



## Teachers Pedagogical Competence in Terms of Supervisors Academic Supervision and Teaching Experience

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### ABSTRACT

" This study aims to determine the pedagogical competence of teachers in terms of supervisors' academic supervision and teachers' teaching experience. This type of research is ex post facto which consists of two independent variables, namely supervisor academic supervision (X1) and teacher teaching experience (X2) and one dependent variable, namely teacher pedagogical competence (Y). The study population was all private junior high school teachers in Binamu District, Jeneponto Regency. Class random sampling and the number of samples used Slovin. Data collection techniques are divided into two, namely questionnaires for variables X1 and X2 and tests for variable (Y). The results of the study found that: 1) teachers' pedagogical competence is influenced by supervisors' academic supervision and teachers' teaching experience, both jointly and partially.

**Keywords:** *Competence, Pedagogic, Supervision*

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## INTRODUCTION

The era of globalization and the rapid development of technology is a challenge for every educator to continue to develop their competence (Goyal dkk., 2021). Legislation No.14 of 2005 states that competence is a set of knowledge, skills, and behaviors that must be owned, lived, and mastered by teachers or lecturers in carrying out their professional duties. Every teacher must have competence in carrying out their duties as a teacher (Sokal dkk., 2020). One of the supporting factors is that teachers must have educational qualifications that are in accordance with the subjects they teach. This is based on the Decree of the Minister of National Education through

Permendiknas Number 16 of 2007 concerning Academic Qualification Standards and Teacher Competencies.

In addition to the education level requirements, to make teachers more professional, teachers must attend training/instruction (Mishra dkk., 2020). For example, training on learning models, making teaching aids, syllabus development, and training related to learning (Dawood dkk., 2020). These training activities will increase teachers' knowledge and experience to improve and motivate learning activities at school. Teachers as educators must have abilities or competencies that are the main requirements in their professional duties. Permendiknas No.16 of 2007 mandates that teachers must have four basic competencies, namely pedagogical competence, personality competence, social competence, and professional competence.

The basic competence that teachers must have in order to make learning effective and dynamic is pedagogical competence (Peeri dkk., 2020). Based on Permendiknas No.16 Year 2007, the pedagogical competence of teachers is described in 10 core teacher competencies, namely; (1) mastering the characteristics of students from physical, moral, spiritual, social, cultural, emotional and intellectual aspects; (2) mastering learning theories and principles of educational learning; (3) developing curriculum related to the subjects taught; (4) organizing educational learning; (5) utilizing information and communication technology for the benefit of learning; (6) facilitating the development of students' potential to actualize their various potentials; (7) communicating effectively, empathetically and politely with students; (8) conducting assessment and evaluation of learning processes and outcomes; (9) utilizing the results of assessment and evaluation for the benefit of learning; and (10) taking reflective action to improve learning quality.

Furthermore, it is explained again in Law No. 14 of 2005 concerning Teachers and Lecturers that the term pedagogical competence is called the ability to manage student learning, which at least includes (Ghobaei-Arani dkk., 2020): 1) understanding of educational insights or foundations, 2) understanding of students, 3) curriculum / syllabus development, 4) learning planning, 5) implementation of educational and dialogical learning, 6) utilization of learning technology, 7) evaluation of learning outcomes, 8) development of students to actualize their potential. However, with the changes in the learning curriculum every year, it is necessary to guide teachers in implementing the learning curriculum. One of the main tasks of school supervisors is to provide guidance to teachers in schools related to the implementation of the education curriculum. This guidance is then called academic supervision.

The implementation of academic supervision begins with planning by drafting an academic supervision program in one school year (Houssein dkk., 2021). Then the supervisor visits the school to inspect and coach the teachers about the preparation of learning tools and sometimes provides MGMP in the school. Then the school supervisor visits the target school to monitor the learning activities carried out by the target teacher. Then the supervisor conducts a reflection (Constandt dkk., 2020). If there are teachers who are considered lacking in the implementation of the learning process, then

the supervisor provides guidance to the teacher concerned. Furthermore, the supervisor evaluates the teachers at the end of the semester.

