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Indonesian Education Services Quality: The Influence of Leadership and Total Quality Management

Anis Fauzi¹, Nana Suryapermana², Ayu Wahyuni³, Ridwan Gofur⁴

⁴ Indonesian University of Educaton, Faculty of Educational Sciences, 229 Setiabudhi St., Sukasari, Bandung, West Java, Indonesia, ridwangofur@upi.edu

Annotation. The study aimed to understand the influence of leadership and Total Quality Management (TQM) implementation on the educational services quality in Banten, Indonesia. Research data is obtained through surveys, observation sheets, and documentation studies. The findings showed that leadership and TQM implementation positively affect the educational services quality by 11.8% and 19%. Two variables are also combined as independent variables that positively impact the educational services quality.

Keywords: leadership, implementation, total quality management, education quality services.

Introduction

The education quality becomes an indicator of the quality of the education process. The quality determination can be seen in the International Student Assessment Program (PISA), aimed at 15-year-old students worldwide. PISA is held every three years, measuring students' abilities in various countries in science, reading, and mathematics (OECD, 2018). In 2018, Indonesia scored an average of 80 in science, mathematics, and reading skills, below the OECD score average, which led to Indonesia ranking 74th out of 80 countries evaluated (Faradila & Yordan, 2019; Jayani, 2019). In contrast, Indonesia's

¹ State Islamic University Sultan Maulana Hasanuddin, Faculty of Education and Teacher Training, 30 Jend. Sudirman St., Serang, Banten, Indonesia, anis.fauzi@uinbanten.ac.id

² State Islamic University Sultan Maulana Hasanuddin, Faculty of Education and Teacher Training, 30 Jend. Sudirman St., Banten, Indonesia, nana.suryapermana@uinbanten.ac.id

³ Banten Islamic Institute, Faculty of Education, 12 Ki Fatoni St., Serang, Banten Indonesia, ayuwahyuni@uinbanten.ac.id

Human Development Index (HDI) is at a low level, 116th out of 189 countries (Basri, 2018; Sourander et al., 2018; Sulaeman, 2020).

The phenomenon of low individual ability can be related to the available education quality. Educators play an essential role in improving students' satisfaction and learning ability (van Griethuijsen et al., 2020). Qualified educators and a conducive classroom environment also significantly influence students' social and emotional abilities (Jone et al., 2017; Nur et al., 2020; Saripah et al., 2020). Educator competence becomes one of the indicators in determining the quality of education (Hammerness & Klette, 2015; Novauli, 2015). Educators have four main competencies: pedagogical, personality, social, and professional (Permendiknas, 2007). These four competencies need to be integrated into the performance of an educator.

Formally, educators need to have a competency certificate to show their eligibility. However, the national teacher competency test results showed an average score of 53.02. This figure has not reached the minimum competency standard of 55.0 (Suwignyo, 2018). The portrait of the education quality can also be seen in the dropout rate, such as the number of children who dropped out of school in Serang, Banten, and 759 children aged 7–18 years (Yulianti et al., 2019). These two phenomena show that providing educational services to children is not optimal.

Efforts have been made by the Indonesian government to improve the quality of education through Government Regulation No 19/2005, which was later changed to Government Regulation No. 13/2015. This regulation serves as the basis for planning, implementing, and supervising education at every level of education to realize quality national education and aims to ensure the quality of national education (Peraturan Pemerintah [Government Regulation], 2015). The national standards achievement level of nutmeg education in public and private junior high schools (SMP) has, on average, reached 85.97% of the expected (Raharjo, 2013).

Schools, as educational institutions, contribute to creating a conducive environment for implementing education for children. Quality management is the key to school success in getting the community's attention (Saroni, 2011; 2017). Quality education services can be evaluated through quality control, known as total quality management (TQM). TQM is a management approach centered on quality, member participation, and long-term success through user satisfaction and benefits for members and society (Deming, 1984; Sallis, 2014; Sholihah, 2012; Wahyuni, 2015). The concept of TQM is commonly used in the industrial world, but there have been studies that have tested the effectiveness of TQM in education, such as the research of Mohammed et al. (2016), Psomas & Antony (2017), Dewi (2018), Sallis (2014), and Zaman & Anjalin (2016).

