

Implementation of Total Quality Management and Interpersonal Communication in Achieving Student Satisfaction through Service Quality at Yayasan Pendidikan Islam, Miftahussalam, Medan

Henny Purnama Dewi¹, Prihatin Lumbanraja², Rahim Matondang²

¹Postgraduate Students, ²Postgraduate Lecturer,
Department of Management, Faculty of Economics and Business at University of North Sumatera, Indonesia

Corresponding Author: Henny Purnama Dewi

ABSTRACT

In the education sector, educational institution is required to increase its quality in meeting student satisfaction in order to realize educated human beings who have high qualified life skill. Control system is one of the weaknesses in educational institutions in Indonesia which causes the decrease in student satisfaction with service quality. Therefore, sustainable increase in quality should be emphasized. The objective of the research was to optimize student satisfaction through one of the strategies of focusing on the increase in quality by implementing Total Quality Management (TQM), supported by good Interpersonal Communication (IC) between teachers and students in order to achieve maximum service quality. The samples were 100 Grade XII Senior High School students of Yayasan Pendidikan Islam, Miftahussalam, Medan, taken by using non-probability sampling with purposive sampling technique. Second order Structural Equation model was used as the basic analysis and Partial Least Square with Smart PLS 3.0 method were used for the analysis. The result of the research showed that Total Quality Management and Interpersonal Communication had positive and significant effects on student satisfaction, either directly or through service quality mediation

Keywords: Total Quality Management, Interpersonal Communication, Service Quality, Student Satisfaction

INTRODUCTION

The control system is one of the weaknesses in educational institutions in Indonesia. This weakness causes student satisfaction (quality satisfaction) on the quality of services provided by educational institutions is unstable or even declining, one of which has an impact on the decline in interest of students to attend the educational institution.

To overcome this we need a strategy that focuses on continuous quality improvement. One of the strategies is the implementation of integrated quality management (TQM) supported by good Interpersonal Communication (IC) in order

to achieve student satisfaction through maximum service quality.

In its implementation, the assessment of student satisfaction of an educational institution is not simple, because it requires various requirements, variables, indicators and the elements that affect it. According to Sopiati (2010) that student satisfaction is effected by intrinsic factors and extrinsic factors. Intrinsic factors themselves are factors from within students that can lead to satisfaction, among others; high achievement, expectations and talents of students. Whereas, extrinsic factors themselves are from outside the students themselves, among others; teacher teaching

quality, school culture, facilities and infrastructure in schools and the school climate.

Yayasan Pendidikan Islam, Miftahussalam, Medan, is one of the educational institutions, is a non-profit waqaf foundation motive that is trying to continue to grow. It has six levels of education, namely Early Madrasah, Middle School (SMP), Madrasah Tsanawiyah (MTs), High School (SMA), Vocational High School (SMK), and Madrasah Aliyah (MA) with 140 staff and teachers and the number of students is 1940 students

School facilities and infrastructure are factors that strongly support student satisfaction of an educational institution, one of which is adequate classrooms that have capacity in accordance with the number of existing students. Based on data obtained from government regulations in accordance with Article 24 of Permendikbud Number 17 of 2017 concerning the number of standards of students in one class (study group) or in one class are as follows:

Table 1.1. Minister of Education and Culture Number 17 of 2017

Educational level	Minimum number of students / class	Maximum number of students / class
SD	20	28
SMP/MTS	20	32
SMA/MA	20	36
SMK	15	36

Source: Minister of Education and Culture Regulation Number 17 of 2017

Increasing student satisfaction can continue to be pursued through quality improvements in all aspects of the organization on an ongoing basis. Not only physical quality, but also total management quality through improving the quality of service to these educational service providers. Total Quality Management (TQM) according to Gaspersz (in Tjiptono, 2016) is a way of increasing continuous performance (continuous performance improvement) at each level of operation or process, in each functional area of an organization, by using all human resources and available capital.

Based on literature from several previous studies, in addition to the implementation of TQM there are other factors that effects the achievement of student satisfaction, one of which is a well-established Interpersonal Communication (IC). De Vito (2013) defines Interpersonal Communication (IC) as verbal and nonverbal interactions between two (or sometimes more than two) people who are interdependent. According to philosopher expert Michael Buber in Wood (2018) Interpersonal Communication is the highest form of communication in human interaction because in it humans are psychologically bound together, mutually reinforcing and respecting differences.

In interpersonal communication the most important thing is not the intensity of communication but how the communication is interwoven. In order for communication to work well, there needs to be supporting factors. Rachmat (2008) mentions there are several factors that foster interpersonal relationships including trust, supportive attitude, and openness.

Philosophically, the role of communication will tie everything together. Starting from the foundation to the roof of a TQM building, all elements are bound by a mixture of binding elements in the form of communication. Communication acts as a link between all TQM elements. Communication means a shared understanding of one or a group of ideas between the sender and recipient of information. Successful TQM requires communication with, and / or between, all members of the organization, as well as customers.

All elements in an organization must maintain the openness of the flow of communication where all employees can send and receive all information about TQM processes accurately to customers (Setiadi, 2017). In this study, TQM is considered to be supported through good Interpersonal Communication (IC) between employees and teachers with students as customers in order to increase student satisfaction

through maximum service quality so that the educational institution is more advanced and can compete with other educational institutions.

Hypothesis

The formulation of the problem in this study is:

1. Total Quality Management has a significant effect on service quality at the Yayasan Pendidikan Islam, Miftahussalam, Medan?
2. Interpersonal communication has a significant effect on service quality at the Yayasan Pendidikan Islam, Miftahussalam, Medan?
3. Total Quality Management has a significant effect on student satisfaction at the Yayasan Pendidikan Islam, Miftahussalam, Medan?
4. Interpersonal Communication has a significant effect on student satisfaction at the Yayasan Pendidikan Islam, Miftahussalam, Medan?
5. Service Quality have a significant effect on student satisfaction at the Yayasan Pendidikan Islam, Miftahussalam, Medan?
6. Total Quality Management has a significant effect on student satisfaction through service quality at the Yayasan Pendidikan Islam, Miftahussalam, Medan?
7. Interpersonal Communication has a significant effect on student satisfaction through service quality at the Yayasan Pendidikan Islam, Miftahussalam, Medan?

MATERIALS AND METHODS

Method of Collecting Data

This type of research is quantitative descriptive research that is research that aims to describe the facts and the characteristics of a particular population or area systematically, factually, and thoroughly. Quantitative descriptive research is a study that aims to describe or to describe the characteristics (characteristics) of a situation or object of researchers.

While the nature of this research is explanatory research, namely research that intends to explain the position of the variables studied and the relationship between one variable and another. Explanation of the position of these variables is done through testing hypotheses (Sugiyono, 2012).

The population of this study was high school / equivalent class XII students consisting of high school students (SMA), Computer Information Technology Vocational High School (Vocational High School) and Madrasah Aliyah (MA) at YPIM which amounted to 140 students. This population was chosen based on the consideration that high school students of class XII were the most mature students in terms of age and the longest felt the quality of education services at YPIM so that they were expected to provide the best answers to the questionnaires given.

The sampling technique in this study is non probability sampling using purposive sampling. Purposive sampling is sampling that is based on certain considerations including the characteristics or characteristics of a population that has been previously known (Sinulingga, 2016)

Table 3.1. Jumlah Populasi

No.	Unit	The number of students
1	SMA	42
2	SMK	62
3	ALIYAH	36
Number of students who meet the criteria		140

Source: Data processed (2018)

The 140 populations that meet the criteria through sampling techniques with purposive sampling. In this study the method used to determine the number of samples is using tables of Isaac and Michael. From Isaac and Michael's table for the total population that meets the criteria as many as 140 people at the level of error (significant level) of 5%, in this study the number of samples was 100 people (table attached).

The number of 100 samples is a quota that must be fulfilled from the SMA, SMK and MA units, then the sample is taken by

cluster proportional sampling technique. Quota data from each education unit to meet 100 samples from all units can be seen in Table 3.2:

No.	Unit	Number of Samples
1	SMA	42/140 x 100 = 30
2	SMK	62/140 x 100 = 44
3	ALYAH	36/140 x 100 = 26
Total		100

Source: Data processed (2018)

RESULTS AND DISCUSSION

First Model Analysis

The first model or initial model proposed in the study is carried out by using all indicators in each construct. The first model was analyzed using the basic reference in the model figure 4.10.

