



Mediation of Satisfaction in Service Quality and Trust In Students' Loyalty: Empirical Evidence From PTM Indonesia

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ABSTRACT: This study aimed to determine the effect of service quality and trust on customer satisfaction and their impact on their loyalty at of Perguruan Tinggi Muhammadiyah Indonesia. This study involved 230 active students of Perguruan Tinggi Muhammadiyah (PTM) as samples, and the selection was determined based on probability sampling techniques with the proportional method. Meanwhile, the data were analyzed using Partial Least Square (PLS) method. The study results revealed that service quality positively affects customer satisfaction, while trust has a positive and significant effect on customer satisfaction. Service quality has a positive and significant effect on the student's loyalty, whereas customer satisfaction positively and significantly affects the student's loyalty. Furthermore, service quality has a positive and significant effect on loyalty through customer's satisfaction and trust has a positive and significant effect on loyalty through customer satisfaction. Meanwhile, trust has a negative and insignificant effect on the student's loyalty at PTM College. Based on these results, the variables that greatly affect students' loyalty at PTM College are service quality and customer satisfaction. It concludes that improving students satisfaction will enhance their loyalty to PTM College.

KEYWORDS: service quality, trust, customer satisfaction, customer loyalty

*Received 20 Dec, 2021; Revised 28 Dec, 2021; Accepted 31 Dec, 2021 © The author(s) 2021.
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I. INTRODUCTION

Loyalty is expected behavior associated with a product or service, described as an attitude that shows the desire to stay or remain in the bond of an emotionally formed relationship. There will be high customer loyalty when a product or service is considered capable of providing the customers' highest satisfaction, making them reluctant to switch to other products. Customer loyalty is shown through repeat purchases the customers make because of a commitment to a product or brand from the company (Kottler, 2007). Indeed, loyal customers are beneficial for the company and function as marketers who can recommend the company's products to those closest to them or to people seeking information. Service users' loyalty will provide positive feedback to the service providers, such as recommending it to family, colleagues, and other colleagues.

Meanwhile, customer loyalty in the educational world is closely related to student loyalty, which is an essential aspect of higher educational institutions' existence. Highly loyal students are the higher educational institution's assets because they will provide positive recommendations and encourage friends, relatives, and other communities to use the educational services they have experienced with. If a tertiary institution provides a higher degree of educational service, loyal students will be more likely to return to study at the same tertiary institution. Students who feel their expectations can be fulfilled will feel satisfied and have a positive perception of educational services' quality. This positive perception forms a sense of satisfaction, impacting student loyalty, resulting in their willingness to provide recommendations to others.

Concerning student loyalty, Daryanto et al. (2014) found that service quality and satisfaction significantly affect student loyalty, but trust does not. It is not influenced by service quality, instead of student satisfaction, while service quality affects student satisfaction. This finding is supported by Saoud and Sansou (2019), who argued that students' satisfaction could explain their loyalty to higher education. Srivastava et al. (2015) through a literature study, Ahmed et al. (2014), Gull and Bricci et al. (2016) in the distribution sector, Mohsan et al. (2011), Martha et al. (2018), Odunlami and Matthew (2015) in the banking sector, Awan and

Rehman (2014) found that satisfaction has a positive effect on consumer loyalty. However, the results of research conducted by Putra (2016) showed that satisfaction did not significantly affect loyalty.

Research on loyalty has also been carried out by Osman et al. (2016) who found that service quality directly affects customer satisfaction. Likewise, research on customer loyalty was conducted by Liu and Wang (2017), Kheng et al. (2010), and Putra (2013) on the financial sector; Basir et al. (2015) in the marine transportation sector; Poku et al. (2013) on hotel services; and Mahmud et al. (2013) on commercial aviation industry services.

In contrast to these studies, a study conducted by Krey et al. (2014); and research conducted by Jhahansahi et al. (2011); and Anand and Selvaraj (2012), found that service quality did not have a direct impact on customer loyalty, but needs to be mediated by customer satisfaction. Moreover, research conducted by Chandra et al. (2018) on the education sector also found that service quality did not directly affect student loyalty. However, service quality can increase student satisfaction and ultimately have an impact on student loyalty. Students who are satisfied with the services provided by the campus will become more loyal. For private educational institutions, improving service quality is an important part, especially in campus facilities and premises, such as classroom availability, cleanliness, and comfort, and improving the quality of administrative data. Annamdevula and Belakonda (2016) prove the role of student satisfaction as a mediator between service quality and student loyalty. Service quality has become an essential input for student satisfaction. Osman et al. (2016) found that service quality positively and significantly affects bank customer loyalty with satisfaction as an intervening variable.

