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# The Influence of the Principal Leadership Model and Teacher Motivation: A Study on the Performance Analysis of Senior High School Teachers in Ngawi District

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## Abstract

Leadership and motivation models are components that must be possessed by school principals and teachers in the scope of education. The existence of a superior leadership and motivation system can increase the value of the institution. This study aims to determine the influence of the principal's leadership model and teacher motivation partially and simultaneously on teacher performance. This research method is descriptive quantitative with a determination technique using total sampling, so that the number of population and samples in this study amounted to 80 subjects. The data collection technique uses a questionnaire that has been validated by the validator with a validity value of 0.86 and a reliability of 0.76 and research documentation. The data analysis technique used in this research uses the t test and the f test. The results of the persial test research are 1) It is known that the value of sig. The influence of the principal's leadership model on teacher performance is  $0.000 < 0.05$  and the value of  $t_{count} 5.764 > t_{table} 1.665$ . 2) The value of sig. for teachers' motivation for teacher performance is as much as  $0.0027 > t_{table} 1.665$ . 3) The value of sig. For the leadership model of the principal and the motivation of teachers simultaneously on teacher performance, which is  $0.000 < 0.05$  and the value of  $t_{count} 24.508 > t_{table} 3.12$ . The results of this study can be concluded that there is an influence of the principal's leadership model and teachers' motivation both physically and simultaneously on the performance of Senior High Schools in Ngawi District.

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## INTRODUCTION

National Education functions to develop abilities and shape the character and civilization of a dignified nation in order to educate the nation's life, aiming to develop the potential of students to become, knowledgeable, faithful, healthy, saucy, creative, independent and become democratic and

responsible citizens (Dahlqvist, 2023). Teachers are the key to learning success for students in an educational institution (Maasoumi et al., 2024). The function of teachers is as a guide to achieve an educational goal in a school (Fischer-Schöneborn & Ehmke, 2023). One of the roles of school leaders can be seen from how a teacher is on duty and plays a role when giving lessons to his students in an ongoing manner, this is what is known as teacher performance (Falcon et al., 2023).

Good performance reflects the amount of responsibility for the tasks given to the teacher (Collie, 2023). Performance is defined as the result of work or achievements achieved by a person, which is assessed based on its quality and quantity in accordance with the duties and responsibilities imposed on him in achieving common goals (Layek & Koodamara, 2024). Teacher performance means the results achieved by the teacher in carrying out his duties in teaching which is given a burden to him which can be seen through learning planning activities, the implementation of the learning process, and not continuing the assessment results (Collie & Martin, 2024). A teacher has a good performance can be seen from how a teacher carries out his duties as a teacher in educating his students and can solve future challenges. Teacher performance explained (Schoenherr & Schukajlow, 2024) It is greatly influenced by several factors, namely internal and external factors. The point is that the internal factor is something that arises from the teacher himself. For example, performance, skills, attitude, mainsets, motivation to be a good teacher, learning experience, and family background. Meanwhile, what is meant by external factors is something that arises from outside the teacher himself. For example, the facilities that teachers get in the work environment space both physically and finally leadership are available.

Teacher performance factors according to (Alqassab & León, 2024) explained that there are factors that affect teacher performance, namely the motivation factor. The motivational factor is the situation/condition of a person who is moved to achieve educational goals. This motivational factor also has two parts, namely internal factors that come from intelligence, skills, talents, abilities, health, motives, personality, ideals and goals. Furthermore, external factors are the family environment, work environment, communication with the principal, facilities and infrastructure. Furthermore, teacher performance is greatly influenced by factors including the principal's leadership model, principal's managerial ability, health insurance, teacher salary, conducive climate, facilities and infrastructure, teacher education level, teaching supervision, teachers' physical and mental conditions and others.

The results of initial observations that have been made by researchers in high schools in Ngawi District. That teacher performance can be said to be optimal. This is evidenced by the creativity of teachers in utilizing learning media, using a variety of methods and fun learning activities. The principal is the main educational leader. The success of an educational goal owned by a school is highly dependent on the role and skills and policies of the principal led in an institution. The principal as a policy holder must be able to create a conducive working climate. Leadership is a person's ability to influence, move and motivate others to do something according to a common goal (Lan, 2024). Many experts put forward the definition of leadership. According to (Gümüş et al., 2024) stated that leadership is a conscious effort made by a leader to influence his or her team to carry out their duties according to their expectations. On the other hand, (Hung et al., 2025) It is stated that leadership is the process of influencing others to achieve the development or goals of the organization. Both opinions are in line with Stogil's opinion, which states that leadership is the process of influencing group activities to achieve organizational goals.