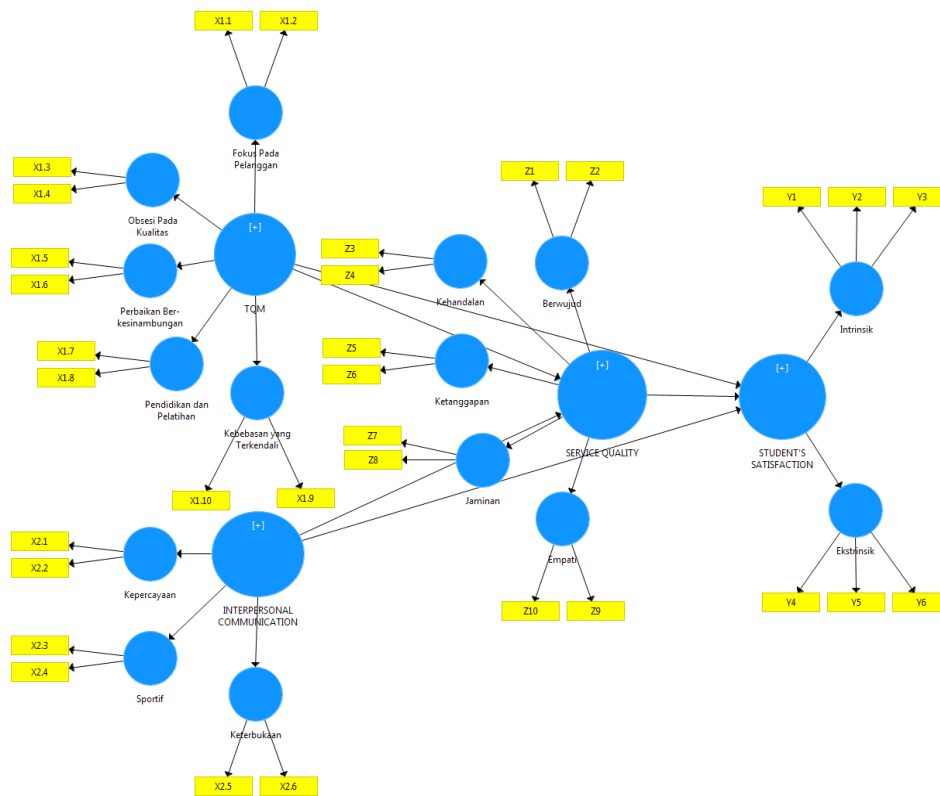
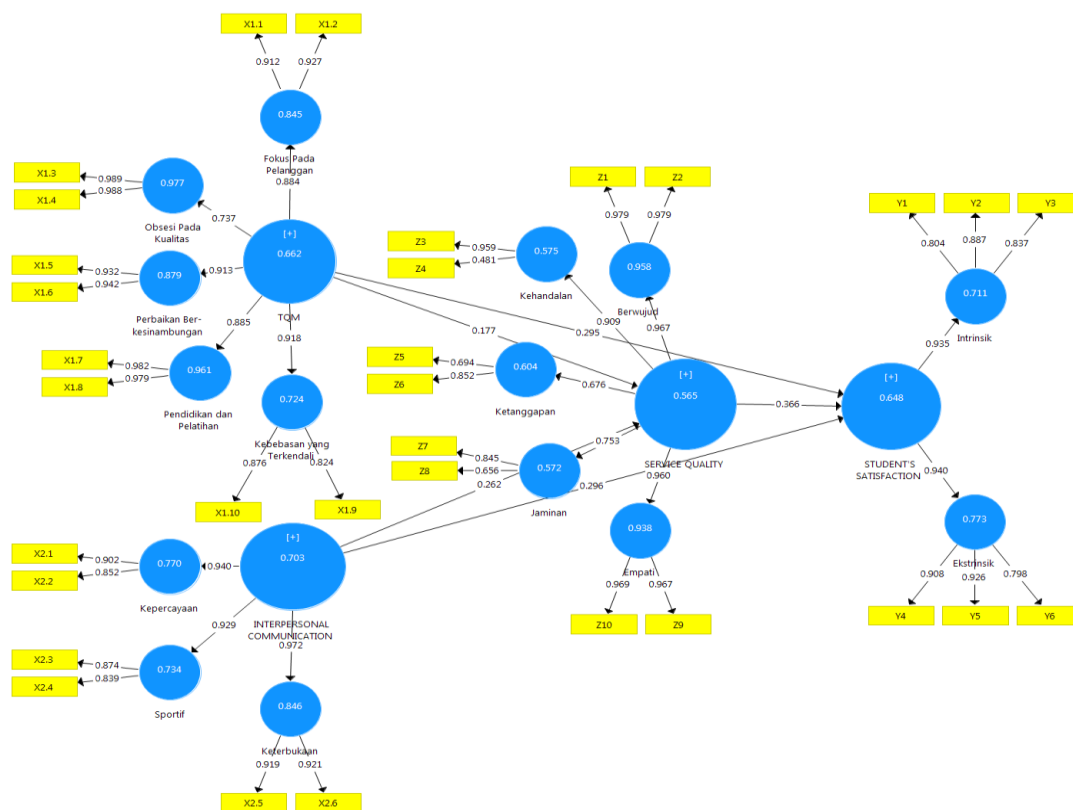


Figure 4.10 First Model Framework

Figure 4.10 shows a second order analysis performed on each research variable. This is done to see the suitability of each indicator in each dimension which is a reference for the decline of the research indicators. If the indicators of each dimension are reliable and precisely measure each dimension, then research can be more accurate in predicting relationships between variables that occur.

In constructs that are reflective, testing reliability indicators is done by using

factor loading. Each indicator measured the loading factor value in each construct. The value of the loading factor is expected to reach more than 0.6. However, in exploratory studies, values of more than 0.4 have been considered adequate (Hulland, 1999). The value of loading factors from each indicator towards each construct is measured using an algorithm in the Smart PLS program. The results of the algorithm in the first model are presented in Figure 4.11.



To be able to see more clearly the value of the loading factor in the path diagram of the first model, it can be seen the values of loading factors to see the relationship between indicators and constructs in Table 4.10.

Tabel 4.10 Loading Factors Algoritma Model Pertama

Variable	Dimension	Indicator	Composite Reliability
Total Quality Management	Customer Focus	X _{1,1}	0.917
		X _{1,2}	0.922
	Obsession with quality	X _{1,3}	0.989
		X _{1,4}	0.988
	Continuous Improvement	X _{1,5}	0.933
		X _{1,6}	0.942
	Education and training	X _{1,7}	0.982
		X _{1,8}	0.979
	Controlled Freedom	X _{1,9}	0.827
		X _{1,10}	0.874
Interpersonal Communication	Trust	X _{2,1}	0.902
		X _{2,2}	0.852
	Sporty	X _{2,3}	0.874
	Openness	X _{2,4}	0.838
		X _{2,5}	0.919
	X _{2,6}	0.921	
Service Quality	Manifest	Z ₁	0.979
		Z ₂	0.979
	Reliability	Z ₃	0.957
		Z ₄	0.487
	Responsiveness	Z ₅	0.697
		Z ₆	0.860
	Guarantee	Z ₇	0.846
		Z ₈	0.654
	Empathy	Z ₉	0.967
		Z ₁₀	0.969
Student Satisfaction	Intrinsic	Y ₁	0.804
		Y ₂	0.887
		Y ₃	0.837
	Extrinsic	Y ₄	0.908
		Y ₅	0.926
		Y ₆	0.797

According to Ghozali (2012) an indicator is considered valid if it has a correlation value above 0.70. However, loading 0.50 to 0.60 is still acceptable by looking at the output correlation between the indicator and the construct. In Table 4.10 there is only one invalid indicator, that is, the Z4 indicator which has a loading factor value below 0.5 which is equal to 0.487 so that this indicator must later be excluded from the model.

Final Model Analysis

In accordance with the results obtained in the analysis of the first model algorithm, the final model proposed is to issue indicators that do not meet the assessment criteria for the outer model, which is <0.6 . The second model analysis is based on the final model framework as shown in Figure 4.16.