Research conducted by Perin et al. (2012) found that student trust positively impacted their commitment and loyalty; their commitment has a positive impact on their loyalty. Their perceptions of service quality have a positive impact on their commitment and trust. These findings also revealed that student loyalty was indirectly influenced by perceived quality. Yousaf, Mishra, and Bashir (2018) argued that creating trust through effective services is a way to enhance loyalty. The dimensions of reliability and integrity are determinants in creating loyalty. The research results by Brilliant and Achyar (2013) found that customer loyalty was influenced by customer trust. This finding is also in agreement with the research results on the telecommunications industry conducted by Hayati (2011), Upamannyu et al. (2015) and Hasan et al. (2014) on the banking sector, Chinomona and Dubihlela (2014) on shops, as well as a literature review conducted by Utami (2015).

Daryanto et al. (2014) and Bricci et al. (2016) found that customer satisfaction in Portugal's distribution sector is directly affected by customer trust. In contrast to these findings, Sampaio et al. (2012) found that trust did not affect student loyalty in their study conducted in Brazil. Furthermore, Haron et al. (2020) found that trust partially mediated consumer satisfaction with consumer loyalty. Meanwhile, the research conducted by Victor et al. (2015) showed that trust influenced consumer loyalty through satisfaction, but the influence was insignificant.

Given the above-varied results of the previous studies on this area, it is indispensable to revisit the effect of service quality and trust on customer satisfaction and its impact on student loyalty. Thus, this study aimed to examine and investigate empirical evidence regarding service quality and trust, customer satisfaction, and its impact on loyalty comprehensively.

II. LITERATURE REVIEW

This section provides intense discussions on the relationship among the relevant factors presented in the background.

2.1. THE RELATIONSHIP BETWEEN SERVICE QUALITY AND CUSTOMER SATISFACTION

Customer satisfaction is one of the critical factors that connect the company with customers in the long run. According to Kotler & Armstrong (2017, p. 39), satisfaction or dissatisfaction is the feelings or perception of pleasure or disappointment that originate from comparing a product's performance with personal desires. One of the influencing factors in customer satisfaction is service quality to which, all customers demand that the product or service in use can deliver satisfaction. Therefore, every organization is always required to prioritize the quality of its services. Customer assessment of service quality results is obtained from comparing expectations between before service with actual service. Service is considered satisfactory if customers feel the service they receive exceeds or is equal to their expectations, and vice versa. Osman et al. (2016) found that service quality had a direct effect on enhancing customer satisfaction. Based on the elaboration above, the following hypothesis is proposed.

H1 = Service quality has a positive effect on customer satisfaction.

2.2. THE RELATIONSHIP BETWEEN SERVICE QUALITY AND CUSTOMER LOYALTY

Khan and Fasih (2014) considered service quality a significantly contributing factor to customer satisfaction and loyalty. The results of their research indicated that service quality and all of its dimensions were significant and positive. On the other hand, Subrahmanyam and Raj (2014) showed that service quality had been found to be an essential input for student satisfaction. Another research conducted by Li (2013) at private tertiary institutions in Taiwan also revealed that service quality had a positive effect on student satisfaction. Thus, the proposed second hypothesis in this study is as follows:

H2 = Service quality has a positive effect on customer loyalty.

2.3. THE RELATIONSHIP BETWEEN TRUST AND CUSTOMER SATISFACTION

Trust is the thought, feeling, emotion, or behavior shown when customers feel they can rely on the producer or service provider of the product they use (Leninkumar, 2017). Customer trust is closely related to satisfaction with a product or service. The results of research conducted by Bricci et al. (2016) showed that customer trust had a direct positive effect on customer satisfaction. Likewise, the research of Gul (2014) proved that trust had a significant effect on satisfaction. Thus, the third hypothesis proposed is as follows:

H3 = Trust has a positive effect on customer satisfaction.

2.4. THE RELATIONSHIP BETWEEN TRUST AND LOYALTY

The results of previous study indicated that trust had a positive and significant effect on customer loyalty. It infers that the higher the trust a company has in managing its business units will increase customer loyalty. Given high credibility supported by the company's reliability, it will directly enhance customer loyalty. The research results by Bozbay and Bazlar (2020) found that brand trust had a significant effect on brand loyalty. Trustworthy customers will recommend brands they trust to others. Daryanto, Sukandar and Yusuf (2014), Bricci et al. (2016) found that customer satisfaction in the distribution sector in Portugal is directly influenced by customer trust. Moreover, trust is the primary determinant of loyalty as stated by Menidjel et al. (2017); Yousaf, Mishra, and Bashir (2018) Thus, the fourth hypothesis is proposed as follows:

H4 = Trust has a positive effect on customer loyalty.

2.5. THE RELATIONSHIP BETWEEN CUSTOMER SATISFACTION AND LOYALTY

The extent to which customer satisfaction or customer dissatisfaction exists can be determined from the subsequent customer behavior. If a customer who consumes a product is satisfied, he/she will show behavior to give his/her preference to others. Furthermore, if the customer is dissatisfied, the customer will complain to the company. Creating optimal customer satisfaction will encourage the creation of loyalty in the mind of the satisfied customer. Chong and Koi (2019); Meesala and Paul (2018), and Teerovengadiem et al. (2019) found that satisfaction affects customer loyalty. Thus, based on theoretical ground and previous research results, the fifth hypothesis in this study is proposed as follows:

H5 = Customer satisfaction has a positive effect on customer loyalty.

