



# Factors Affecting Elementary School Teacher Performance: A SEM-PLS Review

Teni Susanti<sup>1</sup>, Yunus Abidin<sup>2\*</sup> 

<sup>1,2</sup> Elementary School Teacher Education Master Study Program, Universitas Pendidikan Indonesia, Bandung, Indonesia

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## ABSTRAK

Salah satu faktor penting dalam rangka meningkatkan mutu pendidikan adalah kinerja guru. Namun demikian, permasalahan kinerja guru masih selalu bersifat problematik. Hal terutama berkenaan dengan faktor-faktor yang secara teknis berpengaruh terhadap kinerja guru. Oleh sebab itu, penelitian ini bermaksud mengkaji faktor-faktor mengkaji faktor-faktor apa saja yang paling berkontribusi terhadap kinerja guru. Penelitian ini dilaksanakan dengan menggunakan metode survei korelasional. Sumber data penelitian ini adalah 120 guru sekolah dasar di Jawa Barat yang terlibat secara sukarela. Data dikumpulkan melalui kuesioner online dengan berpedoman pada skala likert. Data diolah dengan menggunakan SEM-PLS. Hasil penelitian menunjukkan bahwa faktor yang paling terlibat dalam membentuk kinerja guru adalah kompetensi. Iklim sekolah, kepemimpinan kepala sekolah, dan pengaruh sosial tidak memiliki hubungan yang signifikan dengan kinerja guru. Berdasarkan hasil tersebut, salah satu hal yang penting untuk meningkatkan kinerja guru adalah mengembangkan kompetensinya. Selain itu, faktor lain seperti kepemimpinan kepala sekolah, iklim sekolah, motivasi, pengaruh sosial, dan kesempatan guru juga mempengaruhi kinerja guru meskipun tidak signifikan. Melalui iklim sekolah yang mendukung, motivasi yang tinggi, dan dukungan sosial, guru diharapkan terus menunjukkan peningkatan kinerjanya. Dengan kinerja guru yang lebih baik diharapkan kemajuan pendidikan dapat tercapai.

## ABSTRACT

One important factor in improving the quality of education is teacher performance. However, teacher performance remains a problematic topic. This is particularly true when it comes to factors that technically affect their performance. Therefore, this study aimed to analyze factors that contribute most to teacher performance. This study was conducted using a correlational survey method. Data source in this study was 120 elementary school teachers participated voluntarily. The data were collected through an online questionnaire based on a Likert scale. They were processed using SEM-PLS. The results showed that the most influential factor in shaping teacher performance was competence. School climate, principal leadership and social influence have no significant relationship with teacher performance. Based on the results, improving competence is one effective to improve teacher performance. In addition, the other factors such as principal leadership, school climate, motivation, social influence, and teacher's opportunity also affect teacher performance, albeit not significant. Through supportive school climate, high motivation and social support, teachers are hoped to show steady improvement to their performance. With better teacher performance it is hoped that educational progress will be achieved.

## 1. INTRODUCTION

Improving education quality is a never-ending process. This needs to be done in line with the demands of the times that require quality human resources (Amtu et al., 2020; Ebele & Olofu, 2017). Education bears the responsibility in creating better future. In the 21st century, the mission of education has become more focused on preparing a young generation who is technologically literate and skilled in thinking. Teachers play an important in the production and development of human resources (Ansari & Malik, 2013; Harishree & Mekala, 2020; Khun-inkeeree et al., 2019). Thus, various teacher development programs are continuously carried out, both with regard to administrative capabilities and learning abilities. Teachers are considered to be the spearhead of the birth of a young generation that is responsive

to the challenges of the times (Apak & Taat, 2018; Marisa, 2021). Without competent teachers, the progress of a nation will undoubtedly not be achieved. In current implementation of independent curriculum, the term driving teacher is a concrete manifestation of quality teacher development.

