The Influence of Values and Achievement Motivation on Teacher Professionalism at Muhammadiyah 2 High School Yogyakarta, Indonesia

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Abstract. Teacher professionalism is one of the important aspects of improving the academic success of students. In order to establish teacher professionalism development programs, then it needs to be identified the factors which influenced it. The research that has been around so far tend to prioritize external factors than internal factors, whereas according to a literature review, the researcher finds that internal factors have more impact on the improvement of teacher professionalism. This study aimed to determine the influence of values and achievement motivation on teacher professionalism. This study used a quantitative research by testing hypotheses. The data sources were selected through saturated sampling techniques. The sample for this study consisted of 60 teachers from Muhammadiyah 2 High School Yogyakarta, Indonesia. The data was collected using a questionnaire. The collected data were analysed using simple regression and multiple regression techniques with the aid of SPSS statistics application. The results showed that the teacher’s values had a positive and significant effect on the teachers’ professionalism with a correlation value of 0.562, achievement motivation had a positive effect on the professionalism of the teacher with a correlation value of 0.196, and values and achievement motivation had a simultaneous positive effect on the teachers’ professionalism with a correlation value of 0.616. These findings show that values and achievement motivation are important internal factors in
an effort to improve the professionalism of teachers. The results of this study indicate that values could stand alone in improving teacher professionalism, while the achievement motivation has a positive and significant influence if it is simultaneously incorporated with values. These two internal aspects should be taken into consideration when formulating policies and programs for the improvement of teacher professionalism. Subsequent studies need to be held to identify factors that influence values and achievement motivation.

**Keywords:** values, achievement motivation, teacher professionalism, and Muhammadiyah High School.

**Introduction**

Recent studies have shown that teacher professionalism has a significant influence on the academic success of students. The level of students’ academic success is determined by the level of teacher professionalism. Therefore, increasing the professionalism of teachers is a fundamental issue that needs to be considered by the government in order to improve the quality of education in Indonesia. Guskey (2000) and Jovanova-Mitkovska (2010) explained that the quality of education is strongly influenced by the quality of teachers. Therefore, there is a need for the continuous development of teacher professionalism in order to develop the knowledge, skills, competencies, and strategies required in learning and technology applications.

Some research studies have documented the positive impact on improving teacher professionalism (Baker & Smith 1999; Darling-Hammond, 1999; Glazer & Hannafin, 2006; Yamagata-Lynch & Haudenschild, 2009). The establishment of teacher professionalism programs would result in an increase in the acquisition of knowledge, skills, and mastery of effective learning strategies. In addition, this program will foster collaboration between teachers and increase the level of effectiveness of the learning process in the classroom.

In Indonesia, some efforts have been carried out to improve teacher professionalism. For instance, the government regulated the implementation of educational policies through the National Education System Constitution in the year 2003 and the Constitution of Teachers and Lecturers in the year 2005. According to the 2005 teacher and lecturer law, professional teachers are those with professional, pedagogical, social, and personality competencies. To develop these four attributes, Article 7 of Law Number 14 of 2005 mandates teachers professional development be carried out through democratic situation self-development, justice, non-discrimination, and sustainability by upholding human rights, religious and cultural values, national pluralism, and a professional code of ethics.

The most crucial improvements made by the government include the establishment of teacher certification programs through remedial training such as PLPG (Pendidikan
dan Latihan Profesi Guru) and PPG (Pendidikan Profesi Guru). Through this program, a teacher is considered to be a professional if he/she fulfills the requirements of academic qualifications and exhibits the level of competence (shown by a certificate) as a professional educator. Graduate teachers are entitled to professional allowances above the minimum living standards of and social welfare guarantees. This is to ensure they are comfortable while focusing on their main tasks without challenges attributed to the demands of life necessities.

The problem that arises later is their level professionalism after certification. However, after a decade of improved efforts, teacher professionalism in Indonesia is still low (Leonard, 2015). Furthermore, UNESCO has conducted a survey on teachers’ quality which shows a level 14 grade in Indonesia and other developing countries (Teacher Certification Team, 2006). Their low professionalism is caused by poor motivation, inability to develop themselves and owing to the fact that the teaching profession is poorly recognized (Akadum, 1999). A study carried out by Koswara et al. (2009) and Kartowagiran (2011) explains that teacher’s certification is simultaneously low in professionalism in improving the quality of learning in the classroom.

The poor impact of the improvements instituted by the government in Indonesia may be due to the use methods which focused on the development of the external context of a teacher’s professional competence. The internal context of a teacher’s professional competence is as important as the external context of a teacher’s professional competence. The internal context of a teacher’s professional competence could be in the form of motivation, interests, values, achievement motivation, and intentions. Based on the result of previous research studies, values and achievement motivation greatly influence the level of professionalism, success and overall performance of a teacher.