2.6. THE RELATIONSHIP BETWEEN SERVICE QUALITY, CUSTOMER SATISFACTION, AND CUSTOMER LOYALTY

The intense competition among the higher educational service providers emphasizes that provision of service quality to students is essential to sustain market share. As a private educational institution, the PTM college must recognize the crucial aspects to be considered and students' expectations to provide the best service. Quality services are indispensable for the institutions that offer services because, with quality services, organizations can measure their performance level. Customer satisfaction leads to behavioral consequences in the form of either complaints or customer loyalty. Thus, an organization or a company that can pay attention to every influential aspect of customer satisfaction will manage to attain it. Eventuall, it will positively impact the company since the satisfaction will create customers loyalty to the product or services they provide. Customers' loyalty will lead them to decide to repurchase on an ongoing basis. If a product or service which has a good quality will cause customers to be satisfied. If they are satisfied, they will provide product or service recommendations to others. Customer loyalty means a condition in which they have a positive attitude, commitment towards a brand, and provide recommendations to other parties to use it. Krey et al. (2014); Jhahansahi et al. (2011); Anand and Selvaraj (2012; Chandra et al. (2018); Annamdevula and Belakonda (2016) found that student satisfaction mediates service quality and students' loyalty. Thus, based on theoretical background and previous research results, the sixth hypothesis in this study is as follows:

H6 = Service quality has a positive effect on customer loyalty through customer satisfaction.

2.7. THE RELATIONSHIP BETWEEN CUSTOMER TRUST, SATISFACTION, AND LOYALTY

Kotler and Keller (2009) suggested that delighted consumers will usually be loyal for an extended period and make repeat purchases when introducing new products and updating the old ones. This argument also means that if students are satisfied and rely on the services they receive, they will become loyal. Therefore, customers trust will have a positive effect on their loyalty. Based on theoretical explanation and the findings of the previous studies, the sixth hypothesis in this study is proposed in the following part:

H7 = Trust has a positive effect on customer loyalty through customer satisfaction.

Based on previous theory and research, the conceptual research framework is depicted in the following figure.

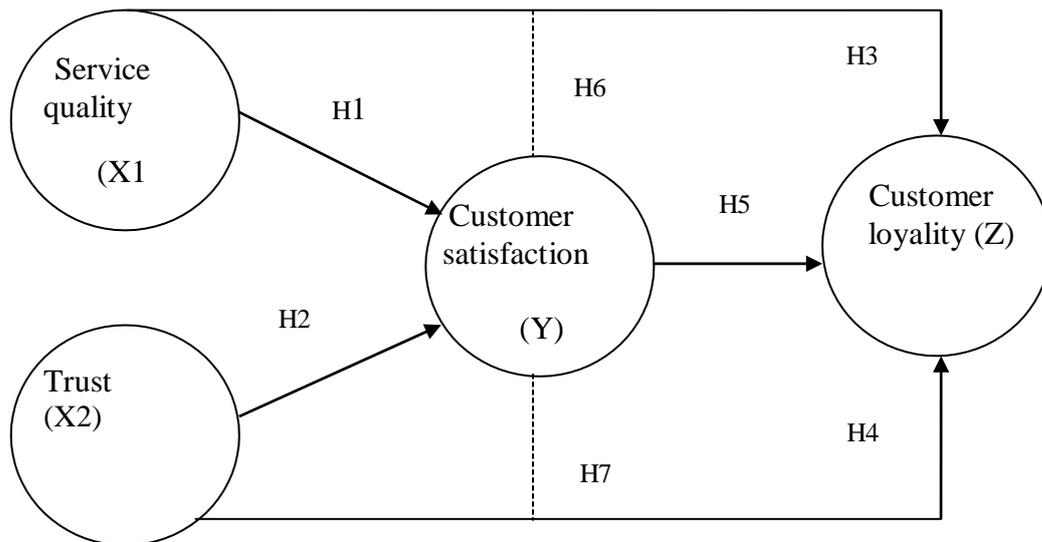


Fig. 1 Conceptual framework of the study

III. METHODOLOGY

The samples in this study were college students, accounting for 230 respondents. Furthermore, the following table presents the variables, dimensions, and indicators used in this study.

