



## The influence of professional teacher competence and student self-management on history learning outcomes of class x students at State High School 9 Manado

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### Abstract

Research has been conducted which aims to analyze and describe the influence of teacher professional competence on student learning outcomes, the influence of student self-management on student learning outcomes, as well as the influence of professional competency and student self-management on the learning outcomes of class X students at SMA Negeri 9 Manado. The method used in this research is a quantitative research method of the multiple regression type. The results show that teacher professional competence and student self-management together have no effect on the learning outcomes of class X students at State High School 9 Manado. It can be seen from the  $F_{\text{count}}$  value of 0.634 with a p-value (sig) of 0.533 which is higher than alpha 5% (0.05).

**Keywords:** Professional teacher competencies, student self-management, student learning outcomes

### Introduction

Education is an important aspect in the development of a country. Almost everyone must receive an education. The quality of education provided will affect the ability of human resources to compete in an increasingly complex and competitive global world. Education cannot be separated from human life in this modern era. Children receive education from their parents, then when the children are adults and have families they will educate their children. Likewise, in schools and colleges, pupils and students are educated by teachers and lecturers. Education functions to help students in their self-development, developing all their potential, skills and personal characteristics in a positive direction. Education functions to develop what students potentially and actually have, because students are not empty glasses that must be filled from the outside (Nana *et al.*, 2007).

Law Number 20 of 2003 concerning the National Education System states that education is a conscious and planned effort to create a learning atmosphere and learning process so that students actively develop their potential to have religious spiritual strength, self-control, personality, intelligence, noble morals, and skills needed by himself, society, nation and state. No one will deny the essence of the role of a teacher. Any teacher. The national education system in Indonesia, which is one of the front lines for achieving national prosperity, is more or less determined by the quality of a teacher (Illahi, 2020) <sup>[3]</sup>.

The world of education is currently developing more rapidly and the increasingly complex educational problems faced are not challenges that can be left to chance, but require constructive thinking in order to achieve good quality. The issues in question include teacher teaching competence. Because teachers as educators who have the most contact with students are required to have good competence in implementing learning activities. Because teachers as people who have authority and are responsible for student education, both individually and classically, both at school and outside school, must at least have the basic competencies as authority in carrying out their duties (Syarif, 1991).

A teacher needs to have personality, master the subject matter and master how to teach as part of his competence. Without this teachers will fail in carrying out their duties. So a teacher must have teaching competence, which is the skill in managing educational activities. In this way, teachers who have teaching competence are able to create an effective and enjoyable learning environment and are better able to manage their classes so that student learning outcomes are at an optimal level. Law Number 14 of 2005 concerning Teachers and Lecturers article 1 states that teachers are professional educators with the main task of educating, teaching, guiding, directing, training, assessing and evaluating students in early childhood education, formal education, basic education, and secondary education.

Teachers are required to have academic qualifications, competencies, educational certificates, be physically and spiritually healthy, and have the ability to realize national education goals. In connection with this purpose, it can be concluded that a teacher must have pedagogical competence, personality competence, social competence and professional competence through professional education (Law Number 14 of 2005). A teacher is a position or profession that requires special skills as a teacher. This work cannot be done by people who do not have the skills to carry out activities or work as a teacher. People who are good at speaking in certain fields cannot yet be called teachers. To become a teacher requires special conditions. Moreover, as a professional teacher, you must really master the ins and outs of education and teaching by sharing other knowledge that needs to be fostered and developed through a certain period of education or pre-service education.

The issue of competency is an important factor in teacher development as a professional position. Competence is rational behavior to achieve the required goals with the expected conditions. Abdul Majid stated that competence is a set of full intelligent actions with responsibilities that a person must have as a condition for being considered capable of carrying out tasks in a particular field of work (Janawi, 2011). A teacher's ability to carry out his main duties as an educator and instructor includes the ability to plan, carry out and evaluate learning outcomes. Education

has a core between educators (teachers) and students (students) to achieve educational goals. The academic qualifications of high school educators (teachers) are that they must have a minimum four-diploma (D-IV) or undergraduate (S1) study program academic qualification that is appropriate to the subject being taught/taught, and obtained from an accredited study program (Minister of Education Regulation Number 16 of 2007).