Values can be described as the standards or principles of behaviour that guides a person’s judgment of what is useful, important or valuable in life. Lickona (2004) stated that the good characters which underlie morality are considered as a value when it is manifested in the form of behaviour. Martišauskienė & Vaičėkauskiene (2015) stated that the values of educators have an influence on student maturity. Therefore, every human behaviour is based on a certain value. Values play an important role in the process of teaching and learning (Print, 2000). Therefore, values need to be instilled in every person through education in the family, school, and community (Nguyen, 2016). Chong & Cheah (2009) explained that teachers who live with certain values are more likely to love their profession because they are driven by internal factors. These factors have a positive impact on the professionalism of teachers.

In addition, achievement motivation influences the level of professionalism and success of teachers. People who have a high level of achievement motivation have the urge to put in extra efforts to ensure better results compared to others. Achievement motivation is an impulse to overcome obstacles, by using inner strength and trying hard to do difficult things as quick as possible. Some research studies have confirmed that achievement
motivation plays a crucial role in improving an individual’s level of professionalism at work (Gesinde, 2000; Dornyei, 2001; Cladella & Herlin, 2002).

Currently, there is a paucity of information on the influence of values and achievement motivation on the level of teacher professionalism. Thus, this study aimed to determine the influence of these variables on the level of teacher professionalism. The findings generated from this investigation will serve as a theoretical basis for the determination and development of strategies for the improvement of teachers’ professionalism by policymakers and practitioners.

**Research questions**

The objective of this article was to determine the effect of values (X₁) and teacher’s achievement motivation (X₂) on their professionalism (Y). The research questions of this research are as follows:

1. Is there an influence of values on teacher professionalism?
2. Is there an influence of achievement motivation on teacher professionalism?
3. Is there a simultaneous influence of values and achievement motivation on teacher professionalism?

**Theoretical Framework**

*Teacher Professionalism*

The quality of education is determined by many components; these include school programs, infrastructure and the quality of learning in the classroom (Rowe & Rowe, 2002). A research study conducted by Darling-Hammond (2000; 2001; 2003) explained that teachers who have a good preparation have a major impact on the learning process that takes place in the classroom. International research also proves that standard schools tend to focus on the impact of their organization on teacher professionalism (Rowe, 2004). The research study conducted by Zbar (2003) highlighted that teaching is the key to improving the quality of education. Ingvarson (2000; 2001; 2002) and Rowe (2003) documented that what distinguishes the quality of each school is the learning process in each class.

Many research studies on teacher professionalism have been carried out in the international community. The studies conducted by Borko (2004), Desimone (2009), and Timperley & Alton-Lee (2008) documented that the research studies on the professional development of teachers have not been effective. Bubb & Earley (2006; 2009), Cordingley (2015), and Timperley & Alton-Lee (2008) explained that most of the literature on the
professional learning of teachers focus on activities, processes, and programs with a certain level of isolation.

Several research studies have revealed that the programs established to improve teacher professionalism should be carried out continuously and intensively. This will enable teachers to discuss, develop and practice the newly acquired knowledge. Furthermore, the effectiveness of programs developed to improve teacher professionalism is directly influenced by the integration of the school-based activities and the teachers’ daily programs (which reflects the learning and teaching process) (Garet et al., 2001; Wayne et al., 2008; Veen et al., 2012; Cordingley, 2015). Moreover, the programs developed to increase the teachers’ professionalism must be supported and developed. Adey (2006) stated that there are four important factors that need to be considered when developing teacher professionalism. These include innovation, quality of programs, school management, and student change. McCormack et al. (2006) explained that collaborative and unplanned learning, colleagues and former colleagues, and informal learning are important factors required for the improvement of teacher professionalism. Admiraal et al. (2016) highlighted that the principal’s distributed leadership is crucial to the development of teacher professionalism. Therefore, it is important for teachers to develop their level of professionalism in order to increase their knowledge and skills as well as enhance the learning process in the classroom.

Another study conducted by Yue et al. (2017) at a Chinese military medical university revealed that shared vision, psychological motivation, teaching experience, professional competence, educational policy, and material security have a great influence on the professional development of teachers. A similar study conducted by Kuijpers et al. (2010) developed an integrated professional development model that is made up of six aspects: theoretical exposure, the performance of skills, direct practice, pre-conference, observation, and post-conference. However, Scribner (1999) stated that the program developed to improve the level of professionalism of teachers is varied and multidimensional. Thus, the development of a suitable program for various educational institutions is yet to be determined.