Table 2. Operational variables

| Variable | Variable concept | Dimension | Question indicator |
|----------------------|--|----------------|--|
| Service quality (X1) | Service quality is often defined as a comparison between the expected service and the actual service received. Service is intangible. It is an activity, benefit to provide and satisfy that basically does not result in any ownership transfer | Reliability | 1. The lecturers' ability to deliver lectures 2. The lecturers' age 3. The academic staff ability to carry out their duties 4. Lecturers have a professional attitude 5. Academic staff has a professional attitude 6. Easy access for students to obtain information |
| | | Responsiveness | 1. Academic staff is responsive to handle complaints 2. Lecturer ethics 3. Ethics of academic staff 4. Friendly academic staff 5. Scholarships for students |
| | | Assurance | 1. Availability of counseling and guidance 2. Responsible academic staff for providing services 3. Sanctions for disobedient students 4. Clear information conveyed by the academic staff 5. Guarantee of security for students |
| | | Empathy | 1. Open and cooperative lecturers 2. No preferential treatment for certain students |
| | | Tangibles | 1. Classroom condition 2. Comfortable classroom 3. Availability of lecture facilities and infrastructure 4. Library is regularly updated |

| | | | |
|----------------------|---|-------------------------------|---|
| | | | 5. Adequate canteen 6. Proper condition of the toilet 7. Availability of WIFI 8. Availability of parking space 9. Availability of facilities and infrastructure for student activities 10. Adequate health clinic 11. Complete place of worship 12. Adequate computer laboratory |
| Trust (X 2) | Customers trust is their knowledge regarding an object, its attributes, and benefits | Competence | 1. Academic staff's good performance 2. Good lecturers' performance |
| | | Honesty | 1. Lecturers' impartial assessment for all student 2. Trustworthy academic staff in conveying information |
| | | Benevolence | 1. Relief payment for student in need 2. Opportunities for grade improvement for students |
| Satisfaction (Y) | Customers satisfaction is a post-purchase evaluation where the chosen alternative is at least the same or exceeds their expectations, while dissatisfaction arises if the results do not meet what are expected | Overall customer satisfaction | 1. Satisfying performance and professionalism of the lecturers 2. Satisfying performance and professionalism of the academic staff |
| | | Confirmation of expectations | 1. Service quality is as expected 2. Academic and non-academic information is well available |
| | | Willingness to recommend | 1. Positive response to complaints 2. Responsive to complaints 3. Proper facilities and infrastructure |
| | | Customer dissatisfaction | 1. Delay in data input 2. Misinformation 3. Lack of online system socialization |
| Consumer loyalty (Z) | Loyalty is a firmly held commitment to rebuy or re-subscribe to certain products or services in the future regardless the influence of situations and marketing efforts that potentially lead to behavioral changes | Brand value | 1. Comparison of prices 2. Comparison of quality |
| | | Customer characteristics | 1. Peer sharing 2. Recommendations to friends 3. Inform the comfort of interesting facilities and activities |
| | | Switching barrier | 1. Facilities do not meet expectations 2. Low level of accreditation |
| | | Customer experience | 1. Confident in the quality of campus activities 2. Constant participation in campus activities |
| | | Competitive environment | 1. Maintaining campus reputation 2. Assured in the quality of education |

(Source: data processed)

Later, the data were analyzed to test the direct and indirect effects of service quality and trust on loyalty using the Structural Equation Model with Smart Partial Least Square (PLS) software. The equation in this study is formulated as follows:

$$KK = \alpha_0 + \beta_1 KP + \beta_2 K + e_1$$

$$LK = \alpha_0 + \beta_3 KP + \beta_4 K + \beta_5 KK + \beta_6 KPKK + \beta_7 KKK + e_2$$

Where:

KP = service quality

K = trust

KK = customer satisfaction

LK = customer loyalty

B = multiple coefficient

α = constant

KPKK = quality of service through customer satisfaction

KKK = trust through customer satisfaction

e_1 = error

e_2 = error

IV. RESULTS AND DISCUSSIONS

4.1. DESCRIPTIVE ANALYSIS

The population of this study were active students at PTM College in Jakarta, with a total sample of 230 respondents. The samples were taken proportionally from the population from various study programs.

Source: authors' own calculation

4.2. VALIDITY AND RELIABILITY TEST

The data from this study were tested using Pearson correlation analysis, from which, if the total value of the analysis indicates less than 0.05, the data are considered invalid. The research results are presented in Table 2 as follows.