Edward M. Deming, one of the well-known figures in TQM, argues that 14 important points represent TQM. These fourteen points are the essence of TQM, including: (1) Creating consistency of direction for the development of items and administration. (2) Embrace the new way of thinking. (3) End the reliance on mass assessments. (4) End the act of granting business dependent on sticker prices alone. (5) Improve continually, and always the arrangement of creation and administration. (6) Establishment preparing; (7) Take on, and foundation authority. (8) Drive out dread. (9) Separate obstructions between staff regions. (10) Take out mottos, admonitions, and focuses for the labor force. (11) Wipeout mathematical shares for the labor force and mathematical objectives for individuals in administration. (12) Eliminate hindrances that deny individuals of pride of value. (13) Energize training and personal growth for everybody. and (14) Make a move to achieve the change (Deming, 1984; Gartner et al., 1988).

The International Organization for Standardization (ISO) also explains that there are seven principles of TQM, namely client center, authority, commitment with individuals (commitment of individuals), process approach, improvement, proof-based direction, and relationship with the executives (ISO, 2015). While determining the quality of school quality can be seen from five principles, namely: (1) the board's responsibility (initiative); (2) centers around clients and representatives; (3) centers around realities; (4) constant improvement; and (5) investment all gatherings (Arcaro, 1995). Based on the two opinions about the principles of TQM, an important element that plays a role in leading the organization is the element of leadership (leadership).

The success of implementing TQM in schools is related to the leadership quality of the principal. Sallis (2014) argues that leadership is important in implementing TQM in schools. The significance of leadership in carrying out the transformation can be seen in the commitment to implementing education quality. The principal, as a leader, needs to build unity and a conducive environment so that the people involved can achieve school quality goals (ISO, 2015). In addition, the principal also plays a role in improving the quality and supporting the staff in running the quality wheel (Sallis, 2014). Thus, the role of the principal as a top leader has the task of integrating the entire school system so that education quality can achieve optimal results.

Based on the explanation above, this study examines the effect of leadership and total quality management (TQM) implementation on the quality of education services in Banten, Indonesia.

Method

This research utilizes an explanatory mixed-method design combining quantitative and subjective methodologies (Creswell, 2013). The quantitative approach is carried out through survey techniques by distributing questionnaires about leadership (x1), total quality management (x2), and the quality of education services (y). Meanwhile, the qualitative approach is carried out through observation and documentation studies which analyze various documents to determine the profile of educational institutions (Stake, 1995). The leadership instrument (x1) consists of 23 question items with five Likert scales as answer choices. The questionnaire on total quality management (x2) consists of 21 items. Finally, the education service quality questionnaire (y) comprises 25 items.

This study's participants were teachers and students of primary and secondary schools in Banten, Indonesia, totaling 100 people. All participants came from the Al-Izzah Integrated Islamic Elementary and Middle School, Serang. The chosen sample is through a simple random sampling technique described in Table 1.

Table 1

Research	Participants
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Participant	Amount
Teacher	50
Student	50
Total	100

The descriptive statistics were used to analyze the leadership conditions, implementation of the TQM concept, and the quality of education services. This study aims to determine the associative hypothesis/relationship between two independent variables and one dependent variable and predict the independent effect on the dependent variable. Statistical procedures performed to test the hypothesis are product-moment correlation, multiple, partial, and regression analysis (Creswell, 2013; Sugiyono, 2017).

Findings and Discussion

Findings

Linearity Test

A linearity analysis was conducted to see if the independent variables (x1 and x2) used as predictors had linearity (Ainiyah et al., 2016; Setyaningsih, 2017). The ANOVA (analysis of variance) table was used to test the linearity. Variables can be linear if the Sig value on Sig from Linearity >0.05 for a significance level of 5%, then the regression of variable X to Y is linear. On the other hand, if the Sig value on <0.05, then the regression of the X variable to Y is not linear. The results of the statistical calculations are as follows.

