

Influence-learning Methods and Students' Interest in Learning Outcomes Polmas at the State Police School Polda Metro Jaya

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Abstract: The implementation of education at SPN Polda Metro Jaya is carried out through a learning process, the implementation of which does not always go well and often experiences obstacles. The success rate of the Serdik Diktuk Bintara Polri in studying subject matter is seen from the serdik's learning outcomes, providing an overview of the position of his level of success. learn it. The method in this study uses the experimental method as for the variables in this study consisted of (1) independent variables (2) bound variables for learning outcomes and (3) control variables for learning interest. The design used in this study is a 2 x 2 factorial design and obtained 24 research subjects, each 24 subjects of the experimental class and 24 subjects of the control class, as well as the experimental class with the Tutorial Method and the control class taught with the Role-Playing Method. The data obtained based on the results of the study include: 1). there are differences in the learning outcomes of community policing subjects for groups of students who study using the tutorial method and role playing, 2). there is an interaction effect between learning methods and interest in learning on the learning outcomes of community policing subjects, 3). there are differences in the learning outcomes of community policing subjects for groups of students who study using the tutorial method and role playing for students who have high interest 4). There are differences in the learning outcomes of community policing subjects for groups of students who study using the tutorial method and role playing for students who have low interest.

Keywords: Learning methods, Learning interests and Learning outcomes

Introduction

Background of the Problem

The 2012 Program for International Study Assessment (PISA) places Indonesiaseba with the lowest rank in achieving the quality of education. The ranking can be seen from the scores achieved by 15-year-old students in the ability to read, math, and science. "During the study since 2000, Indonesia has always been in one of the low rankings," this is in line with the results of a survey conducted by Political and Economic Risk Consultants (PERC) that the quality of education in Indonesia is ranked 12th out of 12 countries in Asia. Indonesia's position is under Vietnam. The new millennium enters the 21st century, the wave of globalization is felt strong and open. It is felt now that there is a lag in the quality of education, both formal and informal education.

Education is a conscious effort to develop the potential of human resources (HR) through learning. The success of the implementation of education cannot be separated from several factors that support and are closely interrelated with one another. In this reform era, the development of society is so fast in responding to the pace of globalization. This requires the Police, especially members of the Police, to be encouraged by changes in both structural and functional changes. Community policing according to Perkap No. 7 of 2008 is translated as Community Policing or Community Policing, which is abbreviated as Polmas. Polmas as one of the subjects taught to students at SPN Polda Metro Jaya. So starting from this description, it is necessary to conduct research on "Comparison of Tutorial Learning Methods and Role Playing Learning Interests Learners against Subject Learning Outcomes Polmas at the Polda Metro Jaya State Police School"

Identification of Problems

Based on the background of the problem above, it is understood that many factors can affect the level of student learning outcomes in community policing lessons, including:

1. Are there learning outcomes for community policing subjects using the tutorial method and role playing?
2. Is there a difference in the interaction between learning methods and interest in learning on the learning outcomes of community policing subjects?
3. Are there learning outcomes for community policing subjects using the tutorial method and role playing for students who have high interest?

Restricting the Problem

Given the many factors that influence community policing learning outcomes that cannot be observed and compared as a whole, this research study is limited to "Comparison of Tutorial Learning Methods and Role Playing Learning Interests Learners against Subject Learning Outcomes Polmas at the Polda Metro Jaya State Police School".

Formulation of the Problem

Based on the description of the previous background, the problem of this research can be formulated as follows:

1. Is there an interaction between learning methods and interest in learning on the learning outcomes of community policing subjects?
2. Are there differences in the learning outcomes of community policing subjects for groups of students who study using the tutorial method and role playing for students who have high interest?
3. Are there differences in the learning outcomes of community policing subjects for groups of students who study using the tutorial method and role playing for students who have low interest?

Research Use

If the results of research on Comparison of Tutorial Learning Methods and Role Playing Learning Interests Learners Against Subject Learning Outcomes Polmas at the Metro Jaya Police State Police School is expected to be useful to assist educators in improving learning methods to be more effective and able to motivate students to study harder so that they can continue their assignments with good learning outcomes.

