

The Influence of Educational Staff Services and Teacher Competence on Student Satisfaction Through Student Loyalty With Competitor Intensity as a Moderating Variable

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Abstract

The growing competition among private high schools has made student satisfaction and loyalty crucial for educational sustainability. This study aims to analyze the influence of educational staff services and teacher competence on student satisfaction and loyalty in private high schools in Padang Timur District, with competitor intensity as a moderating variable. A quantitative survey was conducted with 280 respondents using proportional stratified random sampling, and data were analyzed through path analysis, Sobel test, and Moderated Regression Analysis (MRA). The findings indicate that both educational staff services and teacher competence significantly affect student satisfaction and loyalty, with satisfaction acting as a partial mediator, while competitor intensity weakens the satisfaction–loyalty relationship. These results highlight the need for continuous improvement in administrative services, teacher competence, and clear differentiation strategies to sustain competitiveness in education.

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INTRODUCTION

Education in the era of globalization and rapid technological advancement has become a key determinant in building the quality of competitive human resources. Educational institutions are required not only to function as providers of knowledge but also as service-oriented institutions capable of delivering satisfying learning experiences for students. In such a situation, the success of schools is determined not only by academic achievement but also by the quality of services offered. Handono et al. (2022) emphasize that the quality of leadership, teacher competence, and staff competence have a significant influence on satisfaction with educational services. Therefore, education can no longer be viewed merely as a process of knowledge transfer but rather as a comprehensive system that demands excellent services to ensure school sustainability (Sianipar et al., 2022).

Educational staff services represent one of the essential aspects supporting the success of the education system. Educational staff are not only responsible for administrative tasks but also ensure that students receive adequate academic and non-academic services. Services that are fast, accurate, and friendly can increase students' comfort while fostering emotional connections with the school. Mulyono et al. (2020) found that the quality of services in higher education has a direct effect on both student satisfaction and loyalty. A similar pattern is observed in secondary education, where the quality of administrative services influences students' trust in educational institutions (Uddin & Ali, 2018). These findings affirm educational staff services are a fundamental foundation in creating sustainable student satisfaction (Thanh & Doan, 2021).

Furthermore, teacher competence is also a key factor in determining the quality of education. Competent teachers are able to deliver material clearly, manage classrooms effectively, and provide guidance tailored to students' needs. Dali et al. (2017) demonstrated that teacher quality in teaching is strongly correlated with student learning satisfaction. Similarly, Iqbal et al. (2019) found that teacher competence not only enhances academic achievement but also students'

satisfaction with their learning experience. In the Indonesian context, Febrianti and Mujahidah (2024) highlight the importance of improving teacher and staff competence to promote overall educational quality. Thus, strengthening teacher capacity has become a fundamental strategy that every school must implement in order to remain competitive.

Student satisfaction, as a response to educational services, is an important indicator of institutional success. Satisfied students tend to be more motivated in learning, more active in school activities, and hold positive perceptions of their school. Research by Nisak & Trihantoyo (2023) shows that both academic and non-academic services contribute significantly to student satisfaction. Moreover, Hastari (2022) adds that learning satisfaction is not only shaped by classroom interactions with teachers but also by students' overall experiences at school. In the international context, Paul & Pradhan (2019) assert that service value dimensions play a major role in fostering student satisfaction and loyalty. Therefore, satisfaction can be understood as the result of various internal school factors simultaneously shape students' perceptions as learners.

High levels of satisfaction ultimately serve as the foundation for student loyalty. Loyalty is defined as students' emotional attachment and commitment to continue their studies, support school activities, and recommend the school to others. Trisela & Hermanto (2022) confirm that service quality and teacher competence are closely related to student loyalty in secondary schools. Meanwhile, Suriadi et al. (2025) demonstrated that student loyalty in Islamic universities can be explained through service quality and lecturer performance. Teeroovengadum et al. (2019) also emphasize that in higher education, satisfaction is a key variable linking service quality to loyalty. Accordingly, student loyalty is not only an indicator of success but also a strategic asset for schools to maintain their existence.

However, evidence from the field shows that satisfaction alone does not always guarantee loyalty. In increasingly competitive environments, students tend to have multiple options among schools with varying facilities,

programs, and tuition fees. Santini et al. (2024) found that even satisfied students may still consider transferring to other schools if they are offered better facilities or more attractive benefits. A similar phenomenon was observed by Hai (2022) in Vietnam, showing that competition among educational institutions can weaken the satisfaction–loyalty relationship. This indicates that external factors such as competitor intensity require serious attention as determinants of schools' success in maintaining student loyalty.