Various efforts to improve teacher quality and competence include training, workshops, seminars, FGDs, or technical guidance which aim to improve teacher performance in schools (Suyanto, 2017; Wijaya et al., 2022). However, complaints against teacher performance are still common. There is a prevalent allegation that teachers fail apply what they learn from training or workshops. Moreover, the fact that the same teachers who attend training tend to be the same person worsens teacher performance at school. On the other hand, complaints against teachers are not entirely unexpected. This is because teachers are required to constantly improve their methods. Education is currently expected to produce quality graduates (Skourdombis, 2019; Sulaiman & Ismail, 2020). Quality graduates are characterized by command of thinking competence and qualified character. Graduates are not only ready for physical jobs but also ready to tackle various problems in their life.

In addition to having good thinking capabilities, students are now required to possess technological prowess. The term technological literacy is one of the competencies that students must have in school. Therefore, teachers must also master various widely-used technologies. This is surely different from decades ago where technology was not as ubiquitous as today. This is reasonable considering that this era is often called the era of the industrial revolution 4.0, which means that technology and information are the hallmarks of this century (Afandi et al., 2021; Jardilino et al., 2021). Efforts to improve the quality of learning and the quality of education are believed by many to depend heavily on teacher performance. This is because the teacher plays a very important role in managing learning in the classroom so that it is directly related to efforts to foster students. Teacher performance in the learning process will be very directly related to the formation of students' character, competence, and life skills. Teachers who have low performance are predicted to be unable to equip students with abilities that students really need in everyday life. Based on this fact, efforts to assess teacher performance are very important. This is intended to know the dominant factors that influence teacher performance. By knowing this dominant factor, schools, the government, and educational policy holders can properly develop teacher performance. Teacher performance development based on this predictive factor is believed to be able to improve the quality of education in the future.

Producing quality graduates depends on teacher performance. Teachers must master not only the pedagogic side but also the technological side. That said, pedagogic aspects should come first before trying to get a grasp on technological aspects to facilitate learning (Ansari & Malik, 2013; Hendrawijaya et al., 2020). Even though complaints of teacher performance are considered normal, efforts to improve teacher performance should not cease. Experts see teacher performance not as an autonomous variable, but as a variable that is influenced by other exogenous variables. For this reason, research that examines exogenous variables that contribute to teacher performance continues to be carried out by experts both in Indonesia and abroad (Kanya et al., 2021).

Teacher performance in school is influenced by various aspects, including work motivation, competence, and opportunities. In research, the three aspects are expanded to include extended variables, including leadership management, school climate and social influence. The aim of this study is to analyze factors that contribute most to teacher performance. The addition of these aspects is hoped to expand and clarify the variables that can predict teacher performance (Mailool et al., 2020; Nurabadi et al., 2021). The results of this study are hoped to become an analytical study and practical input for education policy makers in Indonesia.

## 2. METHOD

This study used a quantitative approach. The method used was correlational survey. This is in line with the objective of the study to explore factors that affect teacher performance in school. The participants involved in this study were teachers in West Java Province. They willingly participated by filling out an online questionnaire. They consisted of teachers teaching at the elementary school level. 120 teachers were involved. They have demographic data: age, gender, and varied agencies. Complete demographic data is presented in a Table 1.

**Table 1.** Demographic Respondent Data

Data Demographic		N	%
Gender	Male	39	32,5
	Female	81	67,5
Age	≤ 30 years	18	15,0

<b>Data Demographic</b>		<b>N</b>	<b>%</b>
	30 – 40 years	50	41,6
	41 – 50 years	35	29,2
	≥ 50 years	17	14,2
	Region Bandung Barat	31	25,8
	Bandung City	20	16,7
	Region Bandung	23	19,2
	Cimahi City	11	9,2
	Region Ciamis	8	6,7
Region/City	Region Tasikmalaya	7	5,8
	Tasikmalaya City	5	4,2
	Region Bekasi	5	4,2
	Region Karawang	4	3,3
	Region Cianjur	3	2,5
	Region Bogor	3	2,5

Questionnaire was used as a research instrument, distributed through Google Form. The use of an online questionnaire aimed to ensure that all respondents fill out voluntarily. The research questionnaire consisted of two parts. The first part contained working instructions and demographic data of respondents. The second part contained latent variables being studied. There were seven latent variables, each with five questions, except for performance, which had ten questions. The seven variables were principal leadership, teacher motivation, teacher competence, opportunity, school climate, social influence, and teacher performance. The questionnaire was prepared based on Likert scale with score 1 to 5, except for performance, which had score 1 to 4. The research instruments is show in [Table 2](#).

