

The Effect of Education and Training Levels on Increasing Employee Performance with Competence as Intervening Variables RSUD Dr. RM. Djoelham City of Binjai

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Abstract

This research is to analyze the effect of education and training levels on improving employee performance with competence as an intervening variable. The location of the research was carried out at Dr. RM. Djoelham City of Binjai. The research population is 80 employees. The sampling used was 80 employees and the technique used saturated samples. The research model used is path analysis, the measuring tool is Smart PLS 3.3.3. The result of this study is that competence has a positive and insignificant effect on employee performance. Training has a positive and significant effect on Employee Performance. Training has a positive and significant effect on competence. Education level has a positive and significant effect on employee performance. Education Level has a positive and significant effect on Employee Performance. Training has no significant positive effect on Employee Performance through Competence. Education Level has no significant positive effect on Employee Performance through Competence.

Keywords: Level of Education, Training, Competence, Employee Performance.

INTRODUCTION

The goal of national development includes development in all fields including development in the health sector, such as achieving a healthy life for every resident, both physical, mental and environmental health. The development of the number of hospitals in Indonesia is followed by the development of disease patterns that develop in society, so that people expect health services in hospitals. The hospital is a health service facility (health provider) which has an important role, loaded with tasks, burdens, problems and expectations in realizing public health. This health facility aims to provide health assistance to the community in the form of prevention (preventive), healing (curative), and restoration of conditions of physical and mental disabilities (rehabilitative).

Improving the quality of human resources in general is intended to improve services in hospitals. This is related to the level of ability and work performance as well as other forms of activity that aim to achieve optimal results which are accompanied by symptoms of efforts to improve hospital services. Changes and improvements in the field of education include the various components involved in it, both education implementers in the field (teacher competence and quality of teaching staff), quality of education, curriculum tools, educational facilities and infrastructure and quality of education management including changes in learning methods and strategies that more innovative. Learning according to Spears in Suprijono (2009) is observing, reading, imitating, trying something, listening and following a certain direction.

Training is the obligation of the company and all parties involved in business development and planning. This is because by holding training, the company makes a long-term investment in developing the value of the company. Through training, companies can develop and add to the knowledge and skills of employees so that they can make employee performance more efficient and effective. Competence is an ability to carry out or carry out a job or task that is based on skills and knowledge and is supported by the work attitude required by the job.

Thus, competence shows skills or knowledge characterized by professionalism in a particular field as something that is most important, as the superiority of that field. Employee performance is the result of the thought and energy of an employee towards the work he does, it can be tangible, seen, counted, but in many cases the results of thought and effort cannot be counted and seen, such as ideas for solving a problem, new innovations a product of goods or services, can also be the discovery of a more efficient work procedure. The phenomenon that occurred at Dr. RM.

LITERATURE REVIEW

Education

The level of education according to Lestari in Wirawan (2016) is "an activity of a person in developing abilities, attitudes, and forms of behavior, both for future life where through a certain organization or not organized". Hariandja further in Nuruni (2014) added that the level of education of an employee can increase the company's competitiveness and improve company performance.

Education Level Indicator

Education level indicators according to Lestari in Edy Wirawan (2016), namely:

1. Formal Education The indicator is the last education completed by each worker which includes Elementary School, Junior High School, High School and College.
2. Informal Education The indicator is in the form of attitudes and personality which are formed from family and environment.

Training

According to Mangkunegara (2017) states that training (training) is a short-term educational process that uses systematic and organized procedures in which non-managerial employees learn technical knowledge and skills for limited purposes. According to Larasati (2018) "Training (training) is short-term education that uses systematic and organized procedures so that non-managerial workers learn technical knowledge and skills for specific purposes".

Training Indicator

According to Mangkunegara (2017) training indicators include:

1. Types of Training Based on the analysis of the needs of the training program that has been carried out, it is necessary to conduct training to improve employee performance and work ethics for the lower and middle levels.
2. Training Objectives Training objectives are concrete and measurable; therefore improve work skills so that participants are able to achieve performance.
3. Training Materials Training materials can be in the form of management, script management, work psychology, work communication, discipline, and work ethics.
4. Training Method The training method used is a training method with participatory techniques, namely group discussions, conferences, simulations, in-class simulations.
5. Qualifications of Participants Training participants are employees who meet the qualification requirements such as permanent employees and staff who have received a recommendation from the leadership.

