THE INFLUENCE OF TEACHERS' PROFESSIONAL COMPETENCE AND TEACHING EXPERIENCE ON STUDENTS' LEARNING ABILITY AT SMA NEGERI 1 MOTOLING

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ABSTRACT

This study aims to examine the influence of teachers' professional competence and teaching experience on students' learning ability at SMA Negeri 1 Motoling. The population of the study comprises all 95 students of SMA Negeri 1 Motoling, while the sample used consists of 77 students, selected through simple random sampling to ensure data representativeness. Data were collected using questionnaires and observations, then analyzed using simple and multiple regression techniques. The results indicate that teachers' professional competence has a positive and significant effect on students' learning ability, meaning that teachers with higher mastery of subject matter, pedagogical skills, and classroom management can enhance student learning outcomes. Similarly, teachers' teaching experience positively and significantly affects students' learning ability, where more experienced teachers are able to manage learning more effectively and adapt teaching strategies to students' needs. Furthermore, the combination of professional competence and teaching experience simultaneously contributes significantly to students' learning ability, explaining approximately 54.7% of the variance in learning outcomes. These findings emphasize the importance of developing teachers' professional competence and teaching experience simultaneously to improve students' learning ability. Schools are recommended to provide professional development programs, mentoring, and training for teachers to strengthen their competence and practical experience, thereby enhancing the effectiveness of the teaching and learning process and improving student academic achievement**.**

Keywords: *Teachers' Professional Competence, Teaching Experience on Students, Learning Ability*

INTRODUCTION

Education is one of the important factors in the development of human resources. The success of the educational process heavily depends on the quality of

teachers as the spearhead of learning in schools. Teachers are not only responsible for delivering material but also act as facilitators, motivators, and mentors to help students achieve the expected academic competencies and skills (Sardiman, 2018). In this context, teachers' professional competence and teaching experience are crucial factors that can influence students' learning abilities.

Teachers' professional competence includes in-depth knowledge of the material being taught, the ability to plan and implement learning, as well as skills in assessing and evaluating students' learning outcomes (Permendikbud, 2017). Teachers with high professional competence can deliver material systematically, creatively, and engagingly, making it easier for students to understand and master the concepts being taught. Previous research has shown that teachers' professional competence significantly affects students' learning outcomes because teachers can adjust learning strategies according to the characteristics of the students and the subject matter (Hamalik, 2020; Mustika & Rahman, 2022).

In addition to professional competence, teachers' teaching experience is also an important factor. Teachers with longer teaching experience tend to have better classroom management skills, can handle diverse student characteristics, and have effective learning strategies. Teaching experience allows teachers to develop appropriate methods according to the context and needs of the students, thereby enhancing their learning abilities (Fauzi, 2019; Santosa, 2021). Conversely, teachers with limited teaching experience may face difficulties in delivering material optimally and managing the class effectively, potentially reducing students' learning outcomes.

At SMA Negeri 1 Motoling, preliminary observations show a significant variation in students' learning abilities. Some students are able to follow lessons well and achieve high academic performance, while others struggle to understand the material despite receiving guidance. This raises the question of the extent to which teachers' professional competence and teaching experience play a role in shaping students' learning abilities. This issue is relevant for research because understanding these factors can help schools improve the quality of learning by enhancing teachers' capacity.

From a theoretical perspective, students' learning abilities are influenced by internal and external factors. Internal factors include motivation, interest, and intelligence, while external factors include the learning environment, parental support, and teacher quality (Slavin, 2018). Teachers' professional competence and teaching experience are part of the external factors that have a direct impact on the teaching-learning process. Social learning theory (Bandura, 1977) explains that students learn through observation, interaction, and experiences facilitated by teachers, making teacher quality a key determinant in shaping students' learning abilities.

Previous studies support this relationship. For example, research by Rahayu & Wijaya (2020) shows that teachers' professional competence positively affects high school students' learning achievements. Additionally, a study by Lestari (2021) found that teachers' teaching experience significantly influences the effectiveness of learning and students' academic abilities. Therefore, examining the influence of teachers' professional competence and teaching experience on students' learning abilities at SMA Negeri 1 Motoling is essential to provide practical recommendations for improving educational quality.

Based on the description above, this study aims to determine the extent to which teachers' professional competence and teaching experience influence students' learning abilities, thus providing a basis for efforts to enhance the quality of learning at SMA Negeri 1 Motoling.

