



How School Principals' Managerial Skills Influences Teacher Self-Efficacy

Riswandi^{1*}, Alif Luthvi Azizah², Nursalamah Siagian³, Sumarsih Anwar⁴, Utami⁵ 

^{1,2,5} Faculty of Teacher Training Education, Universitas Lampung, Bandar Lampung, Indonesia

^{3,4} The National Research and Innovation Agency (BRIN), Jakarta, Indonesia

ARTICLE INFO

Article history:

Received February 08, 2024

Accepted April 10, 2024

Available online April 25, 2024

Kata Kunci:

Kepemimpinan, Keterampilan Manajerial, Kepala sekolah, Efikasi-diri, Guru

Keywords:

Leadership, Managerial skills, Principal, Self-Efficacy, Teacher



This is an open access article under the [CC BY-SA](https://creativecommons.org/licenses/by-sa/4.0/) license.

Copyright © 2024 by Author. Published by Universitas Pendidikan Ganesha.

ABSTRAK

Efikasi-diri guru merupakan suatu keyakinan individu guru terhadap kemampuannya untuk mengelola, merancang, dan merencanakan aktivitas yang diperlukan untuk mencapai tujuan pendidikan. Guru dengan efikasi-diri yang tinggi akan memberikan banyak ide baru didalam pengajarannya. Penelitian ini bertujuan untuk menganalisis pengaruh keterampilan manajerial kepala sekolah terhadap efikasi diri guru, berdasarkan jenis penelitian kuantitatif dengan jenis penelitian ex-post facto. Pengumpulan data dilakukan dengan menggunakan kuesioner dengan skala likert terhadap 354 guru sekolah dasar negeri. Validitas dan reliabilitas instrumen dinilai, dan korelasi product moment Pearson digunakan untuk menguji data. Dengan terlebih dahulu memverifikasi normalitas, heteroskedastisitas, multikolinearitas, dan linearitas, data yang terkumpul dianalisis untuk mencari korelasi langsung antar variabel. Hasil penelitian menunjukkan bahwa terdapat pengaruh positif dan signifikan antara keterampilan manajerial kepala sekolah terhadap efikasi diri guru. Temuan ini mungkin berguna bagi negara-negara berkembang yang berupaya meningkatkan efikasi diri guru dan kualitas pendidikan mereka. Sebagaimana disarankan oleh penelitian saat ini, memastikan efikasi diri guru dalam mengajar sangatlah penting karena dampak positifnya terhadap mereka yang memiliki kualifikasi, pangkat, dan pengalaman lebih rendah. Implikasi praktis penelitian ini yaitu managerial skills kepala sekolah dapat ditingkatkan secara terus menerus karena terbukti dapat meningkatkan efikasi-diri guru.

ABSTRACT

Teacher self-efficacy is an individual teacher's belief in his ability to manage, design and plan the activities needed to achieve educational goals. Teachers with high self-efficacy will provide many new ideas in their teaching. This study aimed to analyze the influences of school principals' managerial skills on teacher self-efficacy, based on a quantitative research with the type of research ex-post facto. Data were collected using questionnaires with a Likert scale from 354 teachers in public elementary schools. The validity and reliability of the instrument were assessed, and the Pearson product moment correlation was used to examine the data. By first verifying normality, heteroscedasticity, multicollinearity, and linearity, the data collected was analyzed to find the direct correlation among variables. The study's results showed that there was a positive and significant influence between the school principals' managerial skills on teacher self-efficacy. The findings may be useful for developing countries seeking to improve teacher self-efficacy and the quality of their education. As suggested by the current research, ensuring teacher self-efficacy in teaching is crucial because of its positive impact on those with lower qualifications, ranks, and experience. The practical implication of this research is that the managerial skills of school principals can be improved continuously because it has been proven to increase teacher self-efficacy.