## METHODS

The research approach used is a quantitative approach. Quantitative can be interpreted as a research method based on the nature of positivism, which is used to research on a specific population or sample. This research method is descriptive quantitative with a determination technique using total sampling, so that the number of population and samples in this study amounted to 80 subjects. The data collection technique uses a questionnaire that has been validated by the validator with a validity value of 0.86 and a reliability of 0.76 and research documentation. The data analysis technique used in this research uses the t test and the f test. The grid of this research instrument is in the table below.

Table 1. Principal Leadership Instruments

Variable	Deskriptor	Indicators	Question Items	
			+	-
Leadership Model	Autocratic	1. Lack of attention to the needs of subordinates	1,2,5,6	3,4
		2. One-way communication		
	Democratic	1. Pay attention to subordinates	8,9,10,11,1	7
		2. Give praise	2	
	Laissez Faire	1. Giving freedom to subordinates	14,15,16,1	13
		2. Take relevant decisions	7,18	
	Participatory	1. Participate in decision-making	20,21,22,2	19
		2. Give Praise	3,24	

Table 2. Teacher Motivation Instrument

Variable	Deskriptor	Indicators	Question Items	
			+	-
Motivation	Push for Success Expanding Relationships	1. Drive to success	1,2,5,6	3,4
		1. Needs will be respected	7,8,10,11,1	
	Mastering the Material	2. Take part	3,14	
		1. Develop a Career	15,16,17,1	
			8,19,21,23,24,25	

Table 3. Teacher Performance Instruments

Variable	Deskriptor	Indicators	Question Items	
			+	-
Teacher Performance	Professional Competencies	1. Able to pass teaching materials	1,2,4,5,6,7	3
		2. Mastering in writing scientific papers		
	Pedagogic Competence	1. Understanding students	10,11	8,9,12
		2. Plan learning		
		3. Carry out learning evaluations		
		4. Developing students' potential		
	Social Competence	1. Communicate and get along well	15,16	13,1,4
		2. Adapt		
	Personality Competencies	1. Calm down	17,19,20,2	18
		2. Authoritative	1,22,23,24,	
3. Role Models		25		
4. Faith and piety				

## RESULT AND DISCUSSION

The results of the research conducted on the principal's leadership model data, namely, autocratic, democratic, laissez faire and participatory leadership models, will be processed in the

form of, the average score value of each question item and the average score value of each indicator as well as the overall average score value. Scores are given on each item with a maximum of 4 and a minimum of 1. With the help of spss statistic version 16.0.

Table 4. Statistical Descriptive Data

Leadership Model	Average Indicator Value	Overall Average Score	Category
Autocratic	12,32	4.106	Excellent
Democratic	12,56	4.186	Excellent
Laissez Faire	13,58	4.528	Excellent
Participatory	13,31	4.437	Excellent

Based on the results of statistical descriptive analysis, the autocratic leadership model shows that the average score value of each indicator is 12.32 and the overall average sector value is 4.106. Judging from the criteria for the interperformance of the respondents' assessment, it is included in the very good category. The results of the statistical descriptive analysis of the democratic leadership model show that the average score of each indicator is 12.56 and the overall average score value is 4,186. Judging from the criteria for the interpretation of the respondents' assessments, they are included in the very good category. Furthermore, the results of statistical descriptive analysis of the democratic leadership model show that the average score of each indicator is 13.58 and the overall average score value is 4,528. Judging from the criteria for the interpretation of the respondents' assessment, it is included in the very good category. And the results of the statistical descriptive analysis of the participatory leadership model show that the average score value of each indicator is 13.31 and the overall average score value is 4,437. Judging from the criteria for the interpretation of the respondents' assessment, it is included in the very good category.

