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## ASSESSING THE ROLE OF SPIRITUAL LEADERSHIP IN ENHANCING TEACHER COMMITMENT, PERFORMANCE, AND ENGAGEMENT

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Article Info	ABSTRACT
Submitted: 10-10-2025	The study examines how spiritual leadership improves teacher commitment, performance, and engagement in educational institutions. Spiritual leadership promotes comprehensive teacher development through transcendent values, ethical integrity, and motivational inspiration. Traditional leadership styles stress management efficacy. Indonesian empirical research on its impact is scarce despite its potential. The main goal was to explore spiritual leadership as an exogenous predictor of teacher dedication, engagement, and performance to fill gaps in how spiritual aspects affect education. The quantitative design used SmartPLS version 3.2.9 for Partial Least Squares Structural Equation Modeling (PLS-SEM). G*Power required 387 participants for 0.95 power, and 300 Indonesian instructors were recruited using online questionnaires (Likert scale: 1–5). Reliable instruments, developed from earlier studies, examined spiritual leadership (2 items), teacher commitment (6 items), engagement (6 items), and performance (6 items) (Cronbach's $\alpha > 0.70$ , AVE $> 0.50$ , HTMT $< 0.90$ ). The study found that spiritual leadership favorably impacted teacher commitment ( $\beta = 0.632$ , $p < 0.001$ ), engagement ( $\beta = 0.505$ , $p < 0.001$ ), and indirectly performance ( $\beta = 0.501$ , $p < 0.001$ ) and engagement ( $\beta = 0.360$ , $p < 0.001$ ). The model explains 39.9% of variance in commitment (moderate), 25.5% in engagement (poor), and 61.2% in performance (strong), with predictive significance ( $Q^2 = 0.212-0.371$ ). According to value-based motivation research, spiritual leadership can increase teacher dedication and efficacy. Educational leaders should use spiritual training to boost retention and performance. Cross-sectional data and self-reports are limitations; longitudinal study could examine factors like corporate culture.
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## INTRODUCTION

In recent years, research on leadership and its influence on employee performance has expanded into the field of spirituality. Approaches that are increasingly getting attention include spiritual leadership. Spiritual leadership involves the use of spiritual values and principles in leadership practice, which helps create a holistic and meaningful work environment. According to a study by Maryati and Astuti (2022) on the influence of spiritual leadership and employee engagement on employee performance, they found that spiritual leadership provides support and inspiration to employees, which in turn increases employee engagement and their performance. Another study by Sapta, Rustiarini, Kusuma, and Astakoni (2021) shows that spiritual leadership can also act as a mediator in building organizational commitment through spirituality in the workplace. This approach focuses on transcendent values in leadership that aim to inspire, motivate, and cultivate the spiritual aspects of employees and members of the organization. Through a variety of academic literature sources, research has shown that spiritual leadership is not just about ethical and responsible leadership, but also about how a leader is able to build a shared vision and environment that pays attention to the spiritual needs of his organization's members.

In the paper "Spiritual-Based Leadership Behavior in the Development of Islamic Educational Institutions" by Sarnoto and Sholihin (2017), it is clarified how spiritual leadership can play a vital role in the development of Islamic educational institutions. This paper as well as others such as "Spiritual Leadership in Educational Institutions: Analysis of Sharia Maqasid" by Millah and Far'ia (2020) describe the application of spiritual principles in the Islamic context that leads to the balanced and harmonious management and development of educational institutions. In addition, Azlimin and Juslan's (2021) work, which discusses the effects of spiritual leadership on improving the performance of human resources and organizations at the Kendari City Health Center, highlights the importance of a spiritual approach in improving performance in the health sector. Further analysis of the contribution of spiritual leadership is shown in research conducted by Mulyati (2018), revealing how competence, academic culture, and spiritual leadership can have significant impacts on motivation and have far-reaching implications for educational institutions.

High teacher commitment is very important in achieving quality education. Committed teachers have internal and external strengths that encourage them to embrace greater responsibility, variety, and challenges in their work. This internal strength comes primarily from the drive within the teacher to help students internalize important values. In addition, there are external forces stemming from the education reform movement that emphasize much higher standards and much greater accountability. This approach facilitates student learning and the development of expected behaviors. However, if there is a clash between career goals and values, as well as school goals and values, then the importance of dedication and commitment becomes greater. The goals and basic values of the teaching profession play a role in shaping changes in student behavior in accordance with the principles of education. The quality of education in an educational institution cannot be separated from the role and commitment of teachers which is one of the important aspects in the educational process. The commitment of teachers to their profession not only touches aspects of perseverance and persistence in teaching, but also shows their dedication to the development of quality and sustainable education. The series of studies unearthed by researchers such as Purwoko (2018), Marzuki (2021), Afifa (2022), Rifa'i et al. (2022), and Sari et al. (2021) indicate the importance of a deep understanding of the dynamics and factors that also influence increasing teacher commitment. The principal's leadership, teacher work discipline, school culture, and organizational culture are some of the components that interact in creating a conducive environment to strengthen teacher commitment.

Pardosi and Utari (2021) who focus on the leadership role of school principals in improving teacher performance and student achievement. Finally, research by Ahad, Mustafa, Mohamad, Saadah Abdullah, and Nordin (2021) found that teachers' work attitudes, organizational commitments, and emotional intelligence have a positive correlation with teacher performance in vocational school contexts. Teacher performance has become an important focus in educational research, examining how teaching quality affects student learning outcomes and overall school performance. Teacher performance is defined through various dimensions, including classroom managerial ability, pedagogical readiness, didactic understanding, to students' socio-economic influences. In works such as those written by Depri (2020), which explores classroom management, or Ummah et al. (2020) which examines the use of SPADA in preparing professional mathematics teachers,

we can see an overview of the set of competencies that teachers must have to achieve optimal performance. In line with that, the study conducted by Suhardin, Hunen, and Erwina (2023) focuses on the relationship between certification and gender with teacher performance. In the same year.

Teacher engagement and job satisfaction are key to educational institution success. Skaalvik and Skaalvik (2019) show the relationship of self-efficacy and collective with teacher involvement. Melesse and Belay (2022) found professional learning increases engagement and satisfaction and mediating effects on job satisfaction. In 2023, Skaalvik and Skaalvik also know the collective culture of teachers, school structure goals, and self-efficacy have an impact on teacher engagement. Fane and Sugito (2019) underline teacher interaction and student motivation essential for math achievement. Junianto and Wagiran (2013) have described teacher teaching performance and parental participation as affecting student achievement. Zulaiha and Rohman (2020) show the strategic role of teachers involving parents during the COVID-19 pandemic for students' understanding of science. Ayok (2021) and Randa et al. (2019) explain the quality of teaching and the active role of teachers have an impact on student quality and engagement, affirming that quality teachers teach, motivation, and inspiration.

