TEACHER PROFESSIONAL COMPETENCE AND ITS INFLUENCE ON STUDENT LEARNING MOTIVATION: INSIGHTS FROM SMAN WELULI

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ABSTRACT

This study aims to determine and measure the effect of teacher professional competence on student learning motivation at SMAN Weluli. Quantitative method together with associative research design was employed, data werely gathered via questionnaires from 20 students and 10 teachers. The results of the analysis revealed that there was a significant but weak connection between teacher professional competence with student learning motivation with determination coefficient equal to 4.5%. Simple regression tests showed that teacher competence contributed 4.5% to the variability of student learning motivation, while the other 95.5% was influenced by other factors. This study confirms the importance of improving teacher professional competence, especially in the pedagogical aspect, to support student learning motivation. On the other hand, these research results reveal a more holistic approach to enhancing motivation for student learning should be through exploring various other external factors. This study suggests that, further studies may be conducted using larger and more various samples with regard to variables such as family support and learning facilities to provide a more comprehensive understanding.

Keywords : *Teacher Competence, Learning Motivation, Simple Regression, Teaching Quality, Educational Effectiveness, Student Learning*

I.   INTRODUCTION

Education is one of the key components in developing quality human resources, which in turn determines the future of a nation. In the context of education, teachers act as the main agents who are not only responsible for delivering subject matter, but also in shaping students' attitudes, behavior, and learning motivation. Teachers' professional competence is an essential factor that plays a major role in the effectiveness of the learning process. This competence includes a series of abilities consisting of pedagogical, personality, social, and professional competence as regulated in Indonesian Law No. 14 of 2005 concerning Teachers and Lecturers (Kemendikbud, 2005). This competence is designed to ensure that teachers have adequate provisions in facing the increasingly complex challenges of modern education.

Although policies and training related to improving teacher competence have been widely implemented, their application in the context of learning in the field often encounters various obstacles. Initial observations made at SMAN Weluli, for example, showed that the learning methods used by many teachers were still dominated by the traditional lecture method. This method tends to be one-way and does not actively involve students in the learning process. As a result, students' learning motivation is not optimally stimulated, which has the potential to have an impact on their low academic achievement. This issue raises crucial questions about the extent to which teacher professional competence influences student learning motivation, especially in high school environments.

Previous studies have emphasized the importance of teacher competence in improving student learning outcomes. Baharun (2017) emphasized that teacher competence is a set of intellectual actions that are full of responsibility and must be possessed by a teacher in order to carry out their duties effectively. Inayah et al. (2013) also found that teacher competence, together with student learning motivation and learning facilities, has a significant impact on student academic achievement. However, although many studies have discussed the role of teacher competence in education, there is still a gap in the literature that discusses the direct influence of teacher professional competence on student learning motivation, especially in the context of schools in areas with unique educational challenges, such as in East Nusa Tenggara.

This study aims to fill this gap by providing empirical evidence regarding the influence of teacher professional competence on student learning motivation at SMAN Weluli. This study will not only measure the correlation between teacher professional competence and student learning motivation, but will also identify other factors that may also influence student learning motivation. Thus, the results of this study are expected to provide a significant contribution to the development of more effective and contextual learning strategies, which will ultimately improve the quality of education in high schools in Indonesia.

II. LITERATURE REVIEW

The role of the teacher is widely known as one of the most significant variables in education. It is the skill to guide, inspire and motivate students as well. (Baharun, 2017) stated that teacher competence is a collection of intellectual actions which are responsible for the work of teachers in an educational context. This competence is divided into four main categories: pedagogical competence, personality competence, social competence, and professional competence. Every of these categories is also being a very important part in the learning process, which impacts student motivation and study outcome, directly or indirectly.

Pedagogical competence which is the ability to design and offer valid learning (proper) by teacher It is not just knowledge of how students learn, but knowing strategies that work with specific student groups using and the following various learning tactics appropriate to different characteristics. Shulman, (1987) argued pedagogical competence as a confluence of subject-mater knowledge and the science of teaching, underlining that knowing what aspects to teach comes just after being able to work with second language. It is important in developing an environment suitable for learning thus motivating the students to learn and enabling them achieve their best academic performance.

It refers to the personality competence, which reflects his moral, professional and ethical qualities. According to Inayah et al. (2013), teachers with good personalities will have better communication relationship, so that student motivation and interest in learning can be more ap ased. Ability to be a Role Model, this competence determining the ability of teachers as role models with integrity, responsibility and dedication in doing their job.

Social Competence is about the degree to which the teacher can communicate and interact effectively with students, colleagues, parents and guardians as well as community members. This skill is essential for building positive school culture that recognizes and values the humanity of all stakeholders. Furthermore, Hargreaves (2000) as quoted above understand social competence as working with others and functioning in complex social settings such as school.