Researchers looked at the professional competencies possessed by teachers at SMA Negeri 9 Manado. Teachers facilitate the development of students' potential, master students' characteristics, and organize educational learning, as well as conducting evaluations at the end of learning. Then the researchers looked at the professional competence of the teachers applied, namely teachers who mastered the material and concepts appropriate to the teaching material and used various methods. Researchers see that there are problems, the problem of teacher professional competence in schools includes several factors that influence improving the quality of education in Indonesia. Some of these factors are: 1) Curriculum changes: curriculum changes often require teachers to update their knowledge, skills and professional competencies to be able to keep up with these changes; 2) Technological developments: technological developments continue to change and develop rapidly, so teachers must always update their knowledge and skills in using technology in learning; 3) Global challenges: global challenges in the world of education require teachers who are qualified and able to face these challenges; 4) Performance assessment: teacher performance assessment requires clear and objective standards, so teachers must have adequate professional competence to be able to meet these standards; and 5) Training and professional development: training and professional development are very important for teachers in improving their competence, but limited resources are often an obstacle to its implementation.

Therefore, efforts are needed to improve the professional competence of teachers in schools in order to meet increasingly complex educational demands and improve the quality of education in Indonesia. Furthermore, researchers also looked at the self-management of students who had various problems at school. To overcome this problem, a holistic and collaborative approach involving teachers, school staff, parents and students themselves can be an effective solution. Character education programs, academic and emotional support, and counseling resources can help students develop their self-management skills. In addition, open communication between all parties involved is important to create an environment that supports the development of student self-management at school. Thus, this research aims to analyze and describe the influence of teacher professional competence on student learning outcomes, the influence of student self-management on student learning outcomes, as well as the influence of professional competency and student self-management on the learning outcomes of class X students at SMA Negeri 9 Manado.

## Method

The method used in this research is a quantitative research method of the multiple regression type. This quantitative research uses systematic and directed steps and uses validity and reliability tests so that the data obtained is truly valid and reliable. The population in this study were students of X

SMA Negeri 9 Manado, totaling 738 people. In this research, the population is the total number of students as many as 738 students by calculating the sample size using the Slovin technique according to Sugiyono (2011:87). The sample of respondents in this research was 88 people.

The techniques used to obtain and collect the required data are questionnaires and documentation. Validity testing for professional competency (X1) and self-management (X2) instruments uses the product moment correlation formula by Pearson. Meanwhile, reliability testing was carried out by calculating the reliability coefficient using the Cronbach Alpha formulation.

The data analysis technique used is descriptive statistical analysis. In this descriptive statistics, you can briefly find out the mean score of each variable, median, mode, maximum score value and minimum score value. Descriptive analysis is a technique used to describe each independent variable, namely the variables of teacher professional competence and student self-management and the dependent variable, namely learning outcomes.

The classical assumption test was carried out to test whether the multiple regression model used in this research met the classical assumptions. Conventional selection tests applied in this study include normality test, multicollinearity test, heteroscedasticity test, multiple regression analysis, and partial correlation coefficient.

## Results and Discussion

In the professional teacher competency variable, 18 valid statements were used and the research results based on 88 respondents' responses related to teacher professional competency were obtained with a score of 5330 which is in the interval 1584-6336, including the "Very Good" criteria. The level of professional competence of teachers in this research can be determined using 5 indicators with 18 statement items. The number of respondents in this study was 88 students. Meanwhile, for the student self-management variable, 12 valid statement items were used and the research results based on 88 respondents' responses related to student self-management were obtained with a score of 3237 which is in the interval 1056-4224, including the "Good" criteria. The level of student self-management in this research can be determined using 2 indicators with 12 statement items. The number of respondents in this study was 88 students.

To help test hypotheses, inferential statistics are used, namely multiple linear regression analysis which is classified as parametric statistics. Regarding the use of multiple linear regression parametric statistical testing tools, the model must be tested first with an assumption test. These assumption tests include: normality test, multicollinearity test, heteroscedasticity test.

