

Optimal Strategy to Improve the Quality of Vocational Teacher Services through Knowledge Management, Interpersonal Communication, Organizational Support and Job Satisfaction



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ABSTRACT: Customer perceptions regarding the comparison between fulfilling needs and desires and the accuracy of delivery to balance customer expectations which are closely related to the quality of products, services, and human resources are called Service Quality. Teachers are the main aspect and key determinant of successful learning, policy implementation, and creative, innovative efforts, as well as the democratization of education. Teachers are the main players and spearheads in the world of education. Therefore, the existence of programs that concretely always support, accompany, and help to continue to develop the personal and professional qualities of teachers is a guarantee for brilliant education. Based on preliminary research, it is known that the permanent foundation teachers (GTY) of PGRI Vocational High Schools (SMK) in Bogor Regency have relatively suboptimal service quality. Therefore, research is needed to obtain information on variables related to improving service quality. This research aims to make efforts to improve the quality of service for vocational school teachers by researching the influence of the variables knowledge management, interpersonal communication, organizational support, and job satisfaction. This research uses the path analysis method to determine the influence between the variables studied and the SITOREM method for indicator analysis to obtain optimal solutions to improve the quality of vocational school teacher services.

KEYWORDS: Service Quality, Knowledge Management, Interpersonal Communication, Organizational Support, Job Satisfaction, SITOREM Analysis

INTRODUCTION

Challenges and competition are the hopes for how education will face the present and the future. Education as part of the main pillar of development and development of human resources (HR) is not left behind or only able to survive but must be strived to be superior and able to compete with educational progress in other countries. The excellence referred to in this case means that it can be a reference for other nations in developing human resources in the field of education.

High expectations for the perfection of educational output require the awareness and seriousness of educational stakeholders to empower educational institutions so that they can run effectively, which has an impact on the quality of superior educational output with all competencies. Professional governance is needed by every educational institution. This is done to ensure the continuity of increasing students' knowledge and life competencies as basic capital for nation development in facing the changes and challenges of the times.

The quality of human resources cannot be separated from the quality of education, where one of the main components is teachers. Quality schools are closely related to providing quality educational services. Therefore, teachers are needed who have high qualifications, competence, and dedication in carrying out their professional duties. Foundation Permanent Teachers (GTY) are the foundation's chosen personnel who are tasked with providing services to the community in a professional, honest, fair, and equitable manner in the provision of educational services.

Service quality is a form of consumer assessment of the level of perceived service and the level of expected service. The trust of the public who use educational services is closely related to the quality of the school organization's services. The level of trust is built through the service relationship of teaching staff, in this case, teachers, with their students. The quality of teacher service is related to trust, which essentially provides the best service to students, parents, and the surrounding community. Teachers are the main aspect and key determinant of successful learning, policy implementation, and creative, innovative efforts, as well as the democratization of education. Teachers are the main players and spearheads in the world of education. Therefore, the existence of programs that concretely always support, accompany, and help to continue to develop the personal and professional qualities of teachers is a guarantee for brilliant education.

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Based on a preliminary survey conducted by distributing questionnaires to 30 teachers at 6 (six) PGRI Vocational High Schools (SMK) in Bogor Regency, data was obtained that: 1) 42% of teachers were not optimal in implementing their abilities to provide services by what was promised. accurate and reliable (reliability), where this can be seen from the instructor having the ability to complete the tasks given and the instructor completing the work in accordance with the timeliness, 2) 32% of teachers are not optimal in implementing clear information delivery (responsiveness), where this can be seen from the instructor obtain information that is useful for completing their work and the instructor provides information that is easy to understand if colleagues ask questions, 3) 33% of teachers are not optimal in implementing feelings of trust in the institution (assurance), which can be seen from the instructor training using time which is effective in delivering material and instructors have an obligation to complete their tasks, and 4) 43% of teachers are not yet optimal in implementing efforts to understand consumer desires (empathy), which can be seen from instructors establishing communication with co-workers and instructors caring about co-workers and other employees, and 5) 40% of teachers are not yet optimal in implementing the appearance and capabilities of the institution's physical facilities and infrastructure (tangibles), where this can be seen from the use of learning media facilities to support the process of training training participants and the complete training institution facilities make it easier for instructors finish the job.

The survey results above show that the quality of service for vocational school teachers still needs to be improved and considering that the quality of teacher service is an important element related to achieving educational goals, the quality of teacher service is interesting to research. The research aims to produce strategies and methods for improving the quality of vocational teacher services, namely by strengthening independent variables that have a positive influence on the quality of teacher services. These variables are Knowledge Management, Interpersonal Communication, Organizational Support, and Job Satisfaction. The optimal solution found is then used as a recommendation to related parties, namely teachers, school principals, school supervisors, school organizing institutions, and education offices.

LITERATURE REVIEW

1. Service Quality

Service quality is a comparison between the quality received, after receiving the service, and the expected quality. The quality of the service is as follows: Reliability, namely consistency in providing services, Responsiveness, namely responsiveness in providing services; Assurance, namely guarantee of service quality; Empathy, namely careful attention to customer needs, and Tangibles, the facilities, infrastructure, and service facilities provided (Kotler, 2000).