LITERATURE REVIEW

Professional competence is the ability of teachers to master knowledge in the fields of science, technology, and/or arts and culture for which they are responsible. This competence minimally includes: (a) comprehensive and in-depth mastery of the subject matter in accordance with the curriculum standards of the educational unit, subject, or group of subjects being taught; and (b) understanding of concepts and methods within the relevant discipline of science, technology, or arts, which conceptually support or are consistent with the educational program, subject, or group of subjects under the teacher's responsibility (Maulinar, 2015).

The more teaching experience a teacher has, the more knowledge they possess. The longer a teacher has been in the field, the more professional they are compared to a new teacher. A teacher's experience is not only gained in the classroom, but also through activities outside the classroom that can enhance their skills (Lilies Tangge & Alfira Ferlin, 2018).

Student learning ability is the capacity or potential possessed by students to receive, understand, process, and apply knowledge or skills acquired through the learning process (Slavin, 2016). This ability not only encompasses cognitive aspects but also includes affective and psychomotor aspects. High learning ability enables students to absorb lesson material quickly, solve problems effectively, and develop creativity and critical thinking skills (Suleman Dkk, 2021) (Ii Bidayah, 2019).

RESEARCH METHOD

This study uses a quantitative method with an explanatory research approach to analyze the influence of teachers' professional competence and teaching experience on students' learning abilities at SMA Negeri 1 Motoling. The population of the study comprises all 95 students of SMA Negeri 1 Motoling, while the sample used consists of 77 students, selected through simple random sampling to ensure data representativeness. The independent variables of this study include teachers' professional competence, which covers mastery of the subject matter, ability to plan learning, and ability to evaluate learning outcomes, as well as teachers' teaching experience, which includes years of teaching, types of experience, and diversity of teaching methods. The dependent variable is students' learning ability, measured through subject mastery, critical thinking skills, and ability to complete academic tasks. Data were collected through questionnaires, learning ability tests, classroom observations, and documentation of students' academic grades. Instrument validity was tested using Pearson Product Moment, while reliability was tested using Cronbach's Alpha, with $\alpha \geq 0.7$ considered reliable. Data analysis was conducted using multiple linear regression after fulfilling classical assumption tests, including normality, multicollinearity, and

heteroscedasticity. Hypothesis testing was performed using the t-test for partial effects and the F-test for simultaneous effects. The research procedure involved preparing the instruments, conducting a trial test, collecting data through questionnaires, tests, observations, and documentation, and analyzing the data to draw conclusions and provide practical recommendations for improving the quality of learning at SMA Negeri 1 Motoling.

FINDINGS AND DISCUSSION

FINDINGS

Research Instrument Test

To ensure the accuracy and appropriateness of the research instrument, a validity test was conducted on all items of the questionnaire. The purpose of this test is to determine whether each item effectively measures the variables under study and is capable of producing consistent and meaningful data. By assessing the correlation between each item and the total score, the validity test provides evidence that the instrument can reliably capture the constructs intended for this research. This step is essential before proceeding with data collection to guarantee that the results obtained will be accurate and trustworthy for further analysis.

Table 1. Validity Test

No	rcount	rtable	Inf.	No	rcount	rtable	Inf.	No	rcount	rtable	Inf.
1	0.800	0.227	Valid	1	0.634	0.227	Valid	1	0.644	0.227	Valid
2	0.777		Valid	2	0.631		Valid	2	0.625		Valid
3	0.756		Valid	3	0.550		Valid	3	0.733		Valid
4	0.816		Valid	4	0.658		Valid	4	0.636		Valid
5	0.825		Valid	5	0.706		Valid	5	0.744		Valid
6	0.839		Valid	6	0.623		Valid	6	0.723		Valid
7	0.860		Valid	7	0.618		Valid	7	0.735		Valid
8	0.874		Valid	8	0.706		Valid	8	0.742		Valid
9	0.886		Valid	9	0.743		Valid	9	0.784		Valid
10	0.830		Valid	10	0.703		Valid	10	0.725		Valid
11	0.850		Valid	11	0.597		Valid	11	0.746		Valid
12	0.861		Valid	12	0.738		Valid	12	0.781		Valid

Based on the results of the validity test conducted on the research instrument, all items showed item-total correlation values (rcount) greater than the r-table value of 0.227 at a 5% significance level. This is evident from the rcount values of each item, which range from 0.550 to 0.886, indicating that every item has a positive and significant correlation with the total score. Thus, all items in the questionnaire are considered Valid, showing that the instrument used is capable of consistently measuring the variables being studied. No items need to be removed or revised in terms of validity, so the instrument can be used for further data collection in the research. These results indicate that the data obtained from respondents are reliable and provide a strong foundation for further analysis, including reliability testing and analysis of relationships between variables.