**Values and Teacher Professionalism**

Value can be described as a good character or a form of moral-oriented behaviour. Values have an important role in educating the development of society (Print, 2000). The success of a country in educating its society is a major catalyst for the country’s development (Bette, 2011). Therefore, teachings about value have become the core of the philosophy of education (Salls, 2007; Carr, 2008; Wren, 2008). In order to anticipate various moral damages and seek a balance between local and global values, it is important to revive the teachings about values (Pitiyanuwat & Sujiva, 2000). Therefore, the concept of value should be taught in schools (Bennett & Delattre, 2011).
Some research studies have been conducted on the importance of values on teacher professionalism. Chong & Cheah (2009) stated that there are six values that should be possessed by a teacher in supporting the success of the curriculum in Singapore. These include the belief that all teachers are able to learn, care and focus on all students, respect diversity, have a high level of dedication and commitment, practice collaboration, sharing and exhibit a team spirit. The authors further explained that teachers who have these six values will love their profession more because their work is driven by internal factors from within. Therefore, these six values will have an impact on teacher professionalism. The research study conducted by Chong & Cheah (2009) serves as a suitable framework that explains the relationship between values and professionalism of teachers in this study.

Based on the theoretical description above, the first hypothesis of this study is formulated as follows.

_Hypothesis 1:_
There is a positive and significant effect of values on teacher professionalism.

**The Achievement Motivation and Teacher Professionalism**

The achievement motivation is a theory that explains the different ways in which people obtain achievement. Many experts have defined the theory of achievement motivation and its elements. Achievement motivation can be defined as an action-oriented desire with a perfect standard (Nouhi et al., 2008). Dörnyei (2001) defined motivation as a driving force that encourages a particular behavior in an individual. Cladella & Herlin (2002) stated that achievement motivation is the desire to succeed in achieving goals that are meaningful to an individual’s life. Meanwhile, Brophy (1998) explained that this motivation theory focuses on the process of obtaining achievement and fear of failure. Gesinde (2000) defined achievement motivation as a pattern of an individual’s action and feelings towards the achievement of a particular standard of excellence in predetermined performance. This includes personal responsibility for problem-solving, setting of goals despite the level of risk, the desire for a concrete feedback about performance (McClelland, 1961), being innovative, surviving amidst challenges (Wu et al. 2007), and reaching the set standards of excellence (Zinkhan et al., 1990). McClelland (1976) stated that people with high achievement needs will have a standard of excellence for achieving success. From these definitions, it can be concluded that achievement motivation is the main booster of an individual’s actions in accordance with specific performance standards. Achievement motivation is an impulse that leads to the achievement of maximum results. This impulse stimulates the following behaviors in individuals: unrelenting drive to achieve, the desire to take up challenges, willingness to receive feedback, and take up responsibilities at work.

Achievement motivation has a positive impact on job satisfaction (Yasin, 1996); there is a positive correlation between the intrinsic satisfaction gained from working and service quality (Snipes et al. 2005). Cladella & Herlin (2002) explained that motivation
greatly influences the level of enthusiasm for learning and the teacher’s efforts to study a particular subject. This indicates that if a teacher has high achievement motivation, then he/she will have a high learning spirit that will result in an increase in professionalism.

Based on these theoretical reviews obtained from previous research, the second research hypothesis is formulated as follows.

Hypothesis 2:
There is a positive and significant effect of achievement motivation on the teachers’ professionalism.

The previous theories highlighted in this study explain the relationship between $X_1$ and $Y$ as well as $X_2$ and $Y$. This relationship served as the basis for the development of a third hypothesis:

Hypothesis 3:
There is a simultaneous positive and significant effect of values and achievement motivation on teacher professionalism.

Research Methodology

Participants
The participants chosen for this study were teachers of Muhammadiyah 2 High School Yogyakarta. Based on the use of saturated sampling techniques, 60 teachers were chosen as the data sources for this research study. The distribution of data sources is shown in Table 1.

Table 1
The Distribution of Research Data Sources

<table>
<thead>
<tr>
<th>No</th>
<th>Identity</th>
<th>Gender</th>
<th>Age (in years)</th>
<th>Education</th>
<th>Teaching Period (in years)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>20-30</td>
<td>31-40</td>
<td>41-</td>
</tr>
<tr>
<td>1</td>
<td>Total</td>
<td>28</td>
<td>32</td>
<td>11</td>
<td>15</td>
</tr>
<tr>
<td>2</td>
<td>Percentage</td>
<td>46.76</td>
<td>53.44</td>
<td>18.37</td>
<td>25.05</td>
</tr>
</tbody>
</table>

Design and Procedures
A quantitative research approach was used to test the hypotheses for this study. The study population comprised of 60 teachers. The data collection technique used in this study was the administration of questionnaires. The data analysis technique was carried out by using simple and multiple linear regression analysis. The research design for this study is shown in Figure 1.
**Measures**

The different steps taken to test the hypothesis in this study include the following: descriptive statistics test, classic assumption test with stages, normality test; multicollinearity test, heteroscedasticity test, and hypothesis test. The equation for the hypothesis test is:  
\[ Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + e \]  
\( Y = \text{teacher professionalism}; X_1 = \text{teacher values}; X_2 = \text{teacher achievement motivation} \). The regression analysis was performed to find out how much the reinforcement is between the independent variable and the dependent variable. The statistical tests performed include estimated accuracy model/determination coefficient \( (R^2) \), simultaneous significance test (test F), and the individual parameter significance test (t-test).

