The Effect of Service Quality and Student Satisfaction on Word of Mouth: Sekolah Tinggi Ilmu Manajemen IMMI Jakarta

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ABSTRACT: This research aims to examine the influence of service quality and student satisfaction on word of mouth. The research population is all Sekolah Tinggi Manajemen IMMI students actively studying in the even semester of the 2022–2023 academic year. The research sample size was 357 students and was taken using the convenience sampling method. Primary data collection uses a Google Form questionnaire. The path analysis model was used to test three research hypothesis formulations. The research results prove: (a) service quality has a strong and significant positive effect on word of mouth; (b) service quality has a very strong and significant positive effect on student satisfaction; and (c) student satisfaction has a weak and significant positive effect on word of mouth. In the structure of the multiple linear regression model, with word of mouth as the dependent variable, the coefficient of determination ($R^2$) is 58.30%.

KEYWORDS: Service quality, student satisfaction, word of mouth.

INTRODUCTION

In Indonesia, higher education is hosted by public and private colleges, which work to provide higher education services to meet the demands of the public. By the beginning of 2023, there were 4004 colleges, distributed into 184 public colleges and 3820 private colleges (https://dataindonesia.id). In the province of the Special District of the Capital (DKI) of Jakarta, there are 8 state colleges and 283 private colleges. One of these private colleges is Sekolah Tinggi Manajemen IMMI (STIMA IMMI). This higher education institution was established in Jakarta more than 30 years ago and organizes education with a specialization in management sciences, with diploma, bachelor, and master study programs. By the end of 2022, the number of active students studying at STIMA IMMI will be 2478, which is distributed among education diploma 23 students, undergraduate 1912 students, and postgraduate 543 students.

In its existence as a private college institution and a provider of higher education in management science, STIMA IMMI will compete with other private colleges. We know that in DKI Jakarta, more than a hundred private overlapping colleges own and offer the same services of higher education, namely the study program in management sciences. With many of these kinds of programs available, private college managers will be competitive in providing the best academic and non-academic services to students. The superior quality of operational services provided by the college will have a positive impact on the satisfaction felt by its students. Students are the primary customers of any higher education organization. They’re going to buy and consume the products of educational services offered by higher education institutions.

As a private college institution, STIMA IMMI positions student satisfaction as a high-value intangible asset. The positive impact of student satisfaction is the expression of word of mouth in the dissemination of information by students to society. Word of mouth (WOM) is a communication process that consists of giving recommendations, either individually or in groups, about a product or service that aims to provide personal information. (Kotler dan Keller, 2012). Alumni and students who are active in STIMA IMMI can become communications agents for the wider community. One of the positive communications is to invite the general public to study management science at STIMA IMMI. Desemination of positive information to the public will be done if alumni and active college students get the process of primary service and maximum satisfaction from STIMA IMMI. In extreme cases, maximum student satisfaction will be created if there is no gap between desired expectations and the performance profile of the quality of service obtained.

The findings of the research showed the harmony of causality variables: quality of service, satisfaction, and WOM have strong levels or magnitudes of correlation. The structural relationship between the quality of service and student satisfaction has a strong positive influence (Syah & Wijoyo, 2021), a moderate positive impact (Karami & Elahinia, 2019), and a weak positive effect (Yasa et al., 2021). The relationship between service quality and WOM has a strong positive impact (Mestrovic, 2017), a moderately positive...
effect (Chandra & Suhermin, 2022), weakened positive effects (Tehci, 2022), and a non-significant negative influence (Karлина & Haryanti, 2021). Furthermore, the relationship between students’ satisfaction and the WOM is strongly positive (Afridi et al., 2018), moderately positive (Auriza et al., 2022), and not significantly negative (Handayanto, 2018). (Gogoi, 2021). The research findings show evidence that the structural relationship of causality in each variable is variable and inconsistent. This proves there is a gap in research findings among the researchers. The gap in research findings may be due to differences in the country's cultural background and the organization of colleges, management competence, faculty competence, and educational staff, the availability of physical facilities, equipment, and the modernization of information and technology (IT), the amount of price paid by students, and input qualifications.

With their variation, the findings above have demonstrated the inconsistency of the relationship between the causal variables of quality of service, student satisfaction, and word of mouth. It was so interesting for the authors of this study to do a re-research. The research will be carried out by determining the population of all active students attending STIMA IMMI. The objectives of the research are: (a) to test and analyze the impact of the quality of service on student satisfaction; (b) to test and analyze the influence of the quality of service on the WOM; and (c) to test and analyze the effect of student satisfaction on the WOM.

