefits. Firstly, it provides numerous products at competitive prices; hence, customers only need to select the suitable ones based on their budget. Secondly, it saves their time in getting the selected ones. This model is called business-to-consumer (B2C) (Aryani et al., 2021). Besides the B2C model, the customers-to-customers (C2C) model becomes a medium for the e-commerce transaction platform

between individuals. Through this model, the buyers only need to search for, order, pay, and wait for the products from the individual sellers at their destination (Taher, 2021).

Shopee is one of the famous online buying platforms in Southeast Asia (Khaw, Teoh, Loo, Kam, & Fransiska, 2023) established in Singapore in 2015 (Jaipong, 2022) and proven by its availability in Malaysia (Chong, Chow, Chow, & Lim, 2023; Kee et al., 2023; Lim, Sook Fern, & Bhajan Singh, 2021; Yin, Saad, & Yaacob, 2022), Thailand (Jaipong, 2022), Vietnam (Tran, 2019), the Philippines (Bacay, Ramirez, Ramos, & Grimaldo, 2022), and Indonesia (Firmandani, Sya'bania, Abdani, & Madani, 2021). Operationally, it adopts e-commerce based on customer-to-customer and business-to-business models (Ernestivita & Djawoto, 2020; Yin et al., 2022). Like the other applications, people can utilize this Shopee platform on their smartphones as long as the internet connection exists (Zaato et al., 2023).

Research about commercial platforms focusing on the tendency of e-satisfaction towards e-loyalty is plentiful. They utilize the respondents from Jordan (Al-Adwan & Al-Horani, 2019), Palestine (Alkhateeb, 2020), Saudi Arabia (Alnaim, Sobaih, & Elshaer, 2022), South Korea (Hwang, 2022), Spain (Rodríguez, Villarreal, Valiño, & Blozis, 2020), India (Amulya, 2019; Mittal & Kaur, 2023), Indonesia (Kumbara, Limakrisna, Yulasmi, Lusiana, & Ridwan, 2023; Liani & Yusuf, 2021; Pandjaitan, Mahrinasari, & Hadianto, 2021; Valencia & Layman, 2021; Widayat, Kreatitin, Marsudi, & Wijaya, 2022; Widodo & Yosepha, 2022; Yulian & Moko, 2022), and Thailand (Phromlert, Deebhijarn, & Sornsaruht, 2019). However, their outcome is not consistent, as shown by a positive sign (Al-Adwan & Al-Horani, 2019; Alkhateeb, 2020; Alnaim et al., 2022; Amulya, 2019; Hwang, 2022; Kumbara et al., 2023; Liani & Yusuf, 2021; Mittal & Kaur, 2023; Pandjaitan et al., 2021; Rodríguez et al., 2020; Valencia & Layman, 2021; Widayat et al., 2022; Widodo & Yosepha, 2022; Yulian & Moko, 2022) and a pointless propensity (Phromlert et al., 2019).

Besides, there are numerous studies concerning the inclination of e-trust towards e-loyalty. They employ respondents from Jordan (Al-Adwan & Al-Horani, 2019), Italy (Faraoni et al., 2019), the United States (Tran & Strutton, 2020), South Africa (Mofokeng, 2023), India (Amulya, 2019; Mittal & Kaur, 2023), Indonesia (Kumbara et al., 2023; Liani & Yusuf, 2021; Widodo & Yosepha, 2022; Yulian & Moko, 2022), and Saudi Arabia (Alnaim et al., 2022). Unfortunately, their results are still mixed. For example, Al-Adwan & Al-Horani (2019), Amulya (2019), Faraoni et al. (2019), and Tran and Strutton (2020) exhibit a positive sign, followed by other scholars (Alnaim et al., 2022; Liani & Yusuf, 2021; Mittal & Kaur, 2023; Mofokeng, 2023; Widodo & Yosepha, 2022). Unfortunately, Yulian and Moko (2022) and Kumbara et al. (2023) declare a meaningless tendency.