Table 2Linearity Test Result

Variable	Sig Deviation from Linearity	5% significant	Conclusion
$X_1 \rightarrow Y$	0,237	0,05	Linear
$X_2 \rightarrow Y$	0,462	0,05	Linear

Note: X1 (Leadership), X2 (Total Quality Management), and X3 (Quality of Educational Services)

Table 2 shows that the Sig value between the leadership variable (x1) and the implementation of the TQM concept (x2) on the Quality of Educational Services (y) is more than 0.05 at a significance level of 5%. The results show that all independent variables to the dependent variable have a linear relationship and can be continued at the regression analysis stage.

Hypothesis Test

The Leadership Effect on the Quality of School Services

A simple correlation test analyzed the influence of leadership (x1) and the quality of education services (y). Simple correlation analysis aims to provide an overview of the relationship between the variables x1 and y and calculate the regression (Asuero et al., 2006; Sugiyono, 2017). The analysis is described in the table below.

Table 3

		Leadership	Quality Education Services
Leadership	Pearson Correlation	1	.343*
	Sig. (2-tailed)		.015
	Ν	50	50
	Pearson Correlation	.343*	1
Quality Education	Sig. (2-tailed)	.015	
501 11005	Ν	50	50

Simple Correlation Analysis

Note: *Correlation is significant at the 0.05 level (2-tailed).

The measure used in the simple correlation analysis is the value of the Product Moment correlation coefficient, and the value of r-count or rx1y = 0.343 is obtained (see Pearson correlations). Interpretation with the "r" Product Moment value, the r-table for n = 50 is 0.279 because the value of r-count > r-table indicates a correlation between the variables x1 and y.

Regression					
Model	Unstandardiz	ed Coefficients	Standardized Coefficients	4	C :-
	В	Std. Error	Beta	t	51g.
(Constant)	73.634	12.280		5.996	.000
Leadership	.316	.125	.343	2.531	.015

Note: Dependent Variable: Quality Education Services

From Table 4, the regression equation can be written as = 73.634 + 0.316 x1. The results showed that the regression coefficient value was positive 0.316, which means that every change in the leadership variable (x1) increases by one unit. There will be a change in the educational service quality variable (y) of 0.316. Tables 5 and 6 below show the regression significance test.

Table 5

Table 4

ANOVA Regression Significant

	Model	Sum of Squares	Df	Mean Square	F	Sig.
	Regression	424.391	1	424.391	6.406	.015 ^b
1	Residual	3179.789	48	66.246		
	Total	3604.180	49			

Note:

a. Dependent Variable: Quality Education Services

b. Predictors: (Constant), Leadership

Table 6

Regression Significant Test

	Model	Unstandardized Coefficients		Standardized Coefficients		Sia
		В	Std. Error	Beta	ι	Sig.
1	(Constant)	73.634	12.280		5.996	.000
-	Leadership	.316	.125	.343	2.531	.015

Note: Dependent Variable: Quality Education Services

Tables 5 and 6 show the significance test obtained from the results between t-count and t-table. The t-count for the x1 variable is 2,531, while the t-table is at a significance level of 5% for n = 50, which is 2,008 because t-count > t-table (2,531 > 2,008).

The coefficient of determination test aimed to determine the level of influence of the leadership variable (x1) on the education services quality (y), which is expressed as a percentage (%). Below is a table showing the calculation results.

Determination Coefficients							
Model	R	R Square	Adjusted R Square	Std. The Error in the Estimate			
1	.343ª	.118	.099	8.139			

Table 7Determination Coefficients

Note:

a. Predictors: (Constant), Leadership

b. Dependent Variable: Quality Education Services

Table 7 shows that leadership (x1) can influence the quality of education services (y) by 11.8%. It shows that 88.2% of other factors or variables may still affect the quality of education services. A statistical analysis of the first hypothesis has been conducted based on the analysis result. Overall, it can be concluded that leadership impacts education quality positively and significantly; therefore, hypothesis one is accepted.