## **LITERATURE REVIEW**

The behavior of leaders who practice spiritual-based leadership in the development of Islamic educational institutions is explored by Sarnoto & Sholihin (2017). The study uncovers how such leadership styles help instill spiritual values and foster motivation that goes beyond conventional management practices, thus contributing to the development of such institutions in a more holistic manner. Millah & Far'ia (2020) explore the concept of spiritual leadership in educational organizations from the perspective of Maqasid Sharia, highlighting how leaders can align educational goals with Islamic spiritual goals. This paper suggests that spiritual leadership can guide educational institutions towards achieving higher goals in line with Islamic teachings. Azlimin & Juslan. (2021) Studying the influence of spiritual leadership on improving the performance of human resources and organizations in health centers. Their findings suggest that spiritual leadership has a significant positive influence on individual performance and organizational effectiveness. Mulyati (2018) investigates the impact of competence, academic culture, and spiritual leadership on

motivation and its implications in the academic field. The results underline that spiritual leadership combined with a strong academic culture and high competence can increase the motivation of educators and academic staff so as to have a positive impact on the academic environment. A second study conducted by Mulyati (2018) reaffirms the importance of these factors, and may point to a strong relationship that could have implications for policy development and leadership training in academic institutions.

Ummah et al. (2020) discussed the preparation and performance of mathematics teachers with a focus on the use of the SPADA digital teaching platform, and pointed out the importance of readiness in teacher performance in the digital era. Research by Suhardin et al. (2023) found certification as a benchmark for teacher quality and noted the impact of gender on teacher performance. Hurun Ainun et al. (2022) highlight the influence of constructivist strategies on teacher performance in Islamic Religious Education, while Rimadhani and Abduh (2022) evaluate how teachers help students from low socioeconomic backgrounds improve their academic achievement. Fane and Sugito (2019) emphasize the influence of teacher behavior and parental involvement on academic achievement in mathematics, similar to Junianto and Wagiran (2013), who assessed parental involvement and achievement motivation as supporting factors for student success. Zulaiha and Rohman (2020) discuss teacher strategies and parental involvement in learning science concepts.

### **Leadership**

As stated by Rivai (2007), the definition of leadership is as follows: the process of motivating employees to achieve organizational goals, improving their ability to lead their groups, and improving their quality of life. In addition, it also influences how participants interpret research findings and case studies, as well as organizational efforts and activities to reach consensus, strengthen teamwork and collaborative working relationships, and support individuals outside the group or organization. According to Tasmara (2002), leadership refers to the ability to take positions and occasionally maintain roles so that one's own actions have an impact on the environment. According to Farland's analysis in Danim (2004), leadership is a process where leadership that is implemented will provide benefits or losses, or losses that will be suffered by the work of others to achieve predetermined goals.

### **Spirituality**

Spiritual leadership can also be viewed as a paradigm that also appears in broader spirituality in the workplace. This is a crucial step in developing vision and conformity values at the level of individuals, groups, and organizations that are cultivated and can be applied in religious and spiritual organizations. (Fry, 2003; Fry & Egel, 2017). Intrinsically, spiritual leadership motivates and inspires workers through transnational vision and progress through sequential altruistic business values To meet universal needs through Call to Turn Membership, and productivity, and, to maximize commitment, universality and staff retention.

### **Commitment**

According to Sahertian (1994), affection for work and the tasks associated with it fosters a spirit of commitment and attention. This commitment is an intrinsic trait that all people have, but the variability is high between individuals. Different levels of commitment are influenced by a person's growth and psychological process, relying on scientific principles. Meanwhile, Nawawi and Martini (1993) argue that a person's determination in doing their duties is a real form of commitment. This determination includes the willingness to accept or reject certain goals and choose specific actions to take. Commitment requires that one not only speaks, but also acts according to one's words and responsibilities, not only for personal gain, but as a manifestation of a determination.

### **Performance**

In the context of improving the quality of education, the contribution of every stakeholder, especially teachers, is a key factor. Excellent teacher performance results in positive work outcomes, which directly contribute to the achievement of educational goals. Ruky (2002) understands performance as a combination of components or inputs that can be utilized by an organization for performance improvement—which includes aspects of people, technology, operational methods, and the quality of the physical environment—which collectively bring improvements to the education sector. However, optimization of performance is not a simple process, caused by many factors that can influence it. On the other hand, Malayu (2003) defines performance as an achievement of individual work results based on competence, experience, dedication, and time in carrying out tasks. Meanwhile, according to Pariata Westra, 'Performance' or performance is interpreted as work output or execution of a job task. In contrast to August W. Smith who argued that

performance is the result of a process whether carried out by humans or not. From this description, it is noted that teacher performance should be measured based on the quality and quantity of real work obtained during teaching tasks, including designing learning programs, the implementation of learning itself, as well as in the implementation and analysis of learning evaluation.

### **Teacher Involvement**

Kahn in Saks (2016) states that, engagement can lead both to individual outcomes, such as work quality and one's work experience. As well as the results of organizational outputs, such as organizational growth and productivity. According to Richard Ingersoll (2001), a professor at the University of Pennsylvania, teacher engagement is "the level of teacher engagement in their work that includes commitment to teaching tasks, job satisfaction, and motivation to improve teaching quality." Teacher engagement has a very important role for the initiation of changes that schools want to make. Changes in school organization are one of the most important things with the demands of an era that is always moving dynamically, continuously, and competitively.

### **METHOD**

Endogenous variables in this study are teacher commitment, performance, and involvement. This variable is the focus of the study and can be influenced by other variables in the study. The exogenous variable in this study was spiritual leadership. This variable is an independent variable that can affect endogenous variables in this study. The unit of analysis/object of study, namely the teacher, was given an online questionnaire in the form of a Likert scale (1 strongly disagrees – 5 strongly agrees). From October 19, 2023 to October 30, 2023, we received 300 respondents using Google forms.