Additionally, several investigations of the propensity of e-trust towards e-satisfaction are available. They utilize the respondents from Jordan (Al-Adwan & Al-Horani, 2019), Saudi Arabia (Alnaim et al., 2022), Malaysia (Chong et al., 2023; Kee et al., 2023; Lim et al., 2021), Oman (Taufiq-Hail et al., 2023), India (Mittal & Kaur, 2023), and Indonesia (Huda & Anisa, 2020; Kumbara et al., 2023; Liani & Yusuf, 2021; Prasetyo & Yusran, 2022; Rahmania & Wahyono, 2022; Widodo & Yosepha, 2022). Regrettably, their result is still mixed, as exhibited by a positive sign (Al-Adwan & Al-Horani, 2019; Alnaim et al., 2022; Huda & Anisa, 2020; Kee et al., 2023; Kumbara et al., 2023; Liani & Yusuf, 2021; Lim et al., 2021; Mittal & Kaur, 2023; Rahmania & Wahyono, 2022; Taufiq-Hail et al., 2023; Widodo & Yosepha, 2022); negative mark (Chong et al., 2023); and insignificant inclination (Prasetyo & Yusran, 2022).

Based on these contradictions from the previous research results, our study investigates the inclination of e-satisfaction and e-trust towards e-loyalty and the tendency of e-trust towards e-loyalty based on the perceptions of Shopee users in some areas of Indonesia. Academically, our study is different because it uses the Sobel technique in the CBSEM to check e-satisfaction as the mediator, even though it uses the same variables in the study of Liani and Yusuf (2021). Regardless of a similar sub-structural model from Al-Adwan and Al-Horani (2019) and Mittal and Kaur (2023), our study differs from their model, applying partial least square-based SEM. Also, our study contrasts with Amulya (2019), Faraoni et al. (2019), Phromlert et al. (2019), Tran and Strutton (2020), Pandjaitan et al. (2021), Valencia and Layman (2021), Alnaim et al. (2022), Hwang (2022), and Mofokeng (2023) not employing the Sobel technique to prove the mediating effect but using CBSEM.

After the introduction, the structure of this paper is divided into five sections. The second section reviews the literature as the foundation for developing the hypotheses. Section three demonstrates the research methods, covering the variable definition and the technique to take the data, sample the respondents, and analyze their variable-associated responses. Sections four and five exhibit the statistical results and discussion, respectively. The final section presents implications, conclusions, and limitations.

2. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

2.1. E-Satisfaction and E-Loyalty

From India, Amulya (2019) and Mittal and Kaur (2023) infer a positive influence of e-satisfaction on the e-loyalty of 286 people utilizing e-commercial websites and the viewpoint of 261 users of food delivery applications, respectively. Alkhateeb (2020) indicates this situation when learning about customers of telecommunication services in Palestine. Rodríguez et al. (2020) exhibit this same propensity after studying fashion retailers in Spain using the B2C model. Pandjaitan et al. (2021) confirm this evidence when investigating the users of virtual hotel operators in Bandar Lampung. Employing users of Shopee in Indonesia, Valencia and Layman (2021) and Widayat et al. (2022) exhibit a similar propensity.

From Jordan, Al-Adwan and Al-Horani (2019) depict a positive relationship between e-satisfaction and e-loyalty among 473 online shoppers. After studying 670 visitors booking a hotel via online travel agent (OTA) platforms in Saudi Arabia, Alnaim et al. (2022) affirm that the more electronically satisfied the users are, the more electronically loyal they are. Employing 85 users of Gojek in East Jakarta, Indonesia, Widodo and Yosepha (2022) confirm the same evidence. Besides, Hwang (2022) affirms a similar fact after researching 1,307 online shoppers in South Korea. Yulian and Moko (2022) document an identical tendency through their study with 150 e-commercial fashion users in Surabaya. Besides, Liani and Yusuf (2021) and Kumbara et al. (2023) concluded a similar propensity when employing 380 customers of the GOJEK e-wallet and 100 users of the DANA e-wallet, respectively. Hence, denoting these proofs, this research proposes hypothesis one.