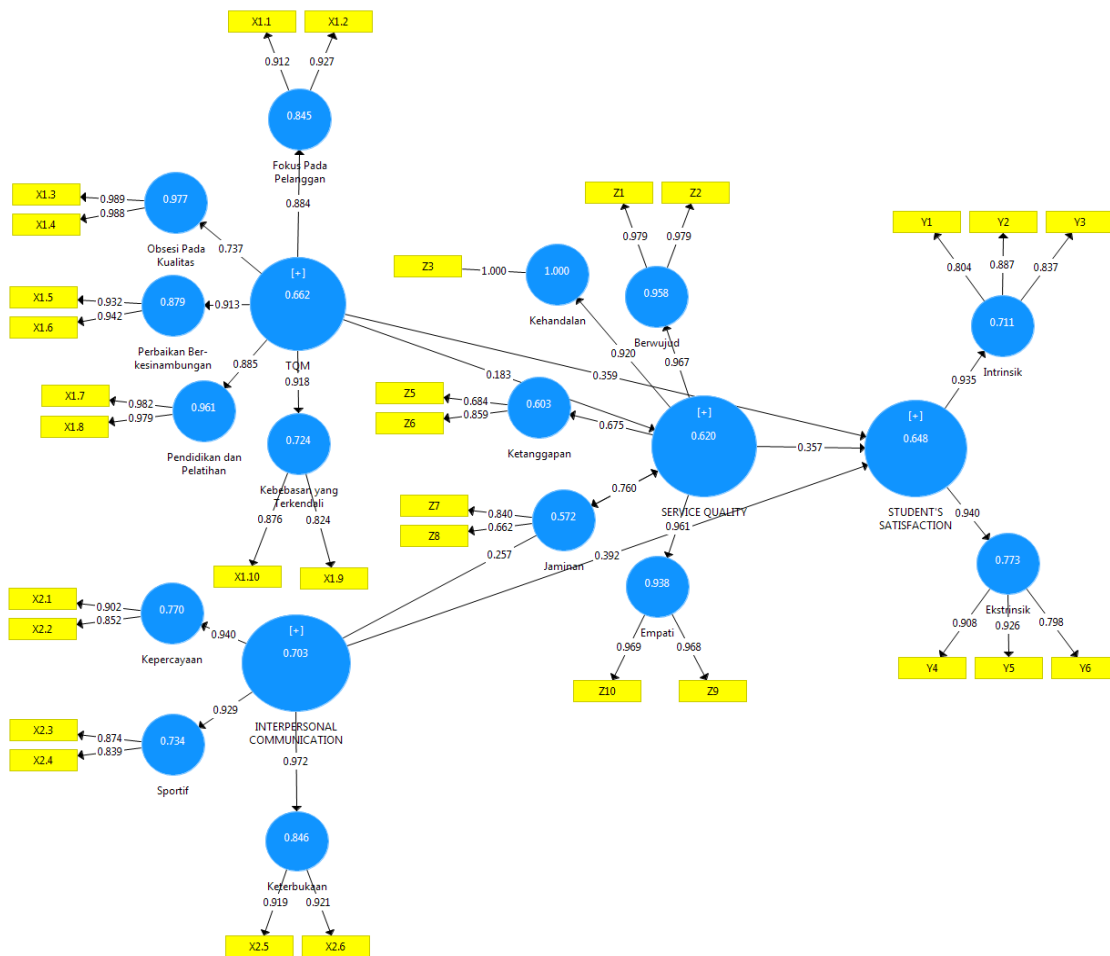


Figure 4.16 Second Model Loading Factors

For more details the value of loading factors in the second model can be seen in Table 4.11.

Table 4.11 Final Factor Loading Factors

Variable	Dimension	Indicator	Composite Reliability
Total Quality Management	Customer Focus	X _{1,1}	0.912
		X _{1,2}	0.927
	Obsession with quality	X _{1,3}	0.989
		X _{1,4}	0.988
	Continuous Improvement	X _{1,5}	0.932
		X _{1,6}	0.942
	Education and training	X _{1,7}	0.982
		X _{1,8}	0.979
	Controlled Freedom	X _{1,9}	0.824
		X _{1,10}	0.876

Table 4.11: To be continued...

<i>Interpersonal Communication</i>	Trust	X _{2,1}	0.902
		X _{2,2}	0.852
	Sporty	X _{2,3}	0.874
		X _{2,4}	0.838
	Openness	X _{2,5}	0.919
		X _{2,6}	0.921
<i>Service Quality</i>	Manifest	Z ₁	0.979
		Z ₂	0.979
	Reliability	Z ₃	1.000
	Responsiveness	Z ₅	0.684
		Z ₆	0.859
	Guarantee	Z ₇	0.840
		Z ₈	0.662
	Empathy	Z ₉	0.969
		Z ₁₀	0.968
	<i>Student Satisfaction</i>	Intrinsic	Y ₁
Y ₂			0.887
Y ₃			0.837
Extrinsic		Y ₄	0.908
		Y ₅	0.926
		Y ₆	0.798

The value of loading factors from each construct above has a factor load value greater than 0.6. Because all indicators have met the indicator reliability criteria for each construct, the outer model analysis can be continued by looking at the internal consistency reliability of each construct. Internal consistency reliability assessment is performed on each construct. The composite reliability value of each construct is expected to be at least 0.7. However, in exploratory studies the composite composite value of ≥ 0.6 is acceptable (Bagozzi and Yi, 1998). The results of the SmartPLS algorithm in the composite reliability of each construct are presented in the following Table 4.12:

Table 4.12 Final Composite Reliability Model

Variable	Dimension	Composite Reliability
<i>Total Quality Management</i>	Customer Focus	0.916
	Obsession with quality	0.988
	Continuous Improvement	0.935
	education and training	0.980
	Controlled Freedom	0.840
<i>Interpersonal Communication</i>	Trust	0.870
	Sporty	0.846
	Openness	0.917
<i>Service Quality</i>	Manifest	0.979
	Reliability	1.000
	Responsiveness	0.750
	Guarantee	0.725
	Empathy	0.968
<i>Student Satisfaction</i>	Extrinsic	0.910
	Intrinsic	0.881

Table 4.10 above shows that each construct has met the reliability assessment criteria of the outer model with a reliability composite

value >0.70 . Thus the analysis of the outer model continues to the validity stage of the outer model.

The outer model validity is done by using convergent validity and discriminant validity. Evaluation of convergent validity is done by looking at the value of Average Variance Extracted (AVE) in each construct. Hair et al. (2014) states that the value of AVE for each good construct is at least 0.5. The results of the SmartPLS Algorithm on the AVE value can be seen in Table 4.13.

Table 4.13 Average Variance Extracted Final Model

Variable	Dimension	Average Variance Extracted (AVE)
<i>Total Quality Management</i>	Customer Focus	0.845
	Obsession with quality	0.977
	Continuous Improvement	0.879
	education and training	0.961
	Controlled Freedom	0.724
<i>Interpersonal Communication</i>	Trust	0.724
	Sporty	0.734
	Openness	0.846
<i>Service Quality</i>	Manifest	0.958
	Reliability	1.000
	Responsiveness	0.603
	Guarantee	0.572
	Empathy	0.938
<i>Student Satisfaction</i>	Extrinsic	0.773
	Intrinsic	0.711

Table 4.13 shows that the AVE value of each dimension construct in the final model has reached >0.5 . Thus, the proposed structural equation model meets convergent validity criteria.

Discriminant validity assessment is done by two methods, namely by using a comparison between the correlation of each construct to

the root of the AVE based on Fornell Lacker criteria or by comparing loading factors with cross loading of each indicator (Hair et al., 2014). AVE root values can be seen in Table 4.14 below:

Table 4.14 Root Value of the Final Variance Extracted (AVE) Model

Variable	Dimension	Average Variance Extracted (AVE)	Root AVE
Total Quality Management	Customer Focus	0.845	0.920
	Obsession with quality	0.977	0.988
	Continuous Improvement	0.879	0.937
	education and training	0.961	0.980
	Controlled Freedom	0.724	0.851
Interpersonal Communication	Trust	0.724	0.851
	Sporty	0.734	0.857
	Openness	0.846	0.920
Service Quality	Manifest	0.958	0.979
	Reliability	1.000	1.000
	Responsiveness	0.603	0.777
	Guarantee	0.572	0.757
	Empathy	0.938	0.938
Student Satisfaction	Extrinsic	0.773	0.879
	Intrinsic	0.711	0.843

Inner Model Analysis

Inner model analysis is done by estimating the path coefficient of the relationship between constructs. The estimation is done by the SmartPLS algorithm. The value of the path coefficient on the relationship between variables becomes a reference in making estimates. Positive values indicate positive effects and vice versa negative values indicate negative effects. The greater the path coefficient value, the greater the effects between these variables. Before looking at the results of the path coefficient values between variables, the following are the results of the SmartPLS algorithm in assessing the effects of each dimension in forming a latent construct.