A supervisor must provide guidance to teachers to develop their professionalism. A supervisor should not only make a monotonous plan about academic supervision every year, but there must be target achievements in each period of implementing academic supervision so that it will provide changes from time to time (Lai dkk., 2020). The role of the supervisor determines the improvement of teachers' pedagogical competence, but it is not the only factor that influences teachers' pedagogical competence. There are several factors that influence teachers' pedagogical competence, one of which is the teacher's teaching experience, this factor comes from individual or internal teacher factors.

Teaching experience for a teacher is something very valuable. The theoretical knowledge that teachers master will be better when complemented by teaching experience. Wibowo (2014: 284) argues that experience is a necessary element, but to become an expert is not enough with experience. However, experience is another aspect of competence that can change with time and environmental changes (Zhang dkk., 2020). Teachers who lack experience teaching in front of the class usually display a rather stiff attitude and are sometimes confused to string the right sentences to start learning. Such circumstances sometimes traumatize a teacher. This is unfavorable because the material that has been mastered may disappear instantly from memory. Finally, it is difficult to master the class situation (Rasheed dkk., 2020). Teaching is a demanding profession. There are times when students feel disinterested in learning and disrupt the classroom environment. There are many educational studies and strategies to improve student behavior but personal experience is the best way to provide change for difficult students into dedicated students.

Experienced teachers have found many cases in the learning process in the classroom and have found many solutions according to the pedagogical theories that teachers have (Lai dkk., 2020). According to Uno (2013: 17) basically the behavioral changes that students can show are influenced by the educational background and experience of a teacher (Adedoyin & Soykan, 2023). The more experienced the teacher is in teaching, the more extensive the subject matter that is mastered so that it allows the teacher to improve his professional competence (Battiston dkk., 2020). If a teacher is able to apply pedagogical knowledge to pedagogical cases (practically in the classroom) then the teacher's pedagogical ability will progress continuously over time (Coman dkk., 2020). So that teachers with longer teaching experience will have more reliable pedagogical skills than teachers with less teaching experience.

Based on the description above, it is clear that academic supervision conducted by school supervisors should support teachers to work professionally (Paranjpe dkk., 2020). In addition, teaching experience should make teachers more proficient in pedagogical skills, both in preparing learning tools, implementing learning, and carrying out learning evaluations.

The results of initial observations made, found that the factors of academic supervision and teaching experience have not yet illustrated success in learning (Fisher dkk., 2020). This is shown, when supervision is held related to the preparation of learning tools, there are still many teachers who have been teaching for a long time and have been certified but have not been able to make learning tools properly and correctly, especially in making learning tools in the 2013 curriculum.

Based on the description above, this study then wants to know that whether the influence of supervisory academic supervision and teaching experience on teacher pedagogical competence (Bai dkk., 2020a). The problem formulations in this study are: 1) is teachers' pedagogical competence influenced by supervisors' academic supervision and teachers' teaching experience both jointly and partially for private junior high school teachers in Binamu sub-district?

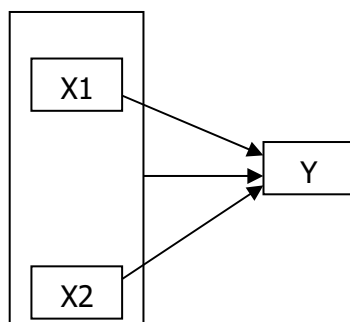
## RESEARCH METHODOLOGY

This research is an ex-post facto type of research with one dependent variable and two independent variables.

Teacher pedagogical competence (Y) as the dependent variable, supervisor academic supervision (X1) and teacher teaching experience (X2) as independent variables. This research was conducted in private junior high schools in Binamu District, Jeneponto Regency.

The study population, namely all teachers in private junior high schools and sampling was done by random sampling technique, and in determining the sample size used the Slovin formula.

The research design is shown in the following figure.



Keterangan:

X1: Supervisi akademik pengawas

X2: Pengalaman mengajar guru

Y : Kompetensi pedagogik guru.

Teknik analisis data penelitian digunakan analisis regresi ganda dengan model regresi:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \varepsilon \text{ dan fungsi regresi: } Y = B_0 + B_1 X_1 + B_2 X_2.$$

## RESULT AND DISCUSSION

**Supervisors' academic supervision and teachers' teaching experience together have an impact on teachers' pedagogical competence.**

Statistical hypotheses tested:

Ho:  $\beta_1 = \beta_2 = 0$

H1:  $\beta_i \neq 0$  for each i, i = 1, 2.