**Tabel 2. Research Instruments**

<b>A. Principal Leadership/Management</b>
1. In terms of the policies he/she made, what do you think of the leadership of the school principal?
2. In terms of the program planning he/she made, what do you think of the leadership of the school principal?
3. In terms of the program organization he/she made, what do you think of the leadership of the school principal?
4. In terms of the program implementation, what do you think of the leadership of the school principal?
5. In terms of the program evaluation process he/she carried out, what do you think of the leadership of the school principal?
<b>B. School Climate</b>
6. Cooperation between teachers and principals has been nurtured well.
7. Cooperation between teachers has been nurtured well.
8. Cooperation between teachers and school members has been nurtured well.
9. The principal supports teacher activities that aim to increase knowledge (for example attending seminars and training).
10. Students at school can learn comfortably and happily.
<b>C. Opportunity</b>
11. The principal gives every teacher opportunities to grow.
12. The principal facilitates teachers to grow for the better.
13. The principal always appreciates teacher performance.
14. The principal gives promotion opportunities to all teachers.
15. The principal gives every teacher the opportunity to vote.
<b>D. Motivation</b>
1. I feel comfortable teaching in this school.
2. I feel challenged to teach better every day.
3. I feel that all members of the school are a family that can strengthen one another.
4. I feel that the principal is able to motivate me to be better.
5. I receive support from students' parents to always give the best for students.
<b>E. Ability</b>
1. I am able to derive competencies from the curriculum well.
2. I am able to formulate learning objectives well.

3. I am able to develop teaching materials according to the intended purpose.
4. I am able to determine and implement any learning model that suit students and learning objectives.
5. I am able to evaluate students fairly and objectively.

**F. Social Influence**

1. The teachers always support me to grow.
2. The principal always supports me to become a professional teacher.
3. Parents of students always participate in ensuring the success of programs designed for their children.
4. The school supervisors always provide good supervision and assistance.
5. The teachers are always willing to collaborate in in developing learning.

**G. Teacher Performance**

1. I begin and end lessons in a timely manner.
2. I begin learning with apperception and trigger questions.
3. I choose and implement a learning model that supports development of students' thinking skills.
4. I implement the type of evaluation in accordance with the learning objectives.
5. I use various learning sources, like books, newspapers, news, internet, and nature.
6. I compile a lesson plan every time I am about to teach.
7. I gather various resources to use in learning.
8. I design or develop simple media every time I teach.
9. I ask the principal/other teachers for input when I have difficulty teaching.
10. I solicit input from students at the end of each lesson.

SEM-PLS was used as the data analysis tool via SmartPLS software. SEM-PLS was considered as the right data analysis technique to test the relationships between complex variables. As mentioned previously, this study contained seven latent variables and eight analysis paths. Therefore, this was in accordance with the purpose of SEM-PLS itself (Hair et al., 2017).

**3. RESULT AND DISCUSSION**

**Result**

*Normality Test*

The first step in processing the results of this study was data normality test. Normality test was carried out using the Excess Kurtosis value and the Skewness value. Identifying whether the data were normally distributed was based on Kurtosis value and Skewness value which should not exceed 2.2. Based on the results of data processing, the Excess Kurtosis and Skewness values ranged from -2.046 to 2.143, which means it was less than 2.2. It means that the data were normally distributed.

The second step was determining the outer loading on each variable criterion. The significance level used was 0.70. That is, if there are criteria that have an outer loading value of less than 0.70, the variable criteria were not considered reliable. The result of the outer loading analysis is show in Figure 1.