Service quality is the customer's perception of the difference between the service received compared to the expected service. Service quality indicators are as follows: Reliability, namely accuracy and consistency in service, Responsiveness, namely willingness and speed of service, Assurance, namely sincerity, self-confidence, and skills in serving, Empathy, namely deep attention to customer needs/problems, and Tangibles, namely the quality of facilities, infrastructure and service facilities (Baines, Fill, & Page, 2011).

Service quality is a dynamic state that is closely related to products, services, human resources, as well as processes, and the environment that can at least meet or even exceed the expected service quality. Service quality indicators are as follows: Timeliness of service, including the time to wait during transactions and payment processes, Service accuracy, namely minimizing errors in service and transactions, Politeness and friendliness when providing services, Ease of obtaining services, namely the availability of resources humans to help serve consumers, and consumer comfort, namely location, parking, comfortable waiting room, cleanliness aspects, availability of information, and so on (Tjiptono, 2005).

According to Wyckoff (2002), service quality is an expected level of excellence, and related to this is the act of controlling that level of excellence to meet consumer expectations. Service quality indicators are as follows: Tangibles: service quality in the form of physical office facilities, computerized administration, waiting rooms, and information areas, Reliability: ability and reliability to provide reliable services, Responsiveness: ability to help and provide services quickly and precisely, and responsive to consumer desires, Assurance (guarantee): the ability, friendliness and courtesy of employees in ensuring consumer trust, and Emphaty: firm but caring attitude from employees towards consumers.

From the various theories above, it can be synthesized that service quality is the customer's perception of the comparison between fulfilling needs and desires and the accuracy of delivery to balance customer expectations which are closely related to the quality of products, services, and human resources. Service quality indicators are as follows: 1) ability to provide services as promised accurately and reliably (reliability), 2) delivery of clear information (responsiveness), 3) feeling of trust in the institution (assurance), 4) striving to understand consumer desires (empathy), and 5) appearance and capabilities of the institution's physical facilities and infrastructure (tangibles).

2. Knowledge Management

Marquardt, Michael J. (2012), Knowledge management is the activity of an organization (organization members) in collecting, organizing, storing, transferring, and using knowledge and experience inside and outside the organization. Dimensions

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include: 1) Collecting: gathering knowledge; 2) Storing: documentation and storage of knowledge; 3) Transfer among members: exchange and transfer of knowledge between members of the organization; 4) Application: application of knowledge in work; and 5) Distribution / Dissemination: distribution of knowledge that has been successfully applied.

Jennex (2008) that knowledge management is the acquisition of the right knowledge for the right people at the right time. The dimensions are as follows: 1) Knowledge acquisition: acquisition of knowledge from knowledge sources; 2) Knowledge Storing: storage and documentation of knowledge files; 3) Knowledge evaluating: evaluating the usefulness and relevance of knowledge; 4) Knowledge dissemination: dissemination of information about the successful application of knowledge; and 5) Knowledge application: practical instructions on how to apply knowledge.

Aulawi, et.al. (2009), Knowledge management is a management function that can create knowledge, manage the flow of knowledge, and ensure that knowledge is used effectively and efficiently for the long-term interests of the organization. Dimensions include: 1) Collecting and reusing structured knowledge; 2) Collect and sharing lessons learned from practices; 3) Creating and sharing lessons learned from practices; 4) Creating a structure and mapping the knowledge needed to improve performance; 5) Measuring and managing the economic value of knowledge; and 6) Compile and disseminate knowledge from external sources.

Leung, Chan, et.al. (2013), Knowledge management is a way for companies to identify, create, represent, distribute, and enable the adaptation of insight and experience. This insight and experience consists of knowledge, both possessed by individuals and knowledge inherent in processes or standard procedures. The dimensions are as follows: 1) knowledge identification; 2) reflection of knowledge; 3) knowledge sharing; and 4) use of knowledge.

Based on the theoretical explanation from several expert opinions above, it can be synthesized that knowledge management is an individual's activity in accessing, collecting, storing, processing, utilizing, and developing personal knowledge to support the progress of himself and the organization. Indicators: 1) acquisition of knowledge, 2) collection of knowledge, 3) storage of knowledge, 4) processing of knowledge into new knowledge, 5) utilization/application of knowledge, and 6) sharing and distribution of knowledge.

3. Interpersonal Communication

Littlejohn & Foss (2018) Communication (in Interpersonal terms) is the verbal exchange of thoughts or ideas. Interpersonal communication can take place effectively if several aspects must be paid attention to by the perpetrators of interpersonal communication. Aspects of interpersonal communication are openness, empathy, supportive attitude, positive attitude, and equality. Schermerhorn, et. al. (2017) Communication is the interpersonal process of sending and receiving symbols with messages attached to them. Four dimensions influence interpersonal communication, namely: self-image, the image of the other party, the physical environment, and the social environment.