Professional competence is the teacher's ability to demonstrate command of the subject that they teach, and a willingness to learn more so you can continue teaching accurately with current information. This would involve developing curriculum, evaluating student learning progress and incorporating technology into the educational experience to enhance it. According to Darling-Hammond (2006), professional competency will help teachers in order to deliver education that varies and keep up with time, such as the emergence of students' needs on 21st century.

A number of studies has indicated that teacher competencies affect student learning motivation greatly. Inayah et al. (2013) revealed that teacher competence, learning motivation and facilities are necessary to improve student academic achievement. This research demonstrates that good teachers are educators who motivate students to work harder. Moreover, Rivkin measured that teacher quality is the single most important determinant of student achievement above all other factors such as class sizes or facilities (Hanushek et al., 1998).

Some research has demonstrated that the competence of teachers is crucial, but it failed to investigate how this competences effects on student motivation in learning (especially as specific as SMAN Weluli). In the particular case of East Nusa Tenggara, most research focuses on a broader educational setting and professionally explores how teacher competence relates to student motivation in senior high schools.

In this respect, the purpose of conducting a study is to fill this gap by giving an empirical outline through teacher professional competence on motivatiation for student learning at SMAN Weluli. This study will add considerably to the current literature but it is also able, through its empirical narratives and discourses in practice which can result some actions or recommendations on increasing educational quality at senior high schools in Indonesia.

III. METHODOLOGY

This study uses a quantitative approach with an associative research design, which aims to identify and analyze the relationship between two main variables: teacher professional

competence (independent variable) and student learning motivation (dependent variable). The quantitative approach was chosen because it allows objective measurement and in-depth statistical analysis to test the formulated hypotheses (Creswell, 2014).

A. Population and Sample

The population in this study were all grade XII students and teaching teachers at SMAN Weluli. The total population of this study was 176 people, consisting of 166 grade XII students and 10 teachers who taught in the class. This study used a purposive sampling technique, where samples were selected based on certain criteria that were relevant to the research objectives. The criteria used included students who had attended classes taught by teachers with certain qualifications and had sufficient learning experience for one school year (Patton, 2015). Considering the limitations of resources and time, the sample selected was 30 respondents consisting of 20 grade XII science students and 10 teachers who taught in the class.

B. Research Instruments

The main instrument used in this study was a questionnaire designed to measure the level of teacher professional competence and student learning motivation. This questionnaire consists of two parts:

The first part measures teacher professional competence based on indicators such as understanding of subject matter, pedagogical ability, communication skills, and professional integrity. This questionnaire is based on the competency theory proposed by Shulman, (1987) and Darling-Hammond (2006), and adapted from relevant previous studies.

The second part measures student learning motivation, which includes aspects such as interest in the subject, persistence, and desire to achieve academic achievement. A 5-point Likert scale was used in this questionnaire, where respondents were asked to indicate their level of agreement with the statements provided, ranging from "*strongly disagree*" to "*strongly agree*".

C. Validity and Reliability

Before being used in the main study, the instrument was tested for validity and reliability to ensure that the data collected was accurate and consistent. Validity testing was conducted using the Pearson Product-Moment Correlation technique (Field, 2013), where the results showed that all questionnaire items had a significant correlation value with the total

score (r> 0.3), indicating that the items were valid. Reliability testing was conducted by calculating the Cronbach's Alpha coefficient (Cronbach, 1951), which produced a value of 0.802 for teacher competence and 0.761 for student learning motivation. These values indicate that the instrument has high reliability (α> 0.7), so it can be trusted to measure the intended variables.

D. Data Collection Procedure

Data were collected through questionnaires that were distributed directly to respondents at SMAN Weluli. Respondents were given a brief explanation of the purpose of the study and how to fill out the questionnaire. To ensure that respondents provided honest and reflective answers, the questionnaire was structured in such a way that the respondent's identity was kept confidential. Data collection was carried out for one week, and during this period, the researcher ensured that all questionnaires were filled out completely and returned on time.

E. Data Analysis Techniques

After the data was collected, the analysis was carried out using SPSS software version 16. The analysis techniques used include:

1. Normality Test.

   The Kolmogorov-Smirnov and Shapiro-Wilk tests were used to ensure that the data was normally distributed. The Kolmogorov-Smirnov test is very commonly used in social research to test whether the data distribution is normal (Ghasemi & Zahediasl, 2012). The test results showed that the significance value for both variables was greater than 0.05 (p> 0.05), which means that the data was normally distributed and met the assumptions for further analysis.

2. Homogeneity Test.

   Levene's test was used to test the equality of variance between groups. This test is often used in analysis of variance (ANOVA) to ensure homogeneity of variance (Levene, 1960). The results showed that the data variance was homogeneous (p> 0.05), which means that the assumption of homogeneity of variance was met.