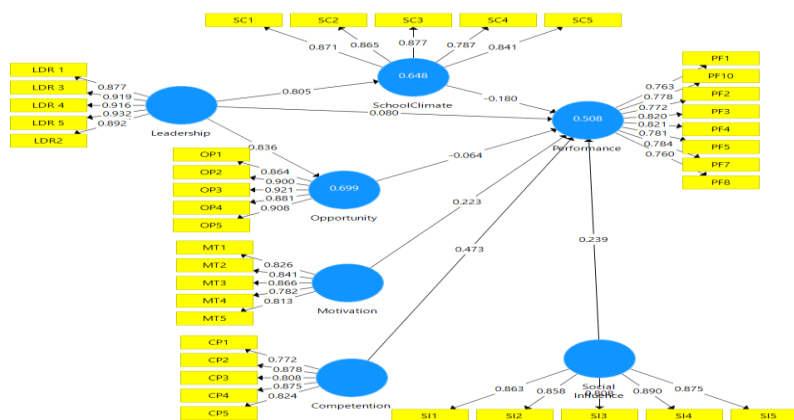


Figure 1. Outer Loading Results

As seen in Figure 1, it can be said that all criteria measured had a value greater than 0.70. This means all data were valid. Therefore, the analysis proceeded to Construct Reliability and Validity tests using

Cronbach's alpha, rho A, composite reliability, and Average Variance Extracted (AVE) (Hair et al., 2017). The value used to determine Construct Reliability and Validity must be greater than 0.70. The results of this test can be seen in Table 3.

**Table 3. Results of Construct Reliability and Validity Tests**

	<b>Cronbach's Alpha</b>	<b>rho_A</b>	<b>Composite Reliability</b>	<b>Average Variance Extracted (AVE)</b>
Competention	0.889	0.898	0.918	0.693
Leadership	0.946	0.949	0.959	0.823
Motivation	0.885	0.901	0.915	0.682
Opportunity	0.938	0.939	0.953	0.801
Performance	0.911	0.912	0.928	0.617
SchoolClimate	0.902	0.904	0.928	0.720
Social Influence	0.911	0.913	0.934	0.738

As seen in Table 3, the resulting values from the Cronbach's alpha, rho A, composite reliability, and Average Variance Extracted (AVE) tests for all variables were greater than 0.07. Therefore, it can be said that all latent variables tested have significant Construct Reliability and Validity values.

The next test was Discriminant Validity. It was carried out using two criteria, namely Fornell-Larcker criterion and Heterotrait-Monotrait Ratio test (HTMT). Both tests were used to further strengthen the discriminant validity results. The criterion is that the relationship between one latent variable and the same latent variable must be greater than the relationship between the latent variable and the other variables. The results of the Discriminant Validity test with Fornell-Larcker criterion and Heterotrait-Monotrait Ratio (HTMT) test are presented in Table 4 and Table 5.

**Table 4. Results of the Fornell-Larcker Criterion Test**

	<b>Competention</b>	<b>Leadership</b>	<b>Motivation</b>	<b>Opportunity</b>	<b>Performance</b>	<b>School Climate</b>	<b>Social Influence</b>
Competention	0.832						
Leadership	0.583	0.907					
Motivation	0.714	0.708	0.826				
Opportunity	0.551	0.836	0.738	0.895			
Performance	0.674	0.487	0.614	0.480	0.785		
SchoolClimate	0.715	0.805	0.799	0.814	0.538	0.849	
Social Influence	0.667	0.718	0.787	0.831	0.591	0.794	0.859

As seen in Table 4, the relationship between latent variables with the same latent variable is greater than the relationship with other latent variables. This means that all the latent variables tested have met the requirements that must be met based on the Fornell-Larcker criterion. Thus, all latent variables tested in the study can be said to have good discriminant validity. Results of the heterotrait-monotrait ratio (HTMT) test is show in Table 5.

**Table 5. Results of the Heterotrait-Monotrait Ratio (HTMT) Test**

	<b>Competenti on</b>	<b>Leadersh ip</b>	<b>Motivati on</b>	<b>Opportuni ty</b>	<b>Performan ce</b>	<b>School Climate</b>	<b>Social Influence</b>
Competention							
Leadership	0.624						
Motivation	0.793	0.794					
Opportunity	0.593	0.885	0.831				
Performance	0.737	0.521	0.661	0.518			
SchoolClimate	0.791	0.863	0.803	0.880	0.594		
Social Influence	0.734	0.777	0.888	0.807	0.642	0.878	

The Heterotrait-Monotrait Ratio (HTMT) test was used in response to the assumption that the Fornell-Larcker test is weak. The significance of this test was that any relationship between the latent

variables tested should not exceed 0.90. based on the Heterotrait-Monotrait (HTMT) test, there was no relationship between latent variables that exceeded 0.90. This means that based on the HTMT test, the latent variables tested have good discriminant validity. The assumption or condition that must be met in the outer model analysis is multicollinearity problem, namely the problem of intercorrelation or strong correlation between indicators. The threshold is correlation value >0.9 which is usually characterized by Variance Inflating Factor (VIF) value within the level indicator >5. The results of the VIF analysis within the level indicator is show in [Table 6](#).