## Normality Test

The normality test is carried out in order to find out whether in the regression model, the dependent and independent variables have normal data distribution or not. A good model is if the data is normally distributed or the distribution of statistical data on the diagonal axis of the normal distribution graph. Based on the normality test with Kolmogorov-Smirnov, the KSZ value was 0.176, which was greater than 0.05. Thus, the data is normally distributed because the p value is  $> 0.05$ .

**Multicollinearity Test**

The multicollinearity test aims to determine the closeness of the relationship between independent variables using the SPSS 22 computer program. Decision making is based on tolerance value and VIF criteria. In this study, the tolerance value was 0.908, so it was found that there was no multicollinearity because it did not exceed 0.10. Meanwhile, the VIF value of 1.101 is smaller than 10.00, which means there is not a perfect relationship between the independent variables so the multiple regression can be continued. This is because the regression coefficient produced by multiple regression analysis is very strong so that it can provide analysis results that represent the nature or influence of the independent variable on the dependent variable.

**Heteroscedasticity test**

This test aims to determine whether in a regression model there is an inequality in the variance of one residual in one observation compared to another observation. The regression model will be good if heteroscedasticity does not occur. In this test, what is hypothesized is: a) There is no similarity in the constant variance of the learning outcome value (Y) to the teacher's professional competency value (X1) and b) There is no similarity in the constant variance of the learning outcome value (Y) to the student's self-management value (X2).

In this test, whether Ho is accepted or rejected can be observed by comparing the significant value with the  $\alpha$ -value. This means that if the sig. value >  $\alpha$ , then the hypothesis Ho: (regression coefficient is not significant) will be rejected and Hi: (regression coefficient is significant) will be accepted. The significance value of the teacher

professional competence variable (X1) is 0.509 and the significant value of the student self-management variable (X2) is 0.648 which is greater than 0.05. This means that heteroscedasticity does not occur, which means that there is equality of variance between one variable and another or homoscedasticity is fulfilled.

The next step after the data is declared valid and reliable, and the model has met the assumptions, is to analyze the relationships between variables. The statistical tool used to determine the strength of the relationship and the influence between the independent variables on the dependent variable is multiple linear analysis. The reason for using multiple linear regression is that the model consists of more than one independent variable (in this case two variables: teacher professional competence and student self-management), with a matrix measurement scale, namely intervals.

Based on the results of the multiple regression test, the influence of teacher professional competence and student self-management on learning outcomes is shown in Table 1. Based on the test results, an empirical model of test results can be formulated as follows

- a. The teacher professional competency variable has a significance value of 0.518 (<0.05), so it can be concluded that the teacher professional competency variable does not have a significant influence on the learning outcome variable.
- b. The student self-management variable has a significance value of 0.498 (<0.05), so it can be concluded that the student self-management variable does not have a significant influence on the learning outcome variable.

**Table 1:** Regression Test Results on the Influence of Teacher Professional Competence and Student Self-Management on Learning Outcomes of Class X Students at State High School 9 Manado

Coefficients <sup>a</sup>						
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
1	(Constant)	84.709	2.106		40.213	.000
	Teacher Professional Competency	.022	.034	.073	.649	.518
	Student Self-Management	.024	.036	.077	.680	.498

a. Dependent Variable: Learning outcomes

Based on the test, the coefficient of determination was obtained as shown in Table 2. Table 2 shows that the test results with statistics show an R-square value of 0.015, which means that the independent variables are able to explain the dependent variable by 01.5% while the remainder is 98.5 % explained by other variables not included in the model.

**Table 2:** Results of the Determination Coefficient Test on the Effect of Teacher Professional Competence and Student Self-Management on the Learning Outcomes of Class X State High School 9 Manado

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.121 <sup>a</sup>	.015	-.008	1.967

a. Predictors: (Constant), Student Self-Management, Teacher Professional Competency

Besides the regression analysis in the form of a coefficient of determination (explaining the strength of the ability to

explain the independent variable on the dependent variable), it also produces the output of a simultaneous influence between the independent variables (teacher professional competence and student self-management) on the dependent variable (learning outcomes). In the multiple linear regression output, the simultaneous test is indicated by the Fcount value. The simultaneous influence test is used to find out whether the independent variables jointly or simultaneously influence the dependent variable. The use of hypotheses (F test) in this research uses the SPSS program. The method used for the F test is to look at the probability of significance of the F-value at a significance level of 5%. The use of the F test can be calculated using the SPSS program. 22.