3. Simple Regression Analysis.

   To test the hypothesis about the effect of teacher professional competence on student learning motivation, simple regression analysis was used (Freedman, 2009). The results of the analysis showed that teacher professional competence had a significant effect on student learning motivation ($p <0.05$), with a coefficient of determination (R Square)

of 0.45. This shows that 45% of the variability in student learning motivation can be explained by teacher professional competence.

4. Determination Coefficient Test and F Test.

   This test is used to assess the strength of the relationship between independent and dependent variables and to test the significance of the regression model (Cohen, 1988). The results show that the regression model is significant ($p < 0.05$), which indicates that the alternative hypothesis is accepted.

IV. RESULTS

This study aims to provide the influence of teacher professional competence on student learning motivation at SMAN Weluli. Data were collected through questionnaires filled out by 20 students and 10 teachers. Data analysis was carried out using various statistical techniques to answer research questions and test hypotheses.

A. Data Description

The following table shows the descriptive results of the variables of teacher professional competence and student learning motivation:

Table 1: Description of Teacher Competency Data

Statistics

Kompetensi Guru

N	Valid	10
	Missing	10
Mean		32.7000
Std. Error of Mean		2.22636
Median		34.0000
Mode		30.00[a]
Std. Deviation		7.04036
Variance		49.567
Range		21.00
Minimum		19.00
Maximum		40.00
Sum		327.00

a. Multiple modes exist. The smallest value is shown

Table 2: Description of Learning Motivation Data

Statistics

Motivasi belajar siswa

N	Valid	20
	Missing	0
Mean		35.6500
Std. Error of Mean		.76184
Median		35.5000
Mode		40.00
Std. Deviation		3.40704
Variance		11.608
Range		10.00
Minimum		30.00
Maximum		40.00
Sum		713.00

Based on the data above, the average (mean) for the teacher competency variable is 32.7 with a standard deviation of 7.04, while for student learning motivation, the average obtained is 35.65 with a standard deviation of 3.41. The data distribution is shown in the following histogram:
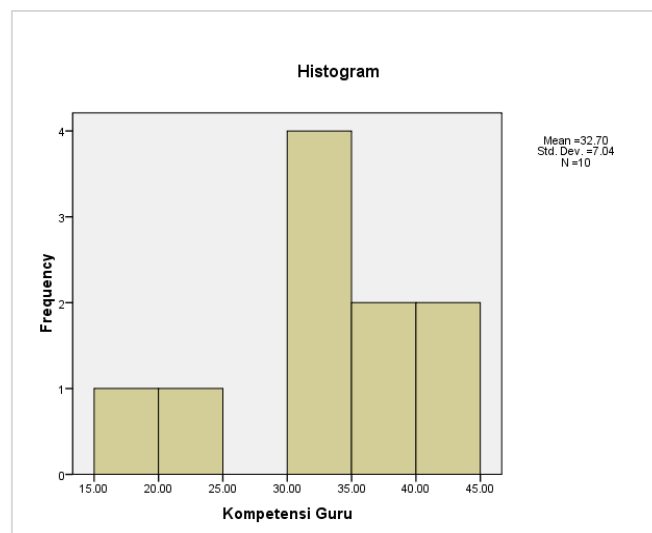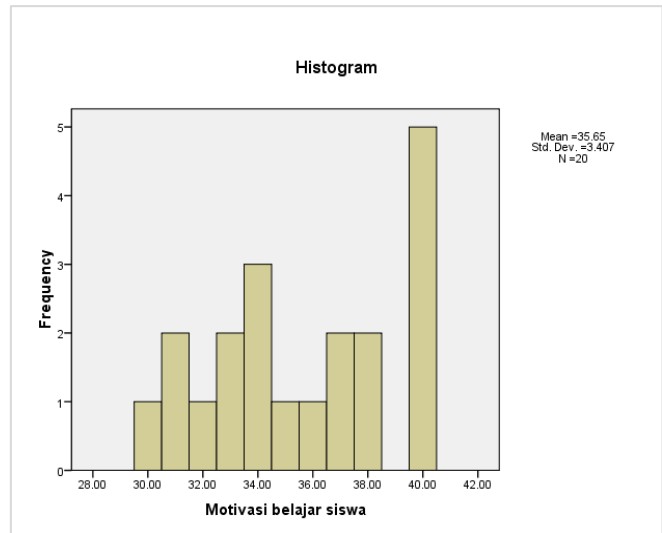

Figure 1: Histogram of Teacher Competence

Figure 2: Histogram of Student Learning Motivation

B. Normality Test

The normality test was conducted using the Kolmogorov-Smirnov and Shapiro-Wilk tests to ensure that the data were normally distributed. The test results showed a significance value of 0.200 (Kolmogorov-Smirnov) and 0.073 (Shapiro-Wilk) for teacher competence, and 0.200 (Kolmogorov-Smirnov) and 0.083 (Shapiro-Wilk) for student learning motivation. Since the significance value is greater than 0.05, it can be concluded that the data are normally distributed.