LITERATUR REVIEW AND HYPOTHESIS

The service quality variable is defined into five dimensions, namely, existence, reliability, resilience, assurance, and empathy (Berry et al., 1988). The customer's perception of service quality is created by matching expectations before experiencing service with their real service experience (Parasuraman et al., 1985; Karami & Elahinia, 2019). Perceived quality has also been understood as a kind of attitude in relation to satisfaction and concluded as an assessment of what one expects of a particular product that has been consumed. The quality of service perceived by students can also be defined as the subjective judgment of students on the level of service performance provided by the college compared to their level of expectation. (Mestrovic, 2017). Furthermore, Mestrovic also explained that the quality of services in higher education institutions refers to a series of characteristics, dimensions, and attributes related to the services they provide. The concept of quality in higher education can be understood as a set of conditions and rules of play that must be available in the educational process to meet the needs and expectations of students. When measuring student responses to the quality of service, there are some important indicators to consider, as their responses are very valuable in an effort to improve the performance of college organizations, including representative building facilities, teaching aspects, and curriculum design.

At the university, customer satisfaction embodies student satisfaction as a user of educational services. Expectations are always at the ideal level if the difference between expectations and accepted reality can create a level of satisfaction in each student (Heriyanto, 2017). Student satisfaction variable data is part of positive feedback information for the organization of the university that organizes education. The student satisfaction variable can be defined as the attitude resulting from the evaluation of student experience with services and facilities provided by the institutions of the college. Student satisfaction is understood as the student's assessment of services provided by universities (Stoltenberg, 2011; Austin & Pervaiz, 2017). When a student is satisfied with the services of education, teaching, facilities, etc., provided by the college, it will affect their attitude, and they are considered to be satisfied. (Austin & Pervaiz, 2017). The dimensions of student satisfaction can be seen in satisfaction with academic processes and learning, academic guidance, campus management, administrative services, campus facilities and resources, extra-curricular activities, aspects of leadership and staff communication, responsive service, accuracy and precision of information, as well as the aspect of decency and hospitality of academic administration services (Aisyah et al., 2021).

Word of mouth can be defined as the communication activity of information dissemination carried out from person to person and directly through verbal conversation about the characteristics of objects, i.e., goods, services, or organizations that are the source of information. WOM is an adaptation and scale validation that occurs when consumers are satisfied or dissatisfied with the product or service they have consumed (Meštrović & Zugic, 2018). Kotler and Keller (2012) defined word of mouth as a communication process involving the giving of individual or group recommendations for a product or service aimed at providing personal information. As mentioned by Sernovitz (2009), there are five dimensions or basic word of mouth elements, namely: (a) talkers, a group of target subjects as influencers in which they are going to talk about a brand of a product or service; (b) topics, information themes relating to what a talker is talking about; (c) tools, are tools for disseminating the topic and the talker; (d) talking part, is explaining a conversation will disappear if there is only one person talking about a product; (e) tracking, is a company's action to
monitor and monitor consumer responses. Furthermore, Sernovitz explained that word-of-mouth marketing would give people a reason to talk about the product and make it easier for the conversation to take place.

Service Quality and Word of Mouth

Word of mouth is the activity of dissemination of information carried out by interpersonal subjects and is part of the product promotion system produced by the company. The dissemination of information through word of mouth is very effective and becomes an important marker of whether the product consumed by the consumer is as expected or not. There are many factors that influence the effectiveness of word of mouth, and one of them is the performance of the quality of service that consumers get from the company. A number of research findings show evidence that word of mouth and quality of service have varying levels of relationship effectiveness, i.e., strong, moderate, weak, and even insignificant levels. Research findings prove there is a strong significant positive influence on the quality of service on word of mouth (Mestrovic, 2017), a moderate significant positive (Rahayu, 2013; MH Nainggolan & Amidiola, 2021; Chandra & Suhermin, 2022), a weak significant positive (Afridi et al., 2018; Handayanto, 2018; Koli et al., 2019; Prabowo et al., 2020; Syah & Wijoyo, 2021; Auriza et al., 2022; Irawan et al., 2022; Rimba et al., 2022; Tehci, 2022), and a non-significant negative (Jiewanto et al., 2012; Karlina & Haryanti, 2021). Most research findings prove that the quality of service has significant positive effects with variations in magnitude levels (strong, moderate, and weak). However, there are also research findings showing that the causal relationship between the two variables is negative and insignificant. The research hypothesis is:

H1: Service quality has a significant positive influence on word of mouth.