The Effect of TQM Implementation on the Quality of Education Services

Table 8

		TQM Implementation	Quality Education Services
TO 16	Pearson Correlation	1	.436**
TQM Implementation	Sig. (2-tailed)		.002
	Ν	50	50
	Pearson Correlation	.436**	1
Quality Education	Sig. (2-tailed)	.002	
Services	Ν	50	50

Simple Correlation Analysis

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

Based on Table 8, the value of r-count or rx2y = 0.436 while interpretation with the value of "r" Product Moment, the r-table value for n = 50 is 0.279. Because the value of r-count > r-table (0.436 > 0.279), there is a correlation between the variables x2 and y.

Regression					
Model	Unstandard	ized Coefficients	Standardized Coefficients		C :
	В	Std. Error	Beta	t	51g.
(Constant)	50.566	16.143		3.132	.003
TQM Implementation	.588	.175	.436	3.354	.002

Table 9

Note: a. Dependent Variable: Quality Education Services

This equation is based on the table above 50.566 + 0.588 X2, which means the regression coefficient value is positive 0.588. As a result, every change in the implementation variable of the TQM concept (X2) increases by one unit; there will be a change in the education service quality variable (y) of 0.588. Tables 10 and 11 present the regression significance test results.

Table 10

ANOVA Regression Significant

-	<u> </u>				
Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	684.280	1	684.280	11.249	.002 ^b
Residual	2919.900	48	60.831		
Total	3604.180	49			

Note:

a. Dependent Variable: Quality Education Services

b. Predictors: (Constant), TQM Implementation

Table 11

Regression Significant Test

Model	Unstandard	ized Coefficients	Standardized Coefficients		C !-
	В	Std. Error	Beta	t	51g.
(Constant)	50.566	16.143		3.132	.003
TQM Implementation	.588	.175	.436	3.354	.002

Note: a.Dependent Variable: Quality Education Services

The significance test was obtained by looking at the t-count and t-table. Obtained t-count for the variable X2 of 3.354. Meanwhile, the t-table has a significance level of 5% for n = 50, which is 2,008 because t-count > t-table (3,354 > 2,008).

Furthermore, the coefficient of determination test aims to determine the level of influence of the TQM concept implementation variable (x2) on the education services quality (y), which is expressed as a percentage (%). Below is a table with the calculation results.

Table 12

Determination Coefficients						
Model	R	R Square	Adjusted R Square	Std. error of the estimate		
1	.436ª	.190	.173	7.799		

Note:

a. Predictors: (Constant), TQM Implementation

b. Dependent Variable: Quality Education Services

Based on Table 12, the coefficient of determination (r2x2y) value is 0.190. In other words, implementing the TQM concept (x2) can affect the quality of education services (y) by 19%. As a result, 81% of other factors or variables may affect the quality of education services. Thus, the TQM concept was found to positively and significantly influence the quality of education services.

The Influence of Leadership and Implementation of the TQM Concept on the Educational Services Quality

Double Correlation Analysis					
	Model	R	R Square	Adjusted R Square	Std. Error of The Estimate
1		.543ª	.295	.265	7.355

Table 13Double Correlation Analysis

Note:

a. Predictors: (Constant), TQM Implementation, Leadership

b. Dependent Variable: Quality Education Services

The results of multiple regression analysis with two predictors showed that the correlation coefficient Ry (1, 2) showed a positive value of 0.543. Interpreting the value of "r" Product Moment, the value of the r-table for n = 50 is 0.279. Because of the value of r-count > r-table (0.543 > 0.279), then there is a moderate relationship between leadership (X1) and the implementation of the TQM concept (X2) on the education services quality. In comparison, the regression equation model can be seen in Table 14.