Development of Theoretic Framework, Framework for Thinking and Research Hypotheses

Theoretical Description

The Essence of Learning POLMAS

The Nature of Learning and Learning

Educational technology is the study and ethical practice of facilitating learning and improving performance. In this practice the process of appropriate technology resources to facilitate learning to be effective, efficient and interesting. The learning process will produce a learning outcome. Learning outcomes can be classified into 3 (three), Hamzah B. Uno, 2006: 21), namely: effectiveness, efficiency, appeal. The effectiveness of learning is usually measured by the level of achievement of the learner.

From this description it can be concluded that learning aims to make changes in accordance with the objectives, where learning requires activity and effort and learning is not just a change in behavior, but a relatively permanent change.

Understanding Learning Outcomes

Learning outcomes are the most important part in the learning process, according to Winkell, learning is "a mental/psychic activity that takes place in active interaction with the environment, where the environment will

produce changes in one's knowledge, understanding, skills, and values of interest. The changes that occur can be relatively constant and have scars.

Howard Kingsley, in Sudjana, divides three kinds of learning outcomes, namely: Skills and habits, Knowledge and understanding, and Interests and ideals. In learning, it is hoped that problem solving is obtained, understanding the problem to face insight, so it is not repeating the material that must be studied.

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The Essence of Community Policing

The development of modern society has led to the development of crime that includes types and dimensions that did not exist before. "Policing" or "policing" in community policing or Polmas are all matters relating to the function of the police which include the maintenance of kamtibmas (harkamtibmas), law enforcement, protection, shelter, and community service, which includes policing management.

The principles of community policing include:

Intensive communication, equality, partnership, transparency, accountability, participation, personalization, decentralization, autonomy, proactive.

Relevant Research Results

Learning and motivation have been widely studied to determine their effect on learning outcomes. Below are some research titles regarding those that affect, motivation and learning outcomes:

Research conducted by Retno Wulandari (2011) on the Correlation of Mathematics Subjects and Interest in Learning in Community Policing with Learning Achievements in Community Policing

The results showed that there was a significant positive correlation with mathematics learning achievement, a significant positive correlation between interest and community policing learning achievement, and a significant positive correlation between interest and community policing learning achievement.

Thinking Framework

1. There are differences in the learning outcomes of community policing subjects using the tutorial method and role playing.
2. There is an interaction between learning methods and interest in learning on the learning outcomes of community policing subjects.
3. There are differences in the learning outcomes of community policing subjects using the tutorial method and role playing for students who have high interest..

Please embed tables and figures in appropriate areas within the document and center them horizontally. Tables and figures should not exceed the given page margins. Provide captions (maximum length: 6 to 8 words) for each table or figure. Centre the caption above the table and below the figure. Please reference the table or figure in the text (Table1). Please do not use vertical lines in tables. For figures, GIF and JPEG (JPG) are the preferred formats.

Research Hypothesis

Based on the formulation of the problem and the framework of thinking above, the following hypothesis is formulated:

1. There are differences in the learning outcomes of community policing subjects using the tutorial method and role playing.
2. There is an interaction between learning methods and interest in learning on the learning outcomes of community policing subjects.

3. There are differences in the learning outcomes of community policing subjects using the tutorial method and role playing for students who have high interest.

Research Methodology

Research Purposes

The purpose of operational research is to answer the research problems proposed, while the research objectives are:

1. Obtaining empirical data about: the difference in learning outcomes for community policing subjects for groups of students who study using the tutorial method and role playing.
2. There is an interaction between learning methods and interest in learning on the learning outcomes of community policing subjects.

Table 1 Research Schedule

No	Kegiatan	Mei				Juni				Juli							
		1	2	3	4	1	2	3	4	1	2	3	4				
1.	Penyusunan usulan penelitian																
	a. Menyusun usulan penelitian	■	■	■	■	■	■	■	■								
	b. Sidang usulan penelitian							■									
	c. Perbaikan								■	■							
2.	Rumusan tesis																
	a. Penyusunan angket																
	b. Menyebarakan angket																
	c. Analisis dan pengolahan data																
	d. Penulisan laporan tesis																
	e. Bimbingan tesis																
3.	Sidang tesis																
	a. Bimbingan akhir tesis																
	b. Perbaikan tesis																
	c. Sidang tesis																■

Research Method

The method used in this research is an experimental study. According to Nana Saodih in Asep Saepul Hamdi and Ending Bahrudin Experimental Research is the purest quantitative research. This method is validation or testing, which is testing the effect of one or more variables on other variables

The variables in this study consist of

The independent variable is the learning method, the dependent variable is the learning outcome and the control variable is learning interest. The design used in this study is a 2 x 2 factorial design whose matrix is as shown in the following table.

