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Effect of Job Satisfaction on Service Quality mediated by Lecturer Performance at State Universities

Abstract: Job satisfaction achieved by lecturers can affect all aspects of productivity, from performance to the quality of services provided in the academic community. This study focuses on analyzing the effect of job satisfaction on service quality with the performance of lecturers as mediators. This study uses an explanatory research method involving 140 respondents from lecturers who teach at state universities. Respondents were chosen by the simple random technique to fill in the questionnaire instrument with the same. The data analysis technique used was Structural equation modeling-partial least squares (SEM-PLS) with the help of Smart PLS 3. The results showed that job satisfaction had a significant direct effect on lecturer performance. However, it does not have a significant direct effect on the quality of lecturer services. On the other hand, the performance of lecturers has a significant direct effect on the quality of lecturer services. In addition, the performance of lecturers also acts as a full mediator so that job satisfaction can affect the quality of lecturer services. The structural model formed also fits the empirical data so that this research can be used as a reference to improve the quality of lecturer services in state universities.
Keywords: Job Satisfaction, Lecturer Performance, Service Quality.

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Introduction

Education and persons are two sides of the same coin that cannot be separated. Humans require education in order to reach their full potential. Education, on the other hand, necessitates humans even though subjects (teachers), as well as objects (which are taught), carry out all of the functions and roles of education (Thai et al., 2017). A university is one of the academic units that significantly impact the future quality of human resources. Higher education has been managed as an educational institution in the academic community's best interest, including students, teaching staff, and employees (Wibowo et al., 2020). Higher education is a component of the public education system that provides educational services and adapt to environmental changes. It is due to the growing knowledge of the community as customers,

as evidenced by changes in increasingly critical attitudes, increased competition, higher demands for the workplace, and rapid technological changes. This change increases competition among universities (Zhao et al., 2021). A university should have various facilities to compare performance in providing quality service. One factor contributing to a university's success is the ease with which the Tri Dharma can be implemented by providing, organizing, and providing services to students (Nyar, 2021). The strategy for improving higher education quality is providing facilities that enhance job satisfaction, lecturers, and employees (Toropova et al., 2021). Improve lecturers' and employees' performance, as well as optimize the quality of service following excellent service to customers (students).

Higher education services come in a variety of shapes and sizes. One of the primary services is to promote the advancement of science and technology through education, research, and community service (Bennett et al., 2018). As a result, the services provided must meet high-quality standards. Excellent service quality is a multifaceted driver of customer satisfaction (Demir et al., 2020). Service quality cannot be assessed from the service provider's standpoint; rather, it must be assessed from the customer's standpoint, specifically customer satisfaction (Meesala & Paul, 2018). Customer satisfaction reflects the level of service provided (Chiang & Trim, 2020). Organizations that provide services must have five service quality indicators: tangible (physical evidence), dependable (reliability), responsiveness assurance (guarantee), and empathy (Tešić, 2020). Tangible (actual evidence) signifies that learners want evidence that employees can show to satisfy them, such as promptness, convenience, sociability, and interactions with learners (Abbas, 2020). 2) Reliable in the manner that employees are dependable in carrying out tasks assigned to students (Ali et al., 2021). 3) Responsiveness requires employees to respond to student claims and needs. Both those concerning administration and all of their needs (Uppal et al., 2018). 4) Assurance in the context that employees must be knowledgeable, competent, courteous, and trustworthy, free of danger, risk, or uncertainty. Protection for these things will be demonstrated through student engagement with academic leaders, lecturers, and employees (Upadhyay et al., 2019). 5) Empathy includes student convenience in developing connections, good communication, personal attention, and employee understanding of students' individual needs (Latif et al., 2019).

Consumer satisfaction is good if it meets their expectations; otherwise, the service is perceived as bad if it does not meet their expectations (Hermiyenti & Wardi, 2019). This explanation implies that students, in this case as university customers, will evaluate service quality by comparing their perceptions of what they receive to what they expect (Fitzpatrick & Finn, 2020). Higher education is a service-provider institution where educational services are academic services that contribute to developing an effective learning process (Osman, 2019). Providing high-quality academic services is inextricably linked to several factors influencing it, including input, process, output, and outcome (Pradhan & Jena, 2017). The first is good input. Quality input can be measured by competent teaching staff, competent admin personnel, qualified students, quality facilities and infrastructure, and other educational inputs (Alauddin, 2019). The educational process is the second. A good educational process includes both teaching and learning. The way lecturers teach, the methods used, and the student's level of comprehension in recognizing the knowledge given by the teaching staff all indicate a quality learning and instruction process (Al-Omari & Okasheh, 2017). The third factor is output. Quality output is defined as graduates' competence relevant to customer needs regarding pedagogic, social, individual, and professional requirements (Thapliyal et al., 2022). Meanwhile, the fourth is the result. Acceptance and benefit of university graduates in their environment, including families, communities, and the workplace, is a quality outcome.