**The Requirements Testing**

The classic assumption test ensures that there is accuracy in estimation, consistency, and reduced bias in the parameters. Therefore, there is no deviation from the assumption of normality, multicollinearity, and heteroscedasticity. The SPSS program was used to test the existence of a classic assumption deviation.

**The Validity and Reliability of Test Results**

The validity and reliability of the research instrument were determined in the study. The research instrument test was carried out on 30 teachers of Muhammadiyah 2 Kalasan, Sleman, Yogyakarta Junior High School.

a. Validity Test

This validity test was carried out by using the correlation test, Microsoft excel and the SPSS 21 calculations with the following conditions:

- If the value of \( R_{\text{hitung}} \geq R_{\text{tabel}} \), the research instrument is said to be valid.
- If the value of \( R_{\text{hitung}} \geq R_{\text{tabel}} \), the research instrument is said to be invalid.

At a predetermined significance level of 5%, an \( R_{\text{tabel}} \) value of 0.361 was obtained. The information on instrument validity and reliability is shown in Table 2.
Table 2
**Data Validity Test Results**

<table>
<thead>
<tr>
<th>Questionnaire</th>
<th>Number of questions</th>
<th>Invalid</th>
<th>Valid and Used</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teachers’ Professionalism</td>
<td>26</td>
<td>2</td>
<td>24</td>
</tr>
<tr>
<td>Teachers’ Achievement Motivation</td>
<td>35</td>
<td>5</td>
<td>30</td>
</tr>
<tr>
<td>Teachers’ Values</td>
<td>20</td>
<td>4</td>
<td>16</td>
</tr>
</tbody>
</table>

b. Reliability Test

1) Reliability Test on Teacher Professionalism Instrument

Table 3
**Reliability Test Result on Teacher Professionalism Instrument**

<table>
<thead>
<tr>
<th>Reliability Statistics</th>
<th>Cronbach’s Alpha</th>
<th>N of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.983</td>
<td>26</td>
</tr>
</tbody>
</table>

Source: data analysis, 2018

The reliability coefficient value of the teacher professionalism instrument obtained from the administration of 26 questionnaires was 0.983 > 0.40. Thus, the instrument was reliable for the medium category.

2) Reliability Test on Teacher Achievement Motivation Instruments

Table 4
**Reliability Test Result on Teacher Achievement Motivation Instruments**

<table>
<thead>
<tr>
<th>Reliability Statistics</th>
<th>Cronbach’s Alpha</th>
<th>N of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.888</td>
<td>60</td>
</tr>
</tbody>
</table>

Source: data analysis, 2018

The reliability coefficient value of the instrument of teacher achievement motivation obtained from the administration of 35 questionnaire items was 0.888 > 0.40. Thus, the instrument was reliable for the moderate category.

4) Reliability Test on Teacher Values Instrument

Table 5
**Reliability Test Result on Teacher Values Instrument**

<table>
<thead>
<tr>
<th>Reliability Statistics</th>
<th>Cronbach’s Alpha</th>
<th>N of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.893</td>
<td>60</td>
</tr>
</tbody>
</table>

Source: data analysis, 2018
The reliability coefficient value of the teacher value instrument obtained from the administration of 35 questionnaire items was 0.893 > 0.40. Thus, the instrument was reliable for the moderate category.

Classic Assumption Test
In this data analysis test, the normality test was carried out to prove that the samples were obtained from a normal distribution and had the same variance. The initial data test was carried out using Microsoft Excel and SPSS 21.

The Normality Test
The normality test used in this study was the Kolmogorov Smirnov test because the sample size was more than 50. This test was conducted to determine if the results of the questionnaire were normally distributed.

a. Hypothesis
If $H_0 > 0.05$, the data is normally distributed
If $H_1 < 0.05$, the data is not normally distributed

b. Calculation
The result of the data analysis using the SPSS 21 software is shown in Table 6.

<table>
<thead>
<tr>
<th>Normal Parameters$^{ab}$</th>
<th>Teachers’ Professionalism</th>
<th>Teachers’ Achievement Motivation</th>
<th>Teachers’ Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>76.20</td>
<td>71.20</td>
<td>51.85</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>10.950</td>
<td>9.863</td>
<td>8.072</td>
</tr>
<tr>
<td>Absolute</td>
<td>.285</td>
<td>.193</td>
<td>.218</td>
</tr>
<tr>
<td>Positive</td>
<td>.107</td>
<td>.116</td>
<td>.096</td>
</tr>
<tr>
<td>Negative</td>
<td>-.285</td>
<td>-.193</td>
<td>-.218</td>
</tr>
<tr>
<td>Kolmogorov-Smirnov Z</td>
<td>2.226</td>
<td>1.504</td>
<td>1.704</td>
</tr>
<tr>
<td>Asymp. Sig. (2-tailed)</td>
<td>.000</td>
<td>.022</td>
<td>.006</td>
</tr>
</tbody>
</table>

a. Test distribution is Normal.
b. Calculated from data.