Based on the results of the analysis of the leadership model, the head of the madarsah is categorized as high as a participatory of 4,528 which is included in the very good interpretation. This proves that teachers strongly agree or support the leadership model applied by the principal.

#### 1. Classical Assumption Test

##### a. Normality Test

This normality test aims to test whether in the regression model, the dependent variable and the independent variable both have a normal distribution or not. Normality testing using Normal P-P Plot Of Standardized Regression Residual. Normality test criteria, namely.

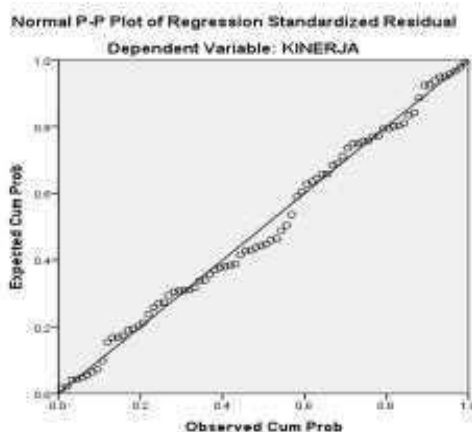


Fig 1. P-P Plot of Regression Standardized Residual Normality Test

Based on the figure above, it can be seen that the data spreads around the diagonal line and follows the direction of the diagonal line, showing that the data has a normal pattern so that the distribution of data is distributed normal.

b. Mulicolinearity Test

The mulicolilnearity test is used to determine whether or not there is a deviation from the classical assumption of mulicolinearity, which is the existence of a liner relationship between independent variables in the regression model. With the following criteria.

Table 5. Mulicolinearity Test

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	10.792	6.257		1.725	.089		
Leadership Model	.559	.097	.534	5.764	.000	.926	1.080
Motivation	.252	.112	.209	2.259	.027	.926	1.080

a. Dependent Variable: PERFORMANCE

Based on the results of the multicoloniality test above, the Collinearity Statistics VIF value of variable  $X_1$  and variable  $X_2$  is  $1,080 < 10.00$  and the Tolerance value of  $926 > 0.1$ , then the data does not occur multicoloniality.

c. Heteroscedasticity Test

The Heteroscedasticity test aims to test whether the regression model has variance inequality and the residual of one observation to another observation is fixed, then it is called homoskedasticity and if it is different, it is called heteroscedasticity. The method used to detect heterokedness problems in this regression model is by using a scatterplot graph test. The basis of heteroscedasticity test analysis using scatterplot graphs is as follows.

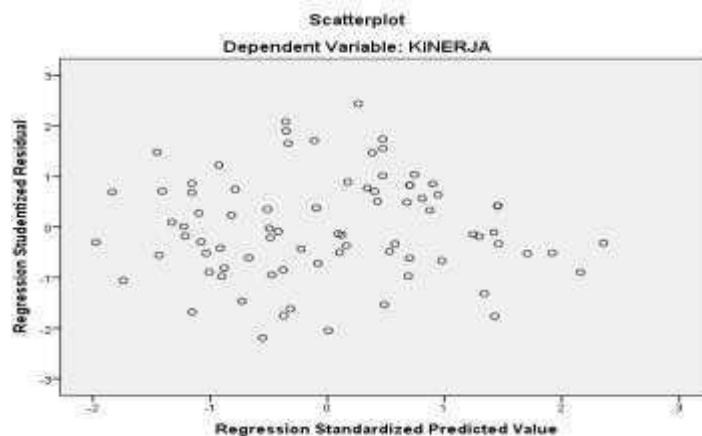


Fig 2. Heteroscedasticity Test Graph

Based on the figure above, it can be seen that the randomly dispersed dots are scattered without a clear pattern, and the dots are spread above and below the number 0 on the Y axis, so heteroscedasticity does not occur.