Reliability Test

Table 2. Reliability Test

Reliability Statistics		
Variable	Cronbach's Alpha	N of Items
X1	0.959	12
X2	0.880	12
Y	0.913	12

Based on the reliability analysis, all variables in the study demonstrated high internal consistency. The variable X1 (Professional Competence of Teachers) has a Cronbach's Alpha of 0.959 with 12 items, indicating excellent reliability. The variable X2 (Teaching Experience of Teachers) shows a Cronbach's Alpha of 0.880 with 12 items, which is considered good reliability. Meanwhile, the dependent variable Y (Students' Learning Ability) has a Cronbach's Alpha of 0.913 with 12 items, also indicating excellent reliability. Since all Cronbach's Alpha values exceed the threshold of 0.7, it can be concluded that the research instruments are reliable and can consistently measure the intended constructs, providing confidence in the accuracy of data collected for further analysis**.**

Hypothesis Testing

Hypothesis Testing 1

Table 3. Coefficients[a]

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	28.386	2.582		10.993	.000
	Professional Competency	.460	.059	.668	7.779	.000
a. Dependent Variable: Learning Ability						

Based on the results of the regression analysis, the regression equation can be expressed as: Y = 28.386 + 0.460X1, where Y represents students' learning ability and X1 represents teachers' professional competency. The constant value of 28.386 indicates the expected learning ability score when professional competency is zero. The unstandardized coefficient (B = 0.460) for professional competency shows that for each one-unit increase in teachers' professional competency, students' learning ability is expected to increase by 0.460 units, assuming other factors remain constant. The t-value of 7.779 with a significance level of p = 0.000 indicates that professional competency has a statistically significant positive effect on students' learning ability. This suggests that higher professional competency of teachers contributes directly to better learning outcomes among students.

Table 4. Model Summary

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.668[a]	.447	.439	5.02071
a. Predictors: (Constant), Professional Competency				

Based on the results of the model summary, the correlation coefficient (R = 0.668) indicates a moderate to strong positive relationship between teachers' professional competency (X1) and students' learning ability (Y). The coefficient of determination (R^2 = 0.447) shows that approximately 44.7% of the variance in

students' learning ability can be explained by teachers' professional competency, while the remaining 55.3% is influenced by other factors not included in the model. The adjusted R^2 value (0.439) confirms that the model fits the data reasonably well, taking into account the number of predictors. These results support the hypothesis that teachers' professional competency has a significant positive effect on students' learning ability, as the model shows both a strong relationship and statistical significance in the regression analysis.

Hypothesis Testing 2

Table 5. Coefficients[a]

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	23.176	4.926		4.705	.000
	Teacher's teaching experience	.521	.102	.506	5.081	.000
a. Dependent Variable: Learning Ability						

Based on the results of the simple linear regression analysis, it was obtained that the constant (intercept) was 23.176 with a t value = 4.705 and a significance of p = 0.000. This indicates that if the teacher's teaching experience is zero, the student's learning ability is estimated at 23.176, and this value is statistically significant. The regression coefficient for the Teacher's Teaching Experience variable is 0.521 with a t value = 5.081 and p = 0.000, which means that every one unit increase in the teacher's teaching experience will increase the student's learning ability by 0.521 units. The standard Beta value of 0.506 indicates that the effect of teaching experience on learning ability is in the moderate to strong category. Thus, it can be concluded that the teacher's teaching experience has a positive and significant effect on student's learning ability, so that the research hypothesis stating that there is a positive effect of teacher's teaching experience on student's learning ability can be accepted.

Table 6. Model Summary

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.506[a]	.256	.246	5.82096
a. Predictors: (Constant), Teacher's teaching experience				

Based on the Model Summary, the R value = 0.506 was obtained, which indicates that there is a moderate positive relationship between Teacher's Teaching Experience and students' Learning Ability. The R Square value = 0.256 indicates that 25.6% of the variation in students' learning ability can be explained by the teacher's teaching experience, while the remaining 74.4% is influenced by other factors outside this model. The Adjusted R Square value = 0.246 provides a more accurate estimate by taking into account the number of predictor variables, indicating the consistency of the contribution of teaching experience to learning ability. The standard error of 5.82096 indicates the average deviation of the model's predictions from the actual value of students' learning ability. Thus, although teachers' teaching experience has a positive and significant effect on learning ability, there are still other factors that influence students' learning ability that need to be considered.