**Table 6. Outer VIF Test Results**

VIF		VIF	
CP1	1.856	PF1	2.093
CP2	2.917	PF10	2.113
CP3	2.104	PF2	2.100
CP4	2.627	PF3	2.681
CP5	1.953	PF4	2.741
LDR 1	3.169	PF5	2.171
LDR 3	4.273	PF7	2.109
LDR 4	4.710	PF8	2.049
LDR 5	4.906	SC1	2.636
LDR2	3.455	SC2	3.347
MT1	2.275	SC3	3.632
MT2	2.051	SC4	1.949
MT3	2.814	SC5	2.353
MT4	2.231	SI1	2.918
MT5	1.964	SI2	2.883
OP1	2.919	SI3	1.973
OP2	3.831	SI4	3.727
OP3	4.464	SI5	3.596
OP4	3.214		
OP5	4.097		

As seen in [Table 6](#), all indicators have a VIF value <5, so all indicators are free from multicollinearity problems. A model is considered fit if the SMSE value is less than 0.05. However, another explanation says that the criteria for model fit include the RMS Theta value or Root Mean Square Theta being <0.102. The results of the model fit assessment is show in [Table 7](#).

**Table 7. Model Fit Test Results**

	Saturated Model	Estimated Model
SRMR	0.077	0.112
d_ULS	4.426	9.375
d_G	2.669	2.990
Chi-Square	1416.854	1543.207
NFI	0.706	0.679
rms Theta	0.150	

As seen in the model fit on [Table 7](#), the RMS Theta or Root Mean Square Theta was 0.150 > 0.102 and the NFI value was 0.706 > 0.9. Based on the two model assessments, the model was considered not fit. However, based on Standardized Root Mean Square, the value was 0.077 <0.10. Based on this result, the model can be said to be fit. Thus, the model is fit based on the data. To address the hypotheses proposed, path analysis was used. The results of the path analysis carried out are presented in [Table 8](#).

**Table 8. Path Analysis Test Results**

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ( O/STDEV )	P Values
Competention -> Performance	0.473	0.471	0.082	5.740	0.000
Leadership -> Opportunity	0.836	0.831	0.036	23.487	0.000

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ( O/STDEV )	P Values
Leadership -> Performance	0.080	0.078	0.129	0.618	0.537
Leadership -> SchoolClimate	0.805	0.806	0.035	23.288	0.000
Motivation -> Performance	0.223	0.230	0.172	1.300	0.194
Opportunity -> Performance	-0.064	-0.038	0.173	0.370	0.711
SchoolClimate -> Performance	-0.180	-0.207	0.202	0.890	0.374
Social Influence -> Performance	0.239	0.232	0.201	1.189	0.235

As seen in Table 8, there were three significant latent variable relationships. The remaining relationships between the latent variables were insignificant. The coefficient of determination (R Square) is a way to assess the extent to which an endogenous construct can be explained by an exogenous construct. Chin describes R Square values of 0.67, 0.33 and 0.19 as strong, moderate and weak, respectively. The results of the analysis of the coefficient of determination is show in Table 9.

**Table 9. Coefficient of Determination Analysis Results**

	R Square	R Square Adjusted
Opportunity	0.699	0.696
Performance	0.508	0.480
SchoolClimate	0.648	0.645

Based on Table 9 results of the analysis of the coefficient of determination above, it can be concluded that the R Square value of the effect of leadership on teacher opportunities was 0.699 with an adjusted r squared value of 0.696. Meaning, the exogenous construct of leadership influences the teacher's opportunity to improve by 0.699 or 69.9%. Since the Adjusted R Square was greater than 67%, the influence of leadership on teacher opportunity is considered high. The R Square value of the effect of leadership on school climate was 0.648 with an adjusted r square value of 0.645. It means that principal leadership influences school climate by 0.648 or 64.8%. Since the Adjusted R Square was greater than 33% but lower than 67%, the influence of principal leadership on school climate is considered moderate. The R Square value of simultaneous effect of principal leadership, school climate, teacher opportunity, motivation, competence, and social influence on teacher performance was 0.508 with an adjusted r square value of 0.480. It means that all exogenous constructs simultaneously affect teacher performance by 0.508 or 50.8%. Since the Adjusted R Square was greater than 33% but lower than 67%, the effect of all constructs on teacher performance is considered moderate.