Competence

According to Wibowo (2014), competence is an ability to carry out or perform a job or task that is based on skills and knowledge and is supported by the work attitude demanded by the job. According to Boyatzis (2008) competency can be developed through training. Competence as a condition for fulfilling tasks (job demand), either in whole or in part, must be owned by an employee in carrying out his duties.

Competency Indicator

According to Wibowo (2014), said that competency indicators are:

1. Ability to carry out tasks.
2. Skills.
3. Attitudes that become individual characteristics

Employee Performance

Performance is defined as what employees do or don't do. Employee performance is what affects how much they contribute to the organization. According to Afandi (2018) Performance is the result of work that can be achieved by a person or group of people in a company in accordance with their respective authorities and responsibilities in an effort to achieve organizational goals illegally, does not violate the law and does not conflict with morals and ethics.

According to Mangkunegara (2009) the notion of performance (work achievement) is the result of work in quality and quantity achieved by an

employee in carrying out his duties in accordance with the responsibilities given to him.

Employee Performance Indicators

According to Afandi (2018) employee performance indicators are as follows:

1. Quantity of work. All kinds of units of measurement related to the amount of work that can be expressed in numbers or other numerical equivalents.
2. Quality of work. All kinds of units of measurement related to the quality or quality of work that can be expressed in numbers or other numerical equivalents.
3. Efficiency in carrying out tasks. Multiple resources wisely and in a cost-effective manner.
4. Work discipline Comply with applicable laws and regulations.
5. Initiative The ability to decide and do the right thing without being told, being able to find what should be done with something around us, trying to keep moving to do things even though things are getting more difficult.
6. Accuracy The level of suitability of the results of work measurements whether the work has reached its goals or not.
7. Leadership The process of influencing or giving examples by leaders to their followers in an effort to achieve organizational goals.
8. Honesty One of human nature that is quite difficult to apply.
9. Creativity Mental processes that involve the generation of ideas or that involve the generation of ideas.

METHOD

The type of research that will be used is quantitative associative, namely research that aims to determine the relationship between two or more variables Sugiyono (2017). This research was conducted at RSUD Dr. RM. Djoelham City of Binjai.

According to Sugiyono (2017), population is a generalization area consisting of objects/subjects that have certain qualities and characteristics determined by researchers to be studied and then the conclusion is drawn that the population used is 80 employees. According to Sugiyono (2017), the sample is part of the number and characteristics possessed by the population. The sample in this study were 80 employees (saturated sample). The data analysis technique used in this study was a quantitative data analysis method. Data analysis in this study used Partial Least Square (PLS) based Structural Equation Modeling (SEM) using SmartPLS 3.3.3 software.

Measurement Model (Outer Model)

The procedure for testing the measurement model consists of a validity test and a reliability test.

1. Validity Test

The validity test is used to assess whether or not a questionnaire is valid. A questionnaire is said to be valid if the questionnaire questions are able to reveal something that is measured by the questionnaire. Validity testing is applied to all question items in each variable.

2. Reliability Test

In general, reliability is defined as a series of tests to assess the reliability of statement items. The reliability test is used to measure the consistency of measuring instruments in measuring a concept or measuring the consistency of respondents in answering statement items in questionnaires or research instruments. To measure the level of reliability of research variables in PLS, you can use the value of the alpha coefficient or Cronbach's alpha and composite reliability). Cronbach's alpha value is suggested to be greater than 0.7 and composite reliability is also suggested to be greater than 0.7. (Now, 2014)

Structural Model (Inner Model)

This test was conducted to determine the relationship between exogenous and endogenous constructs which has become a hypothesis in this study (Hair et al., 2017). To produce inner model test values, steps in SmartPLS are carried out using the bootstrapping method. The structural model is evaluated using the R-square for the dependent variable, the Stone-Geisser Q-square test for predictive elevation and the t test and the significance of the structural path parameter coefficients with the following explanation:

1. Coefficient of Determination / R Square (R²)

In assessing the model with PLS begins by looking at the R-square for each dependent latent variable. The interpretation is the same as the interpretation in regression. Changes in the R-square value can be used to assess the effect of certain independent latent variables on the dependent latent variable whether it has a substantive effect (Ghozali, 2012). The value of R² is generally between 0 and 1.

2. Predictive Relevance (Q²)

This test is used to measure how well the observed values are generated by the model and also the parameter estimates. If the Q² value is greater than 0, it indicates that the model has predictive relevance, which means it has a good observation value, whereas if the value is less than 0, it indicates that the model does not have predictive relevance (Ghozali, 2014).