Hypothesis Testing 3

Table 7. Coefficients[a]

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	15.025	4.044		3.715	.000
	Professional Competency	.390	.057	.567	6.902	.000
	Teacher's teaching experience	.343	.084	.333	4.060	.000
a. Dependent Variable: Learning Ability						

Based on the results of the multiple regression analysis, the constant (intercept) was 15.025 with a t-value of 3.715 and a significance level of p = 0.000.

This indicates that if Professional Competency and Teacher's Teaching Experience are equal to zero, student learning ability is estimated at 15.025, and this value is statistically significant.

The regression coefficient for Professional Competency is 0.390 with a t-value of 6.902 and p = 0.000, meaning that each one-unit increase in teacher professional competence will increase student learning ability by 0.390 units, indicating a significant effect. The standardized beta value of 0.567 indicates that the effect of professional competence on learning ability is relatively strong.

The regression coefficient for Teacher's Teaching Experience is 0.343 with a t-value of 4.060 and p = 0.000, meaning that each one-unit increase in teacher teaching experience will increase student learning ability by 0.343 units. The standardized Beta value of 0.333 indicates that the influence of teaching experience is moderate. Thus, both professional competence and teacher teaching experience have a positive and significant influence on student learning ability. The research hypothesis stating that both independent variables have a positive influence on student learning ability is accepted.

Table 8. Anova

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1869.854	2	934.927	44.748	.000[b]
	Residual	1546.094	74	20.893		
	Total	3415.948	76			
a. Dependent Variable: Learning Ability						
b. Predictors: (Constant), Teacher's teaching experience, Professional Competency						

Based on the ANOVA results, the calculated F-value was 44.748 with a significance level of p = 0.000, which is less than 0.05. This indicates that the multiple regression model involving Professional Competency and Teacher's Teaching Experience is simultaneously significant in predicting student learning ability.

The Regression Sum of Squares value of 1869.854 indicates that the variation in student learning ability can be explained by the two independent variables, while

the Residual Sum of Squares value of 1546.094 indicates that the variation in student learning ability cannot be explained by the model. Therefore, it can be concluded that both predictor variables simultaneously contribute significantly to student learning ability, and the regression model is suitable for predicting learning ability.

Table 9. Model Summary

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.740[a]	.547	.535	4.57090
a. Predictors: (Constant), Teacher's teaching experience, Professional Competency				

Based on the Model Summary, the R value = 0.740 was obtained, which indicates a fairly strong positive relationship between the combination of Professional Competency and Teacher's Teaching Experience variables with students' Learning Ability. The R Square value = 0.547 indicates that 54.7% of the variation in students' learning ability can be explained by the two independent variables, while the remaining 45.3% is influenced by other factors outside the model. The Adjusted R Square value = 0.535 provides a more accurate estimate by taking into account the number of predictors and samples, indicating the consistency of the contribution of both variables to students' learning ability. The standard error of 4.57090 indicates the average deviation of the model predictions from the actual value of learning ability. Thus, the combination of professional competence and teacher teaching experience significantly and substantially influences students' learning ability, although there are other factors that also play a role.

DISCUSSION

The Influence of Professional Competence on the Learning Ability of Students at SMA Negeri 1 Motoling

Based on the results of the simple regression analysis, teachers' professional competence has a positive and significant effect on students' learning ability at

SMA Negeri 1 Motoling. This indicates that teachers who possess in-depth knowledge, strong pedagogical skills, and the ability to manage the learning process effectively can significantly enhance students' learning capabilities. This finding aligns with Shulman (1987), who stated that teachers' professional competence, including mastery of subject matter and pedagogical skills, is a key factor in the success of the teaching-learning process.

Moreover, research by Taufik Mustofa et al. (2023) shows that professionally competent teachers are able to design learning strategies tailored to students' characteristics, thereby increasing motivation and learning outcomes. This reinforces the findings at SMA Negeri 1 Motoling, indicating that teachers' professional competence plays a crucial role in developing students' learning abilities. Competent teachers are able to present material systematically and creatively, making it easier for students to understand the concepts being taught.

Furthermore, teachers' professional competence also includes the ability to design appropriate learning evaluations, which directly affects students' ability to internalize the material. According to Darling-Hammond (2017), professional teachers are capable of adjusting evaluation methods to students' needs, making the learning process more effective. This supports the research results at SMA Negeri 1 Motoling, which show an improvement in students' learning ability alongside the increase in teachers' professional competence.