Table 1. Analysis of Variance

Model	Sum of Square	df	Mean Square	F	.Sig
Regression	87,082	2	43,541	15,306	0,0001
Residual	51,204	18	2.845		
Total	138,286	20			

a. Predictors: (Constant), X2, X1

b. Dependent Variable: Y

R Square = 0.630

Based on table 1, the value of Fcount = 15.306 with a p-value = 0.0001 <  $\alpha$  = 0.05, it can be stated that Ho is rejected or H1 is accepted. This shows that the independent variables X1 and X2 together have an impact on the dependent variable Y. Furthermore, R2 = 0.63 shows that the impact of X1 and X2 on Y is 63%.

**Supervisors' academic supervision has an influence on teachers' pedagogical competence.**

Statistical hypothesis tested:

Ho:  $\beta_1 \leq 0$

H1:  $\beta_1 > 0$ .

3. Teacher teaching experience has an influence on teacher pedagogical competence.

Statistical hypothesis tested:

Ho:  $\beta_2 \leq 0$

H1:  $\beta_2 > 0$ .

Table 2.

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	10.366	2.344		4.423	.000
	<b>X1</b>	0.092	0.036	0.396	2.561	<b>0.020</b>
	<b>X2</b>	0.082	0.023	0.557	3.604	<b>0.002</b>
a. Dependent Variable: Y						

Based on table 2, for variable X1, the tcount value = 0.2561 with a p-value = 0.02 <  $\alpha$

= 0.05, it can be stated that Ho is rejected or H1 is accepted. This means that the independent variable X1 has an influence on the dependent variable Y. Furthermore, for variable X2, the tcount value = 3.04 with a p-value = 0.002 <  $\alpha$  = 0.05, it can be stated that Ho is rejected or H1 is accepted. This means that the independent variable X2 has an influence on the dependent variable Y.

## **Discussion**

In this discussion, it will be stated: 1) the relationship between supervisors' academic supervision and teachers' teaching experience with teachers' pedagogical competence, 2) the relationship between supervisors' academic supervision and teachers' pedagogical competence, and 3) the relationship between teachers' teaching experience and teachers' pedagogical competence as follows.

### **The relationship between supervisors' academic supervision and teachers' teaching experience with teachers' pedagogical competence**

In connection with efforts to improve the quality of education, teachers are required to be professional in carrying out their duties and responsibilities, this has been stated in Law No. 14 of 2005 Article 20b which states that teachers in carrying out their professional duties are obliged to improve and develop academic qualifications and competencies on an ongoing basis in line with the development of science, technology and art. The realization of quality education cannot be separated from the role of a teacher who continues to strive to provide learning that can be easily understood by students, especially competence, teaching experience including in learning and teaching activities (KBM) assessed by school supervisors, especially teacher academic supervision.

Based on the results of data collection that has been done at Private Junior High School in Binamu District, Jeneponto Regency, obtained F-test = 15.306 with p-value = 0.0001 <  $\alpha$  = 0.05. This shows that there is a significant relationship between supervisors' academic supervision and teachers' teaching experience together with teachers' pedagogical competence.

Furthermore, further analysis with multiple regression techniques and regarding the regression equation model formed in this study. Based on these gains, the regression equation model formed is  $\hat{Y} = 10.37 + 0.09X_1 + 0.08X_2$  explaining that if the supervisor's academic supervision (X1) and teacher teaching experience (X2) both variables are zero, then the teacher's pedagogical competence has a constant value of 10.37. Furthermore, the coefficient of X1 = 0.09 (positive) and the coefficient of X2 = 0.08 means that teachers' pedagogical competence is expected to increase by 0.09 and 0.08 respectively for an increase in supervisors' academic supervision and teachers' teaching experience by one score. Furthermore, to determine the contribution of supervisors' academic supervision and teachers' teaching experience together to teachers' pedagogical competence is obtained from the coefficient of determination (R2)



which is 0.63 or 63%. This value means that the contribution of supervisors' academic supervision and teachers' teaching experience together to teachers' pedagogical competence is 63%. In other words, the variance of supervisors' academic supervision and teachers' teaching experience together on teachers' pedagogical competence is 63% and the amount of variance from outside variables is 37%.