Table 3. Validity test results

| Variable | Indicator | Loading | T-Statistics | | | | Note |
|----------------------|-----------|---------|-----------------|-------|--------------|---------|--------------------------|
| | | | Service quality | Trust | Satisfaction | Loyalty | |
| Service quality (X1) | X.1.1 | 0.705 | 15.502 | | | | Valid and significant*** |
| | X.1.2 | 0.727 | 13.500 | | | | Valid and significant*** |
| | X.1.3 | 0.686 | 14.977 | | | | Valid and significant*** |
| | X.1.4 | 0.701 | 16.187 | | | | Valid and significant*** |
| | X.1.5 | 0.719 | 16.503 | | | | Valid and significant*** |
| | X.1.6 | 0.730 | 12.826 | | | | Valid and significant*** |
| | X.2.1 | 0.747 | 15.900 | | | | Valid and significant*** |
| | X.2.2 | 0.641 | 12.105 | | | | Valid and significant*** |
| | X.2.3 | 0.919 | 63.613 | | | | Valid and significant*** |
| | X.2.4 | 0.870 | 46.669 | | | | Valid and significant*** |
| | X.2.5 | 0.525 | 7.231 | | | | Valid and significant*** |
| | X.3.1 | 0.766 | 20.762 | | | | Valid and significant*** |
| | X.3.2 | 0.841 | 30.644 | | | | Valid and significant*** |
| | X.3.3 | 0.747 | 18.255 | | | | Valid and significant*** |
| | X.3.5 | 0.758 | 23.238 | | | | Valid and significant*** |
| | X.3.5 | 0.675 | 12.967 | | | | Valid and significant*** |
| | X.4.1 | 0.863 | 32.805 | | | | Valid and significant*** |
| | X.4.2 | 0.895 | 49.346 | | | | Valid and significant*** |
| | X.5.1 | 0.595 | 11.964 | | | | Valid and significant*** |
| | X.5.2 | 0.827 | 28.561 | | | | Valid and significant*** |
| | X.5.3 | 0.844 | 32.993 | | | | Valid and significant*** |
| | X.5.4 | 0.832 | 32.851 | | | | Valid and significant*** |
| | X.5.5 | 0.752 | 21.166 | | | | Valid and significant*** |
| | X.5.6 | 0.776 | 20.945 | | | | Valid and significant*** |
| | X.5.7 | 0.652 | 12.572 | | | | Valid and significant*** |
| | X.5.8 | 0.745 | 23.903 | | | | Valid and significant*** |
| | X.5.9 | 0.813 | 29.623 | | | | Valid and significant*** |
| | X.5.10 | 0.801 | 31.722 | | | | Valid and significant*** |

Mediation Of Satisfaction In Service Quality And Trust In Students' Loyalty: Empirical ..

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|------------------|-------------|-------|---------|----------------------------|----------------------------|
| | X.5.11 | 0.524 | 9.575 | | Valid and significant*** |
| | X.5.12 | 0.739 | 19.030 | | Valid and significant*** |
| Trust (X2) | X2.1.1 | 0.710 | | 13.894 | Valid and significant*** |
| | X2.1.2 | 0.895 | | 64.328 | Valid and significant*** |
| | X2.2.1 | 0.918 | | 72.208 | Valid and significant*** |
| | X2.2.2 | 0.910 | | 57.293 | Valid and significant*** |
| | X2.3.1 | 0.888 | | 54.390 | Valid and significant*** |
| | X2.3.2 | 0.889 | | 43.736 | Valid and significant*** |
| | Loyalty (Y) | Y1.1 | 0.981 | | 66.175 |
| Y1.2 | | 0.953 | | 74.279 | Valid and significant*** |
| Y2.1 | | 0.945 | | 83.054 | Valid and significant*** |
| Y2.2 | | 0.940 | | 78.452 | Valid and significant*** |
| Y2.3 | | 0.924 | | 66.012 | Valid and significant*** |
| Y3.1 | | 0.546 | | 0.964 | Valid and significant*** |
| Y3.2 | | 0.993 | | 1.072 | Valid and significant*** |
| Y4.1 | | 0.919 | | 97.405 | Valid and significant*** |
| Y4.2 | | 0.791 | | 19.286 | Valid and significant*** |
| Y5.1 | | 0.875 | | 42.698 | Valid and significant*** |
| Y5.2 | 0.930 | | 132.902 | Valid and significant*** | |
| Satisfaction (Z) | Z1.1 | 0.853 | | 30.113 | Valid and significant*** |
| | Z1.2 | 0.912 | | 110.718 | Valid and significant*** |
| | Z2.1 | 0.898 | | 102.292 | Valid and significant*** |
| | Z2.2 | 0.834 | | 24.824 | Valid and significant*** |
| | Z3.1 | 0.924 | | 90.280 | Valid and significant*** |
| | Z3.2 | 0.933 | | 96.341 | Valid and significant*** |
| | Z3.3 | 0.701 | | 13.157 | Valid and significant*** |
| | Z4.1 | 0.903 | | 0.000 | Valid and significant*** |
| | Z4.2 | 0.236 | | | Invalid and significant*** |
| Z4.3 | 0.387 | | | Invalid and significant*** | |

***Significant level at $\alpha = 1\%$, ** significant level at $\alpha = 5\%$, *significant level at $\alpha = 10\%$

Source: results processed using Smart PLS.

In Table 1 above, it could be observed that the indicator has a loading factor greater than 0.5, which is considered valid. Meanwhile, both indicators Z.4.2 and Z4.3 have a loading factor less than 0.5, and therefore, they are considered invalid. These two invalid indicators were dropped and were not taken into account in the subsequent analysis.