Table 4.17 Effect of Dimensions on Latent Constructions

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	P Values	Information
TQM -> Customer Focus	0,884	0,884	0,026	0,000	Significant
TQM -> Obsession with quality	0,737	0,735	0,062	0,000	Significant
TQM -> Continuous Improvement	0,913	0,915	0,012	0,000	Significant
TQM -> Education and Training	0,885	0,887	0,019	0,000	Significant
TQM -> Controlled Freedom	0,918	0,917	0,023	0,000	Significant
INTERPERSONAL COMMUNICATION -> Trust	0,940	0,942	0,016	0,000	Significant
INTERPERSONAL COMMUNICATION -> Sportif	0,929	0,929	0,022	0,000	Significant
INTERPERSONAL COMMUNICATION -> Openness	0,972	0,973	0,007	0,000	Significant
SERVICE QUALITY -> Manifest	0,967	0,968	0,006	0,000	Significant
SERVICE QUALITY -> Reliability	0,920	0,919	0,027	0,000	Significant
SERVICE QUALITY -> Responsiveness	0,675	0,675	0,076	0,000	Significant
SERVICE QUALITY -> Guarantee	0,760	0,756	0,058	0,000	Significant
SERVICE QUALITY -> Empathy	0,961	0,962	0,007	0,000	Significant
STUDENT'S SATISFACTION -> Intrinsic	0,935	0,935	0,009	0,000	Significant
STUDENT'S SATISFACTION -> Extrinsic	0,940	0,940	0,010	0,000	Significant

Through Table 4.17 you can see the value of each dimension in influencing latent variables. The Total Quality Management variable is explained through five dimensions, namely (1) "Focus on Customers" which affects Total Quality Management by 88.4%. (2) "Obsession in Quality" which affects Total Quality Management by 73.7%. (3) "Continuous Improvement" that affects Total Quality Management by 91.3% (4) "Education and Training" which affects Total Quality Management by 88.5% and (5) "Controlled Freedom" that affects Total Quality Management amounting to 91.8%. In the Total Quality Management variable, it can

be seen that the one with the greatest effects is the dimension of "Controlled Freedom" of 91.8% and the smallest effects on the latent construct Total Quality Management is the dimension of "Obsession in Quality" of 73.7 %.

Direct Effects

The direct effects on the research model can occur between the variables Total Quality Management on Service Quality, Total Quality Management on Student Satisfaction, Interpersonal Communication on Service Quality, Interpersonal Communication on Student Satisfaction and Service Quality on Student Satisfaction.

Direct effects between research variables can be seen through the path coefficient on the structural model. The results of the

algorithm above can be summarized in the form of Table 4.18.

Table 4.18 Direct Variable Effects of Research

Direct Effects Between Variables	Path Coefficient	P Values	Information
TQM -> Service Quality	0.183	0.014	Significant
Interpersonal Communication -> Service Quality	0.257	0.004	Significant
TQM -> Student Satisfaction	0.294	0.000	Significant
Interpersonal Communication -> Student Satisfaction	0.300	0.000	Significant
Service Quality -> Student Satisfaction	0.357	0.000	Significant

Table 4.17 shows that in forming good service quality, Total Quality Management and Interpersonal Communication each have positive effects. The magnitude of the effects of Interpersonal Communication is greater than the effect of Total Quality Management (0.257 > 0.183). Whereas in shaping student satisfaction, Total Quality Management, Interpersonal Communication and Service Quality also have a positive effects. The biggest effects on student satisfaction is Service Quality of 0.357, the

second largest effects is Interpersonal Communication with an effects of 0.300 on student satisfaction and the last Total Quality Management has an effect of 0.294 on student satisfaction.

Indirect Effects

Indirect effects are the magnitude of effects through mediating variables. The amount of indirect effects in this study can be seen through the SemPLS algorithm summarized in Table 4.19.

Table 4.19 Indirect Effects Through Service Quality

Direct Effects Between Variables	Indirect Effect	P Values	Information
Total Quality Management -> Student Satisfaction	0.065	0.032	Significant
Interpersonal Communication -> Student satisfaction	0.092	0.017	Significant

Table 4.19 shows that the magnitude of the indirect effect of the Total Quality Management variable on Student Satisfaction through Service Quality is 0.065 and the magnitude of the indirect effect of the Interpersonal Communication variable on Student satisfaction through Service Quality is 0.092.

Total Effects

Total effects are the sum of direct effects and indirect effects. The total effect of the independent variables on the dependent variable with the effect of mediating variables can be calculated and summarized in Table 4.20.

Table 4.20 Effect of Total Variables Through Service Quality

Total Effect Between Variables	Direct Effects	Indirect Effects	Total Effect
Total Quality Management -> Student Satisfaction	0.294	0.065	0.359
Interpersonal Communication -> Student Satisfaction	0.300	0.092	0.392

The results of processing the total effect of independent variables on the dependent variable through mediating variables processed by the SemPLS algorithm can be explained in Table 4.20. It can be seen that the Total Effect value of Total Quality Management for Student Satisfaction through Service Quality is 0.359. This value is the result of the sum of the direct and indirect effects of the influence of each of

these variables in Table 4.12 and Table 4.13 before.

While the Total Effect value of Interpersonal Communication towards Student Satisfaction through Service Quality is 0.392, the value is also the result of the sum of the direct and indirect effects of the influence of each variable in Table 4.12 and Table 4.13 before.

Determination Coefficient (R Square)

Analysis of the coefficient of determination is done to see the magnitude of the variance that can be explained by the independent variable on the dependent variable. The greater the coefficient of determination, the greater the variance in the dependent variable that can be explained by the

independent variable. Because the number of indicators for each construct varies in number, the analysis of the coefficient of determination is done by looking at the value in the adjusted R-square. The adjusted R-square value is obtained by calculation of SmartPLS and shown in Figure 4.17.

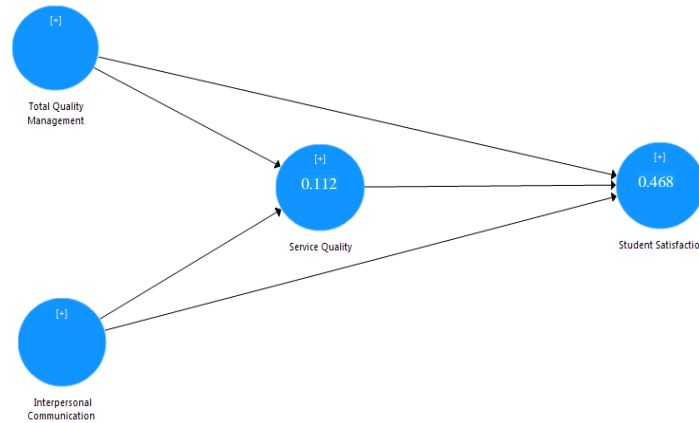


Figure 4.17 Adjusted R Square Final Model

Figure 4.17 shows the adjusted R-square value for each influence between variables. these values are summarized in the following Table 4.21:

Table 4.21 R-Square Final Model

Variable	R-Square	Adjusted r-Square
Service Quality	0.130	0.112
Student Satisfaction	0.484	0.468

Through Table 4.21, it can be seen that the influence of the Total Quality Management and Interpersonal Communication variables together in forming Service Quality is 11.2%, while the remaining 88.8% is explained by other variables outside of this study. While the influence of the Total

Quality Management variable, Interpersonal Communication variables and Service Quality variables together in forming Student Satisfaction variables is 46.8%, while the remaining 53.2% is explained by other variables outside of this study.

Hypothesis Testing

The hypothesis proposed in the study will be tested statistically using the bootstrap method on SmartPLS. The bootstrap method is used to calculate the significance of path coefficient obtained in the inner model where the t-statistic value must be greater than the t-table value.

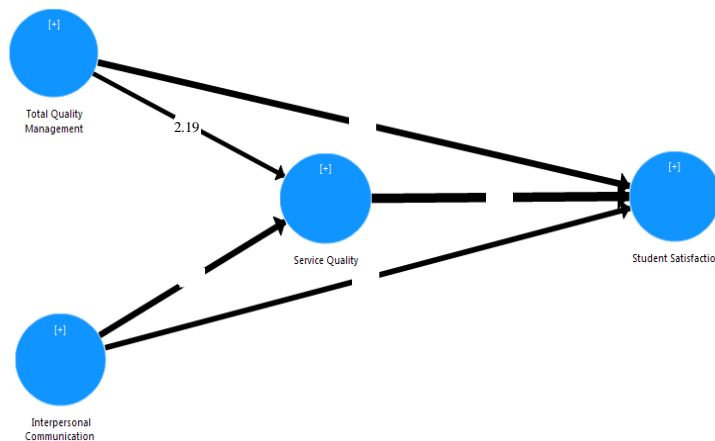


Figure 4.18 Bootstrap Model

Figure 4.18 shows that the influence of each variable according to the hypothesis proposed is positive and significant so that all hypotheses can be accepted.

The biggest value of t-statistics in this bootstrap model is found on the effect of service quality on student satisfaction with a t-statistic value of 3.981. The effect of interpersonal communication on student satisfaction has a t-statistic value of 3.784. For the influence of Total Quality

Management on student satisfaction has a t-statistic value of 3.774. The effect of interpersonal communication on service quality has a t-statistic value of 2.681. While the smallest t-statistic value is in the effect of Total Quality Management on service quality, namely the t-statistic value of 2.196. Comparison of values from the results of the hypothesis test of this study can be seen in Table 4.22.