Table 14

Regression

Model	Unstandardized Coefficients		Standardized Coefficients		C !-
	В	Std. Error	Beta	t	51g.
(Constant)	23.199	18.416		1.260	.214
Leadership	.298	.113	.324	2.641	.011
TQM Implementation	.568	.166	.421	3.432	.001

Note: a.Dependent Variable: Quality Education Services

Based on Table 14, the value of the x1 regression coefficient is 0.298, which means that with every change in the leadership variable (x1) increases by one unit, the quality of education services (y) will increase by 0.298, assuming x2 remains constant. While the value of the x2 coefficient is 0.568 thus, if the value of TQM concept implementation increases by one unit, then the value of education services quality (y) will increase by 0.568 with the assumption that x1 remains.

The regression significance test was carried out with partial and global tests. It addressed whether there was an effect between independent and dependent variables controlled by other independent variables or together (Shadrokh, 2011; Xu & Shen, 2020). This test looks for the t-count and compares it with the t-table. The variable x1 or x2 is said to affect if t-count > t-table. At the same time, the global test looks for an f-count and compares it with the f-table. If f-count > f-table, the variables x1 and x2 together affect y.

Table 14 shows that the value of t-count x1 is 2.641, while the t-table at a significance level of 5% and n = 50 is 2.008. This shows the value of t-count > t-table (2.641 > 2.008). While the value of t-count for the variable x2 is 3.432, thus t-count is bigger than the t-table (3.432 > 2.008).

The picture above shows that the position of the t-count is on the far right of the curve, whose value is more significant than the t-table. It is in line with the Sig value of the leadership variable of 0.011 < 0.025, the sign of the variable implementation of the TQM concept of 0.001 < 0.025, for the two-part test, which means that there is a significant effect between leadership (x1) and the implementation of the TQM concept (x2) on service quality education (y). The f test was used to strengthen the results of the two-part test. Below is a table detailing the regression coefficient value from the multiple linear regression analysis.

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	1061.514	2	530.757	9.811	.000 ^b
Residual	2542.666	47	54.099		
Total	3604.180	49			

Table 15The Result of the F-Test Double Regression

Note:

a. Dependent Variable: Quality Education Services

b. Predictors: (Constant), TQM Implementation, Leadership

Table 15 shows that the f-count value is 9,811, and the f-table at a significance level of 0.05 and n = 50 is 3,195. This means that f-count > f-table (9.811 > 3.195). Thus, it can be concluded that the leadership variable (x1) and the implementation of the TQM concept (x2) combined effects are significant on the education services quality (y). Table 17 shows how the two predictors' coefficients of determination are compared.

Table 16

Determination Coefficients

Model	R	R Square	Adjusted R Square	Std. error of the estimate
1	.543ª	.295	.265	7.355

Note:

a. Predictors: (Constant), TQM Implementation, Leadership

b. Dependent Variable: Quality Education Services

Table 16 shows that leadership (x1) and the implementation of the TQM concept (X2) together can affect the quality of education services (y) by 29.5%. There are still 70.5% of other factors or variables that may affect the quality of education services not explained in this study. Based on statistical calculations that have been carried out to test the third hypothesis, overall, it can be concluded that leadership and implementation of the TQM concept positively affect the quality of education services.

Discussion

The Effect of Leadership on the Educational Services Quality

A significant and positive correlation was found between leadership (x1) and education services quality (y). An analysis of the descriptive data confirms that leadership is in the excellent category, with a percentage of 85.09%. Educational leadership is the process of

educational leaders influencing students and stakeholders to achieve educational goals (Wirawan, 2014). As an education leader, the principal should use the authority and all policies that support the school vision and mission. The success or failure of an educational organization depends on the role of its leader in influencing and moving all elements in the organization to achieve organizational goals.

Improving education quality must start with the principal's understanding of his leadership function. The principal's leadership functions are: (1) strategic thinking; (2) creating organizational culture and climate; (3) curriculum development; (4) learning process development; (5) development of educational facilities; (6) managerial roles; and (7) human resource development in schools (Wirawan, 2014). All of these functions aim to realize competitive school excellence. Schools as educational institutions will certainly strive to provide high-quality services because implementing school services is an interpretation of the quality of education in general (Hidayat, 2014). Quality school services will prioritize customer satisfaction to produce good graduates, such as the quality of school graduates, academic and non-academic achievements, and alums' track records.