### **SAMPLE**

According to Swarjana, 2022, the selected part of the population selected through several processes with the aim of investigating or studying certain characteristics of the parent population, or it can also be said that the selected part of the population selected through the sampling method in a study is the definition of sample. Meanwhile, in the opinion of other experts, a sample is a portion of the number and characteristics possessed by a

particular population. Sampling occurs when the population is large, and researchers are unlikely to study everything in the population, for example due to limited funds, energy, and time, so researchers can use samples taken from the population for research (Ahmad & Jaya, 2021). In this study, G Power was used to calculate the minimum sample size required which is useful for testing the analysis of this study. Based on this, testing suggested that the total sample required in this study was 387 which reached a strength of 0.95. Meanwhile, the method used to analyze data is the SEM-PLS approach method on Smart PLS version 3.2.7.

**DATA COLLECTION INSTRUMENTS**

This research instrument consists of two parts. The first part is a questionnaire used to collect demographic information from respondents. The second part of the questionnaire contains information related to research and views from various sources, which the research team summarised into 20 questions divided into 4 constructs, namely the influence of the role of Spiritual Leadership (2 items) adopted from Ulfah Supriani (2022) and Fadliah (2022). and, Comitmen Teacher (6 items) adopted from Duc An Nguyen (2022), Jemani (2020). and Faury Hidayati (2017), and Engagement Teacher (6 items) adopted from Duc An Nguyen (2022) and Performance Teacher (6 items) adopted from Kazi Enamul Hoque (2020) Each statement in the questionnaire was measured using a Likert scale involving the option "Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree". Overall, the questionnaire was well received by the respondents

INPUT		OUTPUT	
Tail(s)	One	Lower critical R <sup>2</sup>	0.0285281
H1 ρ <sup>2</sup>	0.05	Upper critical R <sup>2</sup>	0.0285281
H0 ρ <sup>2</sup>	0	Total sample size	387
α err prob	0.05	Actual power	0.9504517
Power (1-β err prob)	0.95		
Number of predictors	5		

In this study, we used the G Power program to determine the number of samples or samples we needed. We managed to collect data from 300 people to be sampled. The power to analyze this sample was very high, 95% of the total 7,921 people in the group we saw. To process the data, we use the SEM-PLS technique with the help of Smart PLS software version

3.2.9, in accordance with the steps that have been set. In the first stage, we check whether the way we measure this is reliable and correct, by testing reliability and accuracy. In the second stage, we assess the structure model by looking at how closely the relationship between the variables we choose ourselves (independent) and the outcome variables (dependent) according to the source Hair et al. in 2017.

## RESULT

### DESCRIPTION OF RESEARCH DATA

**Table 2 Demographic Profile of Teachers**

Variable	Demographics	Frequency (N-387)	Presentation	Mean
Age	<30			
	>30			
Gender	Law	146	46,2%	
	Woman	154	53,8%	
Current education	S1		60,3%	
	S2		39,7%	

This table displays statistical results from a google form questionnaire that describes the demographics of respondents from this study. Based on this demographic data, it can be seen that the age of respondents <30 and >30 with a total of 301 respondents but in our data only need 300 respondents. Furthermore, the gender of male respondents was 146 with presentations (46.2%) and women as many as 154 with a percentage (53.8%). And for the education level of S1 respondents as many as (60.3%) and the remaining S2 as many as (39.7%).

## DATA ANALYSIS

This study chose the PLS-SEM method to predict the results precisely. For data analysis and purposeful theory testing, Smart PLS software is used, as recommended by Hair and colleagues in 2017. This technique helps in building detailed models of the factors that influence academic fatigue and student learning outcomes. The strength of this research design lies in measuring instruments that have been verified using Smart PLS, which guarantees precise measurements of the things that are the focus of research (Hair, Matthews, Matthews, & Sarstedt, 2017). For the validation of the tool, this study applied a

method to check the reliability and accuracy of data with the help of Smart PLS version 3.2.9. The first step is to import the unprocessed data into Excel software in CSV form. After data input is complete, the data analysis process is carried out following the steps that have been set.

**Table 2 Cross Loadings**

Construct	Question	Mean	Loading	BRIG HT	Bird	Reliability	Cronbach's
Leadership spiritualism	Leaders always work based on Divine (Spiritual) principles	4,680	0,923	1,700	0,820	0,901	0,782
	My leader encouraged me to pray to God Almighty for smooth running before doing activities.	4,630	0,603	1,700			
Teacher Commitment	Leaders Consider the benefits of the institution in taking actions or decisions.	4,700	0,887	1,312	0,545	0,877	0,831
	Does a teacher feel guilty if he leaves this institution now?	4,453	0,792	2,199			
	A teacher will feel emotionally attached to this institution.	4,470	0,797	2,150			
	A Master will work hard to establish the good name of this institution	4,617	0,677	1,530			
	A teacher will put more effort into realizing the ideals of this institution.	4,520	0,755	1,867			
	Will a teacher be happy spending the rest of his career at this institution?	4,463	0,785	1,880			
Teacher Engagement	In working in this institution, I want to vent the energy I have				0,526	0,845	0,769
	In being a teacher, I always persevered even when things didn't go well.	4,613	0,562	1,205			
	In class I show warmth to my students	4,633	0,790	1,765			

	In class I care about my students.	4,670	0,813	1,859			
	When I teach I work with a pretty good intensity.	4,703	0,682	1,321			
	I am passionate about teaching.	4,613	0,751	1,511	0,627	0,909	0,880
Teacher Performance	I improved my classroom instruction to deliver lessons successfully.	4,600	0,691	1,497			
	My students performed well in exams when I changed my teaching style.	4,457	0,801	2,026			
	When teaching I pay a lot of attention to my work	4,503	0,773	1,791			
	I have good control after being supervised by my boss	4,297	0,839	3,091			
	I have good classroom management after being supervised by my superiors.	4,330	0,834	3,259			
	I improve my teaching practice because I often follow advice or feedback from my supervisor	4,417	0,804	2,132			

Based on the table above, it can be seen that based on the mean score, the **Teacher Engagement** variable has the highest mean value of 4.7. At the second level, the **Teacher Commitment** variable has a mean value of 4.7. While the learning achievement variable has the lowest mean value of 4.2.