**Discussion**

This study is motivated by the fact that teacher performance is the most important element in the effort to improve education quality. However, until now there are still many complaints about the performance of teachers. Considering the different roles of teachers then and now, efforts to examine in depth and comprehensively the factors that influence teacher quality are important to do (Kwong & Wong, 2013; Leguina, 2015). According to our results, teacher performance is greatly affected by teacher competence. This means that the more competent a teacher, the better the performance is likely to be (Nessipbayeva, 2019). The competence in question is related to designing learning or administrative matters as well as to performance during the learning process. With administrative competence and learning competence, teacher should be able to perform better in schools. Based on these results, efforts to improve teacher performance must be carried out through improving their competence (Kanya et al., 2021; Kline, 2011).

Another factor that affects teacher competence, albeit insignificant, is principal leadership and school climate. This means that a good principal will push teachers to improve their performance. School climate also positively affects teacher performance (Mailool et al., 2020; Wahab et al., 2020). Through synergy between school principals, teachers and students, teacher performance will be better than without the support of the principal and school climate. On the other hand, good principal leadership will help create positive school climate (Efendi et al., 2021; Indajang et al., 2021). In line with that, to create good school climate, principal leadership plays an important role. The thing to note is that future school leadership is not mere principal leadership, but distributive leadership. In this case, the school principal must distribute his/her functions and roles to those parties who are deemed appropriate to take responsibility for improving the quality of education (Cangur & Ercan, 2015; Ringle et al., 2020).

Opportunity to grow also affects teacher performance. Even though it is not significant, teachers who are given chance and room to grow from the principal will perform better than those who are not. Therefore, good principal leadership is more likely to give teachers opportunities to grow and develop, which in turn will lead to the betterment of their performance, both administratively and during the learning process (Saleem et al., 2020; Wahab et al., 2020). Motivation and social influence are also other factors that affect teacher performance. Although not significant, motivation and social influence received by teachers may motivate them to improve their performance. In this condition, teachers should be constantly encouraged to maintain good motivation to perform better. Principals and other teachers should also motivate each other and provide social stimulation to perform better (Hendrawijaya et al., 2020; Phytanza & Burhaein, 2020).

Apart from the findings, this study is also acknowledged to have two limitations. First, the limited research sample is thought to be the main cause of the many other variables being less influential on teacher performance. SEM-PLS indeed requires a sample of at least 100 people. However, some experts argue that a sample of at least 200 people would result in more reliable results (Meidani et al., 2022; Pishghadam et al., 2022). The second limitation is the limited factors or latent variables tested throughout this study. As is known, the socio-emotional aspect as an aspect that is currently trending has not yet been studied. Research in the future should explore this aspect deeper in order to produce more comprehensive results.

#### 4. CONCLUSION

This study concludes that teacher competence affects teacher performance the most. In addition, the other factors such as principal leadership, school climate, motivation, social influence, and teacher's opportunity also affect teacher performance, albeit not significant. Based on these findings, to reliably improve teacher performance, principals and policy makers must always provide opportunities for teachers to hone and build competence. Through supportive school climate, high motivation and social support, teachers are hoped to show steady improvement to their performance. With better teacher performance it is hoped that educational progress will be achieved.