Quality schools have been standardized through the school accreditation process. Accreditation aims to provide information on school eligibility according to standards, mapping the feasibility and quality ratings of education, and a form of accountability to stakeholders as a form of public accountability (BANSM, 2020). A series of simple regressions strengthened the relationship between the principal's leadership and the education quality analysis through the correlation test of the x1 variable to Y (leadership to the education services quality). The test shows a correlation coefficient of 0.343 (rx1y), r-table n = 50, 5% significance level, 0.279 (r-table). So, it can be said that r-count > r-table (0.343 > 0.279). The next stage tests the coefficient of determination to determine the magnitude of the contribution of x1 to Y, and the value is 0.118. It shows that x1 contributes 11.8% influence on Y; other factors outside this study influence the remaining 88.2%.

The Influence of the Implementation of the Total Quality Management Concept on the Educational Services Quality

According to the results, there was a significant and positive relationship between the concept implementation of Total Quality Management (TQM) (x1) on the quality of education services (y). These results are included in the excellent category with a percentage of 87.45%. Total Quality Management (TQM) raises quality as a business strategy and focuses on customer satisfaction involving all organization members (Nasution, 2005). TQM focuses on service quality; in this case, there are educational services. TQM in education provides quality assurance for implementing educational services by encouraging all school elements to address clients' issues and assumptions. Implementing the TQM concept in education will provide benefits in increasing the competitiveness of schools so that the market share will be more comprehensive, and the marketing of educational services will also increase.

Schools that apply the TQM concept can implement education quality programs by adhering to the principles of (1) customer-focused, (2) total involvement, (3) measurement of graduate quality standards, (4) commitment to educational change, (5) continuous improvement (Sukmadinata, 2015). It has been applied by the school that became the object of research. It is evident from the results of a series of simple regression analyses carried out by researchers, such as the results of the correlation test for the X2 variable to Y showing a correlation coefficient (rx2y) of 0.436, consulted in r-table with n = 50, at a significance level of 5%, r-table of 0.279 is obtained. So, it can be said that r-count > r-table (0.436 > 0.279). The next stage was testing the coefficient of determination to determine the amount of X2's contribution to Y and obtaining a value of 0.190. It indicates that X2 contributes 19% to Y, and other factors outside this study influence the remaining 81%.

The results of hypothesis testing show a t-count value of 3.354, while the t-table value for the 5% significance level for n = 50 is 2.008; thus, the t-count > t-table (3.354 > 2.008). As a result, the alternative hypothesis (Ha) is acceptable. The null hypothesis (Ho) is rejected; it shows a significant influence between implementing the TQM concept and the education services quality.

The Influence of Leadership and Implementation of the Total Quality Management Concept on the Quality of Educational Services

The results showed that there was a positive and critical impact between leadership (x1) and the implementation of the concept of Total Quality Management (TQM) (x1) on the quality of education services (y). It is supported by the descriptive analysis, which shows that the education services quality is included in the good category with 83.66%. The high percentage of the assessment is inseparable from influencing factors such as leadership and TQM. Leadership is the main factor influencing the quality of education services. In education, leadership influences stakeholders and creates synergy.

Good education service is a service that can meet the expectations and needs of educational customers. The indicators to measure whether or not education services in schools are: (1) reliability, (2) responsiveness, (3) assurance, (4) empathy, and (5) direct evidence (tangibles) (Eswika & Istiatin, 2015). These indicators are related to implementing the Total Quality Management concept or Integrated Quality Management (MMT).

Educational institutions need to adopt the TQM system to improve school competitiveness in the era of globalization and industry 4.0. Therefore, innovation in the provision of educational services is necessary. TQM is an approach taken by organizations to meet customer needs and expectations. This approach involves leaders and employees (Barnawi & Arifin, 2017). Syafaruddin (2002) explains that TQM in education is an application of quality management that is adapted to the fundamental nature of schools as educational service organizations through developing the quality of learning, efforts to achieve the quality of student graduates to meet the expectations of parents, society, and other education customers as targeted output. School quality can be realized if it is committed to providing quality educational services by optimizing the leadership function and implementing the TQM concept. Based on the simple correlation and regression analysis results, leadership has a good and significant impact on education services quality by 11.8%. It means that the higher the leadership role, the higher the influence on the quality of education services. In comparison, simple correlation and regression analysis demonstrate a good and significant impact of implementing the Total Quality Management concept on the quality of education services by 0.436.