Based on the facts that have occurred thus far, the services provided, particularly at state universities, are still subpar. One example is the administrative service flow for the final project, which is still quite lengthy. There are numerous obstacles, from submitting the research title to the final exam. The causes vary, but the most common is the difficulty of students in intensive supervision with supervisors. The final project service, on the other hand, is one type of service that must be provided by the lecturer and facilitated by the university. Furthermore, the final project service reflects a good lecturer performance. Research by (Hill et al., 2017) found that students and the entire academic community will judge the lecturer's performance as good if he or she is dedicated to assisting students in completing the final project.

Lecturers are the primary assets in a university, serving as strategic planners, thinkers, and controllers of university activities. The performance of university lecturers in supplying efficient and effective services to the community or academic community reveals their high and low quality (Dommeyer, 2017). The performance of lecturers is required to enhance quality of service to the community (Schynoll et al., 2021).

A lecturer must always work passionately provide community services so that it does not appear slow. The ability of lecturers to (1) follow the development of science and technology, (2) prepare work programs, (3) optimize study program resources, (4) carry out the tri dharma tasks of higher education, (5) understand the vision and carry out the mission of the study program, and (6) carry out other supporting tasks is used as a parameter for lecturer performance (Hermina & Josepha, 2019).

To deliver a good performance, lecturers must feel at ease with their work. Job satisfaction and comfort are inextricably linked (Jamal Ali & Anwar, 2021). Job satisfaction is the attitude toward how people like or dislike their jobs (Nadinloyi et al., 2013). Lecturers who are satisfied with their jobs are more productive and stay with the company for a long time, whereas lecturers who are unhappy with their jobs will be less productive and more likely to leave (Hoboubi et al., 2017). Employees are motivated to provide better services when they are satisfied with their jobs; job satisfaction and organizational commitment influence service quality (Uteshkaliyeva & Kinzhibayeva, 2021). Job satisfaction is a form of loyal attitude to the company by doing a good job such as being dedicated, orderly, obeying the rules, and being positive (Judge et al., 2017). Several job satisfaction indicators, such as (1) pay, (2) work environment, (4) company regulations and policies, and (5) job security, can be used to reveal important aspects of work. (Izvercian et al., 2016).

All of these explanations conclude that his performance improves when the lecturer is pleased with his work. It can be seen in the improved quality of services provided to students. As a result, this research leads to an investigation into a management model based on empirical data. The variables to be investigated are related to lecturer job satisfaction, lecturer performance, and lecturer-to-student service quality. According to the previous description, this research will analyze a management model based on empirical data regarding the effect of lecturer job satisfaction on service quality to students mediated by lecturer performance.

Hypothesis and research framework

According to research (Helmi et al., 2022; Setyadi et al., 2022), job satisfaction has significant relationship with quality of service. Base on tha research (Adrian, 2019; Aslam et al., 2019; Iskamto, 2021), the job satisfaction variable has a significant relationship with the performance variable, consistent with previous studies. According to some of the prior studies, job satisfaction variables affect performance variables and service quality. A theoretical framework that defines the factors relating to product quality on brand image and its influence on purchasing decisions may be created based on the above description; the framework provided in this research is described in the image 1.