3. t-Statistics

at this stage it is used for hypothesis testing, namely to determine the significance of the relationship between variables in research using the bootstrapping method. In the full Structural Equation Modeling model besides confirming the theory, it also explains whether or not there is a relationship between latent variables (Ghozali, 2012). The hypothesis is said to be accepted if the t statistic value is greater than the t table. According to (Latan and Ghozali, 2012) the criteria for a t table value of 1.96 with a significance level of 5%

4. Path Coefficient (Path Coefficient)

This test is used to determine the direction of the relationship between variables (positive/negative). If the value is 0 to 1, then the direction of the relationship between variables is positive. Meanwhile, if the value is 0 to -1, then the direction of the relationship between variables is declared negative.

5. Model Fit

This test is used to determine the level of suitability (fit) of the research model with the ideal model for this study, by looking at the NFI value in the program. If the value is closer to 1, the better (good fit).

RESULTS AND DISCUSSION

Outer Model Analysis

Testing the measurement model (outer model) is used to determine the specification of the relationship between latent variables and their manifest variables. This test includes convergent validity, discriminant validity and reliability.

1. Convergent Validity

Convergent validity is used to determine the validity of each indicator on its latent variables, in the SmartPLS software to see the results of the validity, it can be seen in the outer loading table. In the outer loading table there are numbers or values that indicate indicators that show similarities with the construct variables. The value for the indicator is said to be valid, if the indicator explains the construct variable with a value of > 0.7 . The structural model in this study is shown in the following figure:

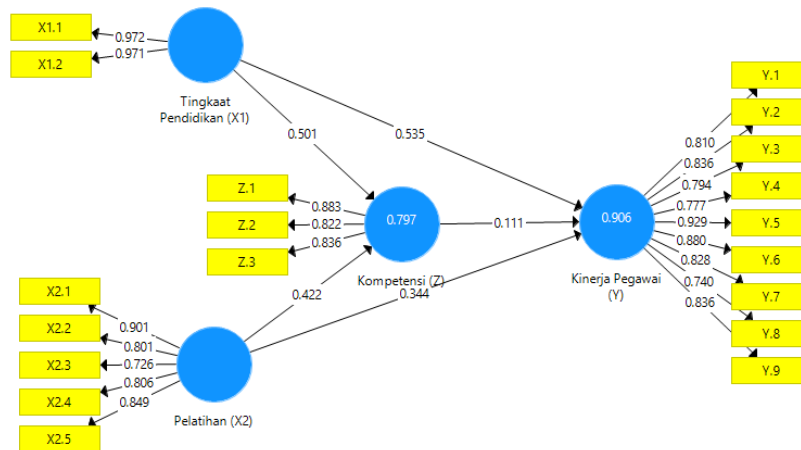


Figure 1. Outer Model
Source: Smart PLS 3.3.3

The Smart PLS output for the loading factor gives the results in the following table: Outer Loadings In this study there are equations and the equation consists of two substructures for substructure 1

$$Z = b1X1 + b2X2 + e1$$

$$Z = 0.501 + 0.422 + e1$$

For substructure 2

$$Y = b3X1 + b4X2 + b5Z + e2$$

$$Y = 0.535 + 0.503 + 0.111 + e2$$

Table 1. Outer Loadings

	Employee Performance (Y)	Competency (Z)	Training (X2)	Education Level (X1)
X1.1				0.972
X1.2				0.971
X2.1			0.901	
X2.2			0.801	
X2.3			0.726	
X2.4			0.806	
X2.5			0.849	
Y. 1	0.810			
Y.2	0.836			
Y.3	0.794			
Y.4	0.777			
Y.5	0.929			
Y.6	0.880			
Y.7	0.828			

Y. 8	0.740			
Y.9	0.836			
Z. 1		0.883		
Z. 2		0.822		
Z. 3		0.836		

Source: Smart PLS 3.3.3

It can be seen in table 1 above that the outer loading shows that the value of each outer loading indicator is greater than 0.7 so that it is determined that the indicators in each variable have a value greater than 0.7 so that each indicator is declared valid and can continue research in the next step.