C. Homogeneity Test

Levene's test was used to test the homogeneity of variance between groups. The test results showed a significance value of 0.306, which is greater than 0.05, so the variance can be considered homogeneous.

D. Simple Regression Analysis

Simple regression analysis was conducted to test the hypothesis regarding the effect of teacher professional competence on student learning motivation. The results of the analysis are presented in the following table:

Table 3: Simple Regression Test Results

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	38.294	5.645		6.784	.000
	Kompetensi Guru	-.104	.169	-.212	-.614	.036

a. Dependent Variable: Motivasi belajar siswa

The results of the analysis show that the regression coefficient is -0.104 with a significance value of 0.036, which is smaller than 0.05. This indicates that teacher professional competence has a significant influence on student learning motivation, although the influence is negative.

E. Determination Coefficient Test

The value of the determination coefficient (R Square) obtained is 0.045, which means that teacher professional competence explains 4.5% of the variability in student learning motivation.

F. F Test

The results of the F test show a calculated F value of 6.784, which is greater than the F table (3.77) with a significance value of 0.026. This confirms that the regression model used in this study is statistically significant, so the alternative hypothesis is accepted.

V.   DISCUSSION

The results of this study shows the influence between teacher professional competence and student learning motivation at SMAN Weluli is significant but low with an R Square value 0.045. This result was in concordance with previous research that pointed out the essential role teacher competence play on different aspects of student learning.

A. The Influence of Teacher Professional Competence on Student Learning Motivation

The results of this study supported the result from Inayah et al. (2013), found that teacher competence is one of the important element affecting student learning motivation. Another way to think about teacher professional competence, as described by Darling-Hammond (2006), includes not only mastery of teaching materials, but also the ability to design and implement effective learning strategies. In the context of SMAN Weluli, the results of this study indicate that although the influence of teacher competence on student motivation is not too large, it is still significant and relevant. The negative influence found may indicate that more motivated students may respond more critically to less interesting or innovative learning methods, which is consistent with the findings of Hanushek et al. (1998).

B. Implications of Research Results

The results of this study have important implications for educational policy, especially in teacher training and development programs. Despite the relatively smaller contribution of teacher competence, innovation to improve this area is still required. Therefore, the enhancements of pedagogical competence should be an ongoing effort to prepare teachers in meeting diverse learning needs as it has been proposed by Shulman (1987).

C. Research Limitations

However, this study also has several limitations. The first limitation is that the sample used in this study was quite small, and only came from one school so it would be inaccurate to

generalise these results for an entire student population. Secondly, the application of this research model did not test other factors affecting student motivation for learning as family support, and facilities learning environment in schools. This is in accordance with the view of Hargreaves (2000) that student motivation is influenced by various factors other than teacher competence.

D. Recommendations for Further Research

For further research, it is recommended to use a larger and more diverse sample, and consider other variables that may influence student learning motivation. Further research must also more deeply investigate about individual domains of teacher competence, such as proficiency in the use of educational technology or classroom management skills, which have a greater impact on student motivation to learn.

VI. CONCLUSION

The purpose of this study is to investigate the effect between one-variable (X) professional competence and student motivation on learning SMAN Weluli. Results of the data analysis shows that teacher professional competence makes a significant contribution to student learning motivation with an amount around 4.5% as specified by coefficient of determination. This demonstrates that teacher proficiency is something we need not ignore, but there are surely other aspects which contribute to motivate students for learning and those remain untouched in the present study.

Although tentative, these findings have many crucial implications for education policy and teacher professional development. The improvement of teacher professional competence needs to continuously undertaken, especially in pedagogical, professional and social factors as it influence student learning motivation. Moreover, it may require that teacher training programs are tailored even more closely to local needs if we wish teachinglearning intervention to work.

Yet, this research also has the shortcomings of small participants number and limited involvement with a single school only. Therefore, it is suggested that future research include samples of various characteristics and sizes, as well the inclusion of other variables such as family support, learning facilities, school environment which have a potentially significant effect on motivation in elementary students.

The exact influence of each aspect in teacher competence (educational technology, classroom management) which have more contribution to the student learning motivation needs further examination. Therefore, successful outcomes in the subsequent studies will furnish us with an integrated understanding of student motivation for and learning about students as well as to a better idea on how teachers can instigate more motivated practices.

In summary, while this research paper concludes that teacher professional competence does have some positive effect on student learning motivation, but it also calls for a more holistic view of how to enhance student learning motivation. Hopefully, by improving teacher

competence and looking at various other factors affecting student motivation, the quality of education in schools such as SMAN Weluli can still be raised so that it provides a sustainable positive impact on student academic achievement.

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