Conclusion

This study was conducted to test the associative hypothesis between leadership, total quality management (TQM) implementation, and the quality of education services. The results showed that leadership (x1) and the implementation of the TQM concept (x2) had a positive effect on the quality of education services (y). These results indicate that the principal's leadership role greatly influences the education services quality. In addition, implementing the TQM concept can increase the quality of school education services. Quality education services will affect school competitiveness, student guardian satisfaction, and the quality of graduates/alums. Further research using other variables and methods and a more diverse sample will enrich research findings on quality education services.

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Indonezijos švietimo paslaugų kokybė: lyderystės ir visuotinės kokybės vadybos įtaka

Anis Fauzi¹, Nana Suryapermana², Ayu Wahyuni³, Ridwan Gofur⁴

- ¹ Valstybinis Sultan Maulana Hasanuddin Islamo universitetas, Edukologijos ir mokytojų rengimo fakultetas, Jend. Sudirman g. 30, Serangas, Bantenas, Indonezija, anis.fauzi@uinbanten.ac.id
- ² Valstybinis Sultan Maulana Hasanuddin Islamo universitetas, Edukologijos ir mokytojų rengimo fakultetas, Jend. Sudirman g. 30, Bantenas, Indonezija, nana.suryapermana@uinbanten.ac.id
- ³ Banteno Islamo institutas, Edukologijos fakultetas, Ki Fatoni g. 12, Serangas, Bantenas, Indonezija, ayuwahyuni@uinbanten.ac.id
- ⁴ Indonezijos švietimo universitetas, Švietimo mokslų fakultetas, Setiabudhi g. 229, Sukasari, Bandungas, Vakarų Java, Indonezija, ridwangofur@upi.edu

Santrauka

Šio tyrimo pagrindinė prielaida – žemi mokinių skaitymo ir rašymo pasiekimai ir prastas jų socialinės raidos vystymasis. Tyrimo tikslas – išsiaiškinti lyderystės ir visuotinės kokybės vadybos (VKV) diegimo įtaką švietimo paslaugų kokybei Banteno mokyklose (Indonezija). Tyrime dalyvavo 100 žmonių: 50 mokinių ir 50 mokytojų. Kiekybiniai metodai buvo taikomi kartu su aiškinamaisiais metodais ir koreliaciniu tyrimo dizainu. Tyrimo duomenys gauti iš apklausos klausimynų, stebėjimo lapų ir atliktos dokumentų analizės. Tyrimo instrumentai buvo taikomi diegti lyderystės ir visuotinės kokybės vadybos (VKV) švietimo paslaugų kokybės sistemą Banteno mokyklose (Indonezija).

Duomenų analizei buvo naudojami aprašomieji duomenys, taikoma Pearsono koreliacija, dviguba ir dalinė koreliacija, regresinės analizės metodai. Gauti rezultatai parodė, kad lyderystės ir visuotinės kokybės vadybos (VKV) diegimas teigiamai veikia švietimo paslaugų kokybę 11,8 proc. ir 19 proc. Abu kintamieji yra kaip nepriklausomi kintamieji, teigiamai veikiantys švietimo paslaugų kokybę. Šie rezultatai rodo, kad vadovo lyderio vaidmuo daro įtaką švietimo paslaugų kokybei. Tolesni tyrimai, kuriuose būtų naudojami kiti kintamieji ir metodai bei įvairesnė imtis, praturtintų švietimo paslaugų kokybės tyrimų rezultatus.

Esminiai žodžiai: lyderystė, įgyvendinimas, visuotinės kokybės vadyba, švietimo paslaugų kokybė.

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