Source: data analysis, 2018

Table 6 (in the Kolmogorov Smirnov column) shows that the professionalism of the teacher was significant at 2.226 ($Z > 0.05$), the value of teacher achievement motivation was significant at ($Z > 0.05$), and the teacher values were significant at 1.704 ($Z > 0.05$). Thus, $H_0$ was accepted, this means that the three variable values are normally distributed.
Based on the analysis in Table 6, it could be concluded that:

a. Teacher professionalism variable values are normally distributed.
b. The variable value of teacher achievement motivation is normally distributed
c. Teacher value variable values are normally distributed

**Multicollinearity Test**

The multicollinearity test was conducted to determine if there is a correlation between the independent variables.
a. Hypothesis
   A correlation value that is greater than 0.90 shows that there is multicollinearity
   A correlation value that is less than 0.90 shows that there is no multicollinearity
b. The Calculation
   By using the SPSS 21 software, the input is obtained as shown in Table 7.

**Table 7**

*The Results of the Multicollinearity Test*

<table>
<thead>
<tr>
<th>Correlations</th>
<th>Teacher_Profesionality</th>
<th>Teacher_Values_X1</th>
<th>Achievement_Motivation_X2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Correlation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher_Profesionality_Y</td>
<td>1.000</td>
<td>.489</td>
<td>.193</td>
</tr>
<tr>
<td>Teacher_Values_X1</td>
<td>.489</td>
<td>1.000</td>
<td>-.168</td>
</tr>
<tr>
<td>Achievement_Motivation_X2</td>
<td>.193</td>
<td>-.168</td>
<td>1.000</td>
</tr>
<tr>
<td>Sig. (1-tailed)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher_Profesionality_Y</td>
<td>.</td>
<td>.000</td>
<td>.070</td>
</tr>
<tr>
<td>Teacher_Values_X1</td>
<td>.000</td>
<td>.</td>
<td>.100</td>
</tr>
<tr>
<td>Achievement_Motivation_X2</td>
<td>.070</td>
<td>.100</td>
<td>.</td>
</tr>
<tr>
<td>N</td>
<td>Teacher_Profesionality_Y</td>
<td>60</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td>Teacher_Values_X1</td>
<td>60</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td>Achievement_Motivation_X2</td>
<td>60</td>
<td>60</td>
</tr>
</tbody>
</table>

Source: data analysis, 2018

The correlation table shows the results of the intercorrelation analysis between the independent variables, which are indicated by the Pearson correlation coefficient value. The result of the correlation between independent variables X1 and X2 was $r = -0.168$. Since the correlation value of -0.168 is less than 0.8, it can be concluded that multicollinearity was not detected.

Based on the analysis in Table 7, it can be concluded that there was no multicollinearity problem in the SPSS test. Therefore the test results are considered to be reliable.
**The Heteroscedasticity Test**

Heteroscedasticity is a condition in which the error variance value for each data is not constant. One of the assumptions of the regression model is that the error or residual value has a constant variance or also called homoscedasticity.

a. Hypothesis

If $H_0 > 0.05$, heteroscedasticity occurs

If $H_1 < 0.05$, heteroscedasticity does not occur

b. Calculation

The result obtained using SPSS 21 software is shown in Table 8.

**Table 8**

<table>
<thead>
<tr>
<th>Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>(Constant)</td>
</tr>
<tr>
<td>1 Teacher.Values_X1</td>
</tr>
<tr>
<td>1 Achievement_Motivation_X2</td>
</tr>
</tbody>
</table>

Source: data analysis, 2018

The heteroscedasticity test results showed that the teacher values variable (0.004) is less than 0.050. Thus, heteroscedasticity did not occur. Also, the teacher achievement motivation variable value (0.363) was less than 0.050. Thus, heteroscedasticity did not occur.

**Findings**

**Hypothesis Test**

The simple linear regression analysis test was used to test the first and second hypotheses while the multiple linear regression analysis test was used to test the third hypothesis.