H_1: *The positive tendency of e-satisfaction towards e-loyalty happens.*

2.2. E-Trust and E-Loyalty

Using the perception of 473 online shoppers in Jordan, Al-Adwan and Al-Horani (2019) illustrate a positive tendency of e-trust towards e-loyalty. Amulya (2019) and Mittal and Kaur (2023) concluded this positive relationship after investigating 286 users of e-commercial websites and 261 individuals ordering food through the applications in India one-to-one. From Italy, Faraoni et al. (2019) verify this situation based on research on the consumers of e-grocery retailers. Equally, Tran and Strutton (2020) prove this positive tendency based on two communication techniques consumers use with their e-retailers: sending emails and posting responses on Facebook. Similarly, based on the perception of 670 visitors booking a hotel in Saudi Arabia through OTA platforms, Alnaim et al. (2022) exhibit this fact. Moreover, Widodo and Yosepha (2022) display a similar tendency after investigating Gojek users in East Jakarta, Indonesia. Furthermore, Mofokeng (2023) demonstrates this relationship when researching e-commerce users in South Africa. Thus, mentioning these proofs, this research proposes hypothesis two.

H_2: *The positive inclination of e-trust towards e-loyalty occurs.*

2.3. E-Trust and E-Satisfaction

Employing 473 Jordanian electronic shoppers, Al-Adwan and Al-Horani (2019) illustrate the positive impact of e-trust on e-satisfaction. In their study, Lim et al. (2021) present a positive relationship between perceived trust and satisfaction among 200 Malaysian users of Shopee: 77 females and 123 males. Similarly, Kee et al. (2023) indicate the equivalent evidence based on the perspective of 200 Malaysian users of Shopee: 49 women and 151 men. From Indonesia, Huda and Anisa (2020) demonstrate that trust positively influences the satisfaction of 132 customers of J

& T in Pasuruan Regency. Similarly, with 98 consumers of the Bukalapak application in Indonesia as their sample, Rahmania and Wahyono (2022) confirm this circumstance. Furthermore, Alnaim et al. (2022) affirm this positive propensity based on the perception of hotel visitors via the OTA platforms in Saudi Arabia. Similarly, it aligns with Liani and Yusuf (2021) and Widodo and Yosepha (2022) after investigating Gojek users in Indonesia, Mittal and Kaur (2023) using the customers ordering food on the applications in India, followed by Kumbara et al. (2023) investigating the 100 users of DANA e-wallet in Indonesia, and Taufiq-Hail et al. (2023) learning about 321 users of delivery services in Oman. Therefore, based on these indications, this research proposes hypothesis three.

H₃: The positive propensity of e-trust towards e-satisfaction transpires.

2.4. Research Model

The research model is obtainable in the first figure by mentioning the formulated hypotheses from the preceding sections.
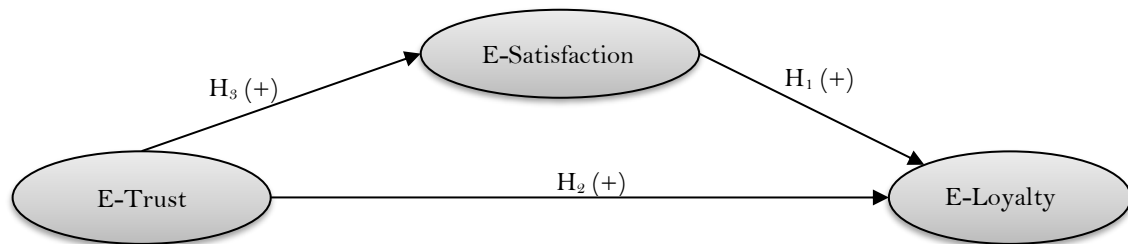

Figure 1. Research model.

3. METHODS

3.1. Variable Definition

By mentioning Figure 1, this research treats e-trust as an exogenous variable. Besides, it employs e-satisfaction and e-loyalty as endogenous variables. Moreover, their related indicators are in Table 1.

Table 1. The indicators to measure e-trust, e-loyalty, and e-satisfaction.

Variable	Indicator	Source
E-trust	I safely transact through the Shopee platform (E-TRUST1). The Shopee platform protects my privacy (E-TRUST2). I believe that the Shopee platform is honest (E-TRUST3). The Shopee platform serves me the best (E-TRUST4). I can count on the Shopee platform to meet my needs (E-TRUST5).	Adapted from Saoula et al. (2023)
E-satisfaction	The Shopee platform meets my expectations (E-SAT1). My decision to use the Shopee platform is sagacious and exact (E-SAT2). I am glad to be utilizing the Shopee platform (E-SAT3).	Adapted from Rodríguez et al. (2020)
E-loyalty	I keep using the Shopee platform (E-LOY1). I doubt other platforms, except for Shopee (E-LOY2). I always try the Shopee platform when buying something (E-LOY3). Shopee is my best retail platform (E-LOY4). Shopee is my preferred platform (E-LOY5).	Modified from Anderson and Srinivasan (2003)

3.2. Method to Take the Data

In this study, a survey is used to acquire the data. Through the survey, according to Bougie and Sekaran (2020), the distribution of the questionnaire occurs, and the five-point Likert scale measures the collected responses to the indicators, starting from 1 to 5 to declare disagreement until agreement.