Thus, it can be concluded that teachers' professional competence not only influences the quality of instruction but also has a direct impact on students' learning abilities. These findings strengthen the empirical evidence that professional development of teachers should be a priority for schools to improve students' overall academic achievement.

The Influence of Teachers' Teaching Experience on Students' Learning Abilities at SMA Negeri 1 Motoling

The results of the simple regression analysis indicate that teachers' teaching experience has a positive and significant effect on students' learning ability. Teachers with longer teaching experience tend to have more well-developed

teaching strategies, can anticipate students' difficulties, and manage the classroom more effectively. This aligns with Darling-Hammond (2000), who stated that teaching experience influences a teacher's ability to design instruction that matches students' characteristics.

Furthermore, research by Sari et al. (2021) found that teachers with extensive teaching experience tend to have better classroom management skills and are able to guide students more effectively. At SMA Negeri 1 Motoling, experienced teachers are able to regulate the pace of learning, provide concrete examples, and facilitate discussions that support the improvement of students' learning ability. Teaching experience enables teachers to recognize the individual learning needs of students, allowing them to provide targeted guidance.

In addition, teaching experience also plays a role in building teachers' credibility in the eyes of students. Experienced teachers tend to be more confident and competent in handling classroom dynamics, which motivates students to engage more in learning. This is reinforced by Nugroho (2019), who showed that experienced teachers can significantly enhance students' academic achievement due to more structured and adaptive teaching methods.

Thus, it can be concluded that teachers' teaching experience is an important factor influencing students' learning ability. The higher the teaching experience, the more effective the implemented learning process, and the greater the students' learning ability at SMA Negeri 1 Motoling.

The Influence of Professional Competence and Teaching Experience of Teachers on the Learning Ability of Students at SMA Negeri 1 Motoling

The results of the multiple regression analysis indicate that the combination of teachers' professional competence and teaching experience simultaneously has a positive and significant effect on students' learning ability. This confirms that students' abilities are influenced not by a single factor, but by a combination of teachers' knowledge, pedagogical skills, and practical experience. These findings are consistent with the theory of professional competence and teaching experience proposed by Shulman (1987) and Darling-Hammond (2017), which states that

mastery of subject matter, pedagogical strategies, and teaching experience together determine the effectiveness of the teaching-learning process.

Furthermore, previous studies by Pingkan Runtunuwu et al. (2023) and Sari et al. (2021) show that teachers who possess both high professional competence and sufficient teaching experience are able to design more innovative and adaptive learning. At SMA Negeri 1 Motoling, teachers meeting both criteria can utilize various teaching methods, tailor materials to students' needs, and enhance students' learning motivation. The combination of these two factors clearly improves students' learning ability compared to teachers who possess only one of the factors.

Moreover, the simultaneous effect of these two variables is also reflected in the R Square value of 0.547, indicating that 54.7% of the variation in students' learning ability can be explained by teachers' professional competence and teaching experience. The remaining variation is influenced by other factors such as learning motivation, learning environment, and parental support. This aligns with Santrock (2019), who stated that teacher quality is one of the main factors affecting students' learning outcomes, but it does not act alone.

Thus, it can be concluded that the simultaneous development of teachers' professional competence and teaching experience is crucial for improving students' learning ability. Schools should provide training and mentoring programs for teachers to enhance their competence and experience, thereby creating an effective teaching-learning process that supports students' academic achievement to the fullest extent.

CONCLUSION

Based on the results of the simple and multiple regression analyses conducted, several conclusions can be drawn as follows:

1. Teachers' professional competence has a positive and significant effect on students' learning ability at SMA Negeri 1 Motoling. This indicates that teachers who possess strong mastery of subject matter, pedagogical skills, and the ability to manage the learning process effectively can enhance students' learning

ability. In other words, the higher the teachers' professional competence, the higher the students' learning ability.

2. Teachers' teaching experience also has a positive and significant effect on students' learning ability. More experienced teachers tend to manage the learning process more effectively, adjust teaching strategies to students' needs, and guide students efficiently. The longer the teaching experience, the greater the improvement in students' learning ability.
3. The combination of teachers' professional competence and teaching experience simultaneously exerts a positive and significant effect on students' learning ability. The results of the multiple regression analysis show that these two variables explain approximately 54.7% of the variation in students' learning ability, while the remaining 45.3% is influenced by other factors such as motivation, learning environment, and parental support.

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