Competitor intensity acts as a moderating variable that may strengthen or weaken the relationship between satisfaction and student loyalty. Schools with high-quality services and competent teachers are not guaranteed to maintain loyalty if they lack clear differentiation strategies. Research by Douwes & Saputra (2024) shows that satisfaction can only foster loyalty when schools successfully provide added value compared to competitors. Musa et al. (2023) further suggest that competitor moderation analysis offers a more realistic understanding of factors influencing loyalty in a competitive education market. Therefore, differentiation through program innovation, strengthening school identity, and cultivating a strong academic culture becomes a strategic necessity that cannot be overlooked.

Based on this rationale, this study focuses on analyzing the influence of educational staff services and teacher competence on student satisfaction and its impact on loyalty, with competitor intensity as a moderating variable. This study is crucial because there are still few investigations that integrate internal and external factors within a single model in the field of educational administration in Indonesia. Theoretically, this research contributes to educational management literature through the testing of an integrative model. Practically, the findings are expected to serve as a reference for schools to enhance service quality, strengthen teacher competence, and design strategies to face competition. This research was conducted on private high school students in Padang Timur District, Padang City, and the results are expected to provide an overview the dynamics of secondary education in context of interschool competition.

METHOD

This study employed a quantitative approach with an associative design to examine the influence of educational staff services and teacher competence on student satisfaction through student loyalty as a mediating variable, while also considering competitor intensity as a moderating variable. The quantitative approach was chosen because it allows researchers to test the relationships among variables objectively using statistical analysis. Creswell (2018) explains that quantitative research focuses on numerical measurement and data analysis using statistical procedures, making it suitable for testing formulated hypotheses. Meanwhile, the associative research design is considered relevant as it aims to explain causal relationships among variables within the context of educational services.

The population of this study consisted of all 11th-grade students enrolled in private high schools in Padang Timur District during the 2024/2025 academic year, totaling 768 students. Based on calculations using Slovin's formula with a 5% margin of error, a sample size of 263 students was obtained. Sampling was conducted using proportional stratified random sampling to ensure that the population of each school was represented according to its proportion of students. According to Sugiyono (2024), this technique enables researchers to obtain a representative sample from a stratified population. Thus, the study results can be more accurately generalized to the target population.

The research instrument was a closed-ended questionnaire developed from the Servqual model, Expectancy Disconfirmation Theory, and Theory of Reasoned Action. The questionnaire used a five-point Likert scale to measure students' perceptions of educational staff services, teacher competence, satisfaction, loyalty, and competitor intensity. Prior to distribution, the instrument was tested for validity and reliability. Validity testing was conducted using Pearson Product Moment correlation, while reliability was tested using Cronbach's Alpha. According to Sekaran & Bougie (2019), a good research instrument must meet the criteria of validity ($r > 0.3$) and reliability

($\alpha > 0.7$) to ensure that the data obtained are credible and consistent.

Data analysis was conducted using path analysis to test direct and indirect effects among variables. Additionally, the Sobel test was applied to measure mediating effects, while Moderated Regression Analysis (MRA) was employed to test moderating effects. Before analysis, the data were tested against classical assumptions, including normality, multicollinearity, and heteroscedasticity. Sugiyono (2024) also emphasizes that meeting classical assumption tests is necessary to ensure that the regression model is appropriate for drawing conclusions. Through these procedures, the study results are expected to provide accurate and empirical insights into the relationships among variables comprehensively.

RESULTS AND DISCUSSION

Results

This study involved 263 respondents who were private high school students in Padang Timur District, Padang City. Respondents came from three schools: SMA Kartika 1-5 (112 students), SMA Adabiah (122 students), and SMA Bukit Barisan (29 students). The

composition of respondents proportionally represented the number of students in each school. In terms of characteristics, most respondents were 11th-grade students, with a relatively balanced distribution between male and female students.

The research instrument was tested for validity and reliability before use. The validity test results showed that all items had Pearson correlation values greater than the *r*-table (0.120), indicating that all items were valid. The reliability test using Cronbach's Alpha also yielded values greater than 0.7, meaning the research instrument was reliable. The results are presented in the following table 1.