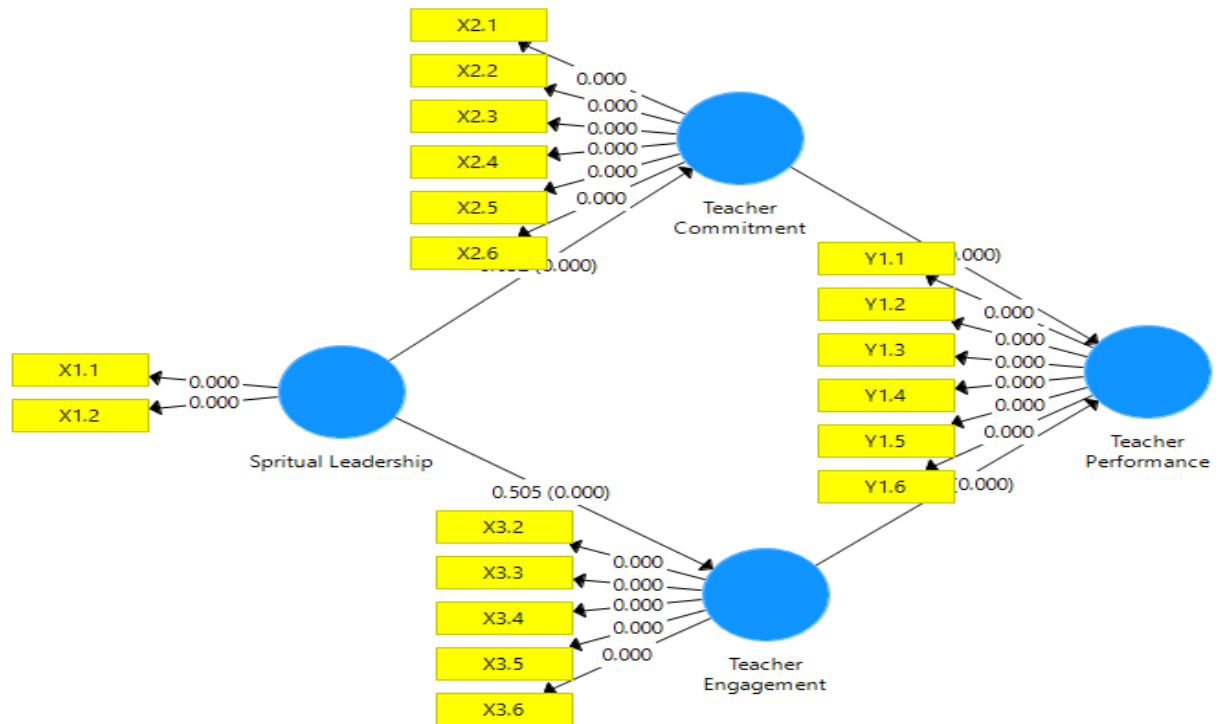


Figure 1 : PLS Algorithm Processing Results

### 3.1.3 Evaluasi Model Pengukuran *Confirmatory Composite Analysis (CCA)*

Step 1: Assess the loading indicator and its significance. Standardized loading must have a value of at least 0.708 and a corresponding t-statistic above  $\pm 1.96$  to be significant in a two-tailed test at a rate of 5% (Hair, Ringle, & Sarstedt, 2011). T-statistics in PLS-SEM are obtained by running bootstrapping procedures (Hair, *et al.*, 2012). Alternatively, Wood (2005) introduced the use of confidence intervals with PLS-SEM. Confidence interval loading indicators can be used in a similar way to t-statistics and intervals that do not include zero are statistically significant. The benefit of confidence intervals is that the dichotomous approach of significance testing can be avoided, and authors may consider other methods to identify practically significant indicator loading when using confidence intervals (Cohen, 1994). We generate data using SmartPLS 3.2.9 to display the loading of all items. Table 3 and figure 1 comprehensively summarize the loading of 20 items. Teacher Engagement (X3.3; 0.562) had the lowest score, while Spiritual Leadership had the highest score (X1.1; 0.923).

Step 2: Squaring the load of the individual indicator provides a measure of the number of variances shared between the individual indicator variables and their associated constructs. This is referred to as indicator reliability (Hair, *et al*, 2019).

Step 3: Construct reliability is measured through Cronbach's alpha and composite reliability (CR), with a minimum criterion limit of 0.70. CR is considered more accurate than Cronbach's alpha because it takes into account variable weights and must be reported. Too high reliability ( $\geq 0.95$ ) indicates the redundancy of the indicator. Table 3 shows all constructs exceeding the 0.70 threshold. Spiritual Leadership recorded 0.782 for Cronbach's alpha and 0.901 for CR. Teacher Commitment recorded values of 0.831 and 0.877; Teacher Engagement 0.769 and 0.845; Teacher Performance of 0.880 and 0.909 for Cronbach's alpha and CR respectively. Step 4: Measurable convergent validity of the similarity of correlations between indicators of the same variable, assessed with AVE. AVE indicates how well the indicator reflects the construct with the generally accepted value being 0.5 or more for sufficient validity. In this study, the AVE scores for 'Teacher Engagement' were 0.526 (52% variation) and 'Spiritual Leadership' 0.820 (82% variation), both exceeding the 0.5 threshold, signifying sufficient convergent validity. High AVE values indicate strong support for the measurement of research variables, but comprehensive statistical analysis and consideration of the research context are strongly recommended for confirmation of validity.

Step 5: Discriminant validity measures the uniqueness of a construct. Discriminant validity is demonstrated when the variants shared within a construct (AVE) exceed the variants shared between them. The method that should be used is *heterotrait-monotrait ratio of correlations* (HTMT) (Henseler, Ringle, & Sarstedt, 2015). Researchers can use withholding scores such as 0.85 and 0.90 to interpret their HTMT results. In addition, Franke and Sarstedt (2019) recently recommended additional significance testing that includes confidence intervals to better assess HTMT ratio and discriminant validity. All HTMT values in table 5 get values less than 0.900, indicating a significant difference. In the Smart PLS 3.2.9 application, discriminant validity was tested using *cross-loading, Fornell-Larcker Criterion and Heterotrait-Monotrait (HTMT) methods* (Henseler *et al*, 2015).