**First Hypothesis**

The first hypothesis test was carried out using the simple linear regression analysis. The complete result of this simple regression analysis calculation can be found in the appendix, the summary as shown in Table 9.
Table 9

Summary of Simple Regression Test Results

<table>
<thead>
<tr>
<th>Variable</th>
<th>koef</th>
<th>konst</th>
<th>R</th>
<th>R²</th>
<th>$t_{hitung}$</th>
<th>$t_{table}$</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>X₁ - Y</td>
<td>0.562</td>
<td>47.797</td>
<td>0.489</td>
<td>0.239</td>
<td>0.2144</td>
<td>4.264</td>
<td>There is a positive influence</td>
</tr>
</tbody>
</table>

Source: data analysis, 2018

a. The Regression Line Equations

The amount of teacher values coefficient ($X₁$) was 0.562 and the constant number was 47.797. Based on these data, the regression line equation can be written as follows:

$$Y = 47.797 + 0.562$$

The equation above shows that if a teacher values variable ($X₁$) increases by 1 unit, then teacher professionalism ($Y$) will increase by 0.562 units.

b. Correlation Coefficient (R)

The correlation value between $X₁$ and $Y$ ($R_{x₁y}$) was calculated to be 0.489. This shows that $R_{x₁y}$ correlation coefficient is positive, thus, teacher values affect teacher professionalism. Therefore, it could be said that the higher the teachers’ values, the higher the level of the teachers’ professionalism.

c. Determination Coefficient ($R^2$)

The coefficient of determination ($R^2_{x₁y}$) value was 0.239. This means that 23.9% of the changes in teacher's variable values are influenced by teacher professionalism. The remaining changes are influenced by other factors that were not discussed in this study.

d. The Significance Testing with $t$-Test

The $t$-test was used to determine the effect of teacher values ($X₁$) on teacher professionalism ($Y$). The value of $t_{hitung}$ was 4.264 while the value of $t_{table}$ was 1.67155. These results show that $t_{hitung}$ was greater than $t_{table}$ (4.264 > 1.67155). This means there is a positive and significant influence of the teachers’ values on the teachers’ professionalism.

e. Conclusion

The result of the significance test showed that $R_{hitung} = 0.489$ and $R_{table} = 0.2144$. Therefore, it could be concluded that the independent variable ($X₁$) affects the dependent variable ($Y$). In other words, the first hypothesis is declared as acceptable. Hence, teachers’ values have a positive influence on teachers’ professionalism.

The Second Hypothesis

The second hypothesis test was carried out using simple linear regression analysis with the help of SPSS statistics application. The complete result of this analysis can be found in the appendix, the summary of this result is shown in Table 10.
Table 10
Summary of Simple Regression Test Results

<table>
<thead>
<tr>
<th>Var</th>
<th>koef</th>
<th>konst</th>
<th>R</th>
<th>R²</th>
<th>R_table</th>
<th>t_hitung</th>
<th>t_table</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>X2 - Y</td>
<td>63.197</td>
<td>0.196</td>
<td>0.193</td>
<td>0.037</td>
<td>0.2144</td>
<td>1.498</td>
<td>1.67155</td>
<td>There is a positive influence</td>
</tr>
</tbody>
</table>

Source: data analysis, 2018

a. The Regression Line Equations

The coefficient number of achievement motivation (X₂) was 0.196 and the constant number was 63.197. Thus, the regression line equation can be written as follows:

\[ Y = 63.197 + 0.196X_2. \]

This equation shows that if the variable of achievement motivation (X₂) increases by 1 unit, then teacher professionalism (Y) will increase by 0.196 units.

b. Correlation Coefficient (R)

The calculation showed that the correlation between X₂ and Y (Rₓ₂y) was 0.193. The Rₓ₂y correlation coefficient is considered to be positive, this means that achievement motivation affects the teachers’ professionalism. It could be said that the higher the achievement motivation, the higher the teachers’ professionalism.

c. Determination Coefficient (R²)

The calculation showed that the coefficient of determination (R²ₓ₂y) was 0.193. This means that 19.3% of the changes in achievement motivation variables are influenced by teacher professionalism.

The remaining changes are influenced by other factors that were not discussed in this study.

d. The Significance Testing with t-Test

The significance testing with the t-test determined the effect of achievement motivation (X₂) on teacher professionalism (Y). The result of the test showed that t_hitung was 1.498 while t_table was 1.67155 (at a significance level of 5%). The value of t_hitung was less than the value of t_table (1.498 < 1.67155). This shows that achievement motivation has a positive (but insignificant) influence on teacher professionalism.

e. Conclusion

The result of the statistical test showed that the value of R_hitung is 0.193 and the value of R_table is 0.2144. The value of R_hitung is greater than the value of R_table (0.193 < 0.2144). Thus, it can be concluded that the independent variable (X₂) has a positive influence on the dependent variable (Y).