2. Test t (Partial Test)

The t-test is used to find out whether the independent variables partially affect the bound variables.

a. The influence of the principal's leadership model on teacher performance in Ngawi District

Table 6. Partial Test

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1(Constant)	10.792	6.257		1.725	.089
Leadership Model	.559	.097	.534	5.764	.000
Motivation	.252	.112	.209	2.259	.027

Based on the table above, it is known that the significant value for the influence of  $X_1$  on  $Y$  is  $0.000 < 0.05$  and the t-value is calculated  $5.764 > 1.665$ , so it can be concluded that  $H_0$  is rejected and  $H_a$  is accepted, meaning that there is an influence of the principal's leadership model on teacher performance. Thus, the research hypothesis reads "There is an influence of the principal's leadership model on teacher performance at High Schools in Ngawi District.

b. The effect of teacher motivation on teacher performance

It is known that the significant value for the influence of  $X_2$  on  $Y$  is  $0.0027 < 0.05$  and the t-value is calculated  $2.259 > 1.665$ , so it can be concluded that  $H_0$  is rejected and  $H_a$  is accepted, meaning that there is an influence of teacher motivation on teacher performance, so the research hypothesis reads "There is an influence of the principal's leadership model on teacher performance at High Schools in Ngawi District.

3. Test F (Simultaneous Test)

Test F aims to determine the influence of independent variable variables, the influence of the principal's leadership model, and teachers' motivation together on the sticky variable (teacher performance).

Table 7. Simultaneous F Test

Model	Sum of Squares	df	Mean Square	F	Sig.
1Regression	1528.448	2	764.224	24.508	.000 <sup>b</sup>
Residual	2401.102	77	31.183		

Total	3929.550	79
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Based on the table above, it is known that the significant value for the influence of the principal's leadership model and teacher motivation on teacher performance is  $0.000 < 0.05$  and the f value is calculated  $24,508 > 3.12$ . So it can be concluded that under  $H_a$  is accepted, which means that there is a simultaneous influence of  $X_1$  and  $X_2$  on  $Y$ .

#### 4. Coefficient of determination ( $R^2$ )

The determination coefficient is a tool used to measure the percentage of influence of the independent variable on the bound variable.

##### a. The influence of the principal's leadership model on teacher performance.

Table 8. Principal Leadership Determination Coefficient

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0,642 <sup>a</sup>	0,413	.0,405	4.018

In relation to the result of .0405 4.018, the calculation of the determinant coefficient contained in the table above obtained an Rsquare value of 0.413. This means that the influence of the principal's leadership model on teacher performance at SMA Sekecamatan Ngawi is 41.3%, the remaining 58.7% is influenced by other factors that are not variables in this study.

##### b. The effect of gruru motivation on teacher performance.

Table 9. Determination coefficient of gruru motivation on teacher performance

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.354 <sup>a</sup>	.125	.114	5.50249

In relation to the results of the calculation of the determinant coefficient contained in the table above, the Rsquare value is obtained of 0.125. This means that the influence of the principal's leadership model on teacher performance at SMA Sekecamatan Ngawi is 12.5%, the remaining 87.1% is influenced by other factors that are not variables in this study.

##### c. The influence of the principal's leadership model and teachers' motivation together on teacher performance.

Table 10. Coefficient of leadership determination and teacher motivation on teacher performance

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.624 <sup>a</sup>	.389	.373	5.58419

In relation to the results of the calculation of the determinant coefficient contained in the table above, the Rsquare value of 0.389 was obtained. This means that the influence of the principal's leadership model on teacher performance at SMA Sekecamatan Ngawi is 38.9%, the remaining 61.1% is influenced by other factors that are not variables in this study.

The word leader has the meaning of leading, directing, guiding (Arokiasamy et al., 2016). Leadership is a person's ability to influence and motivate others to do something according to agreement and common goals (Prasojo et al., 2021). Leaders have the function to manage and maximize their ability to achieve the goals of the educational institution led (Ramos-Pla et al., 2021). Leaders also provide ease for progress and provide convenience for progress and provide inspiration for the organization in achieving goals. According to (Yada & Jäppinen, 2022) Leadership is a set or set of wills and personality traits, including authority, to be used as a tool in convincing leaders so that they are willing and able to carry out their duties willingly charged to

them with enthusiasm and not forcefully. To get maximum performance, the use of the right leadership model from the principal is one of the factors that can move, direct, guide, and motivate teachers to excel in carrying out their duties as educators.