Table 2. Experiment Design

Metode Minat	A ₁	A ₂	Σb
	B ₁	A ₁ B ₁	A ₂ B ₁
B ₂	A ₁ B ₂	A ₂ B ₂	B ₂
Σk	A ₁	A ₂	

Information: A₁: Tutorial Method; A₂: Roll Playing Method; B₁: High Interest; B₂: Low Interest

Treatment:

A₁B₁: Group of students who are taught by the Tutorial Method and Students who have a high interest in learning.

A₂B₁: Group of students who are taught by the Role Playing Method and Students who have a high interest in learning.

A1B2: Group of students who are taught by the Tutorial Method and Students who have low Learning Interest.

A2B2: Group of students taught by the Play Method

The treatments in this study were:

(1) The learning method consisted of the Tutorial Method and the Role Playing Method.

(2) High and low interest in learning. Based on the experimental research design used in this study, factorial 2 X 2, it means that there are 4 groups of students who are given different treatment. Meanwhile, the steps for implementing learning in each group are described in detail as follows in the table.

Research Population and Sample Population

The target population in this study were all students at SPN PMJ Bogor, totaling 24 classes.

Sample

The sample is part of the number and characteristics possessed by the population. If the population is large and it is not possible for the researcher to study everything in the population, the researcher can use a sample taken from that population and the results studied will be applicable to the population.

Table 3. Research Sample Table

Metode Minat	A ₁	A ₂
B ₁	Kelas A 20	Kelas A23
B ₂		

Sampling was done by purposive sampling is a non-random sampling technique where the researcher determines the sampling by determining special characteristics that are in accordance with the research objectives. So that it is expected to be able to answer research problems from the 24 classes selected as samples of class A20 and Class A23.

The Role Playing Method, and grouped based on interest were grouped into 10 respondents on the tutorial learning method with high interest, 4 respondents on the tutorial learning method with moderate interest and 10 respondents on the low miant learning method and vice versa on the role-playing learning method. The composition of each class can be seen in the following table:

Table 4. The Composition of Each Research Subject Based on the Learning Method

Metode Minat Belajar	A ₁	A ₂	Σb
B ₁	A ₁ B ₁ 10	A ₂ B ₁ 10	20
B ₂	A ₁ B ₂ 10	A ₂ B ₂ 10	20
Σk	20	20	40

Grille Instrument

References

Table 5. POLMAS Learning Outcomes Instrument Grid

Dimensi	Indikator	Butir Instrumen			Jumlah
		C1	C2	C3	
1. Pengetahuan tentang pedoman dasar dan strategi POLMAS	1. Menjelaskan pedoman dasar dan strategi POLMAS	1,2, 3,4			8
	2. Menjabarkan pedoman dasar dan strategi POLMAS	5,6			
	3. Menyebutkan pedoman dasar dan strategi POLMAS	7,8			
2. Memahami tentang Pedoman dasar dan strategi POLMAS	4. Pengamalan tuas pokok POLMAS		9,10,11		5
	5. Menjalankan pedoman dasar dan strategi POLMAS		12,13		
3. Pengetahuan tentang implementasi POLMAS	6. Menjelaskan implementasi POLMAS	14,15,16			8
	7. Menjabarkan implementasi POLMAS		17,18		
	8. Menyebutkan implementasi POLMAS	19,20,21			
4. Memahami tentang implementasi POLMAS	9. Pengamalan implementasi POLMAS			22,23	4
	10. Menjalankan implementasi POLMAS		24,25		
					25

Instrument Calibration

Instrument Validation

The instrument for student learning outcomes was developed starting with the preparation of an instrument in the form of a multiple choice test with 5 (five) answer choices A, B, C, D, and E as many as 25 (twenty seven) questions that lead to indicators of student learning outcomes. Furthermore, the concept of the instrument was tested on 30 (thirty) students outside the sample. The calibration process is carried out by analyzing the data from the instrument test results to test the validity of the instrument in the form of item validity by using the coefficient between item scores and the total score of the instrument.