2. Discriminant Validity

Discriminant Validity can be tested by looking at the cross-loading table, this output is used to test discriminant validity at the indicator level with the condition that the correlation between indicators and their late variables is > compared to the correlation between indicators and other latent variables (outside the block). For more details can be seen in the table below:

Table 2. Discriminant Validity

	Employee Performance (Y)	Competency (Z)	Training (X2)	Education Level (X1)
X1.1	0.913	0.856	0.857	0.972
X1.2	0.896	0.832	0.837	0.971
X2.1	0.845	0.791	0.901	0.830
X2.2	0.767	0.705	0.801	0.674
X2.3	0.627	0.656	0.726	0.630
X2.4	0.707	0.640	0.806	0.696
X2.5	0.742	0.712	0.849	0.721
Y. 1	0.810	0.747	0.711	0.760
Y.2	0.836	0.700	0.690	0.683
Y.3	0.794	0.625	0.648	0.666
Y.4	0.777	0.547	0.596	0.667
Y.5	0.929	0.885	0.865	0.912
Y.6	0.880	0.811	0.820	0.929
Y.7	0.828	0.727	0.852	0.799
Y. 8	0.740	0.717	0.794	0.682
Y.9	0.836	0.657	0.706	0.762
Z. 1	0.721	0.883	0.770	0.745

Z. 2	0.640	0.822	0.646	0.699
Z. 3	0.835	0.836	0.757	0.759

Source: Smart PLS 3.3.3

Based on table 2 above, there is a cross loading on the Employee Performance variable. There is a cross loading value that is greater than the cross loading of other latent variables. There is a cross loading value for the Competency variable with a cross loading value that is greater than the cross-loading value of other latent variables. Training is greater than the cross loading of other latent variables, there is a cross loading value of the Education Level variable which has a value that is greater than the cross-loading value of other latent variables so that it can be stated that this data is discriminantly valid.

3. Composite reliability

Subsequent tests determine the reliable value with the composite reliability of each construct, the construct value that is considered reliability is where the composite reliability value is above 0.6 or greater than 0.6. If the value of Coranbasch alpha is also greater than 0.7 then the value of each construct in the block is considered reliable in each construct variable and if the AVE value is also above 0.7 then each construct variable is considered valid. The following is a table of loading values for the research variable construct resulting from running the Smart PLS program in the following table:

Table 3. Construct Reliability and Validity

	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)
Employee Performance (Y)	0.942	0.951	0.684
Competency (Z)	0.804	0.884	0.718
Training (X2)	0.875	0.910	0.670
Education Level (X1)	0.941	0.971	0.944

Source: Smart PLS 3.3.3

Based on the results of table 3 above, it can be seen that the construct variable values in the Cronbach alpha column show that the results for each variable have a value above 0.7 so that all construct variables are considered reliable, and it can also be seen in the composite reliability column that there is a construct value above 0.6 so that in state that each construct variable is greater than 0.6 is considered reliability while in the AVE column there is a construct value

for each variable above 0.7 or greater than 0.7 so it is concluded that each variable is considered valid with the resulting AVE value meaning that each column has the same value is greater than the specified value and is considered the reliability and validity of each variable construct.

Inner Model Analysis

Evaluation of the structural model (inner model) is carried out to ensure that the structural model built is robust and accurate. The stages of analysis carried out in the evaluation of the structural model are seen from several indicators, namely:

1. Coefficient of Determination (R²)

Based on data processing that has been done using the SmartPLS 3.0 program, the R Square value is obtained as follows:

Table 4. R Square results

	R Square	Adjusted R Square
Employee Performance (Y)	0.906	0.903
Competency (Z)	0.797	0.792

Source: Smart PLS 3.3.3

Based on table 4 above, there is an R square value for the Employee Performance variable of 0.906 and if the value is percentaged at 90.6% for the Employee Performance variable, it means that the influence of the Education, Training and Competency Level variables on Employee Performance is 90.6% and the remainder is 09.4% is in other variables. For the R square value of the Competency variable of 0.797 if it is percentaged for a Competency value of 79.7%, it means that the influence of the Level of Education and Training variables on competence is 79.7% and the remaining 20.3% is in the variable other.

2. Assessment of Goodness of Fit (GoF)

The goodness of fit model test can be seen from the NFI value ≥ 0.697 which is declared fit. Based on the data processing that has been done using the SmartPLS 3.3 program, the Fit Model values are obtained as follows:

Table 5. Model Fit

	Saturated Model	Estimation Models
SRMR	0.084	0.084
d_ULS	1,333	1,333
d_G	3,632	3,632

Chi-Square	920,457	920,457
NFIs	0.784	0.784

Source: Smart PLS 3.3.3

The results of the goodness of fit test for the PLS model in the table above show that the NFI value is 0.784, meaning that this study is considered FIT because the NFI value is greater than 0.819. Thus, from these results it can be concluded that the model in this study has a high and feasible goodness of fit. used to test the research hypothesis.