The results of the analysis using multiple liner regression analysis showed that the leadership model had a significant positive effect on the performance of high school teachers in Ngawi District. The results of this study provide information that the model used by school principals in Ngawi sub-district is a participatory leadership model. Participatory leadership is the way the principal leads the subordinates who participate in the decision-making process. This is often done by school principals by treating subordinates well, playing a role in decision-making, leaders not only give opportunities to those who take the initiative, but also help them complete their own tasks, for example providing facilities. Leaders here are here to develop a sense of responsibility for subordinates in achieving the goals of the group, organization or institution, by giving praise, or also giving constructive criticism even though in the end the responsibility to make decisions is in the hands of the leader, but in the process, the decision-making is done together in the group members so that it is proven to be able to improve the performance of high school teachers in Ngawi District.

Motivation is the process of encouraging the strength contained in a person or group to try to produce better behavior in meeting the needs of life (Scholtz, 2024). A teacher's work motivation grows because of the encouragement (Aldighrir, 2024). The job satisfaction of a teacher is influenced by two factors, namely internal and external factors. According to (Dasruth et al., 2024) Motivation is a change in energy in a person that is characterized by the emergence of feelings and is preceded by a response to his goals. Then according to (Frick & Pazey, 2024) Motivation is the desire to do something, and the desire found in an individual who stimulates him to do actions or something that is the basis or reason for a person's behavior. Work motivation can be interpreted as the desire or need that underpins a person so that he is encouraged to work. Therefore, the role of motivation to support success is very important. The results of the analysis using multiple liner regression analysis showed that teacher motivation was significant to the performance of high school teachers in Ngawi District. The results of this study provide information that there is teacher motivation, and teachers get along well so that there is a close friendship between teachers and other colleagues. In addition, the teachers carry out activities related to career improvement, one of which is participating in training, training so that they are able to improve the performance of high school teachers in Ngawi District.

## **CONCLUSIONS**

Based on the results of the above research, it can be concluded that there are several factors that affect teacher performance, including the principal's leadership model and teachers' work motivation. Without an effective and good leadership model such as the participatory model applied, the head of the madrasah can easily manage his educational institution. Then work motivation can be interpreted as the desire or wholeness that underlies a person's background so that he is encouraged to work. A teacher has a good performance can be seen from how a teacher carries out his duties as a teacher in educating his students and can solve future challenges.

## **CONFLICTS OF INTEREST STATEMENT**

There were no conflicts during the research process.

## AUTHOR CONTRIBUTIONS

Study concept and design: Muhammad Shoffa Saifillah AlFaruq. Acquisition of data: Muhammad Shoffa Saifillah AlFaruq. Analysis and interpretation of data: Muhammad Shoffa Saifillah AlFaruq. Drafting the manuscript: Roficha Yuliani. Critical revision of the manuscript for important intellectual content: Roficha Yuliani. Statistical analysis: Muhammad Shoffa Saifillah AlFaruq.