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3.3. Methods to Obtain the Samples

The population comprises users of the Shoppe platform in some places in Indonesia. Its size is unidentified; thus, this study uses snowball sampling, as Pandjaitan et al. (2021) and Sahabuddin and Hadianto (2023) utilize. According to Hartono (2014), this technique collects respondents based on the network.

3.4. Methods to Analyze Data

This research applies the CBSEM to analyze the responses. This situation is due to the formulated hypothesis examination and latent variable utilization, as highlighted by Ghozali (2021) and reinforced by scholars such as Amulya (2019), Faraoni et al. (2019), Phromlert et al. (2019), Pandjaitan et al. (2021), Tran and Strutton (2020), Alnaim et al. (2022), Hwang (2022), Widayat et al. (2022), and Mofokeng (2023). The CBSEM application in this study differs from Al-Adwan and Al-Horani (2019), Alkhateeb (2020), Rodríguez et al. (2020), Lim et al. (2021), Rahmania and Wahyono (2022), Mittal and Kaur (2023) and Taufiq-Hail et al. (2023) employing partial least square-based SEM. Besides, this situation is dissimilar to Huda and Anisa (2020), Liani and Yusuf (2021), Widodo and Yosepha (2022), and Kee et al. (2023) utilizing a multiple regression model.

The first and second equations are the intended CBSEM in this research context. Equation 1 describes e-satisfaction (E-SAT) and e-trust (E-TRUST) as the functions of e-loyalty (E-LOY). Meanwhile, Equation 2 shows E-TRUST as the function of E-SAT.

$$\text{E-LOY} = \beta_1.\text{E-SAT} + \gamma_1\text{E-TRUST} + \zeta_1 \qquad (1)$$
$$\text{E-SAT} = \gamma_2\text{E-TRUST} + \zeta_2 \qquad (2)$$

β_1 is the path coefficient for the endogenous variable with the first standard error (SE_1). Meanwhile, γ_1 and γ_2 are the path coefficients for the exogenous variable with the third standard error (SE_3) and the second standard error (SE_2).

The responses of participants to the items have to be valid and reliable. Therefore, this study validates them through confirmatory factor analysis by contrasting the loading factor (LF) with 0.6 and the average variance extracted (AVE) with 0.5. An accurate response will happen if they exceed each cut-off point (Dash & Paul, 2021). For reliability, this study compares the composite reliability with 0.7 as the cut-off value (Hair, Black, Babin, & Anderson, 2019) and Cronbach Alpha with 0.7 (Ghozali, 2021). A reliable answer will occur if they exceed 0.7 (Ghozali, 2021; Hair et al., 2019).

Subsequently, this investigation examines the appropriateness of suitability by considering various measures, including the Chi-square divided by degree of freedom (CMIN/DF), normed fit index (NFI), Tucker-Lewis index (TLI), and comparative fit index (CFI), as elucidated by Dash and Paul (2021) and Baharum et al. (2023), along with their corresponding standards outlined in Table 2.

Table 2. The cut-off points of the kindness of fit.

Quantification	Required cut-off point	Source
CMIN/DF	Less than 3	Dash and Paul (2021)
NFI	Exceeding 0.9	Dash and Paul (2021)
TLI	Exceeding 0.9	Dash and Paul (2021)
CFI	Exceeding 0.9	Baharum et al. (2023)

Next, this study examines the planned hypotheses. The first and second hypotheses ($\beta_1 > 0$ and $\gamma_1 > 0$) will be acceptable if the one-tailed probability of the critical ratio (CR) is less than the significance level (α) of 5%. The third one ($\gamma_2 > 0$) will be tolerable if the one-tailed probability of the CR is below α of 5%. Finally, using the Sobel test, this research proves the mediating effect of e-satisfaction on the relationship between e-trust and e-loyalty. This test application refers to Al-Adwan and Al-Horani (2019), Maharsi, Njotoprajitno, Hadianto, and Wiraatmaja (2021), Widayat et al. (2022), Widodo and Yosepha (2022), and Sahabuddin and Hadianto (2023).