Furthermore, the reliability test results for service quality, trust, job satisfaction, and loyalty are displayed in Table 4 below. Wati (2018:239) asserted that a variable is considered moderately reliable if it has a construct reliability value greater than 0.6.

| Variables | AVE | Composite reliability |
|-----------------------|-------|-----------------------|
| Loyalty (L) | 0.524 | 0.897 |
| Customer satisfaction | 0.50 | 0.894 |
| Trust | 0.594 | 0.896 |
| Service quality | 0.404 | 0.952 |

Based on the table above, it can be observed that the variable of service quality has composite reliability above 0.7; thus, it can be concluded that the indicators of the variable in each dimension have adequately good reliability. In other words, the indicators are able to measure the construct. However, the service quality variable has an AVE value <0.5, which means that the indicators used have good reliability, yet they cannot measure the construct. But, based on composite reliability, which has a value of 0.952, the service quality is regarded to have good reliability.

Meanwhile, the trust variable has composite reliability above 0.7, so it can be concluded that the indicators used for the trust variable in each dimension have pretty good reliability and can measure the construct. The trust variable has an AVE value > 0.5, which means that the indicators used have sufficiently good reliability or they can measure the construct.

Given that the satisfaction variable has composite reliability above 0.7, we can conclude that the indicators used in each dimension's service quality variable have reasonably good reliability or can measure the construct. However, the service quality variable has an AVE value <0.5, which indicates that the indicators do not have adequately good reliability or cannot measure the construct.

Furthermore, the variable of customer loyalty has composite reliability above 0.7. We can conclude that the trust variable indicators in each dimension have relatively good reliability and can measure the construct. The trust variable has an AVE value > 0.5, which means that the indicators used have sufficiently good reliability or can measure the construct.

4.2. THE GOODNESS OF FIT MODEL (INNER MODEL)

Evaluation of goodness of fit model structural (inner model)

Based on data processing results using SEM PLS, the R2 value of the variables involved in this study is depicted in the following table.

| Variable | R- Square |
|-----------------------|-----------|
| Customer satisfaction | 0,776 |
| Students loyalty | 0,628 |
| Predictive relevance | 0,917 |

Source: data processed using SmartPLS, 2020

Based on the table, we can determine that R square on customer satisfaction has a value of 0.776 (77.6%) > 0.67, which is considered robust. Likewise, R square for loyalty has a value of 0.628 (62.8%) < 0.67 and is regarded as robust. Furthermore, the measurement of the inner model (goodness of fit model) was carried out using the predictive relevance (Q2) value (Wati, 2018: 239). The predictive relevance (Q2) value we obtain was 0.

$$Q^2 = 1 - (1 - R^2_t)(1 - R^2_2)$$

$$Q^2 = 1 - (1 - 0.776)(1 - 0.628)$$

$$Q^2 = 1 - (0.224)(0.372)$$

$$Q^2 = 1 - 0.08332$$

$$Q^2 = 0.91668$$

Meanwhile, the predictive-relevance value of the structural model in this study is 0.917 or 91.7%, indicating that the model can precisely explain the phenomenon of student loyalty related to several variables, which are service quality, trust, and satisfaction.

4.3 HYPOTHESIS TESTING

Table 5. Path Coefficients (coefficient parameter, T- Statistic P- Values)

| Relationship between variable and dimension | Parameter coefficient | T- Statistic | P – Values | Result |
|--|-----------------------|--------------|------------|---------------|
| Service quality >> reliability | 0.746 | 18.077 | 0.000 | Supported *** |
| Service quality >> Responsiveness | 0.839 | 30.234 | 0.000 | Supported *** |
| Service quality >> Assurance | 0.877 | 48.792 | 0.000 | Supported *** |
| Service quality >> Empathy | 0.711 | 22.039 | 0.000 | Supported *** |
| Service quality >> Tangible | 0.905 | 49.260 | 0.000 | Supported *** |
| Service quality >> customer satisfaction | 0.635 | 8.916 | 0.000 | Supported *** |
| Trust >> Competence | 0.896 | 48.618 | 0.000 | Supported *** |
| Trust >> Honesty | 0.918 | 75.779 | 0.000 | Supported *** |
| Trust >> Benevolence | 0.831 | 32.470 | 0.000 | Supported *** |
| Trust > customer satisfaction | 0.288 | 3.658 | 0.000 | Supported *** |
| Customer satisfaction >> Overall customer satisfaction | 0.887 | 47.400 | 0.000 | Supported *** |