## REFERENCES

- Aldighrir, W. M. (2024). Psychometric Properties of the Principal Instructional Leadership Scale (PILS) in Saudi Arabia. *Acta Psychologica*, 246(January), 104262. <https://doi.org/10.1016/j.actpsy.2024.104262>
- Alqassab, M., & León, J. (2024). Motivational messages from teachers before exams: Links to intrinsic motivation, engagement, and academic performance. *Teaching and Teacher Education*, 151(August). <https://doi.org/10.1016/j.tate.2024.104750>
- Arokiasamy, A. R. A., Abdullah, A. G. K., @ Shaari, M. Z. A., & Ismail, A. (2016). Transformational Leadership of School Principals and Organizational Health of Primary School Teachers in Malaysia. *Procedia - Social and Behavioral Sciences*, 229, 151–157. <https://doi.org/10.1016/j.sbspro.2016.07.124>
- Collie, R. J. (2023). Teachers' work motivation: Examining perceived leadership practices and salient outcomes. *Teaching and Teacher Education*, 135(April), 104348. <https://doi.org/10.1016/j.tate.2023.104348>
- Collie, R. J., & Martin, A. J. (2024). Teachers' motivation and engagement to harness generative AI for teaching and learning: The role of contextual, occupational, and background factors. *Computers and Education: Artificial Intelligence*, 6(December 2023), 100224. <https://doi.org/10.1016/j.caeai.2024.100224>
- Dahlqvist, C. (2023). Cognitive and motivational qualities of task instruction: Cognitive appraisals and achievement emotions of Swedish primary teacher students. *Journal of Academic Librarianship*, 49(6), 102797. <https://doi.org/10.1016/j.acalib.2023.102797>
- Dasruth, J., Naicker, S. R., & Smith, C. (2024). Teachers' perceptions of principals' digital leadership practices in a school district in a developing country. *Social Sciences and Humanities Open*, 10(October), 101192. <https://doi.org/10.1016/j.ssaho.2024.101192>
- Falcon, S., Alonso, J. B., & Leon, J. (2023). Teachers' engaging messages, students' motivation to learn and academic performance: The moderating role of emotional intensity in speech. *Teaching and Teacher Education*, 136(August), 104375. <https://doi.org/10.1016/j.tate.2023.104375>
- Fischer-Schöneborn, S., & Ehmke, T. (2023). Evaluating boundary-crossing collaboration in research-practice partnerships in teacher education: Empirical insights on co-construction, motivation, satisfaction, trust, and competence enhancement. *Studies in Educational Evaluation*, 79(September 2023). <https://doi.org/10.1016/j.stueduc.2023.101305>
- Frick, W. C., & Pazey, B. L. (2024). Approaching a substantive theory of moral reckoning in special education leadership: Innovative grounded theory methods using extant data on principals. *International Journal of Educational Research Open*, 7(August), 100398. <https://doi.org/10.1016/j.ijedro.2024.100398>
- Gümüş, S., Liu, Y., Bellibaş, M., & Lee, M. (2024). A global typology of school principals' time use: Exploring the effects of contextual and individual factors. *International Journal of Educational Research*, 125(March). <https://doi.org/10.1016/j.ijer.2024.102343>

- Hung, J. H., Shen, J. Y., & Hsieh, C. C. (2025). Identity Leadership and Atayal Gaga: A case study of an Indigenous experimental school. *Teaching and Teacher Education*, 154(August 2024), 104849. <https://doi.org/10.1016/j.tate.2024.104849>
- Lan, Y. (2024). Through tensions to identity-based motivations: Exploring teacher professional identity in Artificial Intelligence-enhanced teacher training. *Teaching and Teacher Education*, 151(August), 104736. <https://doi.org/10.1016/j.tate.2024.104736>
- Layek, D., & Koodamara, N. K. (2024). Motivation, work experience, and teacher performance: A comparative study. *Acta Psychologica*, 245(December 2023), 104217. <https://doi.org/10.1016/j.actpsy.2024.104217>
- Maasoumi, R., Azin, S. A., Nedjat, S., Parto, M., Zamani Hajiabadi, A., & Samadaee Gelehkolaee, K. (2024). The effect of sexuality education based on the information, motivation, and behavioral skills model on improving the teachers' professional competence. *Heliyon*, 10(2). <https://doi.org/10.1016/j.heliyon.2024.e24170>
- Prasojo, L. D., Yuliana, L., & Akalili, A. (2021). Dataset on factors affecting social media use among school principals for educational leaderships. *Data in Brief*, 39, 107654. <https://doi.org/10.1016/j.dib.2021.107654>
- Ramos-Pla, A., Tintoré, M., & del Arco, I. (2021). Leadership in times of crisis. School principals facing COVID-19. *Heliyon*, 7(11). <https://doi.org/10.1016/j.heliyon.2021.e08443>
- Schoenherr, J., & Schukajlow, S. (2024). Preservice teachers' judgments of students' expectations of success and task values: Close relations with their personal task motivation. *Teaching and Teacher Education*, 148(August 2023), 104659. <https://doi.org/10.1016/j.tate.2024.104659>
- Scholtz, G. (2024). Exploratory study of the humanistic philosophy of adult learning as principal philosophy for leadership development. *International Journal of Management Education*, 22(2), 100949. <https://doi.org/10.1016/j.ijme.2024.100949>
- Yada, T., & Jäppinen, A.-K. (2022). Principals' perceptions about collective competences in shared leadership contexts. *Teaching and Teacher Education: Leadership and Professional Development*, 1(April 2021), 100012. <https://doi.org/10.1016/j.tatelp.2022.100012>