The Third Hypothesis Test

The examination of this hypothesis was carried out using multiple regression analysis. A complete calculation of the multiple regression analysis tests can be found in the appendix, the summary of the data obtained is shown in Table 11.
Table 11
Summary of Multiple Regression Analysis Results

<table>
<thead>
<tr>
<th>Model</th>
<th>Coefficients</th>
<th>Unstandardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td></td>
<td>24.138</td>
<td>11.434</td>
<td>2.111</td>
</tr>
<tr>
<td>1 Teacher_Values_X1</td>
<td></td>
<td>.616</td>
<td>.128</td>
<td>4.825</td>
</tr>
<tr>
<td>Achievement_Motivation_X2</td>
<td></td>
<td>.288</td>
<td>.113</td>
<td>2.546</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Teacher_Professionalism_Y
R = 0.563
R² = 0.316
Fhitung = 13.192  Ftable = 3.16

Source: data analysis, 2018

a. The Regression Line Equations

Based on the result shown in Table 11, the regression equation for teacher professionalism can be written as follows:

\[ Y = 24.138 + 0.616X_1 + 0.288X_2 + e. \]

Notes:

Y : Teacher Professionalism
X_1 : Teacher values
X_2 : Achievement Motivation

The coefficients of the multiple linear regression equation derived from Table 11 could be interpreted as follows:

1) Constant (a) = 24.138
This means that independent variables consisting of teacher values and achievement motivation are considered constant and show a positive influence. Therefore, if teacher professionalism rises the independent variable will increase by 24.138.

2) Teacher’s value regression coefficient = 0.616
Teacher’s value regression coefficient is the regression coefficient values of the teacher values variable (X1) to teacher professionalism variables. If the teacher values increase (X1) by 1 unit, then teacher professionalism (Y) will increase and have a positive effect of 0.616 or 61.6%. The increasing teacher values variables (X1) will result in an increase in teacher professionalism (Y).

3) Achievement motivation regression coefficient of 0.288
This is the regression coefficient variable of achievement motivation variable (X2) on teacher professionalism variable. This means that an increase in achievement motivation (X2) by 1 unit will result in an increase in teacher professionalism (Y) by 28.8%. Thus, the increase in achievement motivation variables (X2) will have a positive effect on teacher professionalism (Y).
b. The Correlation Coefficient (R)

The calculation results showed that the correlation between X₁ and X₂ to Y (R_y(1,2)) is 0.563 and the correlation coefficient of R_y(1,2) is positive. Therefore the teacher values and achievement motivation have a positive effect on teacher professionalism. Thus, an increase in teacher values and achievement motivation will result in an increase in teacher professionalism.

c. Determination Coefficient (R²)

The calculated value of the coefficient of determination (R²_y(1,2)) is 0.316. This means that 31.6% of the changes in teacher professionalism variable are due to teacher values and achievement motivation. The remaining changes are influenced by other factors that were not discussed in this study.

**The Significance Testing with F Test**

The significance test was simultaneously carried out with the F test to determine the influence of teacher values (X₁) and achievement motivation (X₂) on teacher professionalism. The results of the F test showed that the value of t_hitung was 13.192 and the value of F tabel was 3.16 (at 5% significance level). The value of F_hitung is greater than F tabel (13.192 > 3.16, at a significance level of 5%). Thus, there is a significant influence of teacher values (X₁) and achievement motivation (X₂) on teacher professionalism.

Based on the calculation above, it could be concluded that there is a positive and significant influence between teacher values (X₁) and the achievement motivation (X₂) on teacher professionalism.

**Discussion**

The objective of this study was to determine the effect of values and achievement motivation with teacher professionalism. A summary of the results of the research analysis could be summarized as in Figure 2.

![Diagram](image)

**Fig. 2. The significance relationship of the X₁ and X₂ to Y variables**

*Figure 2 shows the first hypothesis was on variable X₁ with the correlation coefficient (R) is 0.489 and the regression coefficient (R²) is 0.249. This result shows that the teacher’s*
variable values have a positive influence on teacher professionalism. The second hypothesis was on variable $X_2$ with a correlation coefficient ($R$) of 0.193 and a regression coefficient ($R^2$) of 0.037. This result indicates that the variables of achievement motivation have a positive but not significant effect on teacher professionalism. Furthermore, the third hypothesis was on the variables $X_1$ and $X_2$ with a correlation coefficient ($R$) of 0.563 and the coefficient of determination ($R^2$) of 0.316. The result showed that the teacher’s values and achievement motivation variables have a positive and significant influence on the teacher’s professionalism.

The results of this study indicate that the conclusions of this study align with the conclusions of previous researchers (Chong & Cheah, 2009). Chong & Cheah (2009) explained that there are six important values that must be possessed by a teacher, which include the belief that all teachers are able to learn, care and focus on all students, respect diversity, have a high level of dedication and commitment as teachers; practice collaboration, exhibit team spirit and possess the zeal to learn, and innovate. The authors further stated that these six values have an impact on increasing teachers’ professionalism.