Service Quality and Student Satisfaction

When a student is formally registered to study at a college, it means that they have made transactions with the institution. Students have already paid a certain amount of tuition to get the education they want. Students will feel satisfied and happy if the services they receive are equal to or greater than the cost they have paid. Or, on the other hand, the perception of dissatisfaction will arise if they receive less than they expect. In this process, the service quality factor must be superior to that given by the college institution to its students. This is because the quality factor of service is the key to student satisfaction. It has been demonstrated that the results of the study show a positive causal relationship between the two variables. Significantly positive, causal relationships between quality of service and student satisfaction were found in Mestrovic (2017), as well as in Azam (2018) and Syah & Wijoyo (2021). Furthermore, at a moderate level of significant positive influence, the findings of Karami & Elahinia (2019) and Auriza et al. (2022) are at a low level of significant positive influence. (Karatepe, 2011; Jiewanto et al., 2012; Handini & Ruswanti, 2016; Afridi et al., 2018; Handayanto, 2018; Mwiya et al., 2019; Koli et al., 2019; Mulyono et al., 2020; Yasa et al., 2021; Gogoi, 2021; Tania et al., 2021; Irawan et al., 2022). The degree of strength of the causal relationship between the two variables may vary because the climate and culture of the college organization in which student study are also different, which will influence the formation of the character ethos of students learning differently. The research hypothesis can be formulated as follows:

H2: Service Quality has a significant positive influence on student satisfaction.

Student Satisfaction and Word of Mouth

Based on a number of empirical studies, it was found that student satisfaction has a strong positive influence on word of mouth (Tehci, 2022). Furthermore, Karami & Elahinia also mention that from research results, a number of authors have identified that satisfaction generates a higher probability that positive things will be disseminated by students about an institution and university to other prospective students. Many researchers found a positive link between student satisfaction and word-of-mouth communication. The strength of relationships also varies, namely: positive, strong, moderate, weak, and some negative relationships. Significant positive influence on student satisfaction with word of mouth was found amongst others in studies by Mestrovic (2017), Afridi et al. (2018), Yasa et al. (2021), and Tehci (2022). moderately significant positive impact (Handini & Ruswanti, 2016; Mwiya et al., 2019; Karami & Elahinia, 2019; Auriza et al., 2022), weakly significant positive effect (Handayanto, 2018; Koli et al., 2019; Syah & Wijoyo, 2021). In general, researchers would argue that student satisfaction can be an active promoter of institutional services and products. Nevertheless, there is some empirical research finding a weak and even negative correlation between them. It's because dissatisfied students are more actively engaged in words than satisfied students. The hypothesis that can be developed is:

H3: Student satisfaction has a significant positive influence on word of mouth.
RESULT AND DISCUSSION
Descriptive of Respondents Characteristics
The research data collection was carried out during the even semester of the academic year 2022-2023. The sample members were selected as respondents among 357 students. The frequency distribution of respondents by gender was 49.6% male and 50.4% female. Characteristics by age: less than 18 years, 12.7%; between 18 and 22 years, 31.6%; 23–29 years, 8.3%; 30 years or over, 47.4%. According to the level of the study program: diploma 2%, undergraduate 62.3%, and graduate 35.7%. By semester, active students: second semester 37.1%, fourth semester 31%, sixth semester 15%, eighth semester 7.8%, tenth semester 9.1%. As the main reason they chose to study at STIMA IMMI is to develop competence and improve management science (56.8%), earn a degree for career advancement conditions at the workplace (18.3%), cheap tuition fees (8.6%), and other reasons, such as residence near campus and inviting friends to learn at STIMA IMMI.

Descriptive Variables, Indicators, Instrument Validity, and Reliability Tests
Referring to Table 1, we obtained variable measurement score profiles, indicators, coefficients of validity, and reliability of research instruments.