### **The relationship between supervisors' academic supervision and teachers' pedagogical competence**

With regard to the supervisors' academic supervision variable, the t-test statistic results with a t-count value = 2.56 (positive) with a p-value =  $0.02/2 = 0.01 < \alpha = 0.05$ . This indicates that supervisors' academic supervision has a significant positive relationship with teachers' pedagogical competence.

This analysis test was conducted to show the partial relationship between the independent variable and the dependent variable. Inferential analysis will provide outputs that will be used in answering research questions. Research answers will be obtained through research hypothesis testing and statistics compiled from related concepts. Therefore, this study will compare between the null hypothesis and the alternative hypothesis of the relationship between two variables.

The analysis results show a probability value of p-value = 0.02. The p-value obtained from the output of the analysis using the SPSS program will be a benchmark in determining the hypothesis. Based on these results, it can be stated that the p-value is smaller than 0.05 or acceptance of the alternative hypothesis. The alternative hypothesis states that supervisors' academic supervision has a positive relationship with teachers' pedagogical competence. The hypothesis is acceptable because the error rate in accepting the hypothesis is smaller than 5%. These results indicate that the importance of supervision conducted by supervisors on improving teachers' pedagogical competence.

Regression analysis is conducted to show how the independent variable predicts the value of the dependent variable. Therefore, the output of the regression analysis is the regression equation of the two variables. The meaning of the positive relationship between the two variables means that when the supervisor's academic supervision variable is greater, the teacher's pedagogical competence will also be greater. These results are in line with Akhmad's research (2022) which states that the implementation of academic supervision of PAI supervisors will improve the professional competence of PAI teachers in terms of mastery of teaching materials, lesson planning, and assessment of learning outcomes. Furthermore, it is in line with Angelicha's research (2021) which states that a real and very strong correlation exists between academic supervision and teacher competence.

### **The relationship between teachers' teaching experience and teachers' pedagogical competence**

The results of the analysis on the teaching experience variable and teacher pedagogical competence show that the p-value = 0.002 is smaller than 0.05. The p-value obtained from the output of the analysis using the SPSS program will be a benchmark in determining the hypothesis. Based on these results, it can be stated that the alternative hypothesis is accepted. The alternative hypothesis states that teaching experience has a positive relationship with teacher pedagogical competence. The hypothesis can be accepted because the error rate in accepting the hypothesis is smaller than 5%. These results indicate that teaching experience has an important role in improving teachers' pedagogical competence.

Regression analysis is conducted to show how the independent variable predicts the value of the dependent variable. Therefore, the result of the regression analysis is the regression equation of the two variables. The regression equation is determined based on the alpha coefficient and beta coefficient. The meaning of a positive relationship with the dependent variable means that when the teacher has high teaching experience, the teacher's pedagogical ability will also be better.

Prayitno's (2019) research results state that teaching experience will have a positive impact on teacher professional competence. Teacher professionalism is something that is formed from the results of the teacher's teaching experience continuously, therefore teaching experience has a strong relationship with the teacher's pedagogical ability. Furthermore, Rahayu (2020) added that teaching experience will make a strong contribution to teachers' pedagogical knowledge. This is because the more experienced the teacher, the higher the teacher's pedagogical competence.

## **CONCLUSION**

Based on the results and discussion of the study, it is concluded that: 1) teachers' pedagogical competence is influenced by supervisors' academic supervision and teachers' teaching experience, 2) supervisors' academic supervision has an influence on teachers' pedagogical competence, after taking into account teachers' teaching experience, and 3) teachers' teaching experience has an influence on teachers' pedagogical competence, after taking into account the academic supervision of supervisors of private junior high schools in Binamu District, Jeneponto Regency.

**Based on the conclusions that have been stated, the following suggestions are made.**

It is suggested to schools, school supervisors, and private junior high school teachers, especially in Binamu Sub-district, that to improve teachers' pedagogical competence, it is necessary to increase supervisors' academic supervision and expand and deepen teachers' teaching experience. In terms of improving supervisory supervision, principals and supervisors are required to follow a predetermined schedule and be carried out regularly. In addition, objective assessments from both principals and supervisors are needed for teachers who have been supervised.



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