| | | | | |
|--|--------|--------|-------|-------------------|
| Customer satisfaction >> confirmation of expectation | 0.909 | 54.613 | 0.000 | Supported *** |
| Customer satisfaction >> willingness to recommend | 0.931 | 66.611 | 0.000 | Supported *** |
| Customer satisfaction >> customer dissatisfaction | 0.722 | 18.667 | 0.000 | Supported *** |
| Customer satisfaction > customer loyalty | 0.428 | 3.981 | 0.000 | Supported *** |
| Customer loyalty >> brand value | 0.855 | 36.066 | 0.000 | Supported *** |
| Customer loyalty >> customer characteristics | 0.922 | 79.575 | 0.000 | Supported *** |
| Customer loyalty >> Switching barrier | 0.279 | 0.920 | 0.179 | Not Supported *** |
| Customer loyalty >> customer experience | 0.823 | 31.276 | 0.000 | Supported *** |
| Customer loyalty >> competitive environment | 0.839 | 35.817 | 0.000 | Supported *** |
| Service quality > customer loyalty | 0.468 | 4.652 | 0.000 | Supported *** |
| Trust > customer loyalty | -0.090 | 1.004 | 0.158 | Not Supported *** |
| Service quality > customer loyalty through customer satisfaction | 0.272 | 3.770 | 0.000 | Supported *** |
| Trust > customer loyalty through customer satisfaction | 0.123 | 2.458 | 0.007 | Supported *** |

Note: **Significant at level 5%, * significant at level 10%

Source: data processing using Smart PLS

$$KK = \alpha_0 + 0.635 KP + 0.288 K + e_1 \dots$$

$$LK = \alpha_0 + -0.090 K + 0.428 KK + 0.272 KPKK + 0.123 KKK + e_2$$

Based on testing the first hypothesis, the path parameter coefficient value we obtained from the effect of service quality on customer satisfaction is 0.635. A t-statistic value of 8.916 > 1.66 at the significant level $\alpha = 0.05$ (5%). These results indicate that service quality has a positively direct effect on customer satisfaction. The coefficient value of 0.635 indicates that student satisfaction will increase as the service quality is improved. This study result found that the most significant dimension of the PTM College is the tangibles, with the parameter coefficient value of 0.905 and t-statistic 46.260 > 1.66. Furthermore, these results are in line with Mansori et al. (2014) in their study on service quality in Malaysian private education sectors, where service quality, especially the tangible aspect, significantly affects student satisfaction. These findings indicate that physical facilities play a vital role in increasing student satisfaction. This condition also means that tangibility has the most significant influence on students' intentions to continue their tertiary education at the same institution. This study's results support Rimbinguwu et al. (2014); Sultan and Wong (2012) in their research on the service quality have a substantially direct influence on consumer satisfaction. The results of this study emphasize that service quality is an essential component in higher education. Chandra et al. (2018) studied 1000 students from 13 universities and found that service quality affected student satisfaction. Good quality service will create satisfaction for its customers. When the customers are satisfied with the products or services they receive, they will compare the services provided by other institutions. If students are delighted, they will recommend others to study in the same institution.

Based on the results of testing the second hypothesis, the path coefficient value obtained from the influence of trust on customer satisfaction was 0.288 with a t-statistic value of 3.981 > 1.66 at the significant level $\alpha = 0.05$ (5%). It states that the variable of trust has a direct positive effect on customer satisfaction. These research results are in line with Daryanto, Sukandar, and Yusuf (2014) and Bricci et al. (2016), that trust directly affects consumer satisfaction. Thus, in this research, it can be said that the higher the students' trust in their higher education institutions, the higher the satisfaction they feel. However, this study's results are different from the research results by Haron et al. (2020), which found the opposite condition, i.e. consumer satisfaction can affect consumer confidence.

Moreover, based on the third hypothesis testing on the service quality effect on loyalty, it was obtained that a path parameter coefficient value was 0.468 with a t-statistic value of 4.652 > 1.66 at the significant level $\alpha = 0.05$ (5%). It means that service quality has a direct positive effect on the variable of loyalty; in other words, customer loyalty will be increased with the improvement in service quality they perceive. The study results are in line with Liu and Wang's research (2017), which states that service quality positively and significantly affects customer loyalty. Service quality is the main factor affecting customer loyalty because customers whose personal values are satisfied and experience a positive perception of service will have high loyalty. This study also reveals that the service quality in tertiary educational institutions with the most decisive influence on customer loyalty is the tangible aspects, such as parking lots, buildings, classrooms, libraries, and other premises for student comfort. This result supports Chandra et al. (2018) findings that the service quality will affect students' loyalty at private universities.

Testing the fourth hypothesis on the effect of trust on loyalty obtained a path coefficient value of -0.090 with a t-statistic value of 1.004 < 1.66 at the significant level $\alpha = 0.158$ (15.8%) or insignificant. The path coefficient and p-value indicate that trust has no direct effect on loyalty. This study's results do not support the fourth hypothesis, where trust is a determinant of loyalty. This finding is not following the research results of Hasan et al. (2014). In contrast, it is in line with the research results of Daryanto, Sukandar, and Yusuf (2014).

These findings also support the research results by Sampaio et al. (2012) conducted at universities in Brazil, that higher trust in administrative staff and faculty did not significantly impact student loyalty.