Singh, (2014) Interpersonal communication is the process of transmitting information and general understanding between one person and another. Dimensions of interpersonal communication: Openness, namely the willingness to respond happily to information received in dealing with interpersonal relationships; Empathy, namely feeling what another person feels; Support, namely an open situation to support effective communication; Positive feelings, a person must have positive feelings towards himself, encourage others to participate more actively and create a communication situation conducive to effective interaction; and Equality or similarity, namely tacit recognition that both parties value, are useful, and have something important to contribute.

Luthans, (2016) interpersonal communication, is seen as a basic method for influencing behavior change, and it combines psychological processes (perception, learning, and motivation) on the one hand and language on the other. An indicator of interpersonal communication is intention. Effective feedback is directed at improving performance and work results to become a more valuable asset, specificity. Effective feedback is designed to provide specific information to recipients so they know what to do to improve the situation and description. Effective feedback can also be characterized as descriptive rather than evaluative, usefulness. Effective feedback is information that employees can use to improve performance and timeliness.

There are also considerations in timing feedback correctly. As a rule, the quicker the feedback, the better. This way employees have a better chance of knowing what their superiors are talking about and can take corrective action, and readiness. For feedback to be effective, employees must be ready to receive it. When feedback is imposed or forced on employees, it is much less effective, clarity. Effective feedback must be clearly understood by the recipient. A good way to check this is to ask the recipient to restate the main points of discussion, and validity. For feedback to be effective, it must be reliable and valid. Of course, when the information is wrong, the employee will feel that the supervisor is unnecessarily biased or the employee may take corrective actions that are inappropriate and only a minor problem.

Based on the theoretical explanation from several expert opinions above, it can be synthesized that interpersonal communication is the activity of sending and receiving messages reciprocally carried out by individuals who have close relationships to achieve the desired goals in the organization with indicators: 1). openness, 2) equality, 3) empathy, 4) positivity, and 5) support.

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4. Organizational Support

Organizational support is the degree to which employees believe the organization values their contributions and cares about their welfare. Indicators of organizational support are as follows: Fair appreciation for employee contributions, care for their welfare, and supportive supervision (Robbins & Judge, 2018). According to Salehzadeh et al (2014), defining organizational support is defined as employees' beliefs about the extent to which the organization cares about their welfare and appreciates contributions. Indicators of organizational support are as follows: Concern for employee welfare, respect for cooperation with employees, and the existence of appropriate rewards. Baran, Shanock, and Miller (2012), define organizational support as focusing on the extent to which employees believe their work organization values their contributions and cares about their well-being. Indicators of organizational support are as follows: Fairness shown by the organization, Appropriateness of the rewards and working conditions provided by the organization, and Supervisory support (as far as the supervisor is seen as an agent or representative acting on behalf of the organization).

Organizational support reflects the degree to which employees believe that the organization values their contributions and cares about their welfare. Indicators of organizational support are as follows: Providing adequate (providing adequate), Rewards, Protecting job security (protecting job security), Improving work conditions (improving working conditions), and Minimizing the impact of politics (Colquitt, LePine, & Wesson, 2015). According to Zagenczck, Gibney, Few, and Scott (2011), Organizational Support is employees' attention to the treatment offered by the organization to determine the extent to which their contributions to the organization are appreciated and the organization cares about them. Indicators of organizational support are as follows: Concern for employees, valued employee contributions, and fit in the workplace.

According to Baran et al. (2012), Organizational support refers to the extent to which employees believe the organization values their contributions and cares about their well-being. Indicators of organizational support are as follows: Fairness, Favorableness of organizational rewards, and job conditions (goodness of organizational rewards and working conditions) which include work aspects such as training, autonomy, role stressors, Supervisor support, Demographics, and Personality characteristics.

From the various theories above, it can be synthesized that organizational support is the level of employee confidence in a workplace organization that provides justice, respects contributions, pays attention to welfare, provides recognition of employee values, and provides guaranteed working conditions to employees. Indicators of organizational support are as follows: 1) providing justice (fairness), 2) leadership support, 3) awards from the organization, and 4) working conditions.

5. Job Satisfaction

According to Gibson, et al (2006), job satisfaction is an individual's attitude towards his job, which originates from his perception of his job. Indicators of job satisfaction are as follows: pay (salary, wages, honorarium), job (work conditions: facilities, challenges, job requirements), promotion opportunities (opportunities for promotion, career development, increasing status), supervisor (supervision of superiors, relationships superiors-subordinates), and co-workers (colleagues, teamwork, etc.)

Job satisfaction is an individual's emotional condition that arises from an assessment of his or her work, or experiences at work. Indicators of job satisfaction are as follows: salary (high and certain), promotion (opportunities based on performance and ability), supervisor supervision (good working relationships with superiors, and giving awards), coworkers (good and responsible relationships), the job own (freedom to realize abilities, creations, achievements, etc.) (Colquitt et al., 2015).

Robbins (2006), defines job satisfaction as a person's general attitude towards their work, the difference between the amount of income an employee receives and the amount they believe they should receive. Indicators of job satisfaction are as follows: Salary, job security, opportunities for advancement, and management and company. Meanwhile, Kim, Tavitiyaman, and Kim (2009), define job satisfaction as a general employee attitude that is the result of several attitudes toward work factors, personal adjustment, and individual social relationships outside of work. Indicators of job satisfaction are as follows: rewards received (compensation), supervision carried out by superiors (supervision), work itself, relations between co-workers, job security, and opportunity to obtain a change of status (advancement opportunity).