The classical assumption tests indicated that the data met the requirements for regression analysis. The normality test showed that the data were normally distributed. The multicollinearity test showed that the Variance Inflation Factor (VIF) values were less than 10 and Tolerance values were greater than 0.1, indicating no multicollinearity problem. The heteroscedasticity test confirmed the regression model was free from heteroscedasticity issues.

The next stage was path analysis to examine the direct effects among variables. The results are presented in the following table 2.

Table 1. Validity and Reliability Test Results of the Instrument

Variable	Number of Items	r-value (≥ 0.120)	Cronbach's Alpha	Remarks
Educational Staff Services	17	0.312–0.726	0.926	Valid & Reliable
Teacher Competence	14	0.298–0.701	0.927	Valid & Reliable
Student Satisfaction	12	0.284–0.655	0.925	Valid & Reliable
Student Loyalty	10	0.336–0.689	0.931	Valid & Reliable
Competitor Intensity	10	0.301–0.673	0.929	Valid & Reliable

Table 2. Path Analysis Results

Relationship Between Variables	Path Coefficient (β)	Sig.	Remarks
Educational Staff Services → Satisfaction	0.312	0.000	Significant
Teacher Competence → Satisfaction	0.428	0.000	Significant
Educational Staff Services → Loyalty	0.215	0.003	Significant
Teacher Competence → Loyalty	0.267	0.001	Significant
Student Satisfaction → Loyalty	0.489	0.000	Significant

These results indicate that both educational staff services and teacher competence have a significant positive effect on student satisfaction and loyalty. Student satisfaction was also proven to significantly influence student loyalty.

The mediation test was conducted using the Sobel test. The results showed that student satisfaction acts as a mediator in the influence of educational staff services and teacher competence on student loyalty.

Table 3. Sobel Test Results

Mediation Path	Sobel Value	Sig.	Remarks
Educational Staff Services → Satisfaction → Loyalty	3.782	0.000	Significant Mediation
Teacher Competence → Satisfaction → Loyalty	4.215	0.000	Significant Mediation

The effect of competitor intensity as a moderating variable was tested using Moderated Regression Analysis (MRA). The results showed that the interaction between student satisfaction

and competitor intensity significantly influenced student loyalty, meaning that competitor intensity strengthens the relationship between student satisfaction and loyalty.

Table 4. Moderated Regression Analysis (MRA) Results

Interaction Variable	Coefficient (β)	Sig.	Remarks
Satisfaction × Competitor Intensity	0.178	0.012	Significant Moderation

Overall, the results of this study show that educational staff services and teacher competence have significant positive effects on both student satisfaction and loyalty. Student satisfaction plays a mediating role in strengthening the relationship between service quality and teacher competence with student loyalty. In addition, competitor intensity was proven to be a moderating variable that strengthens the influence of student satisfaction on loyalty.

Discussion

The findings of this study confirm that educational staff services have a significant influence on student satisfaction. Fast, accurate, and friendly administrative services create a sense of comfort and foster feelings of being valued among students. This factor strengthens students' attachment to the school as they feel they are receiving proper attention (Handayani, 2019). Other studies also indicate that student satisfaction is strongly influenced by the consistent quality of educational services provided (Yulia & Abubakar, 2024). In the context of private high schools, non-academic services such as administrative support form an important part of the school's image, which in turn affects student satisfaction (Lubis, 2021).

In addition to enhancing satisfaction, educational staff services also play a key role in shaping student loyalty. Students who are satisfied with administrative services tend to recommend the school and continue their studies there. This aligns with findings showing that the quality of administrative services influences long-term student loyalty (Amin et al., 2022). Other

research highlights that responsive services increase the likelihood of students remaining at the school (Erliani, 2024). Conversely, poor-quality services may cause students to seek alternatives, making it crucial for schools to maintain the quality of educational staff to preserve loyalty (Wiranto et al., 2023).

The findings of this study are also consistent with prior research linking educational staff management to improved educational quality. Professional educational staff services provide a foundation for creating positive learning experiences (Felita et al., 2024). Other studies demonstrate that staff members with strong social competencies can enhance student satisfaction with the school (Simbolon, 2025). This proves that non-academic dimensions cannot be overlooked, as student loyalty is built from a holistic experience encompasses interaction with teachers and administrative staff (Hakim, 2023).