Table 4.22 Hypothesis testing

No	Hipotesis	Original Sample (O)	T Statistics ((O/STDEV))	P Values	Information
H ₁	Total Quality Management has a positive and significant effect on service quality	0.183	2.196	0.014	Accepted
H ₂	Interpersonal Communication has a positive and significant effect on service quality	0.257	2.681	0.004	Accepted
H ₃	Total Quality Management has a positive and significant effect on student satisfaction	0.294	3.774	0.000	Accepted
H ₄	Interpersonal Communication has a positive and significant effect on student satisfaction	0.300	3.784	0.000	Accepted
H ₅	Service quality has a positive and significant effect on student satisfaction	0.357	3.981	0.000	Accepted
H ₆	Total Quality Management has a positive and significant effect on student satisfaction through service quality	0.065	1.859	0.032	Accepted
H ₇	Interpersonal Communication has a positive and significant effect on student satisfaction through service quality	0.092	2.136	0.017	Accepted

DISCUSSION OF RESEARCH RESULTS

Total Quality Management for Service Quality

Total Quality Management (TQM) is indeed a basic process and philosophy that will succeed if applied simultaneously at all levels in the organization. The application of TQM does not require new equipment or management systems, but rather a commitment or awareness to make a cultural change that is oriented towards improving quality and improving the whole process continuously, thoroughly, and continuously. TQM can indeed be applied in any organization and is no exception. With regard to the way it is applied, in what areas of the philosophy are applied, and how to overcome the obstacles and barriers that hinder this application to educational organizations, implementation that takes a long time will not be felt. In addition, if followed correctly, success will be on hands, both individuals and organizations.

The Total Quality Management variable in this study was measured through five dimensions, namely, customer focus, obsession with quality, continuous improvement, education and training and controlled freedom (Goetsch et al., 2010) in which each dimension consisted of two indicators. In the Total Quality Management variable, it can be seen that the one that gives the most influence is the dimension of "controlled freedom" and the smallest one influences the latent constructs Total Quality Management is the dimension of "Obsession in Quality".

This construct the highest adjusted R square value is also found in the controlled dimensions of freedom. The higher the R square value the better the model predicts the proposed research model (Jogiyanto, 2015). This is supported by the results of respondents' answers to the controlled dimensions of freedom which are represented by two indicators, namely: (1) advice of students who help improve quality

(2) management accepts criticism of constructing both indicators including agreeable categories which means students agree that criticisms and suggestions delivered by students able to help improve quality at YPIM.

The direct effect of the Total Quality Management variable on the Service Quality variable is 18.3%. Based on the results of hypothesis testing, Total Quality Management has a positive and significant effect on service quality with a t-count value greater than t-table and a value of p values smaller than 0.05. The results of this test prove that the first hypothesis (H1) is accepted. The results of this study are in line with the results of research by Hutomo and Ratih (2015) which states that there is a positive and significant effect of Total Quality Management (TQM) on service quality at SD Al-Ghifari Plus Bandung.

The results of this study are also supported by Gupta et al. (2005) obtained results that when TQM is applied in the service sector, it will create better service quality, through programs to shape employee behavior. This research has also shown that the perception of customer service quality is based on the difference between actual service experience and what they expect.

Interpersonal Communication for Service Quality

Interpersonal Communication variables in this study are measured through three dimensions including trust, supportive attitude, and openness (Rachmat, 2008) where each dimension is measured using two indicator items. In the Interpersonal Communication variable, it can be seen that the one that gives the most influence is the dimension of "Openness" and the smallest one influences the latent constructs of Interpersonal Communication is the dimension of "Trust". In this construct the highest adjusted R square value is also found in the dimension of openness. This supports the theory from Devito (2013)

which states that one dimension to measure interpersonal communication is openness.

Although the highest adjusted R square value is in the dimension of openness, the average respondent disagrees with the two questionnaire statements, namely (1) the teacher is able to communicate openly (2) the teacher is willing to exchange ideas. This means that students consider teachers and students to be less able to communicate openly and are less able to be invited to exchange ideas because between students and teachers each lack psychological attachment.

The quality of openness refers to at least three aspects of interpersonal communication. First, effective interpersonal communicators must be open to the people they are interacting with. There must be a willingness to disclose information that is usually hidden, provided that this self-disclosure is appropriate. The second aspect of openness refers to the willingness of communicators to react honestly to the stimulus that comes. People who are silent, not critical, and unresponsive are generally participants of boring conversation.

When the service process carried out by teachers and employees of students occurs service interaction through communication contacts. Employees and teachers must be able to create good communication contacts with students because good communication contacts are one of the factors that determine students' satisfaction or failure with the services provided.

The direct effect of Interpersonal Communication variables on Service Quality variables is 25.7%. Based on the results of hypothesis testing, Interpersonal Communication has a positive and significant effect on service quality with a t-count value greater than t-table and p value values that are smaller than 0.05. The results of this test prove that the second hypothesis (H2) is accepted. The results of this test are in line with the results of Fletcher's (1999) study, which in his research proved that the

performance and quality of service in an organization can be considered as a direct result of how effectively a communication system is structured and managed.

Total Quality Management for Student Satisfaction

The TQM approach, quality is determined by the customer. Therefore, only by understanding the process and customers can the organization realize and appreciate the meaning of quality. All management efforts in TQM are directed at one main goal, namely the creation of customer satisfaction. Whatever management does is useless if it ultimately does not result in an increase in customer satisfaction.

Student Satisfaction variables in this study were measured using two dimensions namely, intrinsic and extrinsic. Each dimension is measured using three indicators. The intrinsic dimension includes the abilities, expectations and talents of students, while the extrinsic dimensions include the quality of teaching teachers, facilities and school atmosphere. In the Student Satisfaction variable it can be seen that the "Extrinsic" dimension has a greater influence on the Student Satisfaction variable than the "Intrinsic" dimension.

The construct of student satisfaction, the highest adjusted R square value is found in the extrinsic dimension. Extrinsic dimensions are explained by three indicators, namely: (1) the quality of teaching professional teachers, who have a mean score disagree (2) complete laboratory facilities, who have mean values disagree (3) school atmosphere that supports students to focus, who have mean value disagrees. Although the highest adjusted R square value is in the extrinsic dimension, it turns out that students' perceptions of satisfaction in terms of extrinsic dimensions have a total perception of disagree. This shows that students are not satisfied with the quality of teaching teachers, incomplete laboratory facilities and uncomfortable school atmosphere and make them less focused in doing teaching and learning.

The direct effect of the Total Quality Management variable on the Student Satisfaction variable is 29.4%. This relationship between Total Quality Management and customer satisfaction is in line with Nasution's (2015) statement that by increasing the application of TQM as a way to improve quality, this is done to obtain customer satisfaction.

Based on the results of hypothesis testing, Total Quality Management has a positive and significant effect on Student Satisfaction with a t-count value greater than t-table and a value of p values smaller than 0.05. The results of this test prove that the third hypothesis (H3) is accepted. The results of this study are in line with the results of the study of Florentina and Lauw (2014) which states that the increase in Total Quality Management has a positive and significant effect on the satisfaction of Accounting Department students of the Faculty of Economics, one of the University in Bandung.

Interpersonal Communication to Student Satisfaction

Establishing interpersonal communication is a very helpful way to establish good relationships with customers in order to provide the best quality service that ultimately can create customer satisfaction and loyalty. Kotler and Amtrong in Weningtyas (2012) state that consumers will feel more satisfaction in the technique of interacting with others and have the ability to perceive socially to be able to read the feelings, attitudes and beliefs of consumers. Interacting techniques and the ability to read feelings, attitudes and beliefs can be created through good interpersonal communication between employees and consumers / customers in this study, especially between teachers and students.

In this study the direct effect of the Interpersonal Communication variable on the Student Satisfaction variable was 30%. Based on the results of hypothesis testing, Interpersonal Communication has a positive and significant effect on Student

Satisfaction with a t-count value greater than t-table and a value of p values smaller than 0.05. The results of this test prove that the fourth hypothesis (H4) is accepted.

The results of this study are in line with the results of the study of Novia (2016) which states that there is a very significant effect between interpersonal communication on customer satisfaction at Bank Rakyat Indonesia (BRI) in Balikpapan's Pandan Wangi Branch. This means that the higher the interpersonal communication obtained, the higher the level of satisfaction. This statement is also supported by research conducted by Putra (2009) that good interpersonal communication can play a role in an image and the level of customer satisfaction which in turn becomes a driver of consumer willingness with the company.

Service Quality for Student Satisfaction

Student satisfaction is closely related to the quality of school services. Student satisfaction is the response of students' feelings to the experience gained (reality) in school with their expectations, and students will feel satisfied if what is received is a match between expectations and experiences gained by students. Quality schools are schools that have the quality of education servants who are able to provide satisfaction to students.

Service quality variables are measured using five dimensions, namely, tangible, reliability, responsiveness, assurance and empathy. Each dimension is measured using two questions. In this Service Quality variable, it can be seen that the one that has the greatest influence is on the "Tangible" dimension and the smallest one that gives effect to the Service Quality latent construct is the "Responsibility" dimension.