**Table 4 *Fornell-Larscher* Criterion**

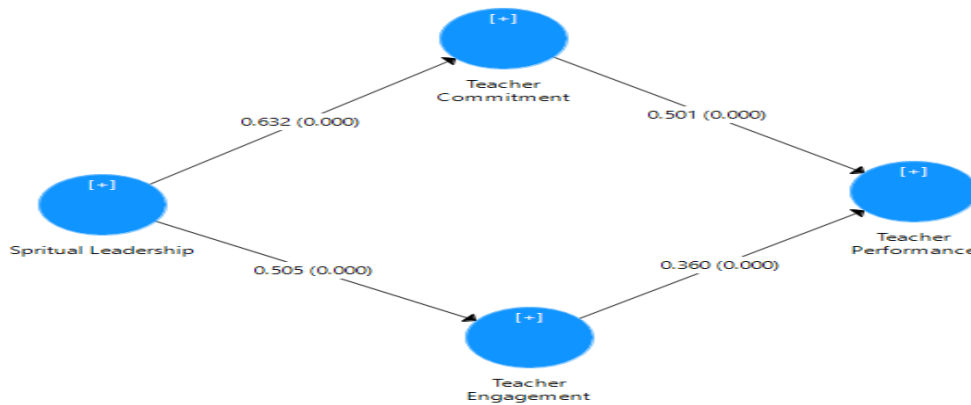
	Spiritual Leadership	Teacher Commitment	Teacher Engagement	Teacher Performance
Spiritual Leadership	0,905			
Teacher Commitment	0,632	0,738		
Teacher Engagement	0,505	0,644	0,725	
Teacher Performance	0,515	0,732	0,682	0,792

Discriminatory validity criteria were determined following the Fornell-Larcker method and cross-loading criteria, as analyzed in Table 4. Numbers that are not on the primary diagonal mark the relationship between different variables, while numbers on the main diagonal represent the square of the calculated average success, accentuating the average variance extracted (AVE) of each variable that is superior to the others. The data show that the square root of the mean AVE has a greater value when compared to the correlation between variables exposed below it. This means that the square root of the mean AVE of each variable exceeds the correlation number of the variable with the others to be examined, this is a strong indication of adequate discriminatory validity according to Hair et al. (2011). The test results for discriminatory validity applied in this study using the Heterotrait-Monotrait Ratio approach are presented in

**Table 5 described HTMT**

	Spiritual Leadership	Teacher Commitment	Teacher Engagement	Teacher Performance
Spiritual Leadership				
Teacher Commitment	0,785			
Teacher Engagement	0,636	0,806		
Teacher Performance	0,615	0,847	0,829	

Cross-loading methods and the Fornell-Larcker criterion are less effective at measuring discriminant validity. The better Heterotrait-Monotrait (HTMT) method has a value limit below 0.9 for good discriminant validity between reflective variables. The results from table 5 show the HTMT values between the variables of teacher engagement and commitment, as well as teacher performance towards spiritual leadership are 0.785, 0.636, and 0.615. HTMT scores for teacher performance relative to teacher engagement and commitment were 0.806, 0.847, and 0.829. Although HTMT is useful, the validity of discriminants is best assessed using various



**Figure 2 : Bootsraping Processing Results**

method and analyze the results in the context of the study to ensure proper assessment.

### **Structural Model Assessment**

Step 1: in structural model evaluation is to check multicollinearity with VIF values or bivariate correlations. A value of  $VIF < 3$  or  $correlation < 0.50$  indicates multicollinearity is not a problem. In case of multicollinearity, it is recommended to merge separate constructs into higher constructions. In this study, there was no value of  $VIF > 5$ , indicating no multicollinearity problem (Cenfetelli & Bassellier, 2009; Hair et al., 2017 Step 2: If multicollinearity is not an issue, the second step is to check the size and significance of the path coefficient. This process allows researchers to test hypothesized relationships between these constructs. The path coefficient is a standardized value that can range from

+1 to -1, but rarely comes close to +1 or -1. This is especially true with complex models that have multiple independent constructs in the structural model. The closer the path coefficient value is to 0, the weaker the ability to predict dependent (endogenous) constructs, and the closer those values are to absolute values from 1, the stronger the ability to predict dependent constructs. To evaluate the structural model, the research data was subjected to bootstrapping method (300 sub-samples). The structural model for the four hypotheses of this study proved significant with a P-value on the Spiritual Leadership • Teacher Commitment hypothesis of 0.000. In the Spiritual Leadership hypothesis → Teacher Engagement is 0.000. In the hypothesis, the Teacher Commitment → Teacher Performance is 0.000. Teacher Engagement → Teacher Performance of 0.000 (Table 6).

Table 6 Hypotesis

hipotesis	Average Sample (M)	Path coefficient	P Value	Support
Spritual Leadership -> Teacher Commitment	0,633	0,632	0,000	Supportted
Spritual Leadership -> Teacher Engagement	0,505	0,505	0,000	Supportted
Teacher Commitment -> Teacher Performance	0,501	0,501	0,000	Supportted
Teacher Engagement -> Teacher Performance	0,362	0,360	0,000	Supportted

In assessing structural models, R<sup>2</sup> or coefficient of determination is the primary metric used to measure the extent to which endogenous constructs can be predicted in a given sample, rather than the general population. R<sup>2</sup> ranges from 0 to 1, with higher values signaling better predictions. Researchers should compare R<sup>2</sup> with similar studies and may also use adjusted R<sup>2</sup> that considers sample size and number of predictor constructs. For example, R<sup>2</sup> values of 0.75, 0.50, and 0.25 signify strong, medium, and weak forces in explaining variability in the model. Hair et al. (2020) propose a general interpretation for R<sup>2</sup> values: 0.67 for strong strength, 0.33 for medium, and 0.19 for weak. The data shows that Teacher Commitment, Teacher Performance, and Teacher Engagement each have moderate, high, and weak explanatory strengths of variability.

**Table 7 Coefficient of Determination (R2)**

Teacher Commitment	0,399	0,397
Teacher Engagement	0,255	0,252
Teacher Performance	0,612	0,609

Step 4: The second measure of predictability of the structural model is the effect measure, which provides an estimate of the predictive ability of each independent construct in the model. To calculate this value, each predictor construct is systematically removed from the model (SmartPLS does this automatically) and a new R2 is calculated without that predictor. Furthermore, R2 with the predictor in the model is compared with R2 without the predictor in the model, and the difference between the two R2 values indicates whether the omitted construct is a meaningful predictor of the dependent construct (Hair, *et al.*, 2017). The effect size, referred to as  $f^2$ , is classified as small, medium, and large. Values above 0.02 and up to 0.15 are considered to have little effect; values of 0.15 and up to 0.35 are of moderate effect; and values of 0.35 and above are influential (Cohen, 1988). The effect size is also considered a predictive metric in the sample. The value of  $f^2$  is presented in table 8 below. From the results in table 8 shows that Teacher Engagement has a small effect on Teacher Performance. And for spiritual leadership, it has a big influence on teacher commitment. In addition, Teacher Commitment has a major influence on Teacher Performance.