Furthermore, the Sobel test in this research context is done through some phases, as Maharsi et al. (2021) and Sahabuddin and Hadianto (2023) explain. The multiplication between γ_2 and β_1 ($\gamma_2 * \beta_1$) is the first step. Secondly, the calculation of Sobel's standard error (SE) is conducted based on the formula in Equation 3.

$$\text{SE of Sobel} = \sqrt{(\gamma_2^2 \text{SE}_1^2) + (\beta_1^2 . SE_2^2) + (SE_1^2 . SE_2^2)} \qquad (3)$$

Thirdly, the Z-statistic for the Sobel based on the fourth equation gets calculated by mentioning Equation 4.

$$\text{Z-statistic of Sobel} = \frac{\gamma_2 * \beta_1}{SE \ of \ Sobel} \qquad (4)$$

Fourthly, this study uses Microsoft Excel to seek the probability (2-tailed) of the Z-statistic by denoting this formula in Equation 5.

$$NORM.DIST(Z - statistic; 0; 1; \ FALSE) \quad (5)$$

NORM.DIST is the command in Microsoft Excel to know the Z-statistical probability. Zero and one symbolize the average and standard deviation to shape a standard normal distribution. By writing FALSE, the selection of the probability mass function ensues. Fifth, we want to find the mediating effect by comparing the 2-tailed probability of the Z-statistic with a 5% significance level. If this value is still below 5%, this impact will occur.

According to Kelloway, cited in Alnaim et al. (2022), mediation has two types: full and partial. In this research context, the full impact will happen if the mediating or indirect effect is substantial, but the direct impact is meaningless. The partial will occur if both influences are significant.

4. RESULT

4.1. The Respondent Profiles

In this research, the survey between May and August 2023 efficaciously got 175 respondents. Furthermore, gender, age, occupation, and location become tools to categorize them. Their classification, denoting the total, is available in Table 3. The leading respondents are female based on gender (54.29%), between 18 and 25 years old based on age (88%), undergraduate students based on occupation (87.43%), and from Bandung City and Regency based on their domicile (83.43%).

Table 3. Respondent profiles.

Profile	Description	Total	Portion
Gender	Female	95	54.29%
	Male	80	45.71%
Age	18-25	154	88.00%
	26-30	4	2.29%
	31-40	11	6.29%
	41-55	6	3.43%
Occupation	Employee	6	3.43%
	Entrepreneur	1	0.57%
	Lecturer	12	6.86%
	Librarian	1	0.57%
	Medical doctor	2	1.14%
	Undergraduate student	153	87.43%
Domicile	Bandung city and regency	146	83.43%
	Bandar Lampung city	5	2.86%
	Batam city	1	0.57%
	Bekasi city and regency	2	1.14%
	Bogor regency	1	0.57%
	Central Buton regency	1	0.57%
	Cianjur city	1	0.57%

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Profile	Description	Total	Portion
	Cimahi city	9	5.14%
	Cirebon city and regency	3	1.71%
	Depok city	1	0.57%
	Langkat regency	1	0.57%
	Medan city	1	0.57%
	Purwakarta regency	2	1.14%
	Sumedang regency	1	0.57%

4.2. The Testing Result of Validity and Reliability

Table 4 shows the confirmatory factor analysis output based on the loading factor. In this table, all LFs are above 0.5 from E-TRUST until E-TRUST5, i.e., 0.754, 0.716, 0.872, 0.880, and 0.657, followed by LFs from E-SAT1 to E-SAT3, i.e., 0.818, 0.898, and 0.569. Also, the LFs from E-LOY1 to E-LOY5 are more extensive than 0.5: 0.792, 0.632, 0.889, 0.892, and 0.769. Considering this evidence, the precise response to the items exists, supported by the AVE for e-trust, e-satisfaction, and e-loyalty, encompassing 0.5: 0.610, 0.600, and 0.641. Furthermore, the composite reliability for e-trust, e-satisfaction, and e-loyalty is 0.855, 0.813, and 0.898, with their Cronbach Alpha of 0.878, 0.788, and 0.892, one-to-one. Because they are higher than 0.7, the answer is consistent.