This construct the highest adjusted R square value is found in the Tangible dimension. Respondents' answers to the questionnaire were seen for the tangible dimension represented through two indicators, namely: (1) the availability of supporting technology that has an average

value (2) agreeing (2) a comfortable learning room that has a mean score agreed . This shows that although the highest adjusted R square value is in the Tangible dimension but through comfortable class indicators, it turns out that students disagree with the statement but the average student agrees with the availability of technology supporting teaching and learning activities at school.

The direct effect of the Service Quality variable on the Student Satisfaction variable in this study was 35.7%. To be able to create satisfied consumers, company management must know the things that lead to the creation of student satisfaction, one of which is by continuing to strive to improve service quality.

The influence of the Total Quality Management and Interpersonal Communication variables together in forming Service Quality is 11.2%, while the remaining 88.8% is explained by other variables outside of this study. Based on the results of hypothesis testing, Service Quality has a positive and significant effect on Student Satisfaction with t-count values greater than t-table and p value values less than 0.05. This statement proves that the fifth hypothesis (H5) is accepted.

The results of this study are in line with the results of the research by Yuniarti (2014) which states that service quality has a positive and significant effect on student satisfaction in the Extension Program of the Faculty of Economics, Jambi University. This means that the better the quality of service provided by the Extension Program of the Faculty of Economics, University of Jambi, the more students feel satisfied with the service.

Total Quality Management for Student Satisfaction Through Service Quality

To produce quality products and services, the best companies need continuous efforts to improve human capabilities, processes, and the environment. The right way to continually improve the capabilities of these components is by

implementing Total Quality Management which will ultimately create customer satisfaction and loyalty.

From this study, the results of the Total Quality Management variable indirect effect on the Student Satisfaction variable after going through the Service Quality variable is 6.5% and based on the results of hypothesis testing, Total Quality Management has a positive and significant effect on Student Satisfaction with Service Quality as an intervening variable with t-count values greater than t-table and p values smaller than 0.05. This statement proves that the sixth hypothesis (H6) is accepted.

The results of this study are back in line with the results of research by Hutomo and Ratih (2015) which showed the results that Total Quality Management had a positive and significant effect on Service Quality and customer satisfaction.

Interpersonal Communication for Student Satisfaction Through Service Quality

Consumer satisfaction is influenced by several driving factors, such as interpersonal communication and service quality. At the time of the customer service process, at that time there was an interaction between the waiter and the customer. This interaction must be able to occur through good interpersonal communication so as to create customer satisfaction which ultimately can maintain customer loyalty (Weningtyas, 2012).

This study the indirect effect of the Interpersonal Communication variable on the Student Satisfaction variable after going through the Service Quality variable was 9.2%. Based on the results of hypothesis testing, Interpersonal Communication has a positive and significant effect on student satisfaction with service quality as a mediating variable with a t-count value greater than t-table and a p value of less than 0.05, this statement proves that the seventh hypothesis (H7) received.

The results of this study are in line with the results of the research of Weningtyas (2012) which proved that the hypothesis which reads there is a positive influence on interpersonal communication and service quality on customer satisfaction is acceptable. That is, the higher the interpersonal communication skills and the quality of services provided by employees, the higher consumer satisfaction. Conversely, the lower the interpersonal communication skills and the quality of services provided by employees, the lower the customer satisfaction.

This study the total influence of the Total Quality Management variables, Interpersonal Communication variables and Service Quality variables together formed a Student Satisfaction variable of 46.8%, while the remaining 53.2% was explained by other variables outside of this study.

CONCLUSION

Based on the results of the research and discussion in the previous chapter, a number of things can be concluded as follows:

1. Total Quality Management has a positive and significant effect on service quality.
2. Interpersonal Communication has a positive and significant effect on service quality.
3. Total Quality Management has a positive and significant effect on Student Satisfaction.
4. Interpersonal Communication has a positive and significant effect on Student Satisfaction.
5. Service Quality has a positive and significant effect on Student Satisfaction.
6. Total Quality Management has a positive and significant effect on Student Satisfaction through service quality.
7. Interpersonal Communication has a positive and significant effect on student satisfaction with service quality.

Recommendation

Based on the research that has been done, the suggestions from researchers are:

1. Further research is expected to expand the research population, namely by increasing the number of respondents by conducting research in larger educational institutions.
2. Further research is expected to further evaluate the questions in the questionnaire in order to be able to accurately represent the variables to be measured.
3. Further research is expected to be able to find other indicators as a measure of the variables to be measured.
4. Further research is expected to add to other variables, both independent and dependent variables, and it is expected that further researchers can find other variables that can be used as intervening variables or moderating variables to find out variables that can strengthen or weaken the dependent variable.

REFERENCES

- Abdillah, Willy dan Jogiyanto. 2015. *Partial Least Square (PLS) Alternatif Structural Equation Modeling (SEM)* dalam Penelitian Bisnis. Ed.1. Yogyakarta: ANDI.
- Abdullah, Taman, Sukirno, Annisa Ratna Sari, Ngadirin Setiawan dan Adeng Pustikaningsih. 2013. Analisis Kualitas Pelayanan Terhadap Kepuasan Mahasiswa Pada Fakultas Ekonomi Universitas Negeri Yogyakarta. *Jurnal Nominal / Volume II Nomor I / Tahun 2013*.
- Agustina, Vina dan Yoestini. 2012. "Analisis Pengaruh Kualitas Pelayanan, Kepuasan Pelanggan, Dan Nilai Pelanggan Dalam Meningkatkan Loyalitas Pelanggan Joglosemar Bus (Studi Pada Wilayah Semarang Town Office)". *Diponegoro Journal Of Management*. Volume 1, Nomor 1, Tahun 2012, Halaman 1-11.
- Allen, R.S, Kilmann, R.H. 2001. "The Role Of The Reward System For A TQM Based Strategy". *Journal of Organizational Change Management*, Vol. 14 No 2, pp. 110-131.
- Amalia, Ria. 2016. Pengaruh *Total Quality Management (TQM)* Terhadap Kepuasan Pelanggan Pada Matahari Department Store di Plaza Mulia Samarinda. *eJournal Administrasi Bisnis*, Volume 4, Nomor 3.
- Ana, Hidayati, Achmad Fudholi, dan Sumarni. 2014. Analisis Kepuasan Mahasiswa Terhadap Kualitas Pelayanan Tenaga Administratif Di Fakultas Farmasi Universitas Ahmad Dahlan Yogyakarta. *Pharmajiana*, Vol. 4, No. 1, 2014 : 59-64.
- Andre, Florentina dan Lauw Tjun Tjun. 2014. Pengaruh *Total Quality Management (TQM)* Terhadap Kualitas Pelayanan dan Kepuasan Konsumen di Jurusan Akuntansi Fakultas Ekonomi Salah Satu Universitas di Bandung. *Jurnal Akuntansi*, 6 (1). pp. 47-83. ISSN 2085-8698.
- Ardianto. 2016. Pengaruh Komunikasi Positif dalam Keluarga dan Komunikasi Interpersonal Guru terhadap Perilaku Asertif Siswa. *Journal of Islamic Education Policy*, Vol. 1, No. 2, 82-98.
- Arikunto, Suharsimi. 2007. *Manajemen Penelitian*, Cetakan Kesembilan, Jakarta, Rineka Cipta.
- Asmal, Mira. 2012. Pelatihan Komunikasi Interpersonal Untuk Meningkatkan Kualitas Layanan Pada Perawat Rumah Sakit Umum. *Jurnal Intervensi Psikologi*, Vol. 4 No. 2.
- Aw, Suranto. 2011. *Komunikasi Interpersonal*. Yogyakarta: Graha Ilmu.
- Bagozzi, Richard P dan Youjae Yi. "On The Evaluation of Structural Equation Models". *Journal of The Academy Marketing Science* 16:74-21 doi : 10.1007/BF02723327.
- Basu Swastha dan Irawan, 2010, *Manajemen Pemasaran Modern*, Penerbit Liberty, Yogyakarta.
- Bergquist, T. and Ramsing, K. (1999). "Measuring Performance After Meeting Award Criteria". *Quality Progress* 32(9): 66-72.
- Cangara, Hafied. 2011. *Pengantar ilmu komunikasi*. Jakarta: PT Raja Grafindo. Persada.
- Chin, Wayne W., dan Peter R. Newstead. 1999. *Structural Equation Modeling Analysis With Small Samples Using Partial Least Square*, <http://www.researchgate.net/publication/242370645>
- Clifford, Margaret M., dan Elaine Walster. 1973. "The Effect of Physical Attractiveness on Teacher Expectations". *Sociology of education*. 46 : 248-11 doi : 10.2307/2112099.
- Danim, Sudarwan. 2010. *Profesionalisme dan Etika Profesi Guru*. Cetakan I: Bandung, Alfabeta.
- Denhard, Janet V, and Denhard, Robert B. 2003. *The New Public Service: Serving, Not Steering*. Armonk, N.Y: M.E. Sharpe.
- Devito, Joseph A. 2013. *Komunikasi Antar Manusia*. Pamulang-Tangerang Selatan: Karisma Publishing Group.
- Efendi, Januar. 2016. Pengaruh Kualitas Pelayanan Terhadap Kepuasan Pelanggan Pada JNE Cabang Bandung, *DeReMa Jurnal Manajemen* Vol. 11 No. 2.
- Ermawati, Erli. Indriyati. 2011. Hubungan Antara Konsep Diri Dengan Perilaku Konsumtif Pada Remaja Di SMP N 1 Piyungan. Vol 2. No 1.
- Eskildson, L. 1994. "Improving The Odds of Total Quality Management's Success". *Quality Progress*. Vol. 27. No. 4. PP 61-63.