1. INTRODUCTION

Teachers play an important role in the progress of education. Quality education can be seen from the effectiveness of teachers (Coban et al., 2023; Gordon et al., 2023). In this case, teachers are expected to love their profession, have a positive attitude towards their work, and have high self-efficacy beliefs in carrying out their work. Teachers' self-efficacy beliefs are becoming increasingly important for controlling important behaviors and events in their lives (Gozum et al., 2023; Polatcan et al., 2023; Skaalvik & Skaalvik,

2023). Moreover, these beliefs are useful to see the difference between individual performance and their true potential in a particular field. Self-efficacy is an individual's belief, judgment, and performance of himself in doing certain work to achieve success (Mathews et al., 2023; Naidoo & Naidoo, 2023; Sánchez-Rosas et al., 2023). Teacher self-efficacy is seen as a manifestation of teacher behavior to be able to do work in accordance with their profession. In addition, teachers' self-efficacy beliefs have a stronger effect than ability in completing tasks well (Abdillah et al., 2023; Bellibaş, 2023). This teacher self-efficacy belief is a desirable teacher quality for the advancement of education. Teacher self-efficacy plays an important role in the teacher's own choice of personal goals (Chan et al., 2023; Pan & Cheng, 2023). This means that teachers with high self-efficacy tend to have good engagement with their students. Previous study revealed that there are three dimensions of self-efficacy, namely magnitude, strength, and generality (Bandura, 1977). The three dimensions of self-efficacy provide a wide range of knowledge and are useful for teachers to educate students well (S. Gumus & Bellibaş, 2020; Karuniasih, 2022). Based on the results of observations and interviews with teachers in public elementary schools in Bandar Lampung City, the reality of the conditions that occur in schools today is the low self-efficacy of teachers. This problem is due to the lack of teacher confidence in their profession, there are obstacles to teacher self-efficacy such as lack of communication between principals and teachers which causes discomfort. Based on these results, this problem should be resolved well, namely that there will be no more obstacles to teacher self-efficacy in schools. So what can be done to overcome this is with quality managerial skills of school principals. Through managerial skills, the principal is expected to increase the self-efficacy of teachers in schools.

Furthermore, teacher self-efficacy requires the role of the principal's managerial skills. The principal's managerial skills are very important for the continuity of education (Amril et al., 2023; Ullah et al., 2023). This is because the principal is a manager who has great duties and responsibilities to manage his school. A qualified principal shows good managerial skills such as always providing support to teachers and all school members, maintaining school facilities properly. In addition, they have good communication between teachers, school staff, students, parents, and the community (E. Gumus & Bellibaş, 2023; Webster & Litchka, 2020). Therefore, good managerial skills of school principals are expected to be a role model and motivate teachers so that they can show their work productivity well.

Being a leader is not an easy task. Leaders must understand each subordinate's different behavior. To be a competent school leader, the principal needs skills called managerial skills. For an organization to be effective, the principal must have a clear understanding of the importance of different skills in his managerial role (Anggraini & Sholihin, 2023; Erisa et al., 2023). Managerial skills or what is referred to as managerial skills is a person's ability to manage organizational resources based on established competencies in order to achieve the specified goals (Ayalew et al., 2022; Giraud et al., 2022; Otto & Lumapenet, 2022). Managerial skills must be clearly understood by the principal. This is because a principal with managerial skills will be able to professionally run the effective schools (Estiani & Hasanah, 2022; Riani & Ain, 2022). Therefore, a principal with good managerial skills will know how to run a school wisely. According to previous study, managerial skills consist of three types of skills, namely: (1) technical skills, which are skills to carry out work in accordance with the tasks they receive, (2) conceptual skills, related to a person's ability to think about organizational planning and strategy, (3) human skills, which are skills related to how to communicate with others (Northouse, 2016). The three managerial skills of school principals can improve the quality of education. Previous literature also proves that managerial skills can positively increase teacher self-efficacy to improve the quality (Mugani, 2022; Sakiz et al., 2020).

In addition, research on managerial skills and teacher self-efficacy has never been conducted in public primary schools in Bandar Lampung City, Indonesia. In addition, it is still rare for researchers to examine both variables about school principals' managerial skills and teacher self-efficacy simultaneously. As a manager in the school environment, the principal plays an important role in ensuring the efficiency of the school he leads. So the focus of this research is different from the focus of previous studies. Therefore the novelty of the research focuses on the managerial abilities of school principals which can influence teacher self-efficacy. To overcome this gap, this research was conducted to answer the research question: how school principals' managerial skills influence teacher self-efficacy. In this regard, this research is considered comprehensive and important because it provides a holistic view of the explanations made specifically in Bandar Lampung city for similar problems. So, we hope that this research will contribute to knowledge.