The average value of the service quality variable is 3.216 (standard deviation: 0.4242). The highest indicator score is 3.38 (faculty attendance in student learning services, SQ13), and the lowest is 3.02 (educational facilities and information technology facilities, SQ2). On the student satisfaction variable, there is an average score of 3.207 (standard deviation 0.4466). The average score is indicator highest is 3.37 (friendship of lecturers in students learning services, SS7), and the least is 3.08 (facilities of student buildings and classrooms, SS1). On the variable word of mouth, there is a mean score of 3.247 (standard deviation of 0.4721). The maximum indicator scores are 3.28 (I am on STIMA IMMI as my pride, WOM1), and the minimum is 3.19 (I will invite family, friends, and the community to have the opportunity to register and lecture at STIMA IMMI, WOM4). Overall, the average score on each variable and its indicators are all above 3 and below 3.5. Thus, it can be concluded that the performance profile of the three variables of the study and its indicators have reached good values. But it hasn't reached a very good level.

Table 1. Data Descriptions of Variables, Indicators, Validity, and Reliability Instrument Test

<table>
<thead>
<tr>
<th>Variable and Indicator</th>
<th>Sample Size</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>R statistic</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service Quality (SQ)</td>
<td>357</td>
<td>2.00</td>
<td>4.00</td>
<td>3.216</td>
<td>.4242</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>SQ1</td>
<td>357</td>
<td>1</td>
<td>4</td>
<td>3.04</td>
<td>.591</td>
<td>.735**</td>
<td></td>
</tr>
<tr>
<td>SQ2</td>
<td>357</td>
<td>1</td>
<td>4</td>
<td>3.01</td>
<td>.573</td>
<td>.729**</td>
<td></td>
</tr>
<tr>
<td>SQ3</td>
<td>357</td>
<td>1</td>
<td>4</td>
<td>3.09</td>
<td>.519</td>
<td>.715**</td>
<td></td>
</tr>
<tr>
<td>SQ4</td>
<td>357</td>
<td>1</td>
<td>4</td>
<td>3.29</td>
<td>.588</td>
<td>.765**</td>
<td></td>
</tr>
<tr>
<td>SQ5</td>
<td>357</td>
<td>1</td>
<td>4</td>
<td>3.35</td>
<td>.543</td>
<td>.778**</td>
<td></td>
</tr>
<tr>
<td>SQ6</td>
<td>357</td>
<td>1</td>
<td>4</td>
<td>3.20</td>
<td>.581</td>
<td>.777**</td>
<td></td>
</tr>
<tr>
<td>SQ7</td>
<td>357</td>
<td>2</td>
<td>4</td>
<td>3.31</td>
<td>.535</td>
<td>.772**</td>
<td></td>
</tr>
</tbody>
</table>
Still in Table 1, the correlation coefficient (\(= r\)) and the reliability of the questionnaire instruments are examined. The correlation coefficient indicates the results of the construction validity test, and the chrombach's alpha is the reliability factor, which describes the strong or weak level of the community of indicators on each study variable. The lowest statistical r coefficient is 0.715, the highest is 0.909, and all are significant at the p-value of 0.000. This means that the questionnaire instrument items have a high construct validity value. Similarly, on the concept of reliability, Chombach's alpha coefficient on service quality is 0.955, student satisfaction is 0.956, and word of mouth is 0.954, all of which meet the minimum criteria of 0.7. It can be concluded that all indicators on each variable have strong community relationships and are able to explain the value of the research variable.

**Hypothesis Test Results**

The result of the primary data collection processed using the application of SPSS 22 obtained path coefficients, p-values, and determined coefficients as studied in Table 2. The construction path analysis derived from the conceptual model of the research can be formed into two substructures of the model of linear regression equations: SS = 0.860 SQ + \(\varepsilon_1\), determined coefficient \(R^2 = 0.740\), and WOM = 0.639 SQ + 0.141 SS + \(\varepsilon_2\), determination coefficient \(R^2 = 0.583\). Value \(\varepsilon = \sqrt{1 - R^2}\)

<table>
<thead>
<tr>
<th>Relations Structure</th>
<th>Path Coefficient</th>
<th>P-value</th>
<th>Direct Effect</th>
<th>Indirect Effect</th>
<th>Total Effect</th>
<th>Hypothesis</th>
</tr>
</thead>
<tbody>
<tr>
<td>SQ (\rightarrow) WOM</td>
<td>.639</td>
<td>.000</td>
<td>.4080</td>
<td>.1213</td>
<td>5293</td>
<td>H1 accepted</td>
</tr>
<tr>
<td>SQ (\rightarrow) SS</td>
<td>.860</td>
<td>.000</td>
<td>.7396</td>
<td>-</td>
<td>7396</td>
<td>H2 accepted</td>
</tr>
<tr>
<td>SS (\rightarrow) WOM</td>
<td>.141</td>
<td>.037</td>
<td>.0198</td>
<td>-</td>
<td>0198</td>
<td>H3 accepted</td>
</tr>
</tbody>
</table>

Source: Primary data processed, 2023.