- Fadli, Rozaq. 2012. Hubungan Komunikasi Interpersonal Antara Guru dan Siswa Dengan Keaktifan Belajar Siswa Kelas XI Program Keahlian Teknik Otomotif di SMK Muhammadiyah 4 klaten Tengah Tahun Ajaran 2012/2013. *Jurnal Skripsi*. Repository UNY.
- Fletcher, Melani. 1999. "The Effect Of Internal Communication, Leadership and Team Performance on Successful Service Quality Implementation : A South African Perspective". *Team Performance Management: An International Journal*. Vol. 5 Issue: 5, pp.150-163.
- Frymier, Ann Bainbridge. 1994. "The Use of Affinity-Seeking in Producing Liking and Learning in the classroom". *Journal of Applied Communication Research*. 22 (2) : 87-19, doi : 10.1080/00909889409365391.
- Garakhani, Davood. 2013. "Total Quality Management And Organizational Performance". *American Journal of Industrial Engineering*. Vol. 1, No. 3. Hal. 46-50.
- Ghozali, I. Latan, H. 2012. *Partial Least Square : Konsep, Teknik dan Aplikasi*. SmartPLS 2.0 M3. Semarang: Badan Penerbit Universitas Diponegoro. Istijanto.
- Ghozali, Imam. 2012. *Aplikasi Analisis Multivariate dengan Program IBM SPSS 19*, Cetakan V. Semarang : Badan Penerbit Universitas Diponegoro.
- Goetsch, D.L. & Davis, S. 2010. *Quality Management For Organizational Excellence: Introduction to Total Quality*. NJ: Printice Hall International, Inc.
- Goni, Marvin. 2016. Peranan Komunikasi Organisasi Dalam Peningkatan Kualitas Pelayanan, Di Kecamatan Mapanget Kota Manado. Volume 5, No. 3.
- Gultom, Dedek. k, Paham, Ginting, Beby dan KF. Sembiring. 2014. Pengaruh Bauran Pemasaran Jasa Dan Kualitas Pelayanan Terhadap Kepuasan Mahasiswa Program Studi Manajemen Fakultas Ekonomi Universitas Muhammadiyah Sumatera Utara. *Jurnal Manajemen & Bisnis* Vol 14.
- Hair, Joseph F., et.al.2010. *Multivariate Data Analysis. 7th Edition*. New York
- Hair, Joseph F.Jr, G Thomas M Hult, Cristian M. Ringle dan Marko Sartsted. 2014. *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*.
- Hardianti, Novia. 2016. Pengaruh Komunikasi Interpersonal dan Mutu Pelayanan Terhadap Kepuasan Nasabah Bank Rakyat Indonesia Cabang Pandan Wangi Balikpapan. *Psikoborneo*, 2016, 4 (2) : 276 - 285. ISSN 2477-2674, ejournal.psiologi.fisip-unmul.ac.id.
- Haryono, Budi. *How to Manage Customer Voice*. Yogyakarta : ANDI, (2013), Ed. I, hlm. 5.
- Helmita. 2016. Pengaruh Persepsi Kualitas Pelayanan Dan Komunikasi Terhadap Kepuasan Mahasiswa di Biro Kemahasiswaan IBI Darmajaya. *Jurnal Manajemen Magister*, Vol. 02. No.02.
- Hendricks, K.B. and Singhal, V.R. 1997. "Does Implementing An Effective TQM Program Actually Improve Operating Performance: Empirical Evidence From Firms That Have Won Quality Awards". *Management Science*, Vol. 44 No. 9, pp. 1258-74.
- Herjanto, Eddy.2008. *Manajemen Operasi Edisi Ketiga*, Jakarta: Grasindo.
- Hidayati, Ana, Achmad Fudholi, dan Sumarni. 2014. "Analisis Kepuasan Mahasiswa Terhadap Kualitas Pelayanan Tenaga Administratif Di Fakultas Farmasi Universitas Ahmad Dahlan Yogyakarta". *Pharmacia*, Vol. 4, No. 1, 2014 : 59-64.
- <https://www.panduandapodik.id/2017/07/aturan-jumlah-siswa-dan-rombel-sekolah.html>.
- Hulland, J. 1999. "Use of Partial Least Squares (PLS) in Strategic Management Research: A Review of Four Recent Studies". *Strategic Management Journal* 20 (2): 195-204.
- Husain, Umar. 2005. *Manajemen Riset dan Perilaku Konsumen*. PT. Gramedia.
- Ismunawan. 2010. Penerapan Penilaian Kinerja dan Sistem Pengukuran. *Jurnal Graduasi*. Vol. 24.
- Jantes. 2014. Pengaruh Kinerja Kepala Sekolah Dan Pemanfaatan Sarana Prasarana Terhadap Produktivitas.
- Jasuri. 2014. *Total Quality Management (TQM) Pada Lembaga Pendidikan Islam*.
- Kotler dan Keller. 2013. *Manajemen Pemasaran*. Edisi 13. Jilid 1. Erlangga, Jakarta.
- Kotler, Philip, dan Armstrong, Gery. 2012. *Prinsip-Prinsip Pemasaran*. Edisi Tiga Belas, Jilid Pertama, Erlangga, Jakarta.
- Kurnianingsih, Retno dan Nur Indriantoro. 2001. Pengaruh Sistem Pengukuran Kinerja dan Sistem Penghargaan Terhadap Keefektifan Penerapan Teknik *Total Quality Management* Studi Empiris pada Perusahaan Manufaktur di Indonesia. Vol.4, No.1.
- Manik, Ester dan Iwan Sidharta. 2017. "The Impact Of Academic Service Quality On Student Satisfaction". *MPRA Munich Personal RePEc Archive*. Paper No. 80878.
- Mauludin, Hanif. 2010. *Marketing Research: Panduan Bagi Manajer, Pimpinan Perusahaan Organisasi*. Jakarta: Elex Media Komputindo.
- Minarti, Sri. 2011. *Manajemen Sekolah*, Jogjakarta: Ar-Ruzz Media.
- Mishra, Patanjali dan Asha Pandey. 2013. "Barriers In Implementing Total Quality