The basis for the decision to reject or accept a hypothesis is if: 1) Probability > significant level (5%), then Ho is accepted and Ha is rejected and 2) Probability < significant level (5%), then Ho is rejected and Ha is accepted. The results of multiple linear regression testing show that together the independent variables (teacher professional competence and student self-management influence learning

outcomes. This can be seen from the Fcount value as shown in Table 3.

**Table 3:** Simultaneous Test Results of the Effect of Teacher Professional Competence and Student Self-Management Have No Influence on Learning Outcomes

ANOVA <sup>a</sup>						
	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.906	2	2.453	.634	.533 <sup>b</sup>
	Residual	328.912	85	3.870		
	Total	333.818	87			
a. Dependent Variable: Learning outcomes						
b. Predictors: (Constant), Student Self-Management, Teacher Professional Competency						

Table 3 shows that the F-value is 0.634 with a p-value (sig.) of 0.533 which is higher than alpha 5% (0.05). This means that there is no significant influence simultaneously or jointly between the independent variables on the dependent variable. Thus, the results of this research can prove the hypothesis which states "teacher professional competence and student self-management together have no effect on learning outcomes".

**Conclusion**

Teacher professional competence and student self-management together have no effect on the learning outcomes of class X students at State High School 9 Manado. It can be seen from the F<sub>count</sub> value of 0.634 with a p-value (sig) of 0.533 which is higher than alpha 5% (0.05).

**References**

1. Djamarah SB. Guru dan Anak Didik dalam Interaksi Edukatif: Suatu Pendekatan Teoretis Psikologis. Jakarta: Rineka Cipta, 2010.
2. Herawati T. Pengaruh Prosedur Kerja dan Manajemen Diri Terhadap Keselamatan Kerja pada Karyawan PT. Alam Jaya Pratama di Kecamatan Loa Janan Kabupaten Kukar. Psikoborneo,2017;4(3):449-461.
3. Illahi N. Peranan Guru Profesional Dalam Peningkatan Prestasi Siswa dan Mutu Pendidikan di Era Milenial. Jurnal Asy- Syukriyyah,2020;21(1):1-20.
4. Jazimah H. Implementasi Manajemen Diri Mahasiswa dalam Pendidikan Islam. Mudarrisa: Jurnal Kajian Pendidikan Islam,2014;6(2):221-250.
5. Kunandar. Guru Profesional Implementasi Kurikulum Tingkat Satuan Pendidikan dan Sukses dalam Sertifikasi Guru. Bandung: PT Remaja Rosdakarya, 2018.
6. Minarti S. Ilmu Pendidikan Islam: Fakta Teoritis-Filosofis dan Aplikatif-Normatif. Jakarta: Amzah, 2013.
7. Rotty VNJ, Giroth LGJ, Ruata KE, Undap TR, Tengker ACC. Typology of Teacher Development. JPPI (Jurnal Penelitian Pendidikan Indonesia),2021;7(4):670-677.
8. Saerang HM, Lembong JM, Sumual SDM, Tuerah RMS. Strategi Pengembangan Profesionalisme Guru di Era Digital: Tantangan dan Peluang, El-Idare: Jurnal Manajemen Pendidikan Islam, 2023, 9(1).
9. Sanjani MA. Tugas dan Peranan Guru dalam Proses Peningkatan Belajar Mengajar. Jurnal Serunai Ilmu Pendidikan,2020;6(1):35-42.
10. Sugiyono. Metodologi Penelitian Pendidikan. Bandung: Alfabeta, 2013.

11. Sugiyono. Statistika untuk Penelitian. Bandung: Alfabeta, 2016.
12. Supardi. Kinerja Guru. Jakarta: PT. Raja Grafindo Persada, 2014.
13. Suprijono A. Cooperative Learning: Teori dan Aplikasi PAIKEM, Yogyakarta: Pustaka Pelajar, 2012.