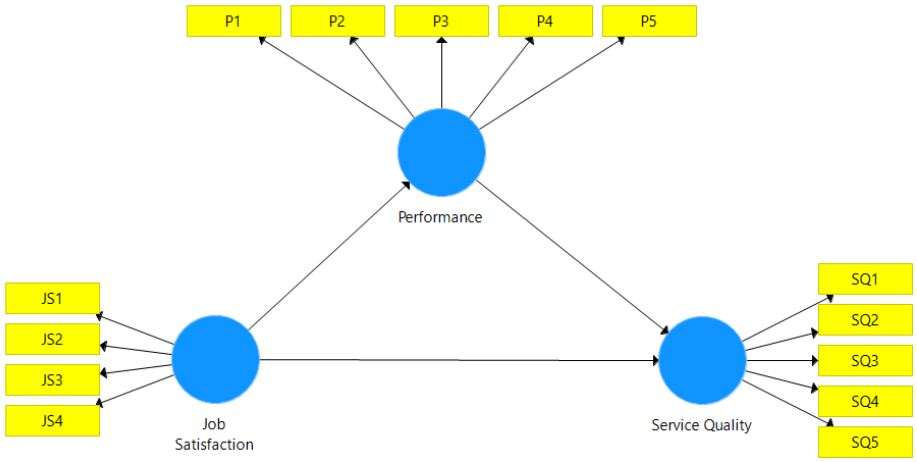

Figure 1. Research Framework

According to the framework model, the proposed hypothesis:
H1: Job satisfaction has significant effect on quality of service
H2: Job satisfaction has significant effect on lecturer performance
H3: Lecturer performance has a positive and significant effect on service quality
H4: Lecturer performance is a significant mediators of the effect of job satisfaction on quality of service

Research Methods

This study takes the form of explanatory research. It is also known as explanatory research with a quantitative approach (Creswell, 2012). The aim of this research is to examine the effect of a lecturer's job satisfaction on service quality to students, as mediated by the lecturer's performance. This study's variables include the independent variable, job satisfaction (X). Service quality (Y) is the exogenous variable, and lecturer performance is the moderator variable (Z). This study focuses on knowing whether there is an influence or relationship between variables consisting of independent variables, dependent variables, and moderator variables.

The study will run from January 2022 to September 2022. A sample of 140 respondents was chosen using a simple random sampling technique. The minimum number of samples in the SEM-PLS analysis, which is equal to or greater than ten times the number of the largest indicators used to measure a construct, is also used to determine the number of samples. In this research, 14 indicators from three constructs are used. In practice, the sample comes from the paths leading to the latent variable (10 x 14 = 140). (Hair et al., 2017). The instrument is a questionnaire distributed to lecturers who teach at state universities. The type of questionnaire used in this study is a questionnaire paired with the type of scale used, namely the Likert scale (1-5).

Table 1. Description of Indicator

Variables	**Indicators**	**Items Code**
Job Satisfaction	Company Policy	JS1
	Job Security	JS2
	Salary	JS3
	Work Environment	JS4
Performance	Keeping up with the development of science and technology	P1
	Optimizing study program resources	P2
	Carry out the tri dharma task of higher education	P3
	Understand the vision and carry out the mission of the study program	P4
	Carry out other supporting tasks	P5
Service Quality	Assurance	SQ1
	Tangible	SQ2
	Empathy	SQ3
	Reliability	SQ4
	Responsiveness	SQ5

The Smart PLS 3 software was used to analyze data. A covariance matrix and analysis of variance were used to calculate SEM. SEM is used to solve multilevel models that cannot be solved concurrently using linear regression equations (Hutomo et al., 2020). Model specifications, an estimate of structural model testing, model parameters, and a demonstration of hypotheses were the steps of SEM-PLS analysis in this work (Schumacker & Lomax, 2010). PLS-SEM measurement model evaluation generates non-parametric assessment methods and employs bootstrap and blinding procedures. The measurement model examination at whatever point required to determine the reliability and validity of conceptual framework or measurement indicators.

The reflecting measurement model was tested in research utilizing internal reliability (construct reliability), reliability factors, and concurrent validity (extracted mean variance). The higher the value of a model's factor loadings, the more similar the manifestations are to the construct. It ought to be noted that removing or expelling these identifiers from the model may result in an increase in the reliability coefficient score and average variance extract (AVE). Convergent validity is generally evaluated using the average

variance extract value, which must be greater than 0.5. The error is larger than the variance explained by the construct if the AVE value is less than 0.5. A loading factor value greater than 0.7 is considered ideal, indicating that the indicator is valid for measuring the construct it forms. A loading factor value greater than 0.5 is still acceptable in practice research. Even some experts accept the value 0.4. As a result, loading factors less than 0.4 must be excluded from the model. Commonalities are the fair value of the loading factor value. This value represents the proportion of constructs that are capable of describing the variations in the indicator.