According to Chong & Cheah’s (2009), the importance of each value is explained as follows: 1) the belief that all students have the ability to learn. Teachers who are confident that all students have the ability to learn will use various efforts and strategies to develop students’ capabilities. Darling-Hammond & Bransford (2005) stated that a teacher must be prepared in order to develop a learning climate that supports all students learning capability. 2) Care for all students. The teacher’s concern for students is an important aspect of learning comfortably in the classroom. Eisner (2002) explained that teaching entails learning how to care for students. LePage et al. (2005) added that teachers have a responsibility to support care and involve all students in the process of learning. The provision of care and support to students will enhance the learning outcomes of students. 3) Appreciate diversity. This means that teachers must accept all differences in students, including the physical appearance, gender, race, socioeconomic status, and academic ability. The class climate that values the differences of each student needs to be created by the teacher. Banks et al. (2005) stated that a learning environment that introduces differences allow students to share their experience based on different perspectives. 4) A high dedication and commitment to work. Bransford et al. (2005) revealed that an important aspect of being a professional teacher is to have a high commitment to help all the students in the school. 5) Collaboration, sharing and exhibiting a team spirit. Chong & Cheah (2009) stated that collaboration is an important element for an effective change. Teachers must find ways to work collaboratively and creatively with various parties, especially parents. 6) A passion to continue to learn and innovate. Teachers should be lifelong learners; they must be willing to acquire more knowledge and improve their competence as the content of the curriculum, is improved. Chong & Cheah (2009) further stated that being innovative, efficient, and able to improvise during learning could help teachers become adaptive experts. Being an adaptive expert will make the teacher
eager to learn and innovate continuously. These results are also in line with the findings documented by Lockwood (2009) and Ho (2006), which stated that schools should be a place to instill value. Thus, the curriculum in schools must be a significant means to instill value in its students.

This study showed that achievement motivation has a positive influence on teacher professionalism, as emphasized in previous research (Yasin, 1996; Snipes, et al. 2005). Achievement motivation ensures that a person uses all of the time and energy available to achieve standard goals (Tucker et al., 2002; Nuthana & Yenagi, 2009). This form of motivation increases the teachers’ professionalism because people who have high achievement motivation will have a strong desire to reach individual targets (Cladella & Herlin, 2002). Cladella & Herlin (2002) explained that motivation has a great influence on the level of enthusiasm, the impact of learning and the teacher’s efforts to study a particular subject. A teacher who has a high level of achievement motivation will have a high learning spirit which leads to increasing professionalism at work. Mcdlelland (1976) also supports this explanation. He said that people who have high achievement needs will have high standards of excellence in carrying out their profession. For teachers, the enthusiasm to study the subject they teach in class will automatically contribute to an increase in professionalism that results in effective learning. Furthermore, the effectiveness of teacher learning in the classroom will influence the students’ motivation to learn, thereby increasing the student’s academic achievement (Tucker et al. 2002).

**Conclusion**

Values and achievement motivation are two internal variables that play an important role in increasing teacher professionalism. The results of the first hypothesis show that values have a positive effect on teacher professionally with a correlation coefficient (R) of 0.489 and a regression coefficient (R2) of 0.249. The results of the second hypothesis show that the variable achievement motivation has a positive and insignificant effect on teacher professionalism with a coefficient (R) of 0.193 and a regression coefficient (R2) of 0.037. The results of the third hypothesis show that the teacher values and achievement motivation have a positive and significant influence on teacher professionalism with a correlation coefficient (R) of 0.563 and a coefficient of determination (R2) 0.316.

Achievement motivation would have a positive and significant impact on learning if it collaborates with values. This indicates that achievement motivation must be combined with values to maximize teacher professionalism. Therefore, in the development of teacher professionalism programs, these two aspects must be used to increase the teachers’ professionalism. These two internal aspects should be taken into consideration when formulating policies and programs for the improvement of teacher professionalism. The further researches are necessary to conduct in order to identify the factors which
influence those two research variables, either values or achievement motivation. Future studies need to be carried out in order to identify the factors that influence both research variables, both values and achievement motivation.

**Acknowledgment**

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Tyrimas atskleidė, kad didinant mokytojų profesionalumą vertybės gali būti svarbios ir vienos, o pasiekimų motyvacija turi teigiamą poveikį ir reikšmę tik jei derinama kartu su vertybėmis. Remiantis šiuo tyrimu, rekomenduojama atsižvelgti į šiuos du vidinius aspektus kuriant mokytojų profesionalumo ir gerinimo programas tiek valstybinėse, tiek privačiose įstaigose.

**Santrauka**


Tyrimas atskleidė, kad didinant mokytojų profesionalumą vertybės gali būti svarbios ir vienos, o pasiekimų motyvacija turi teigiamą poveikį ir reikšmę tik jei derinama kartu su vertybėmis. Remiantis šiuo tyrimu, rekomenduojama atsižvelgti į šiuos du vidinius aspektus kuriant mokytojų profesionalumo ir gerinimo programas tiek valstybinėse, tiek privačiose įstaigose.

**Esminiai žodžiai:** vertybės, pasiekimų motyvacija, mokytojų profesionalumas.