The technique used to test the validity of the instrument is the Biserial Point correlation test (rpb) as follows:

$$r_{pb} = \frac{x_i - x_t}{S_t} \sqrt{\frac{p_i}{q_i}}$$

Information :

rpb= Point biserial correlation coefficient

Xi = the average total score of respondents who answered correctly

Xt = average total score of all respondents

pi= the proportion of correct answers to item i

qi = the proportion of incorrect answers to item i

St= Standard deviation of total score

The criteria used to test the validity of the items on 50 respondents if the rpb hit > rpb tab item of the instrument being tested is considered valid, on the contrary if rpb hit < rpb tab item of the instrument being tested is considered invalid, then it is not used.

Research Instruments

Description of Research Data

Description of the data on the effect of the use of learning learning methods and learning interest on POLMAS learning outcomes at SPN PMJ Bogor (Experimental Method Using Tutorial Learning Methods and Role Playing Learning Methods) Meanwhile, the overall data description, which includes: mean and standard deviation can be seen in Table 6 below.

Table. 6. Frequency Distribution of POLMAS Learning Outcomes Students who have a high interest in the Tutorial Learning Method

Kelompok	A1B1	A1B2	A2B1	A2B2
Mean	88,20	86,00	74,00	69,00
Standard Error	1,32	1,81	2,21	2,38
Median	88,50	86,50	72,50	67,50
Mode	87,00	90,00	70,00	65,00
Standard Deviation	4,18	5,72	6,99	7,51
Sample Variance	17,51	32,67	48,89	56,44
Kurtosis	(0,03)	(0,18)	2,46	(0,39)
Skewness	(0,70)	(0,45)	1,35	0,60
Range	13,00	18,00	25,00	23,00
Minimum	80,00	77,00	65,00	60,00
Maximum	93,00	95,00	90,00	83,00
Sum	882,00	860,00	740,00	690,00
Count	10,00	10,00	10,00	10,00

A1 = Learning outcomes using the Tutorial Learning Method

A2=Learning results using the Role Playing Learning Method

B1= Learning outcomes with high interest

B2= Learning outcomes with low interest

n = Number of samples

\bar{y} = Average score of learning outcomes

Description of data POLMAS learning outcomes students who have a high interest are taught using the Tutorial Learning Method.

The group of students as a whole both have a score of learning outcomes with the highest or maximum value of 93, the lowest value of 80 with a range of 13

The frequency distribution of student learning outcomes who are taught using the Tutorial Learning Method can be classified into 4 class intervals, each with an absolute frequency and a relative frequency. The highest frequencies are as follows:

Table 7. Role Playing Histogram Distribution of POLMAS Learning Outcomes Scores Students who have low interest Learning Method Tutorial

Interval	Frekuensi	Frekuensi	Frekuensi
Kelas	Absolut	Relatif %	Kumulatif
80 - 83	1	10,00	10,00
84 - 87	4	40,00	50,00
88 - 91	3	30,00	80,00
92 - 95	2	20,00	100,00
Jumlah	10	100,00	

Description of the data POLMAS learning outcomes students who have low interest are taught using the Tutorial Learning Method.

The group of students as a whole either has a score of learning outcomes with the highest or maximum value of 95, the lowest value of 77 with a range of 18. To clarify the frequency distribution of learning outcomes of students who have high interest who are taught the Tutorial Learning Method, it can be seen that the highest score mostly found in the 84-87 interval with a relative frequency of 40% and the least found in the 80-83 interval with a relative frequency of 10%, this can be seen in the Role Playing histogram in the following graph.

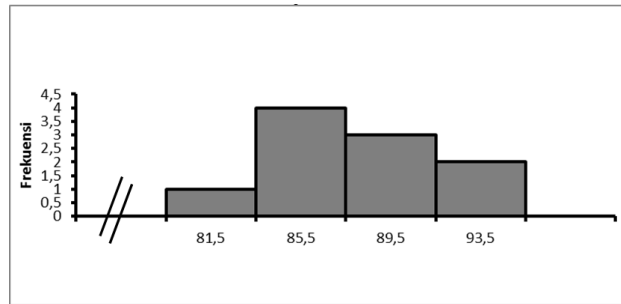


Figure. 1. Role Playing 4.3. Histogram Distribution of POLMAS Learning Outcomes Scores Students who have a high interest in the Tutorial Learning Method

Variance Analysis Requirements Test

The hypotheses proposed in this study were tested using two-way analysis of variance (ANOVA). The data that has been collected has been tested for ANOVA requirements, which include normality test and homogeneity of variance test. The analysis test according to the above can be seen below:

Normality test

There are several ways to test the normality of tabulated data. The normality test of the estimation tool ($Y - \hat{Y}$) is calculated by the difference score of each with the regression equation (\hat{Y}) with a variable score of Y . In the normality test study, the Kolmogorov - Smirnov test (KS test) is used, because the KS test is "More Powerful" compared to other tests, with a total significance ($\alpha = 0.05$). The statistical hypothesis for the normality test is as follows:

H_0 = Population Data with Normal Distribution

H_1 = Population Data Not Normal Distributed

With the following test criteria:

If the obtained significance

< then the data from the population is normally distributed

If the significance obtained > then the data from the population is not normally distributed

The calculation of the normality test is carried out with the help of the SPSS program, 21. There is also a summary result that can be seen in the table below.

Table. 8. Summary of Normality Test

Hasil Test	Kolmogorov-Smirnova			Signifikansi	Distribusi
	Statistic	df	Sig.		
1. Kelolompok Siswa yang menggunakan Metode Pembelajaran Tutorial dengan Minat tinggi	0.400	8	0.031*	0.05	Normal
2. Kelolompok Siswa yang menggunakan Metode Pembelajaran Tutorial dengan Minat rendah	0.488	8	0.031*	0.05	Normal
3. Kelolompok Siswa yang menggunakan Metode Pembelajaran Bermain Peran dengan Minat tinggi	0.280	8	0.028*	0.05	Normal
4. Kelolompok Siswa yang menggunakan Metode Pembelajaran Bermain Peran dengan Minat rendah	0.270	8	0.021	0.05	Normal

From the table above, the significance of the KS value is smaller than the significance ($\alpha = 0.05$). Thus it can be said hypothesis H_0 . accepted, which means that the data comes from a normal distribution.

Homogeneity Test

In this study, what is meant is the variance between the dependent variable groups (Y) which are grouped based on the independent variables (X1, X2, and Y). The statistical hypothesis for the homogeneity test is as follows:

H0 = Variance of each homogeneous group

H1 = The variance of each group is not homogeneous

The test criteria are if the obtained significance based on mean $>$, then the population variance is homogeneous and vice versa if the significance based on mean $<$, then the population variance is not homogeneous. The results of the SPSS calculation can be seen as follows:

Based on the table above, it can be seen that the significance value of $0.008 < (0.05)$ means that the hypothesis is accepted, which means that the variable is homogeneous, in other words the population is homogeneous.

Research Hypothesis Testing

The statistical hypothetical test in this study was followed by the Tukkey test. This two-way analysis of variance was used to examine the main effect and interaction effect of the independent variables. Learning Methods and students' interest in learning on the dependent variable of learning outcomes.

Based on the foregoing and the results of the analysis of hypothesis testing, which are stated as follows:

1. There are differences in the learning outcomes of community policing subjects for groups of students who study using the tutorial method and role playing.
2. There is an interaction between learning methods and interest in learning on the learning outcomes of community policing subjects.
3. There are differences in the learning outcomes of community policing subjects for groups of students who study using the tutorial method and role playing for students who have high interest.

Conclusion, Implication and Suggestions

Conclusion

Based on the experimental results obtained from the field, this chapter presents research conclusions, implications and relevant suggestions as follows:

1. Learning methods of learning and interests as well as the dependent variable, namely the learning outcomes of POLMAS,
2. Learning Method as an independent variable.
3. Tutorial Learning Methods and
4. Role Playing Learning Method. The data obtained based on the results of the study include:
 1. There are differences in the learning outcomes of POLMAS subjects between students who learn to use tutorial learning methods and role playing.
 2. There is an interaction between the application of the tutorial learning method with the students' learning interest on the learning outcomes of POLMAS subjects.

Implications

Implication The results of this experiment are that the implementation of POLMAS learning should use the Tutorial Learning Method, to make it more interesting and effective, and not as boring as using the Role Playing Learning Method. And to obtain maximum learning outcomes, it will be better if learning is combined between Tutorial Learning Methods and Role Playing Learning Methods and adjusted to core competencies and basic competencies (KI and KD). So that learning can achieve optimal learning outcomes.

Suggestion

Based on the experimental results that have been concluded and the discussion of the research, as well as the implications, it is suggested to improve student learning outcomes as follows:

1. For related educational institutions, it is recommended to provide training to educators at SPN PMJ.
2. To make a good learning method so that finally every educator at SPN PMJ can use the tutorial learning method in every subject.

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