By testing the fifth hypothesis regarding the effect of satisfaction on loyalty, it obtained a coefficient value of 0.428 with a t-statistic value of $3.658 > 1.66$ at the significant level $\alpha = 0.05$ (5%). It indicates that customer satisfaction has a direct positive effect on loyalty. These findings support the research results of Srivastava and Rai (2013), Mohsan et al. (2011), which revealed that customer satisfaction and loyalty have an inseparable relationship. High satisfaction will increase customer loyalty, and vice versa; lower satisfaction will result in insufficient consumer loyalty. This study also supports the findings of Appuhamilage and Torii (2019) that satisfaction has a strong and positive influence on student loyalty.

Testing the sixth hypothesis regarding the effect of service quality on loyalty through customer satisfaction obtained a path parameter coefficient of 0.272 with a t-statistic value of $3.770 > 1.66$ at the significant level $\alpha = 0.05$ (5%). It indicates that service quality positively affects loyalty through customer satisfaction either directly or indirectly. This study finding is in line with the research results of Krey et al. (2014); Jhahansahi et al. (2011); Anand and Selvaraj (2012); Chandra T et al. (2018); Annamdevula and Belakonda (2016). Service quality is an effort to deliver services to meet customers' needs, desires, and expectations. Fulfilled or exceeded expectations of service quality by service providers will foster a feeling of satisfaction and the desire to buy back or recommend the provider to others. The customer whose expectations can be exceeded or fulfilled will feel satisfied, leading to customer loyalty.

The results of testing the seventh hypothesis, i.e., the effect of trust on loyalty through customer satisfaction, obtained the value of parameter coefficient of 0.123 with a t-statistic value of $2.458 > 1.66$ at the significant level $\alpha = 0.05$ (5%). It means that trust can indirectly increase customer loyalty through satisfaction. If customers are convinced of a higher educational institution, their satisfaction will increase; thus, their loyalty will rise. This study's results align with Haron et al. (2020), who found that trust acts as a mediating variable between customer satisfaction and consumer loyalty.

In the research model, the effect of trust on customer satisfaction has a smaller coefficient value when compared to the coefficient of service quality. It indicates that service quality has more influence on customer satisfaction than trust. Investigating the effect of mediation can be performed with a procedure developed by Hair et al. (2011) in (Wati: 259; 2018). This method is considered more appropriate because it does not require any assumptions about the distribution of the variables; so that it can be applied to small sample size. VAF is a measure of how much the mediating variable can absorb the direct effect previously significant from the model without mediation. If the VAF value is above 80%, it indicates the mediating variable's role as a full mediator. Meanwhile, if the VAF is above 20 – 80%, it can be categorized as a partial mediator. However, if the VAF is less than 20%, it is said that there is almost no mediation effect (Wati: 259:2018).

Based on the parameter's coefficient value as shown in Table 4.6 above, there is a significant direct or indirect effect of service quality and trust on customer satisfaction and its impact on student loyalty at PTM College. Thus, according to the calculation results, the VAF value for the effect of service quality on loyalty through customer satisfaction is 0.3675 (36%), while that of trust in loyalty through customer satisfaction is 3.727 (372%). Based on these calculations, the VAF value of the effect of service quality on loyalty through customer satisfaction is 0.3675 (36%), indicating that satisfaction partially acts to mediate service quality and loyalty. The VAF value for the effect of trust on consumer loyalty through customer satisfaction is 3.727 (372%), indicating that satisfaction fully mediates the effect of trust on loyalty.

V. CONCLUSIONS

This study investigated the effect of service quality and trust on student loyalty mediated by customer satisfaction. The results showed that customer satisfaction was directly influenced by service quality and trust. The better the service PTM College can provide, the higher student satisfaction will be. In addition, high trust of the students will more result in their satisfaction. Furthermore, it was revealed that good service quality could directly increase student loyalty. Yet, the results showed that trust has a direct negative effect on loyalty. Increased loyalty is directly influenced by student satisfaction, which means that the students' high satisfaction will lead to loyalty. The results also found that service quality has a positive influence on loyalty through student satisfaction. Trust was found to enhance student's loyalty through the students' satisfaction. Thus, both variables of service quality and trust can increase student loyalty provided that the variables the College gives can provide them satisfaction.

Regardless of the essential findings, this study still has limitations in the sample size and observation due to the Covid-19 pandemic. Based on this study's results, PTM College needs to improve and develop facilities, such as canteens, revamping working hours for clinics, parking lots, updating library collections, and improving toilet cleanliness. Besides, it is also necessary to develop and improve academic and financial academic administration services. Students' confidence also needs to be enhanced by the College's efforts to elevate its accreditation status.

ACKNOWLEDGEMENT

The authors would like to express gratitude to Sekolah Tinggi Ilmu Ekonomi (STIE) Muhammadiyah Jakarta Indonesia for supporting and providing assistance in this research.

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