Table 4. Loading factor, AVE, composite reliability, and Cronbach Alpha for e-trust, e-satisfaction, and e-loyalty.

Variable	Indicator	Loading factor	AVE	Composite reliability	Cronbach alpha
E-trust	E-TRUST1	0.754	0.610	0.885	0.878
	E-TRUST2	0.716			
	E-TRUST3	0.872			
	E-TRUST4	0.880			
	E-TRUST5	0.657			
E-satisfaction	E-SAT1	0.818	0.600	0.813	0.788
	E-SAT2	0.898			
	E-SAT3	0.569			
E-loyalty	E-LOY1	0.792	0.641	0.898	0.892
	E-LOY2	0.632			
	E-LOY3	0.889			
	E-LOY4	0.892			
	E-LOY5	0.769			

4.3. The Goodness of Fit Detection Result

Before examining the hypotheses, this study notices the virtuousness of the model's fit, and Table 5 exhibits the result. Based on CMIN/DF, this value is below 3: 2.425. Therefore, the data supports the model. Also, NFI, TLI, and CFI are above 0.9: 0.904, 0.926, and 0.941, confirming this suitability.

Table 5. The kindness of fit recognition results.

Measurement	Value	Suggested value	Interpretation
CMIN/DF	2.425	Below 3	Data supports the model.
NFI	0.904	Upper than 0.9	Data supports the model.
TLI	0.926	Upper than 0.9	Data supports the model.
CFI	0.941	Upper than 0.9	Data supports the model.

4.4. The Estimation Result of the Research Model

Table 6 presents the research model estimation result of the positive path coefficients of 0.520, 0.461, and 0.944 for E-SAT → E-LOY, E-TRUST → E-LOY, and E-TRUST → E-SAT. Also, their probability (1-tailed) of the critical

ratio is below 5%: 0.016, 0.037, and 0.000. Therefore, the first, second, and third hypotheses are supportable: E-satisfaction and e-trust positively affect e-loyalty. Meanwhile, e-trust positively influences e-satisfaction.

Table 6. The estimation result of the CBSEM.

Hypothesis	Cause and effect relationship	Path coefficient	Standard error	Critical ratio	Probability	
					2-tailed	1-tailed
One	E-SAT → E-LOY	0.520	0.240	2.163	0.031	0.016
Two	E-TRUST → E-LOY	0.461	0.258	1.787	0.074	0.037
Three	E-TRUST → E-SAT	0.944	0.098	9.604	0.0000	0.000

The Sobel method is used in this study to show that e-satisfaction has a mediating effect. The results are shown in Table 7. The 2-tailed probability of the Z-statistic of the Sobel is 0.044. This value is less than the 5% significance level; consequently, the significant mediation effect of e-satisfaction on the association between e-trust and e-loyalty occurs. The type of this mediation is partial, as supported by this significant mediating influence ($\gamma_2 * \beta_1$) of 0.491 (see Table 7) and the significant direct impact of e-trust on e-loyalty ($\gamma_1 = 0.461$ with t-statistical probability (1-tailed) of 0.037) (see Table 6).

Table 7. The verification result of the mediating effect based on the Sobel testing: E-TRUST → E-SAT → E-LOY.

Associated path	Path coefficient (PC)	The standard error (SE) of PC	Indirect effect ($\gamma_2 * \beta_1$)	The SE of Sobel	Z-statistic	2-tailed probability
E-TRUST → E-SAT	0.944	0.098	0.491	0.233	2.103	0.044
E-SAT → E-LOY	0.520	0.240				

Note: The asterisk (*) means multiplication.

5. DISCUSSION

Based on the first hypothesis test, e-satisfaction positively affects e-loyalty. For customers, e-satisfaction describes their positive valuation, mentioning the pleasant experience of the service after utilizing the e-commercial platform. This experience increase their loyalty to this platform. Therefore, this study supports Al-Adwan and Al-Horani (2019) demonstrating this positive relationship between e-satisfaction and e-loyalty of online shoppers in Jordan, as well as Amulya (2019) and Mittal and Kaur (2023), showing a positive inclination when investigating users of virtual platforms and food delivery applications in India, respectively. This positive confirmation also comes from Alkhateeb (2020) with consumers of telecommunication services in Palestine and Rodríguez et al. (2020) with their fashion retailers in Spain. Besides, this study verifies Pandjaitan et al. (2021) and Alnaim et al. (2022) employing travelers reserving hotels in Bandar Lampung and Saudi Arabia through virtual hotel operators and online travel agents. This positive relationship affirms Valencia and Layman (2021), Widayat et al. (2022) and Yulian and Moko (2022) utilizing online shoppers in Indonesia, and Hwang (2022) using the same buyers in South Korea, followed by scholars from Indonesia, i.e., Widodo and Yosepha (2022) and Liani and Yusuf (2021) occupying GOJEK users, and Kumbara et al. (2023) applying DANA e-wallet users.