3. Hypothesis Testing

After assessing the inner model, the next thing is to evaluate the relationship between latent constructs as hypothesized in this study. Hypothesis testing in this study was carried out by looking at the T-Statistics and P-Values. The hypothesis is declared accepted if the T-Statistics value is > 1.96 and the P-Values are <0.05. The following are the results of the Path Coefficients of direct influence:

Table 6. Path Coefficients (Direct Effects)

	Original Sample (O)	T Statistics (O/STDEV)	P Values	Results
Competency (Z) -> Employee Performance (Y)	0.111	1,431	0.153	Rejected
Training (X2) -> Employee Performance (Y)	0.344	4,154	0.000	Accepted
Training (X2) -> Competence (Z)	0.422	3,700	0.000	Accepted
Education Level (X1) -> Employee Performance (Y)	0.535	6,986	0.000	Accepted
Education Level (X1) -> Competency (Z)	0.501	4,281	0.000	Accepted

Source: Smart PLS 3.3.3

Based on table 6, it can be explained that competence has a positive and insignificant effect on employee performance with an original sample value of 0.111 and a P value of 0.153 meaning that competence will increase if performance increases, in this case competence does not guarantee good performance because not all employees share their competence with the organization. Training has a positive and significant effect on employee performance with an original sample of 0.344 and P values 0.000 <0.05 meaning that each training increases, performance will increase if training decreases, performance will also decrease. Training has a positive and significant effect on competence with an original sample value of 0.422 and P values 0.000 < 0, 5 means that training will increase competency but if training is not carried out then

competency will not increase evenly. Education level has a positive and significant effect on employee performance with 0.535 and P values 0.000 <0.05 meaning that if the level of education increases then employee performance also increases if decreases, the employee's performance decreases. Education level has a positive and significant effect on competence with an original sample value of 0.501 and a P value of 0.000 <0.05 meaning that if the level of education increases, competence will increase, if competence decreases it will also decrease. 05 means that if the level of education increases, employee performance also increases; if it decreases, employee performance decreases. Education level has a positive and significant effect on competence with an original sample value of 0.501 and a P value of 0.000 <0.05 meaning that if the level of education increases, competence will increase, if competence decreases it will also decrease. 05 means that if the level of education increases, employee performance also increases; if it decreases, employee performance decreases. Education level has a positive and significant effect on competence with an original sample value of 0.501 and a P value of 0.000 <0.05 meaning that if the level of education increases, competence will increase, if competence decreases it will also decrease.

Table 7. Path Coefficients (Indirect Effects)

	Original Sample (O)	T Statistics (O/STDEV)	P Values	Results
Training (X2) -> Competency (Z) -> Employee Performance (Y)	0.047	1.195	0.233	Rejected
Education Level (X1) -> Competency (Z) -> Employee Performance (Y)	0.055	1.417	0.157	Rejected

Source: Smart PLS 3.3.3

Based on table 7 above, the results of the hypothesis indirectly show that competence is not an intervening variable and is not able to influence training, education level on employee performance indirectly, meaning that competence is not able to influence other variables indirectly. This can be explained as training has an insignificant positive effect on performance. Employees through competence with an original sample value of 0.047 and P values 0.233 > 0.05. Education level has no significant positive effect on Employee Performance through Competence with an original sample value of 0.055 and P values 0.157 > 0.05.

CLOSING

Conclusion

Based on the results of the research above, it can be concluded in this study as follows:

1. Competency has a positive and insignificant effect on employee performance at RSUD Dr. RM. Djoelham City of Binjai
2. Training has a positive and significant effect on employee performance at RSUD Dr. RM. Djoelham City of Binjai
3. Training has a positive and significant effect on competence in RSUD Dr. RM. Djoelham City of Binjai
4. Education level has a positive and significant effect on employee performance at RSUD Dr. RM. Djoelham City of Binjai
5. Education level has a positive and significant effect on employee performance at RSUD Dr. RM. Djoelham City of Binjai
6. Training has no significant positive effect on Employee Performance through Competence at RSUD Dr. RM. Djoelham City of Binjai
7. Education Level has no significant positive effect on Employee Performance through Competence at RSUD Dr. RM. Djoelham City of Binjai

Suggestion

1. Organizations must improve the education of employees in any way to improve the quality of work.
2. To improve employee performance and employee competence, organizations must train employees properly.
3. Organizations must look for employees with high commitment and good performance.

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