**Tabel 8 effect size (F2)**

	Spritual Leadership	Teacher Commitment	Teacher Engagement	Teacher Performance
Spritual Leadership		0.664	0.342	
Teacher Commitment				0.378
Teacher Engagement				0.195
Teacher Performance				

Step 5: The third metric used to assess predictions is the Q2 value, also known as blindfolding (Geisser, 1974; Stone, 1974). Some scholars regard this metric as an assessment of out-of-sample predictive power, and so far it is. However, this metric is definitely not a model prediction metric as powerful as PLSpredict, which is described in the next step. When interpreting Q2, values greater than zero have meaning, while values below 0 indicate a lack of predictive relevance. In addition, Q2 values greater than 0.25 and 0.50 represent medium and large predictive relevance of the PLS-SEM model. *Redundant cross-validation* (Q2) or Q-square tests are used to evaluate the predictive significance of the model. If the value of  $Q2 > 0$ , it indicates that the model has accurate predictive ability for a particular variable. Conversely, if the value of  $Q2 < 0$ , indicates that the model does not have a significant predictive value (Sarstedt, *et al.*, 2017).

Tabel 9 Q Square

	SSO	SSE	Q2 (=1-SSE/SSO)
Spiritual Leadership	600.000	600.000	
Teacher Commitment	1800.000	1417.945	0.212
Teacher Engagement	1500.000	1305.601	0.130
Teacher Performance	1800.000	1132.803	0.371

## DISCUSSION

Research on the impact of spiritual leadership on teacher commitment, connectedness, and performance in schools offers an important perspective in the study of educational management. The hypothesis that spiritual leadership has a significant influence on these variables postulates that leaders who display characteristics such as high integrity, awareness of greater purpose, and the ability to inspire and give meaning to work to teachers tend to increase their dedication, loyalty, and effectiveness in teaching. This leadership style is assumed to not only strengthen an individual's identification of the school through shared values and vision, but also improve teaching performance as teachers feel more connected and motivated to contribute to broader educative goals.

H1: Spiritual leadership has an influence on teacher performance. In previous research Azlimin and Juslan (2021) concluded that spiritual leadership, which focuses on values, ethics, integrity, and personality of leaders, has a significant positive impact on improving the performance of human resources, including in the health sector.

Mulyati (2018) noted a positive correlation between spiritual leadership, competence, and academic culture with motivation, which affects performance improvement. Permatasari and Frendika (2022) observed that the implementation of spiritual leadership in educational institutions has a positive influence on the morale of teachers, which indirectly affects their performance in the educational process. Utomo and Pamungkas (2022) revealed that spiritual leadership acts as a strong mediator in the relationship between job satisfaction, organizational commitment, and employee performance, emphasizing the importance of spiritual elements in understanding performance dynamics.

H2: Teachers' commitment to their profession and educational institutions has a positive effect on their performance in school, so the higher the commitment of a teacher, the higher his performance. Purwoko (2018) shows that teacher commitment has an impact on school operational efficiency and the educational performance they do, directly affecting quality education output. Marzuki (2021) underlines the importance of increasing teacher work commitment, linking it to improving the quality of teaching and student learning outcomes. Afifa (2022) supports the idea that commitment is one of the important aspects that affect the professionalism of teachers and their performance in the school environment.

Rifa'i et al., (2022) specifically suggest that strengthening teacher commitment can be key in creating more effective learning. Sari et al., (2021), indicated that teacher commitment can be increased through optimizing the principal's leadership, which then has a positive impact on teacher performance. Fane & Sugito (2019) indicate a relationship between teacher behavior and student mathematics learning achievement, implying that teacher involvement in mathematics learning can contribute to increased student academic achievement. Junianto & Wagiran (2013) show that teacher teaching performance is one of the factors that influence student achievement, which confirms the importance of the teacher's active role in education to achieve the desired results. H:3 Zulaiha & Rohman (2020) discuss teacher strategies and parental involvement, describing the importance of collaboration between teachers and parents in improving children's understanding of science concepts. Ayok (2021) emphasizes the importance of teacher quality and parental involvement as the key to improving student quality, which indirectly points to the

influence of teachers' pedagogical leadership on their own performance and student learning outcomes. Randa et al., (2019) highlight the importance of the teacher's role to student engagement, suggesting that teacher involvement in lessons triggers active student participation, which contributes to teaching effectiveness. Luji et al., (2021) discuss teacher involvement in church ministry, which can reflect the broader role of teachers in character development, potentially influencing their teaching performance positively. H4: Leadership has an influence on teacher performance. In previous research, based on the results of a study by Depri (2020), leadership involving adequate academic supervision, as explained by Hambali, Rosyidah, and Djuwairiyah (2023), is a key factor that leads to better teacher performance in managing the classroom. In addition, leadership that supports the application of innovative learning methods, such as the flipped-classroom model adapted by Manikowati (2019), encourages improving teacher performance in delivering lesson materials. Furthermore, Sipayung (2020) stated that the principal's leadership followed by a directed attitude and diverse thinking can stimulate the creativity of teachers, which Rimadhani and Abduh (2022) believe can improve students' academic performance, especially those from low socioeconomic backgrounds.

#### **CONCLUSIONS AND ADVICE**

The results of the instrument analysis, which uses the Rasch model to test the variables of teacher working hours in Indonesia, consist of eight hypotheses that have been proven to have validity and reliability based on criteria that differ from conventional measures of validity and reliability. The validity of the instrument using Rasch modeling can produce the validity of the item and its person. While the reliability of the instrument produces *person reliability*, *item reliability* and *Alpha Cronbach*. The results of testing differences in perception of instrument items using Rasch modeling produce findings that can be found solutions. The conclusions of this study regarding the influence of spiritual leadership on teacher commitment, teacher linkage, and teacher performance supported by questionnaire data from 300 respondents processed using SMART PLS version 3.2.7 can be formulated as follows: Spiritual leadership is an important factor that has a significant impact on improving the quality and effectiveness of teaching carried out by teachers. First, there is a positive relationship between spiritual leadership and teacher commitment. This means that in environments where leaders implement spiritual values in their leadership, teachers tend to show higher levels of commitment in their work. Second, spiritual leadership also influences the interconnectedness of teachers. That is, the stronger the

spiritual leadership in a school or educational institution, the greater the emotional and professional connection teachers feel to the place where they teach.