The result of the SRMR test must be less than 0.8. Moreover, the d ULS and d G value sho that a strong research framework should have a significance higher than 0.05 (since it uses a 95% significance level). Furthermore, an NFI (Normal Fit Index) greater than 0.9 can be used to assess the model's suitability. Proof of the hypothesis can be shown by the value of significance/p-value and/or calculating the value of T are all steps in evaluating the structural model. The satisfactory Critical Value cannot exceed 1.96. The mediating variable, that also causes the predictor variables to influence the dependent variable, is then examined. The mediating variable, which also causes this same independent variable to influence the dependent variable, is then examined. The test is performed using the value of T, and the significance level permitted must be higher than 1.96. This test's objective is to support the hypothesis and pull the conclusion of the research.

Research Results

Proving The Validity and Estimation of The Reliability. The average variance extract (AVE) was used to examine the validity of the questionnaire questions, and the instrument's accuracy was tested in a composites fashion, namely directly on the construct. The Construct Reliability (CR) price, dependent on the loading factor price, is used in this reliability test. The cost of each construct's reliability and validity estimate is displayed in the table below.

Table 2. Evaluation of validity and reliability value

Variables	Construct Reliability (CR)	AVE	Cronbach's Alpha	Criteria
Job Satisfaction	0.954	0.839	0.936	Valid & Reliable
Lecture Performance	0.930	0.726	0.905	Valid & Reliable
Service Quality	0.946	0.780	0.929	Valid & Realiable

Thus according table 2, that AVE greater than 0.50. All of these indicators can measure variables well. All concepts from this study may be integrated into the model if the CR score is more than 0.80. Moreover, Cronbach's Alpha values higher than 0.7 indicate that the indicator used in assessing each variable is precise and reliable. The table below shows the validity of each indication that comprises the latent variable.

Table 3. Outer Loodings

Indicators Code	Loading Factor	Communalities
JS1	0.909	0.826
JS2	0.929	0.863
JS3	0.921	0.848
JS4	0.904	0.817
P1	0.778	0.605
P2	0.844	0.712
P3	0.850	0.723
P4	0.905	0.819
P5	0.876	0.767

SQ1	0.867	0.752
SQ2	0.862	0.743
SQ3	0.907	0.823
SQ4	0.909	0.826
SQ5	0.869	0.755

According to table 3, the loading factor of each indicator is more than 0.7. It signifies that the indicator is accurate in measuring the structure it creates. Furthermore, an aggregate value of commonalities larger than 0.6 indicates that all indicators may offer the most information on each construct they assess.

The goodness of the Fit Model Test

To test the hypotheses described earlier, a structural equation model was formed and tested in SmartPLS. The results of the structural model are described as follows.

Table 4. The goodness fit of model test

Parameter Model	Saturated Model	Description
SRMR	0.049	Fit
d_G	0.263	Fit
d_ULS	0.251	Fit
NFI	0.983	Fit

The table 4 shows the structural model that has met the fit specifications. These indicators (SRMR, dULS, dG, and NFI) are suitable for all structures. According to Hair, a model must contain three to four indexes in a suitable category to be considered practical or adequate. According to the fit test results, the overall research design has four model fit indices. Based on table 4, the SRMR value of 0.049 is smaller than 0.08 which means that this model fits the data. In addition, the d_ULS value of 0.622 and d_G of 0.297 which is greater than 0.05 also means that the model fits the data.

Furthermore, the convergent validity test is supported by a Normal Fit Index (NFI) value of 0.983, which is greater than 0.9. It means that the data fits the model as well. As a result, it is possible to conclude that this conceptual framework meets the fit demands. Model fit of job satisfaction, performance, and service quality from the previous hypothesis. The results of the complete model show in the image below.

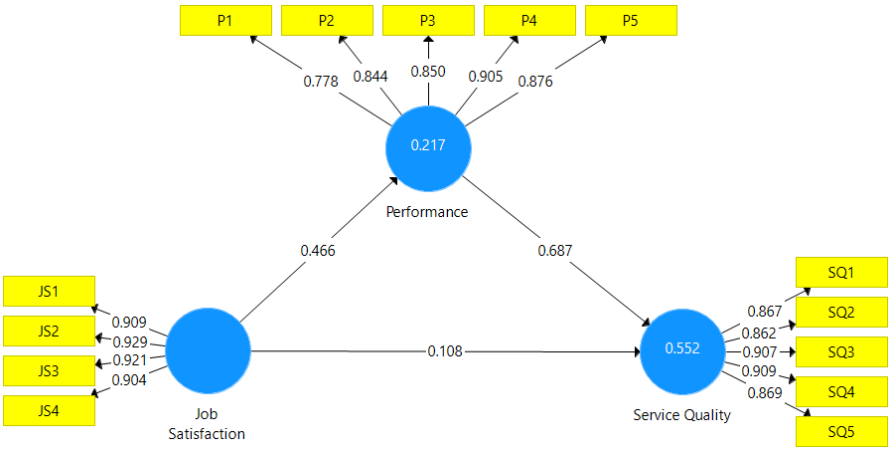

Figure 2. Model Fit Estimate

(Source: SEM analysis results using Smart PLS)

Testing the Hypotheses: Structural Equation Models

Decisions based on the results of the descriptive analysis are certainly not convincing enough, but generally, they can provide an overview. It is necessary to test the data following the hypothesis proposed in this study. The hypothesis of variables on other variables is presented in the following table.