#### 5. REFERENCES

- Afandi, M., Wahyuningsih, S., & Mayasari, L. I. (2021). Does elementary school teacher performance matter? *Cakrawala Pendidikan*, 40(1), 242–252. <https://doi.org/10.21831/cp.v40i1.35284>.
- Amtu, O., Makulua, K., Matital, J., & Pattiruhu, C. M. (2020). Improving Student Learning Outcomes through School Culture, Work Motivation and Teacher Performance. *International Journal of Instruction*, 13(4), 885–902. <https://doi.org/10.29333/iji.2020.13454a>.
- Ansari, S. U., & Malik, S. K. (2013). Image of an Effective Teacher in 21 St Century Classroom. *Journal of Educational and Instructional Studies in the World*, 3(4), 61–68. <https://www.researchgate.net/profile/sufiana-khatoun-malik/publication/274656383>.
- Apak, J., & Taat, M. S. (2018). Pengaruh kesediaan guru terhadap pengurusan bilik darjah abad ke-21. *Malaysian Journal of Social Sciences and Humanities*, 3(4), 6–22. <http://msocialsciences.com/index.php/mjssh/article/view/103>.
- Cangur, S., & Ercan, I. (2015). Comparison of model fit indices used in structural equation modeling under multivariate normality. *Journal of Modern Applied Statistical Methods*, 14(1), 152–167. <https://doi.org/10.22237/jmasm/1430453580>.
- Ebele, U. F., & Olofu, P. A. (2017). Enhancing the standard of teaching and learning in the 21st century via qualitative school-based supervision in secondary schools in Abuja municipal area council (AMAC). *International Journal of Educational Administration and Policy Studies*, 9(6), 79–83. <https://doi.org/10.5897/ijeaps2016.0490>.
- Efendi, E., Harini, S., Simatupang, S., Silalahi, M., & Sudirman, A. (2021). Can Job Satisfaction Mediate the Relationship between Emotional Intelligence and Spiritual Intelligence on Teacher Performance? *Journal of Education Research and Evaluation*, 5(1), 136. <https://doi.org/10.23887/jere.v5i1.31712>.
- Hair, J. F., Hult, G. T. M., & Ringle, C. M. (2017). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)* (2nd ed.). SAGE Publications, Inc.
- Harishree, C., & Mekala, S. (2020). Need for 21st century skills education for teachers. *Roots International Journal of Multidisciplinary Researches*, 7(1), 45–52. <https://www.researchgate.net/profile/harishree-charath-chandran/publication/345733371>.
- Hendrawijaya, A. T., Hilmi, M. I., Hasan, F., Imsiyah, N., & Indrianti, D. T. (2020). Determinants of teacher performance with job satisfactions mediation. *International Journal of Instruction*, 13(3), 845–860.