Beyond staff services, this study also found that teacher competence has a substantial impact on student satisfaction. Teachers who master subject matter, employ innovative teaching methods, and build effective communication foster enjoyable learning processes. This is consistent with studies indicating a significant relationship between teacher competence and student satisfaction (Hastari, 2022). International studies also confirm that teacher competence influences both academic success and student satisfaction (Iqbal et al., 2019). Ultimately, professional teachers are able to make meaningful contribution to improving educational quality (Sukapsih & Supriyoko, 2024).

Teacher competence is related not only to satisfaction but also to student loyalty. Students who receive high-quality instruction feel proud to be part of the school, thereby enhancing the school's reputation in the community (Febrianti & Mujahidah, 2024). Other studies demonstrate that improved teacher performance directly impacts school reputation and student loyalty (Tanjung et al., 2024). Skilled and professional teachers make schools more competitive, enabling them to survive in an increasingly competitive environment (Yulmulyono et al., 2020). Therefore, improving teacher competence is a long-term investment that supports the sustainability of student loyalty (Kusumaningrum et al., 2024).

Furthermore, student satisfaction was proven to serve as a mediator between educational staff services and teacher competence with loyalty. Student loyalty cannot be established without satisfaction. This is consistent with the Expectancy Disconfirmation Theory, which explains that satisfaction arises when learning experiences meet or exceed students' expectations (Paul & Pradhan, 2019). Previous studies also identified satisfaction as a key factor in building long-term relationships with educational institutions (Mulyono et al., 2020). Thus, satisfaction can be considered a crucial prerequisite for sustainable student loyalty (Amini et al., 2023).

The Sobel analysis in this study reinforced the mediating role of satisfaction, particularly in the relationship between educational staff services and student loyalty. This suggests that services provided not only have a direct effect but also influence loyalty through the enhancement of student satisfaction (Akmal & Harianto, 2024). Prior research emphasizes that satisfaction is an important pathway linking service quality to student loyalty (Sofiati & Sumarni, 2016). In other words, schools that focus on improving staff service quality will be more successful in fostering loyalty if student satisfaction is managed consistently (Hanum & Setiawan, 2024).

In addition to staff services, satisfaction also mediates the relationship between teacher competence and student loyalty. Professional teachers enhance learning satisfaction, which in turn drives long-term loyalty (Dali et al., 2017).

Other studies show that satisfaction serves as an effective bridge between teaching quality and student loyalty (Hastari, 2022). In short, student loyalty results from satisfying learning experiences and positive relationships with teachers (Hanum & Setiawan, 2024). Therefore, improving teacher competence benefits not only academic quality but also institutional loyalty.

This study also provides evidence that competitor intensity moderates the relationship between satisfaction and student loyalty. In highly competitive school environments, even satisfied students may still consider transferring to other schools. This suggests that satisfaction does not always guarantee loyalty, especially if competitors can offer better facilities or lower costs (Sukapsih & Supriyoko, 2024). Other studies confirm that educational competition requires schools to be more innovative and adaptive in order to remain relevant and competitive (Yakmuri et al., 2025). Schools must therefore create service differentiation as a strategy to address competitive intensity (Febrianti & Mujahidah, 2024).

Overall, this study underscores the strong interconnection between educational staff services, teacher competence, satisfaction, and student loyalty. These findings support educational management theories emphasizing the importance of managing both teaching and non-teaching personnel to enhance school quality (Nurlindah et al., 2020). Other research highlights that managing human resources in education is a strategic aspect in creating competitive added value (Kusumaningrum et al., 2024). By integrating staff services, teacher competence, and innovation in facing intense competition, private schools can sustain student satisfaction and loyalty effectively (Felita et al., 2024).

CONCLUSION

This study confirms that educational staff services and teacher competence significantly influence the formation of student satisfaction, which ultimately enhances their loyalty to private schools, while competitor intensity was found to weaken the relationship between satisfaction and loyalty. The uniqueness of this study lies in the integration of direct effects, indirect effects

through satisfaction as a mediating variable, and competition as a moderating factor into a single comprehensive model. The practical implications highlight the need for continuous improvement in administrative service quality, strengthening teacher competence through training, and implementing clear differentiation strategies to address educational competition. These findings may serve as a reference for schools in designing adaptive educational management, while future research is recommended to expand the regional context and adopt mixed-method approaches to gain deeper insights into the dynamics of student satisfaction and loyalty.

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