Table 5. Hypothesis Test Results

Hypothesis	T-Statistics	P-Values	Description

H1	1.714	0.086	Not Significat
H2	5.482	0.000	Significant
H3	10.734	0.000	Significant

Note: *significant at critical ratio > 1.96.

- There is no significant effect of job satisfaction on service quality because the t-statistic of 1.714 < 1.96.
- Job satisfaction has a significant effect on lecturer performance because a t-statistic of 5.482 > 1.96
- Lecturer performance has a significant effect on quality of service because a t-statistic of 10.734 > 1.96

The research results of (Dhamija et al., 2019; Milana, 2018) studies indicate that there is a significant gap in all dimensions of service quality between the service expected and also the quality experience, and that there is no substantial link between job satisfaction and quality of service. Furthermore, (Arif et al., 2019; Wolomasi et al., 2019) found that job satisfaction has a significant direct effect on performance. Job satisfaction is one of the organisational factors that can be used to determine how employees feel about their jobs as well as predictors of work behavior such as encouragement, performance, and absences (Asbari et al., 2020; Yuen et al., 2018). Based on these research results, an employee satisfaction is more inclined to be at job (low absenteeism), makes fewer errors (quality), is more constructive, and is more likely to stay with the company.

Testing mediation effects

The aim of this research is to prove the role of lecturer performance in mediating the effect of job satisfaction on service quality. T Statistics and P Values can be used to calculate mediation effectst show in following table.

Table 6. Mediation Effect

Hypothesis	T-Statistics	P-Values	Result
H4	4.923	0.000	Full Mediation

Note: *significant at critical ratio > 1.96.

Table 6 shows an indirect effect of job satisfaction on service quality mediated by performance, with a value of 4.923 > 1.96. This means that the results of the mediation test can be reported the lecturer's performance has a full mediating effect so that job satisfaction can improve the service quality of the lecturer. The findings presented above are backed up by studies conducted by (Loan, 2020; Lu et al., 2019), which found that increasing employee job satisfaction is critical because it has the potential to improve customer perceptions of service quality and guarantee more optimal employee performance. The indirect relationship between quality of service and job satisfaction, as well as predictors of lecturer performance, contributes to a more comprehensive understanding of the complex character of job satisfaction, which can aid in the development of effective strategies to address faculty shortages and improve student service quality (Ćulibrk et al., 2018). When lecturer performance is included in the model, the relationship between quality of service and job satisfaction increases significantly, demonstrating the mediating role of lecturer performance (Davidescu et al., 2020). As a result, the key to the sustainability and quality of higher education lies in improving the performance of lecturers, which can be done through fulfilling the job satisfaction of lecturers to improve the quality of service to students.

Conclusions

The findings show that hypotheses 2, 3, and 4 are accepted, while hypothesis 1 is rejected. According to the findings of testing hypotheses, lecturer job satisfaction has no effect on service quality but does have an impact on lecturer performance. Lecturer performance has a significant effect on quality of service. The researcher discovered that lecturer performance is a significant mediators of the effect of lecturer job satisfaction on quality of service. It demonstrates that lecturers' performance will influence their job

satisfaction in order to improve service quality. Because it'll be a proposal for improved performance in the service of lecturers at the institution, the results of this research will be extremely beneficial in enhancing the quality of higher education services. This study informs state university stakeholders about how to enhance the standard of lecturer services in education. Job satisfaction and lecturer performance must be prioritized. This research can also be a theoretical reference in increasing lecturer job satisfaction, lecturer performance, and lecturer service quality at state universities because the model formed has been proven by the data. Recommendations for further research need to be tested in various locations with diverse objects. However, this study has certain limitations, including the sampling procedure and the number of samples used. The researcher agrees that the larger the sample used, the freer from bias in the study conclusions, and the more precisely they can be extrapolated.

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