**. Correlation is significant at the 0.01 level (2-tailed).**

Table 2. Path Coefficient, P-value, Determination, and Hypothesis Testing

Source: Primary data processed, 2023.
By referring to the choice of significant values (α = 5%), then the data compiled in Table 2, we can explain the meaning of the contents as follows:

**Service quality and word of mouth.** Path coefficient: 0.691, p-value: 0.000. Conclusion: hypothesis tested and H1 accepted. That means there's a significant positive influence of service quality on word of mouth. The indirect impact, i.e., through mediation of student satisfaction variables, was 12.13%. The total impact of service quality on word of mouth was 52.93%. The findings of this study prove the great role of the service quality variable in driving the positive behavior of word-of-mouth students toward the public. Average service quality score of 3.216, which is equal to 80.40% of the highest or ideal score of 4. The average word-of-mouth score is 3.247 (81.17%). The average score profile of both variables is concluded to meet good qualitative criteria. There is an alignment between high-profile performance, service quality, and word of mouth, proving a strong positive causal relationship between service quality and word of mouth. This study reinforces the findings of research conducted by Mestrovic (2017), Meštrović & Zugic (2018), MH Nainggolan & Amidiola (2021), and Chandra & Suhermin (2022), all of which show evidence of a strong causal and moderate service quality relationship with word of mouth.

**Service quality and student satisfaction.** Path coefficient: 0.860, p-value: 0.000. Conclusion: hypothesis tested and H2 accepted. That means there's a significant positive influence of service quality on student satisfaction. However, the proportion of direct influence is 73.96%. An average student satisfaction score of 3.207 (80.17%) can be included in the criteria for excellent qualitative value. This proves the causal relationship between service quality and student satisfaction has a very strong magnitude. Or, in other words, in STIMA IMMI, the variable service quality is an instrument that plays a very good role in building student satisfaction and performance. The results of this study reinforce the findings of research conducted by Mestrovic (2017), Azam (2018), and Syah & Wijoyo (2021).

**Student satisfaction and word of mouth.** Path coefficient: 0.141, p-value: 0.037. Conclusion: hypothesis tested and H3 accepted. That means there's a significant positive influence of student satisfaction on word of mouth. The magnitude of the influence value is 1.98%. This proves that student satisfaction has a significant causal relationship to word of mouth, but the level of causality at the magnitude position is weak. It shows that the satisfaction of students at STIMA IMMI with organizational services is not enough to inspire and motivate them to disseminate information to the public. The causal relationship positions of the two variables have weak magnitude levels, as also found in the Handayanto (2018), Koli et al. (2019), and Syah & Wijoyo (2021) research. The level of weak influence proves that the active behavior of the student is not determined by his attitude of satisfaction but rather by the pragmatic behavior of the student; for example, more appreciation and advancement of the quality values they receive from IMMI STIMA will be their strong driving force to speak to the public.

**CONCLUSION**

The test results on all research hypotheses show the evidence remains the same and consistent with the study of the theory and the development of the hypothesis. Service quality is a variable that plays a very good role in building student satisfaction performance, as well as a good and strong role in word-of-mouth behavior dynamics. However, the variable student satisfaction restricted the formation of word-of-mouth behavior in STIMA IMMI students.

Dynamics of behavior: word of mouth Students greatly help STIMA IMMI in disseminating information about the positive values of organization maintenance to the community. Students who gain experience and enjoy excellent service-quality activities will ultimately be motivated to actively promote institutions in the community, but it can also happen the opposite.

Measuring the attitude of student satisfaction toward the operational and learning facilities that STIMA IMMI has is very important, even if its influence is weak on word of mouth. Basically, student satisfaction reflects attitudes of comfort, pleasure, correct choice, and declaration of conformity expectations experienced by the students during their lectures at the IMMI STIMA campus. Student satisfaction mapping results became one of the best inputs to build a quality management strategy for the maintenance of student learning at STIMA IMMI.

**REFERENCES**