Finally, the impact of spiritual leadership on teacher performance shows that leadership styles that prioritize soul and moral development not only increase morale but also improve teacher performance. A spiritual leader in an educational setting creates an atmosphere where teachers feel supported and valued, thus encouraging them to work better and more effectively. The conclusion is based on quantitative data analysis from online questionnaire answers collected through Google Form and confirmed through structural equation modeling using SMART PLS software version 3.2.7. These findings underscore the importance of spiritual leadership in improving teacher commitment, connectedness, and performance, which overall contributes to improved quality of education.

#### **Data availability statement**

This study's anonymized dataset, analytical code, and survey instruments are accessible from the corresponding author upon reasonable request. Data are de-identified and restricted to academic, non-commercial use under a data-sharing agreement. Institutional ethics prevent public repository use.

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#### **Generative AI statement**

Gemini (version not mentioned) was used for language improvement, methodical summary, and table layout. The writers meticulously checked all outputs for accuracy, originality, and reference validity. Authors are responsible for the content; no AI tool is credited. No confidential or individually identifiable information was entered into AI systems without protections and consent. Plagiarism and reference accuracy were checked.

## REFERENCES

- Abd Razak, N., Darmawan, I. G. N., & Keeves, J. P. (2010). The influence of culture on teacher commitment. *Social Psychology of Education*, 13, 185-205. <https://doi.org/10.1007/s11218-009-9109-z>
- Afifa, M.-. (2022). UNDERSTANDING THE COMMITMENT OF PROFESSIONAL TEACHERS. JPG: *Journal of Teacher Education*, 3(2). <https://doi.org/10.32832/jpg.v3i2.6968>
- Ahad RMustafa MMohamad S et al. See more *Journal of Technical Education and Training*, (2021), 13(1) Work attitude, organizational commitment and emotional intelligence of Malaysian vocational college teachers Ahad, R., Mustafa, M. Z., Mohamad, S., Saadah Abdullah, N. H., & Nordin, M. N. (2021). Work Attitude, Organizational Commitment and Emotional Intelligence of Malaysian Vocational College Teachers. *Journal of Technical Education and Training*, 13(1). <https://doi.org/10.30880/jtet.2021.13.01.002Ahad>,
- Firestone, W. A., & Pennell, J. R. (1993). Teacher commitment, working conditions, and differential incentive policies. *Review of educational research*, 63(4), 489-525. <https://doi.org/10.3102/00346543063004489>
- Fresko, B., Kfir, D., & Nasser, F. (1997). Predicting teacher commitment. *Teaching and teacher education*, 13(4), 429-438. [https://doi.org/10.1016/S0742-051X\(96\)00037-6](https://doi.org/10.1016/S0742-051X(96)00037-6)
- Hambali, M., Rosyidah, A., & Djuwairiyah, D. (2023). ACADEMIC SUPERVISION OF THE HEAD OF ISLAMIC EDUCATION INSTITUTION IN IMPROVING TEACHER PERFORMANCE PERFORMANCE. *Edupeedia : Journal of Islamic Education and Pedagogy Studies*, 7(2). <https://doi.org/10.35316/edupedia.v7i2.2660>
- Harsono, B., & Iswadi, I. (2023). THE EFFECT OF INFORMATION PROGRESS SKILLS AND WORK HABITS ON G URU PERFORMANCE. *Research and Development Journal of Education*, 9(1). <https://doi.org/10.30998/rdje.v9i1.16317>
- Hurun Ainun, M., Suhardini, A. D., & Afrianti, N. (2022). Constructivist Analysis of Teacher Performance in Islamic Religious Education (PAI) Learning at Darul Hikmah High School. *Bandung Conference Series: Islamic Education*, 2(2). <https://doi.org/10.29313/bcsied.v2i2.4339>
- Husnah, A., Harapan, E., & Rohana, R. (2021). The Influence of Principal's Leadership and Organizational Culture on Teachers' Commitment in Carrying Out Duties. *Journal of Educational Management: Scientific Journal of Educational Administration, Management and Leadership*, 3(1). <https://doi.org/10.21831/jump.v3i1.38599>
- James Billy, L., & Taat, M. S. (2020). Budaya Sekolah: Hubungannya dengan Komitmen Guru. *Malaysian Journal of Social Sciences and Humanities (MJSSH)*, 5(10). <https://doi.org/10.47405/mjssh.v5i10.511>
- .1845
- Luji, D. S., Lopo, I., & Soibala, A. v. (2021). Involvement of PAK SMU Negeri Se-Kota Kupang Teachers in Church Services. *HUPERETES: Journal of Theology and Christian Education*, 2(2). <https://doi.org/10.46817/huperetes.v2i2.54>
- Manikowati, M. (2019). Application of Flipped-Classroom Model to Improve Teacher Performance in English Lessons (Case Study at SMA Negeri 1 Narmada, West Nusa Tenggara). *Technodika*, 17(2). <https://doi.org/10.20961/teknodika.v17i2.34957>
- Mart, C. T. (2013). A passionate teacher: Teacher commitment and dedication to student learning. *International Journal of Academic Research in Progressive Education and Development*, 2(1), 437-442.