Job satisfaction is a general attitude that is the result of several specific attitudes towards work factors, personal adjustment, and individual social relationships outside work. Indicators of job satisfaction are as follows: Personal factors, which include age, level of health, character, and expectations, Social factors which include, family relationships, views of society, opportunities to react, implementation of labor unions, freedom of politics and relations with society, and Main factors in work, including salary, supervision, work security, working conditions and opportunities for advancement (As'ad, 2015). Job satisfaction is an emotional condition in an employee who is happy and loves his job. Indicators of job satisfaction are as follows: enjoying their job, loving their job, work morale, discipline, and work performance (Hasibuan, 2001).

Davis (2005), defines job satisfaction as employee satisfaction with their work between what employees expect from their work/office. Indicators of job satisfaction are as follows: Wages: amount and a sense of fairness, Promotion: opportunities and a sense of fairness to get promotions, Supervision: fairness and competence in managerial assignments by supervisors, Benefits: insurance, vacations, and other forms of facilities, Contingent rewards: respect, recognized and given appreciation, Operating

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procedures: policies, procedures and rules, Co-workers: pleasant and competent colleagues, Nature of work: the task itself can be enjoyed or not, and Communication: various information within the organization (verbal and nonverbal)

From the various theories above, it can be synthesized that Job Satisfaction is an individual's attitude that reflects pleasant or unpleasant feelings towards their work, or experiences, which originate from their perception of their work and the income they receive. Indicators of job satisfaction are as follows: 1). salary (pay), 2). conditions of employment (job), 3). promotion opportunities, 4). supervision, and 5). co-workers.

RESEARCH METHODS

This research aims to find ways to improve the service quality of vocational school teachers through research on the strength of influence between teacher service quality as the dependent variable and knowledge management, interpersonal communication, organizational support, and job satisfaction. as the independent variable. The research method used is a survey method with a path analysis test approach to test statistical hypotheses and the SITOREM method for indicator analysis to determine optimal solutions for increasing teacher OCB.

The research was carried out on foundation permanent teachers (GTY) of PGRI Vocational High Schools (SMK) in Bogor Regency with a teacher population of 289 people, with a sample of 168 teachers calculated using the Slovin formula.

Data collection in this research used research instruments in the form of questionnaires which were distributed to teachers as research respondents. The research instrument items are derived from the research indicators whose conditions will be explored. Before being distributed to respondents, the research instrument was first tested to determine its validity and reliability. The validity test was carried out using the Pearson Product Moment technique, while for the reliability test, a calculation was used using Cronbach's Alpha formula. After the data is collected, homogeneity tests, normality tests, linearity tests, simple correlation analysis, coefficient of determination analysis, partial correlation analysis, and statistical hypothesis testing are then carried out.

The indicator analysis used is the SITOREM method from Hardhienata (21017) to determine the priority order for improving indicators as a recommendation to related parties which is the result of this research. In determining the priority order for handling indicators, SITOREM uses three criteria, namely (1) the strength of the relationship between variables obtained from hypothesis testing, (2) the priority order for handling indicators resulting from expert assessments, and (3) the indicator value obtained from data calculations. obtained from the answers of research respondents. SITOREM is an abbreviation for "Scientific Identification Theory to Conduct Operation Research in Education Management", which can generally be interpreted as a scientific method used to identify variables (theory) to carry out "Operation Research" in the field of Education Management (Hardhienata, 2017).

In the context of Correlational and Path Analysis research, SITOREM is used as a method to carry out: 1). Identify the strength of the relationship between the Independent Variable and the Dependent Variable, 2) Analysis of the value of research results for each indicator of the research variable, and 3) Analysis of the weight of each indicator for each research variable based on the criteria "Cost, Benefit, Urgency and Importance".

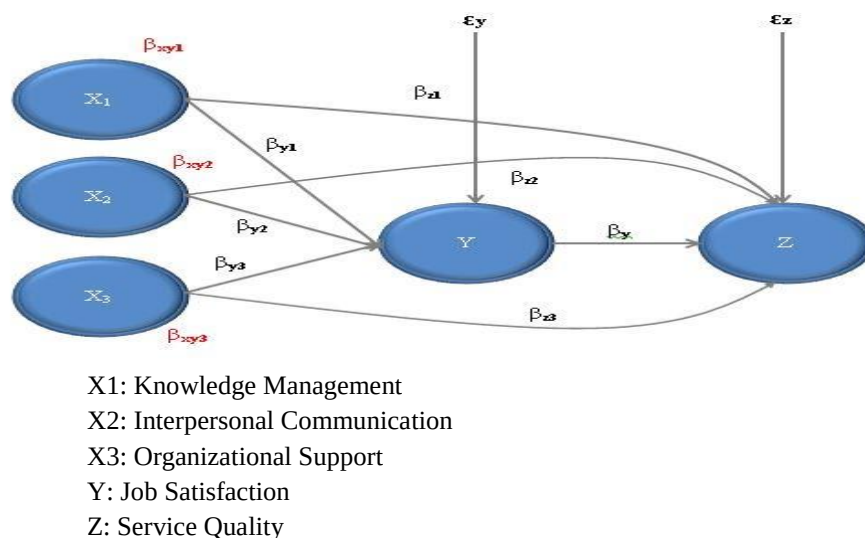


Figure 1. Research Constellation

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RESULTS AND DISCUSSION

1. Descriptive Statistics

Based on the results of the analysis of statistical descriptions for research variables, symptoms of central data can be revealed as listed in the following table:

Table 1. Summary of Statistical Description of Research Variables

Description	Knowledge Management (X ₁)	Interpersonal Communication (X ₂)	Organizational Support (X ₃)	Job Satisfaction (Y)	Service Quality (Z)
Mean	121.05	126.75	122.91	122.80	126.28
Standard Error	1.21728	1.75046	1.19771	1.77186	1.25326
Median	124	134	126.5	130	130
Mode	121	150	130	149	136
Stand Deviation	16.6906	24.001	16.4221	24.2945	17.1838
Sample Variance	278.575	576.049	269.687	590.223	295.284
Kurtosis	0.58266	1.64903	1.64832	0.5498	0.85695
Skewness	-0.9844	-1.4904	-1.3927	-0.7772	-1.0468
Range	70	101	81	101	77
Minimum Score	74	52	64	59	75
Maximum Score	144	153	145	160	152

a. Normality Test

Based on the overall calculation results of the error normality test in this study, it can be seen in the summary in the following table:

Table 2. Estimated Standard Error Normality Test

Estimate Error	n	L-Count	L-table		Decision
			$\alpha = 0,05$	$\alpha = 0,01$	
$z - \hat{Y}_1$	168	0.009	0.065	0.075	Normal
$z - \hat{Y}_2$	168	0.012	0.065	0.075	Normal
$z - \hat{Y}_3$	168	0.010	0.065	0.075	Normal
$z - \hat{Y}_4$	168	0.008	0.065	0.075	Normal
$y - X_1$	168	0.011	0.065	0.075	Normal
$y - X_2$	168	0.010	0.065	0.075	Normal
$y - X_3$	168	0.012	0.065	0.075	Normal
Normal distribution term: Lcount < Ltable					

b. Homogeneity Test

Based on the overall calculation results of the error normality test in this study, it can be seen in the summary in the following table:

Table 3. Summary of Data Variance Homogeneity Test

Grouping	X ² _{Count}	X ² _{table}	Conclusion
		$\alpha = 0,05$	
z to X ₁	3714.91	6132.59	Homogeneous
z to X ₂	3823.33	7288.01	Homogeneous
z to X ₃	4592.84	8451.28	Homogeneous
z to y	4613.17	6192.48	Homogeneous
y to X ₁	3710.50	6132.59	Homogeneous
y to X ₂	4469.28	7288.01	Homogeneous

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Grouping	X^2_{Count}	X^2_{table}	Conclusion
		$\alpha = 0,05$	
y to X_3	4912.17	7288.01	Homogeneous
Homogeneous population term $\chi^2_{\text{count}} < \chi^2_{\text{table}}$			

c. Regression Model Test

The overall calculation results of the regression model in this research can be seen in the summary in the following table:

Table 4. Regression Model

Relationship Model Between Variables	Regression Model	Significance Test Results
z to x_1	$\hat{y} = 39,508 + 0,645X_1$	Significant
z to x_2	$\hat{y} = 54,744 + 0,523X_2$	Significant
z to x_3	$\hat{y} = 58,693 + 0,533X_3$	Significant
z to y	$\hat{y} = 39,508 + 0,645X_1$	Significant
y to x_1	$\hat{y} = 62,423 + 0,447X_2$	Significant
y to x_2	$\hat{y} = 72,122 + 0,382X_3$	Significant
y to x_3	$\hat{y} = 46,152 + 0,577X_5$	Significant
z to x_1 through y	$\hat{y} = 46,77 + 0,30X_2 + 0,26X_5$	Significant
z to x_2 through y	$\hat{y} = 34,12 + 0,37X_1 + 0,33X_4$	Significant
z to x_3 through y	$\hat{y} = 51,45 + 0,34X_2 + 0,20X_4$	Significant

d. Regression Model Significance Test

The overall calculation results of the linearity test of the regression model in this study can be seen in the summary in the following table:

Table 5. Summary of Regression Model Significance Test Results (F Test)

Relationship Model Between Variables	Sig	α	Significance Test Results
z to x_1	0,000 ^b	0,005	Significant
z to x_2	0,000 ^b	0,005	Significant
z to x_3	0,000 ^b	0,005	Significant
z to y	0,000 ^b	0,005	Significant
y to x_1	0,000 ^b	0,005	Significant
y to x_2	0,000 ^b	0,005	Significant
y to x_3	0,000 ^b	0,005	Significant
z to x_1 through y	0,000 ^b	0,005	Significant
z to x_2 through y	0,000 ^b	0,005	Significant
z to x_3 through y	0,000 ^b	0,005	Significant
Significant Terms: Sig < α			

e. Linearity Test

The overall calculation results of the linearity test of the regression model in this study can be seen in the summary in the following table:

Table 6. Summary of Regression Model Linearity Test Results (t =Test)

Relationship Model Between Variables	Sig	α	Linearity Pattern Test Results
z to x_1	0,000	0,005	Linear
z to x_2	0,000	0,005	Linear

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Relationship Model Between Variables	Sig	α	Linearity Pattern Test Results
z to x_3	0,000	0,005	Linear
z to y	0,000	0,005	Linear
y to x_1	0,000	0,005	Linear
y to x_2	0,000	0,005	Linear
y to x_3	0,000	0,005	Linear
z to x_1 through y	0,000	0,005	Linear
z to x_2 through y	0,000	0,005	Linear
z to x_3 through y	0,000	0,005	Linear
Linear Terms: Sig < α			

f. Multicollinearity Test

Multicollinearity testing aims to determine whether the regression model found any correlation between independent variables or independent variables. Testing uses the Spearman Test. The effect of this multicollinearity is that it causes high variability in the sample. This means that the standard error is large, as a result, when the coefficient is tested, the t-count will be a smaller value than the t-table. The overall calculation results of the multicollinearity test are as follows:

Table 7. Summary of Multicollinearity Test

Independent Variable	Tolerance	VIF	Precondition	Conclusion
Knowledge Management (X_1)	0.227	4.408	H ₀ : VIF < 10, there is no multicollinearity H ₁ : VIF > 10, there is multicollinearity	Ho accepted There is no multicollinearity
Interpersonal Communication (X_2)	0.203	5.803	H ₀ : VIF < 10, there is no multicollinearity H ₁ : VIF > 10, there is multicollinearity	Ho accepted There is no multicollinearity
Support Organization (X_3)	0.225	4.449	H ₀ : VIF < 10, there is no multicollinearity H ₁ : VIF > 10, there is multicollinearity	Ho accepted There is no multicollinearity
Job Satisfaction (Y)	0.213	4.692	H ₀ : VIF < 10, there is no multicollinearity H ₁ : VIF > 10, there is multicollinearity	Ho accepted There is no multicollinearity

g. Heteroscedasticity Test

In this research, to test whether there is heteroscedasticity using the Glejser Test where if the significant value is <0.05 then heteroscedasticity occurs, on the contrary, if the significance value is ≥ 0.05 then homoscedasticity occurs. The overall calculation results of the heteroscedasticity test in this study can be seen in the summary in the following table:

Table 8. Summary of Heteroscedasticity Test

Variable	Sig.	α	Precondition	Conclusion
Knowledge Management (X_1)	0,000	0,05	H ₀ : significant value < 0,05 there is no heteroscedasticity. H ₁ : significant value $\geq 0,05$ there is heteroscedasticity.	Ho accepted There is no heteroscedasticity
Interpersonal Communication (X_2)	0,000	0,05	H ₀ : significant value < 0,05 there is no heteroscedasticity. H ₁ : significant value $\geq 0,05$ there is heteroscedasticity.	Ho accepted There is no heteroscedasticity
Support Organization (X_3)	0,000	0,05	H ₀ : significant value < 0,05 there is no heteroscedasticity. H ₁ : significant value $\geq 0,05$ there is heteroscedasticity.	Ho accepted There is no heteroscedasticity

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Variable	Sig.	α	Precondition	Conclusion
Job Satisfaction (Y)	0,000	0,05	H ₀ : significant value < 0,05 there is no heteroscedasticity. H ₁ : significant value $\geq$ 0,05 there is heteroscedasticity.	H ₀ accepted There is no heteroscedasticity

2. Path Analysis Test Results

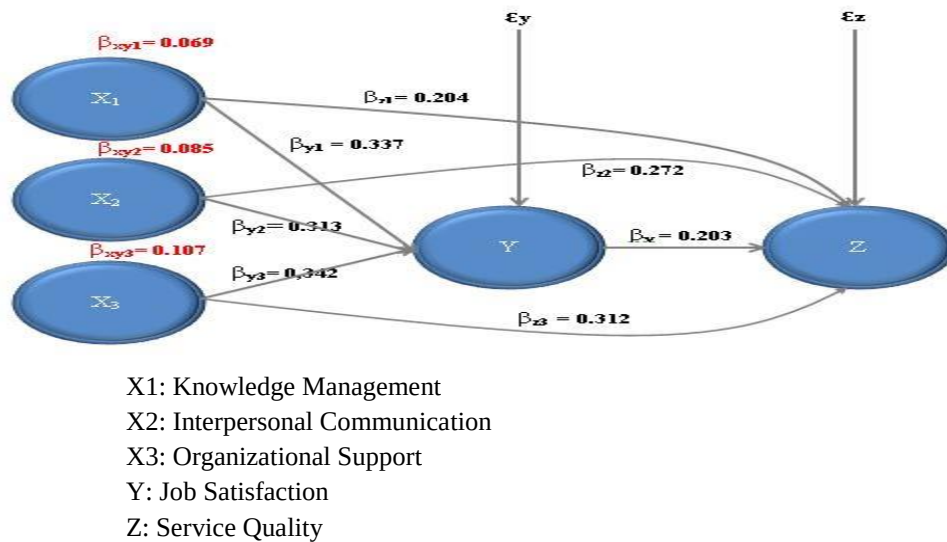


Figure 2. Path Analysis Test Results

The influence between the independent variable and the dependent variable when viewed from path analysis, then this relationship is a functional relationship where Teacher Service Quality (Z) is formed as a result of the working of Knowledge Management (X1), Interpersonal Communication (X2), Organizational Support (X3) functions and Job Satisfaction (Y). Discussion of research results can be described as follows:

Table 9. Research Hypothesis

Hypothesis	Path Coefficient	Statistic test	Decision	Conclusion
Knowledge Management (X ₁) on the Quality of Teacher Services (Z)	0.204	H ₀ : $\beta_{z1} \leq 0$ H ₁ : $\beta_{z1} > 0$	H ₀ rejected H ₁ accepted	Direct Positive Influence
Interpersonal Communication (X ₂) on the Quality of Teacher Services (Z)	0.272	H ₀ : $\beta_{z2} \leq 0$ H ₁ : $\beta_{z2} > 0$	H ₀ rejected H ₁ accepted	Direct Positive Influence
Organizational Support (X ₃) on the Quality of Teacher Services (Z)	0.312	H ₀ : $\beta_{z3} \leq 0$ H ₁ : $\beta_{z3} > 0$	H ₀ rejected H ₁ accepted	Direct Positive Influence
Job Satisfaction (Y) on the Quality of Teacher Services (Z)	0.203	H ₀ : $\beta_{yz} \leq 0$ H ₁ : $\beta_{yz} > 0$	H ₀ rejected H ₁ accepted	Direct Influence Positive
Knowledge Management (X ₁) on Job Satisfaction (Y)	0.337	H ₀ : $\beta_{y1} \leq 0$ H ₁ : $\beta_{y1} > 0$	H ₀ rejected H ₁ accepted	Direct Influence Positive
Interpersonal Communication (X ₂) on Job Satisfaction (Y)	0.313	H ₀ : $\beta_{y2} \leq 0$ H ₁ : $\beta_{y2} > 0$	H ₀ rejected H ₁ accepted	Direct Influence Positive
Organizational Support (X ₃) on Job Satisfaction (Y)	0.342	H ₀ : $\beta_{y3} \leq 0$ H ₁ : $\beta_{y3} > 0$	H ₀ rejected H ₁ accepted	Direct Influence Positive
Knowledge Management (X ₁) on the Quality of Teacher (Z) through Job Satisfaction (Y)	0.069	H ₀ : $\beta_{xy1} \leq 0$ H ₁ : $\beta_{xy1} > 0$	H ₀ rejected H ₁ accepted	Influential Indirect Positive

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Hypothesis	Path Coefficient	Statistic test	Decision	Conclusion
Interpersonal Communication (X_2) on the Quality of (Z) through Job Satisfaction (Y)	0.085	$H_0 : \beta_{X_2Y} \leq 0$ $H_1 : \beta_{X_2Y} > 0$	H_0 rejected H_1 accepted	Influential Indirect Positive
Organizational Support (X_3) on the Quality of (Z) through Job Satisfaction (Y)	0.107	$H_0 : \beta_{X_3Y} \leq 0$ $H_1 : \beta_{X_3Y} > 0$	H_0 rejected H_1 accepted	Influential Indirect Positive

3. Indirect Effect Test Result

The indirect effect test is used to test the effectiveness of the intervening variable which mediates the independent variable and the dependent variable. The results of the indirect influence test are as follows:

Table 10. Research Hypothesis

Indirect Effect	Z-count	Z-table	Decision	Conclusion
Knowledge Management (X_1) on the Quality of Teacher (Z) through Job Satisfaction (Y)	4.860	1,966	H_0 rejected H_1 accepted	proven to mediate
Interpersonal Communication (X_2) on the Quality of (Z) through Job Satisfaction (Y)	4,678	1,966	H_0 rejected H_1 accepted	proven to mediate
Organizational Support (X_3) on the Quality of (Z) through Job Satisfaction (Y)	4,608	1,966	H_0 rejected H_1 accepted	proven to mediate

4. Optimal Solution to Strengthen the Quality of Teacher Services

Based on the results of statistical hypothesis testing, determining indicator priorities, and calculating indicator values as described above, a recapitulation of research results can be made which is the optimal solution for strengthening Teacher Service Quality as follows:

Table 11. SITOREM Analysis

Knowledge Management ($\beta y_1 = 0,204$) (rank. III)				
Indicator in Initial State		Indicator after Weighting by Expert		Indicator Value
1	Knowledge Acquisition	1 st	Knowledge Acquisition (23.17%)	3.88
2	Knowledge Gathering	2 nd	Utilization of knowledge (22.54%)	4.10
3	Knowledge Storage	3 rd	Sharing and distribution of knowledge (20.96%)	4.00
4	Processing knowledge into new knowledge	4 th	Processing knowledge into new knowledge (18.12%)	3.61
5	Sharing and distribution of knowledge	5 th	Knowledge Gathering (15.21%)	3.60
6	Utilization of knowledge	6 th	Knowledge Storage (14.21%)	3.60
Interpersonal Communication ($\beta y_2 = 0,272$) (rank. II)				
Indicator in Initial State		Indicator after Weighting by Expert		Indicator Value
1	Empathy	1 st	Openness (26.67%)	3.57
2	Equality	2 nd	Equality (25.07%)	4.02
3	Openness	3 rd	Empathy (24.88%)	3.68
4	Positiveness	4 th	Positiveness (23.38%)	3.74
5	Supportiveness	5 th	Supportiveness (21.38%)	3.74
Organizational Support ($\beta y_3 = 0,312$) (rank. I)				
Indicator in Initial State		Indicator after Weighting by Expert		Indicator Value
1	Fairness	1 st	Fairness (21.45%)	3.82
2	Job Conditions	2 nd	Supervisor Support (20.24%)	3.84

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3	Organizational Rewards	3 rd	Organizational Rewards (19.78%)	3.92
4	Supervisor Support	4 th	Job Conditions (19.64%)	4.04
Job Satisfaction (Y) ($\beta_4 = 0,203$) (rank. IV)				
Indicator in Initial State		Indicator after Weighting by Expert		Indicator Value
1	Co-Workers	1 st	Pay (16.95%)	3.85
2	Job	2 nd	Job (16.36%)	4.11
3	Pay	3 rd	Promotion Opportunities (14.31%)	3.65
4	Promotion Opportunities	4 th	Supervisor (13.78%)	4.03
5	Supervisor	5 th	Co-Workers (13.73%)	3.78
Teacher Service Quality				
Indicator in Initial State		Indicator after Weighting by Expert		Indicator Value
1	Assurance	1 st	Reliability (18.48%)	3.78
2	Empathy	2 nd	Responsiveness (17.93%)	3.85
3	Reliability	3 rd	Assurance (16.77%)	4.10
4	Responsiveness	4 th	Empathy (16.77%)	3.76
SITOREM ANALYSIS RESULT				
Priority order of indicator to be Strengthened		Indicators remain to be maintained		
1 st	Fairness	1. Job Conditions		
2 nd	Supervisor Support	2. Equality		
3 rd	Organizational Rewards	3. Utilization of knowledge		
4 th	Openness	4. Sharing and distribution of knowl		
5 th	Empathy	5. Job		
6 th	Positiveness	6. Supervisor		
7 th	Supportiveness	7. Assurance		
8 th	Knowledge Acquisition			
9 th	Processing knowledge into new knowledge			
10 th	Knowledge Gathering			
11 th	Knowledge Storage			
12 th	Pay			
13 th	Promotion Opportunities			
14 th	Co-Workers			
15 th	Reliability			
16 th	Responsiveness			
17 th	Empathy			

CONCLUSIONS, IMPLICATIONS, AND SUGGESTIONS

Based on the results of the analysis, discussion of research results, and hypotheses that have been tested, it can be concluded as follows:

1. Strengthening the Quality of Teacher Services can be done by using a variable development strategy that has a positive effect on the Quality of Teacher Services.
2. Variables that have a positive influence on Teacher Service Quality are Knowledge Management, Interpersonal Communication, Organizational Support, and Job Satisfaction. This was proven from the results of variable analysis using the Path Analysis method.
3. The way to strengthen the quality of teacher services is to improve indicators that are still weak and maintain good indicators for each research variable.

Based on the research conclusions above, the following implications can be drawn from this research:

1. If the quality of teacher services is to be strengthened, it is necessary to develop Knowledge Management, Interpersonal Communication, and Organizational Support as exogenous variables with Job Satisfaction as an intervening variable.

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2. If Knowledge Management is to be developed, it is necessary to improve indicators that are still weak, namely: Knowledge Acquisition, Processing knowledge into new knowledge, Knowledge Gathering, and Knowledge Storage as well as maintaining or developing indicators: Utilization of knowledge and Sharing and distribution of knowledge.
3. If Interpersonal Communication is to be developed, it is necessary to improve the indicators that are still weak, namely, Openness, Empathy, Positiveness, and Supportiveness, as well as maintain or develop the indicator: Equity.
4. If Organizational Support is to be developed, it is necessary to improve the weak indicators, namely: Fairness, Supervisor Support, and Organizational Rewards, as well as maintain or develop the indicator: Job Conditions.
5. If Job Satisfaction is to be increased, it is necessary to improve the weak indicators, namely Pay, Promotion Opportunities, and Co-Workers, as well as maintain or develop the indicators of job and Supervisor.

Suggestions or recommendations that can be given to related parties are as follows:

1. School principals need to improve the quality of teacher services by developing Knowledge Management, Interpersonal Communication, Organizational Support, and Job Satisfaction. by improving: Reliability, Responsiveness, and Empathy as well as by maintaining Assurance
2. The Ministry of Education, Culture, Research, and Technology (Kemdikbudristek) and school organizing institutions need to develop teachers in strengthen the quality of teacher services by providing appropriate direction to strengthen the development of Knowledge Management, Interpersonal Communication, Organizational Support, and Job Satisfaction by the results of this research.

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