- <https://doi.org/10.29333/iji.2020.13356a>.
- Indajang, K., Halim, F., & Sudirman, A. (2021). The Effectiveness of Teacher Performance in Terms of the Aspects of Principal Leadership, Organizational Culture, and Teacher Competence. *Proceedings of the 2nd Annual Conference on Blended Learning, Educational Technology and Innovation (ACBLETI 2020)*, 560(Acbleti 2020), 402–408. <https://www.atlantis-press.com/article/125957871.pdf>.
- Jardilino, J. R. L., Sampaio, A. M. M., & Oliveri, A. M. R. (2021). Teacher Performance Evaluation: to blame, punish or develop professionally? *Ensaio*, 29(111), 318–337. <https://doi.org/10.1590/S0104-40362021002902701>.
- Kanya, N., Fathoni, A. B., & Ramdani, Z. (2021). Factors affecting teacher performance. *International Journal of Evaluation and Research in Education*, 10(4), 1462–1468. <https://doi.org/10.11591/IJERE.V10I4.21693>.
- Khun-inkeeree, H., Dali, P. D., Daud, Y., Fauzee, M. S. O., & Khalid, R. (2019). Effects of Teaching and Learning Supervision on Teachers Attitudes to Supervision at Secondary School in Kubang Pasu District, Kedah. *International Journal of Instruction*, 12(1), 1335–1350. <https://doi.org/10.29333/iji.2019.12185a>.
- Kline, R. B. (2011). Principles and practice of structural equation modeling. In *The Guilford Press* (Vol. 245). The Guilford Press. <https://doi.org/10.1097/00003086-198908000-00042>.
- Kwong, K., & Wong, K. (2013). 28/05 - Partial Least Squares Structural Equation Modeling (PLS-SEM) Techniques Using SmartPLS. *Marketing Bulletin*, 24(1), 1–32. [https://www.academia.edu/download/39627062/2013\\_journal\\_10\\_PLS\\_MB.pdf](https://www.academia.edu/download/39627062/2013_journal_10_PLS_MB.pdf).
- Leguina, A. (2015). A primer on partial least squares structural equation modeling (PLS-SEM). *International Journal of Research & Method in Education*, 38(2), 220–221. <https://doi.org/10.1080/1743727x.2015.1005806>.
- Mailool, J., Kartowagiran, B., Retnowati, T. H., Wening, S., & Putranta, H. (2020). The effects of principal's decision-making, organizational commitment and school climate on teacher performance in vocational high school based on teacher perceptions. *European Journal of Educational Research*, 9(4), 1675–1687. <https://doi.org/10.12973/EU-JER.9.4.1675>.
- Marisa, M. (2021). Inovasi Kurikulum “Merdeka Belajar” di Era Society 5.0. *Santhet: (Jurnal Sejarah, Pendidikan Dan Humaniora)*, 5(1), 72. <https://doi.org/10.36526/js.v3i2.e-ISSN>.
- Meidani, N. E., Makiabadi, H., Zabetipour, M., Abbasnejad, H., Firoozian Pooresfehiani, A., & Shayesteh, S. (2022). Emo-Sensory Communication, Emo-Sensory Intelligence and Gender. *Journal of Business, Communication & Technology*, 1(2), 54–66. <https://doi.org/10.56632/bct.2022.1206>.
- Nessipbayeva, O. (2019). The Competencies of the Modern Teacher. *Pre-Service and In-Service Teacher Training*, 148–154. <https://eric.ed.gov/?id=ED567059>.
- 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), 17–31. <https://doi.org/10.21831/cp.v40i1.35641>.
- Phytanza, D. T. P., & Burhaein, E. (2020). The effects of tenure, teacher certification, and work motivation on special needs teacher performance. *Universal Journal of Educational Research*, 8(9), 4348–4356. <https://doi.org/10.13189/ujer.2020.080962>.
- Pishghadam, R., Abdwani, T. Al, Ahari, M. K., Hasanzadeh, S., & Shayesteh, S. (2022). Introducing Metapathy as a Movement beyond Empathy: A Case of Socioeconomic Status. *International Journal of Society, Culture and Language*, 10(2), 35–49. <https://doi.org/10.22034/ijsc.2022.252360>.
- Ringle, C. M., Sarstedt, M., Mitchell, R., & Gudergan, S. P. (2020). Partial least squares structural equation modeling in HRM research. *International Journal of Human Resource Management*, 31(12), 1617–1643. <https://doi.org/10.1080/09585192.2017.1416655>.
- Saleem, A., Aslam, S., Yin, H. B., & Rao, C. (2020). Principal leadership styles and teacher job performance: Viewpoint of middle management. *Sustainability (Switzerland)*, 12(8), 1–15. <https://doi.org/10.3390/SU12083390>.
- Skourdombis, A. (2019). Theorising teacher performance dispositions in an age of audit. *British Educational Research Journal*, 45(1), 5–20. <https://doi.org/10.1002/berj.3492>.
- Sulaiman, J., & Ismail, S. N. (2020). Teacher competence and 21st century skills in transformation schools 2025 (TS25). *Universal Journal of Educational Research*, 8(8), 3536–3544. <https://doi.org/10.13189/ujer.2020.080829>.
- Suyanto, S. (2017). A reflection on the implementation of a new curriculum in Indonesia: A crucial problem on school readiness. *AIP Conference Proceedings*, 1868(1), 39–57. <https://doi.org/10.1063/1.4995218>.
- Wahab, J. A., Mansor, A. Z., Hussin, M., & Kumarasamy, S. (2020). Headmasters' instructional leadership and

- its relationship with teachers performance. *Universal Journal of Educational Research*, 8(11 A), 97–102. <https://doi.org/10.13189/ujer.2020.082112>.
- Wijaya, T. T., Jiang, P., Mailizar, M., & Habibi, A. (2022). Predicting Factors Influencing Preservice Teachers' Behavior Intention in the Implementation of STEM Education Using Partial Least Squares Approach. *Sustainability (Switzerland)*, 14(16). <https://doi.org/10.3390/su14169925>.