- Marzuki, M. (2021). increased teacher work commitment EFFORTS TO INCREASE TEACHER WORK COMMITMENT IN THE FIELD OF STUDY. *Journal of Educational Management*, 12(2). <https://doi.org/10.21009/jmp.v12i2.11109>
- Melesse, T., & Belay, S. (2022). Uplifting teachers' professional capital through promoting engagement in professional learning: Mediating effect of teacher job satisfaction. *Cogent Education*, 9(1). <https://doi.org/10.1080/2331186X.2022.2057102>
- Millah, N. I. A. Q., & Far'ia. (2020). Spiritual Leadership in Educational Institutions: Analysis of Sharia Maqasid. *IQ (Science of the Qur'an): Journal of Islamic Education*, 3(01). <https://doi.org/10.37542/iq.v3i01.56>
- Mulyati, T. (2018). THE INFLUENCE OF COMPETENCE, ACADEMIC CULTURE AND SPIRITUAL LEADERSHIP ON MOTIVATION AND ITS IMPLICATIONS. *EQUITY (Journal of Economics and Finance)*, 19(1). <https://doi.org/10.24034/j25485024.y2015.v19.i1.90>
- Nurabadi, A., Irianto, J., Bafadal, I., Juharyanto, Gunawan, I., & Adha, M. A. (2021). The effect of instructional, transformational and spiritual leadership on elementary school teachers' performance and students' achievements. *Cakrawala Pendidikan*, 40(1). <https://doi.org/10.21831/cp.v40i1.35641>
- Pardosi, J., & Utari, T. I. (2021). Effective principal leadership behaviors to improve the teacher performance and the student achievement. *F1000Research*, 10. <https://doi.org/10.12688/f1000research.51549.1>
- Permatasari, S. I., & Frendika, R. (2022). The Influence of Spiritual Leadership on Teacher Morale at Pelita Bandung Vocational High School. *Bandung Conference Series: Business and Management*, 2(2). <https://doi.org/10.29313/bcsbm.v2i2.4172>
- Purwoko, S. (2018). The influence of the principal's leadership, teacher commitment, teacher work discipline, and school culture on the performance of vocational teachers. *Journal of Accountability of Education Management*, 6(2). <https://doi.org/10.21831/amp.v6i2.8467>
- Qorimah, E. N., & Laksono, W. C. (2023). Teacher Involvement in the Development Process of Independence of Elementary School Students. *Basicedu Journal*, 7(3). <https://doi.org/10.31004/basicedu.v7i3.5180>
- R., Mustafa, M. Z., Mohamad, S., Saadah Abdullah, N. H., & Nordin, M. N. (2021). Work Attitude, Organizational Commitment and Emotional Intelligence of Malaysian Vocational College Teachers. *Journal of Technical Education and Training*, 13(1). <https://doi.org/10.30880/jtet.2021.13.01.002Ahad>,
- Rachmawati YSuyatno S. *Participatory Educational Research*, (2021), 8(1) The effect of principals' competencies on teachers' job satisfaction and work commitment <http://dergipark.org.tr/en/doi/10.17275/per.21.21.8.1>
- Randa, G. A., Tiatri, S., & Mularsih, H. (2019). THE IMPORTANCE OF THE ROLE OF TEACHERS IN THE INVOLVEMENT OF ELEMENTARY X GRADE 5 STUDENTS IN MANDARIN LESSONS IN WEST JAKARTA. *Estuarine Journal of Social Sciences, Humanities, and Arts*, 3(2). <https://doi.org/10.24912/jmishumsen.v3i2.3601.2019>
- Razak, N. A., Darmawan, I. G. N., & Keeves, J. P. (2009). Teacher commitment. In *International handbook of research on teachers and teaching* (pp. 343-360). Boston, MA: Springer US. [https://doi.org/10.1007/978-0-387-73317-3\\_22](https://doi.org/10.1007/978-0-387-73317-3_22)
- Rifa'i, M., Muadin, A., Faiz, F., Khomsiyah, L., & Mabruroh, A. (2022). Creating Effective Learning through Strengthening ECCE Teacher Commitment. *Journal of Obsession : Journal of Early Childhood Education*, 6(4). <https://doi.org/10.31004/obsesi.v6i4.2122>

- Rimadhani, A., & Abduh, M. (2022). Teachers' Efforts in Improving the Academic Performance of Students with Low Socioeconomic Status Backgrounds in Elementary School. *Basicedu Journal*, 6(4). <https://doi.org/10.31004/basicedu.v6i4.3200>
- Sari, E., Sihaloho, R., Sutomo, S., & Arum, W. S. A. (2021). Increase Teacher Commitment through Optimizing Principal Leadership. *JOURNAL OF WINDOWS EDUCATION*, 1(04). <https://doi.org/10.57008/jjp.v1i04.32>
- Sarnoto, A. Z., & Sholihin, A. (2017). SPIRITUAL-BASED LEADERSHIP BEHAVIOR IN THE DEVELOPMENT OF ISLAMIC EDUCATIONAL INSTITUTIONS. *Journal Statement : Social Information Media and Education*, 7(2). <https://doi.org/10.56745/js.v7i2.203>
- Sipayung, R. (2020). THE INFLUENCE OF THE PRINCIPAL'S LEADERSHIP AND A DIRECTED ATTITUDE TOWARDS DIVERSE THINKING ON THE PERFORMANCE OF TEACHER CREATIVITY AT SMA ST MARIA MEDAN SCHOOL. *SCHOOL EDUCATION JOURNAL PGSD FIP UNIMED*, 10(2). <https://doi.org/10.24114/sejpgsd.v10i2.18555>
- Skaalvik, E. M., & Skaalvik, S. (2019). Teacher Self-Efficacy and Collective Teacher Efficacy: Relations with Perceived Job Resources and Job Demands, Feeling of Belonging, and Teacher Engagement. *Creative Education*, 10(07). <https://doi.org/10.4236/ce.2019.107104>
- Sudirman, A., Sherly, S., Candra, V., Dharma, E., & Lie, D. (2021). Determinants of Teacher Performance: Exploring the Role of Satisfaction and Motivation as Mediation. *Jurnal Pendidikan Dan Pengajaran*, 54(1). <https://doi.org/10.23887/jpp.v54i1.32417>
- Suhardin, S., Hunen, A., & Erwina, E. (2023). Teacher Performance: Certification and Gender Study Ex Post Facto in Sindang Bareng Bogor. *Action Research Literate*, 7(2). <https://doi.org/10.46799/ar.v7i2.134>
- Suhaty, J., Suwatno, S., & Buchdadi, A. D. (2023). PLS-SEM Model: Explore Factors Affecting Teacher Performance. *International Journal*
- Triwardhani, I. J., Trigartanti, W., Rachmawati, I., & Putra, R. P. (2020). Teacher strategies in building communication with Parents of Students at School. *Journal of Communication Studies*, 8(1). <https://doi.org/10.24198/jkk.v8i1.23620>
- Ummah, S. K., Pratama, R. S., & Wijayanti, Y. (2020). Professional maths teacher preparation and performance: A case study of SPADA use. *Journal of Teacher Professional Education*, 1(2). <https://doi.org/10.22219/jppg.v1i2.12512>
- Utomo, A., & Pamungkas, A. R. (2022). Examine the mediating role of job satisfaction and organizational commitment: the influence of spiritual leadership on employee performance. *Excellent*, 9(2). <https://doi.org/10.36587/exc.v9i2.1383>
- Zulaiha, D., & Rohman, A. (2020). Teacher Strategies and Parental Involvement in Understanding Children's Science Concepts During Covid-19. *Journal of Obsession : Journal of Early Childhood Education*, 5(2). <https://doi.org/10.31004/obsesi.v5i2.816>