Based on the second hypothesis test, this study validates that e-trust positively affects e-loyalty. According to Tran and Strutton (2020), customers with high confidence in the e-commerce platform commit to repurchasing goods in the future. Therefore, this situation decreases the efforts and costs of seeking new consumers. With this enlightenment, this study aligns with Al-Adwan and Al-Horani (2019), Amulya (2019), Liani and Yusuf (2021), Alnaim et al. (2022), Widodo and Yosepha (2022) and Mittal and Kaur (2023) declaring a positive relationship between e-trust and e-loyalty. Additionally, Faraoni et al. (2019), Tran and Strutton (2020) and Mofokeng (2023), using online shoppers in South Africa between the ages of 18 and 65, confirmed this tendency using one-to-one consumer perspectives from e-retailers in Italy and the United States.

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Based on the third hypothesis test, this study proves that e-trust positively affects e-satisfaction. According to Tran and Strutton (2020), e-trust is the confidence of consumers to receive promise fulfillment from e-commerce. Completed promises cause the customer to be loyal. Hence, this research result supports Al-Adwan and Al-Horani (2019), Alnaim et al. (2022), Liani and Yusuf (2021), Widodo and Yosepha (2022), Mittal and Kaur (2023) and Kumbara et al. (2023), demonstrating a positive association between e-trust and e-loyalty. This evidence is verified by Huda and Anisa (2020) applying the users of delivery services in Indonesia, Rahmania and Wahyono (2022) utilizing the online shoppers of Bukalapak in Indonesia; Lim et al. (2021) and Kee et al. (2023) using Malaysian shoppers of Shopee; and using the customers of the delivery service in Oman.

Additionally, the partial mediating effect of e-satisfaction on the association between e-trust and e-loyalty happens. Interestingly, this effect is more extensive than the direct effect. By following this pattern, this study aligns with Mittal and Kaur (2023) demonstrating the higher mediating effect of e-satisfaction than the direct impact of e-trust on e-loyalty of the users of online food delivery applications in North India, and Alnaim et al. (2022) showing that the effect of e-trust on e-loyalty through e-satisfaction is beyond the impact of e-trust on e-loyalty when researching customers booking hotels in Saudi Arabia.

6. IMPLICATION, CONCLUSION, AND LIMITATION

6.1. Implication

This research finds that e-trust is the motorist for the Shopee platform to satisfy its users, leading to e-loyalty. It happens because online transactions through a virtual platform are always associated with risk. Therefore, it is practically recommended that this platform provide secure transactions and privacy protection for sellers and purchasers.

6.2. Conclusion

This study concludes with some essential matters. Firstly, e-satisfaction positively affects customer e-loyalty. Consumers who have fulfilled expectations based on their experience after using the electronic platform tend to be loyal. Secondly, e-trust positively affects e-satisfaction and e-loyalty. Consumers trusting the electronic platform are glad and loyal as long as this platform guarantees a secure transaction and protects their private data. Finally, e-loyalty can mediate the relationship between e-trust and e-loyalty. This situation indicates that e-trust is the key for this online platform to survive and compete in business because it can generate e-satisfaction and create e-loyalty sequentially.

6.3. Limitation

This research only uses e-trust as one antecedent of e-satisfaction and e-loyalty of the online platform and citizens in a single country. By mentioning the first border, this study proposes that subsequent scholars add their determinants, such as website quality, e-commerce reputation, consumer experience, service quality, social value, experiential marketing, and service recovery. Moreover, to address the second limit, this study suggests that subsequent researchers consider using individuals from certain countries, such as Indonesia, Malaysia, and Singapore, as representative samples. In addition, they are expected to include them as a moderating variable, as investigated through the sub-group analysis.

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