- Management In higher Education". *Management Science*. Volume-1, Online Issue-1.
- Mulyana, Deddy. Ilmu Komunikasi: Suatu Pengantar. Cetakan ke 18. Bandung: PT. Remaja Rosdakarya, 2014.
 - Mulyasa. 2011. Manajemen dan Kepemimpinan Kepala Sekolah, Penerbit Bumi Akasara JakartaPress.
 - Munizu, Musran. 2010. Praktik Total Quality Management dan Pengaruhnya Terhadap Kinerja Karyawan (Studi Pada PT. Telkom Tbk, Cabang Makasar). *Jurnal Manajemen dan Kewirausahaan*. Vol. 12, No. 2, Hal. 185 -194 (JMK-2010-12-2).
 - Munizu, Musran. 2010. Praktik *Total Quality Management* dan Pengaruhnya Terhadap Kinerja Karyawan (Studi Pada PT. Telkom Tbk, Cabang Makasar). *Jurnal Manajemen dan Kewirausahaan*. Vol. 12, No. 2, Hal. 185-194 (JMK-2010-12-2).
 - Nasution, M.N. 2014. Kepemimpinan Mutu Kepala Sekolah Dalam Peningkatan Mutu Pendidikan. Volume 12, no. 2.
 - Nasution, Nur 2015. Manajemen Mutu Terpadu, *Thirteenth Edition*, Jakarta: Ghalia Indonesia.
 - Nawawi, Hadari. 2003. Manajemen Strategik Organisasi *Non Profit* Bidang Pemerintahan dengan Ilustrasi di Bidang Pendidikan. Yogyakarta. Gadjah Mada University Press.
 - Nawawi, Hadari. 2012. Metode Penelitian Bidang Sosial. Yogyakarta: Gajah Mada University Press.
 - Neyestani, Benham. 2017. "Principles And Contributions of Total Quality Management Gurus on Business Quality Improvement". *MPRA Paper No. 77282*.
 - Nurgiyantoro, Burhan dkk .2004. Statistik Terapan untuk Penelitian Ilmu-ilmu Sosial. Yogyakarta. Gadjah Mada University Press.
 - Nyoman, I Rinala, I Made Yudana dan I Nyoman Natajaya. 2013." Pengaruh Kualitas Pelayanan Akademik Terhadap Kepuasan Dan Loyalitas Mahasiswa Pada Sekolah Tinggi Pariwisata Nusa Dua Bali". E-Journal Program Pascasarjana Universitas Pendidikan Ganesha. Volume 4 Tahun 2013.
 - Primiani, C. Novi. 2005. *Total Quality Management Dan Service Quality* Dalam Organisasi Pendidikan Tinggi. Cakrawala Pendidikan, Th. XXIV, No. 2.
 - Przasnyski, Z.H and Tai, L.S. 1999. "Stock Market Reaction to Malcolm Baldrige National Quality Award Announcement : Does Quality Pay?". *Journal of Total Quality Management*. Vol. 10. No.3.
 - Pujawan, I Nyoman. 2010. Supply chain management. Edisi Kedua. Surabaya : Guna Widya.
 - Purwanto, Djoko. 2011. Komunikasi Bisnis. Edisi 4. Erlangga. Jakarta. Pusat: Jakarta.
 - Putra, Adi. 2009. Pengaruh Kualitas Pelayanan Terhadap Kinerja Kerelasiaan Nasabah. *Jurnal Ekonomi Bisnis Tahun 14 Nomor 2*.
 - Putra, I.W.J.A. 2009. Pengaruh Kualitas Pelayanan terhadap kinerja dan Kerelasiaan Nasabah. *Jurnal Ekonomi Bisnis*, 14(2), 151-160.
 - Rafiq, Muhammad dan Aswi. 2015. Analisis Dampak Penerapan Manajemen Mutu Iso 9001:2008 Terhadap Kualitas Pelayanan Akademik Perguruan Tinggi Di Bandar Lampung. *Jurnal Bisnis Darmajaya*, Vol.01. No.02, Juli.
 - Rahman, Taufiqur. 2012. Paradoks Manajemen Mutu = Standarisasi Pendidikan Di Indonesia. Vol.4. no.2.
 - Rakhmat, Jalaludin. (2008). Psikologi Komunikasi (Edisi Revisi). Bandung: PT. Remaja Rosdakarya.
 - Redmond, 2008. "Quality In Higher Education :The Contributing of Edward Deming's Principles". *International Journal of Educational Management*. Vol 22. Issue : 5. PP 432-441
 - Resmini, Wayan. 2010. Pembinaan Kemampuan Profesional Guru Melalui Kelompok Kerja Guru (KKG).GaneCSwara, Vol. 4, No. 1, hlm. 59-62.
 - Rinala I Nyoman, I Made Yudana, I Nyoman Natajaya. 2013."Pengaruh Kualitas Pelayanan Akademik Terhadap Kepuasan Dan Loyalitas Mahasiswa Pada Sekolah Tinggi Pariwisata Nusa Dua Bali". E-Journal Program Pascasarjana Universitas Pendidikan Ganesha. Volume 4 Tahun 2013.
 - Salim, Syahrums. 2007. Metodologi Penelitian Kuantitatif. Bandung, Cipta Pustaka Media.
 - Sallis, Edward. 2012. *Total Quality Management In Education* (alih bahasa Ahmad Ali Riyadi). Jogjakarta :IRCiSoD.
 - Setiadi, Ign. Dadut. 2017. Hubungan *Interpersonal Communication* Dalam Implementasi TQM.Tribun Jateng 17 Mei 2017, hal. 2.
 - Sinulingga, Sukaria. 2016. Metode Penelitian. Edisi 3. Medan. USU Press.
 - Sopiadin, Popi. (2010). *Manajemen Belajar Berbasis Kepuasan Siswa*. Cilegon: Ghalia Indonesia.
 - Sugiyono. 2012. Metode Penelitian Kuantitatif Kualitatif dan R&D. Bandung : Alfabeta.
 - Sukardi. 2008. Metodologi Penelitian Pendidikan : Kompetensi dan Praktiknya. Jakarta.
 - Sungkono, Joko. 2013. Resampling Bootstrap Pada R. *Jurnal Magistra* No. 84 Th. XXV. ISSN 0215-9511.

- Sutrisno, Edi. 2011. Manajemen Sumber Daya Manusia. Jakarta: Kencana.
- Syafaruddin. 2008. Efektivitas Kebijakan Pendidikan. Jakarta: Rineka Cipta.
- T. Wood, Julia. 2018. Komunikasi Interpersonal Komunikasi Keseharian. Edisi Enam. Jakarta. Salemba Humanika.
- Terziovski, M., dan Samson, D. 1999. "The Link Between Total Quality Management Practice and Organizational Performance". *International Journal of Quality & Reliability Management* 16(3):hal. 1-11.
- Tjiptono, Chandra, et al.. 2016. *Service, Quality dan Satisfaction*. Yogyakarta : Andi offset.
- Tjiptono, Fandy dan Diana Anastasia. 2009. *Total quality management*. Yogyakarta: Gadjah Mada University Press.
- Tjiptono, Fandy dan Gregorious Chandra. (2012). Pemasaran Strategik. Yogyakarta: Andi Offset.
- Tri, Hutomo dan Ratih Hendayani. 2015. *Implementasi Total Quality Management (TQM) Dan Pengaruhnya Terhadap Kepuasan Konsumen Dan Service Quality*. ISSN : 2089 - 3477. Volume 4 No. 2.
- Udiutomo, Purwa. (2011). Analisa Tingkat Kepuasan Siswa Terhadap Layanan Program Smart Ekselensia Indonesia Tahun 2011. *Jurnal Pendidik Dompot Dhuafa (Edisi I)*. Halaman 7.
- Umiarso dan Imam Gojali. 2010. Manajemen Mutu Sekolah di Era Otonomi Pendidikan. Jogjakarta: IRCiSoD.
- Usman, Husaini. 2001. Peran Baru Administrasi Pendidikan dari Sistem Sentralistik Menuju Sistem Desentralistik. *Jurnal Ilmu Pendidikan*. Jili8, No.1.
- Usman, Husaini. 2013. *Manajemen: Teori, Praktik dan Riset Pendidikan*, Penerbit Bumi Aksara.
- Usmara. 2003. Strategi Baru Manajemen Pemasaran. Yogyakarta: Amoro Book.
- Weningtyas dan Suseno. 2012. Pengaruh Komunikasi Interpersonal Dan Kualitas Pelayanan Terhadap Kepuasan Konsumen. *Jurnal Psikologika*. Vol.17 No. 1
- Wijaya, Toni. (2011). *Manajemen Kualitas Jasa*. Jakarta: Indeks.
- Wijaya, David. 2008. "Implementasi Manajemen Mutu Terpadu Dalam Penyelenggaraan Pendidikan di Sekolah". *Jurnal Pendidikan - No.10, Tahun ke-7, Juni 2008*, (<http://bpkpenabur.or.id>).
- Wijaya, David. 2012. *Pemasaran Jasa Pendidikan*. Penerbit Salemba Empat, Jakarta
- Yudianto, Agus dan Juni Trisnowati. 2014. "Pengaruh Kualitas Pelayanan Terhadap Kepuasan Siswa Di SMA Negeri Kerjo Kabupaten Karanganyar". *Jurnal Pendidikan*. Vol 12, No 2.
- Yuniarti, Yenny. 2014. "Pengaruh Kualitas Pelayanan terhadap Kepuasan Mahasiswa Program Ekstensi Fakultas Ekonomi Universitas Jambi". *Trikonomika*. Volume 13, No. 1, Juni 2014, Hal. 49-61 ISSN 1411-514X / ISSN 2355-7737.
- Yuwono, Rendy. 2017, Pengaruh Penerapan *Total Quality Management* dan Sistem Penghargaan Terhadap Peningkatan Produktivitas. *Jurnal Ilmu dan Riset Akuntansi*. Volume 6, no. 4.
- Zahroh, Aminatul. 2014. *Total Quality Management: Teori dan Praktik Untuk Mendongkrak Mutu Pendidikan*. Ar-Buzz Media. Yogyakarta.

How to cite this article: Dewi HP, Lumbanraja P, Matondang R. Implementation of total quality management and interpersonal communication in achieving student satisfaction through service quality at Yayasan Pendidikan Islam, Miftahussalam, Medan. *International Journal of Research and Review*. 2019; 6(2):111-129.