2. METHOD

This study employed the use of a quantitative approach. Quantitative research focuses on careful measurements and to answer research questions and hypotheses based on theory (Creswell, 2017). While the type of this research is ex post facto. Furthermore, the research respondents consisted of public

elementary school teachers in Bandar Lampung City. The population of this research was the public elementary school teachers in Bandar Lampung City as many as 3359 teachers with a sample of 354 teachers. The sampling technique used a cluster random sampling. The number of samples was determined based on the Taro Yamane Formula (Uakarn et al., 2021). The data were collected through a questionnaire using a Likert scale: strongly agree, agree, neutral, disagree, and strongly disagree. Researchers compile the dimensions of managerial skills. This dimension consists of three phases, namely: technical skill, human skill, and conceptual skill (Northouse, 2016). The dimension of technical skill is reflected by the items "The principal is able to compile long-term school plans" and "The principal carries out tasks at school using hardware such as computers, laptops, and smartphones". The dimension of human skill is reflected by the items "The principal makes a regular agenda to carry out training for teachers" and "The principal and teachers work together to manage the improvement of school resources." The dimension of conceptual skill is reflected by the items "Carry out regular evaluations of the performance of teachers/school staff" and "Ability to create a school organizational culture." The following managerial skills grid is in Table 1.

Table 1. Managerial Skills Questionnaire Grid

No	Dimensions	Indicator	Item Number
1	Technical skill	Develop detailed standards and work procedures	1, 6
		Able to use a computer/laptop (IT device)	11, 18, 30
		Create a school organizational structure	2, 26
		Organize the storage of school equipment well	12
		Distribute teachers' teaching schedules proportionally	19, 27
2	Human skill	Increasing the professional competence of teachers and school staff	3, 7
		Creating teamwork between teachers	13, 20
		Conduct performance assessments of teachers and school staff	28
		Give awards to teachers and staff who excel	4, 9
		Creating positive relationships with the community	14, 21
3	Conceptual skill	Make decisions quickly	5, 15
		Create a school vision and mission	8, 22
		Design educational programs realistically	16, 29
		Establish strategies for achieving school goals	24
		Make detailed teacher and employee duties	10, 23
		Develop extracurricular programs	17, 25

Based on the test results obtained 22 valid items that are ready to be used for research with a Cronbach's alpha coefficient that $r_{count} > r_{table}$ (r_{table} value = 0.361). Therefore, the basis for compiling the dimension of teacher self-efficacy from Bandura, which consists of magnitude, strength, and generality. The magnitude dimension is reflected in the items "I find it difficult to choose a learning method that suits the characteristics of current students" and "I find it difficult to regulate myself so as not to engage in behaviors that exceed my limits." The dimension of strength is reflected by the items "I deserve to be trusted in carrying out the tasks given by the principal" and "I have difficulty in time management to carry out learning well." The dimension of generality is reflected by the items "I hesitate to teach in a variety of different subject areas" and "I hesitate when chosen to be an extracurricular coach at school." The following teacher self-efficacy grid is in Table 2.

Table 2. Teacher Self-Efficacy Questionnaire Grid

No	Dimensions	Indicator	Item Number
1	Magnitude	Analyze the choice of work to be carried out	1, 6, 20
		Adapt to immediate tasks both easy and difficult	11, 12, 27
		Avoid situations and behavior beyond the limits of ability	2, 19, 23
2	Generality	Confidence in carrying out tasks in various fields	13, 14, 29
		Confidence in carrying out assignments in a specific area	3, 7, 22, 30
3	Strength	Lack of confidence in completing tasks	15, 21, 26
		Weak efficacy beliefs	4, 8, 18
		Strong confidence in doing the job well	9, 16, 24, 25
		Confidence in the success of whatever you do	5, 10, 17, 28

Based on the test results obtained 19 valid items that are ready to be used for research with a Cronbach's alpha coefficient that $r_{count} > r_{table}$ (r_{table} value = 0.361). Besides that, the responses were then analyzed through simple regression. The rejection and acceptance of the hypothesis were based on a significance level of 0.05, the analysis was with the help of the SPSS 22 program (Arikunto, 2012; Pallant, 2011). The questionnaires of managerial skills (technical skill, conceptual skill, dan human skill) with 22 items and teacher self-efficacy questionnaires (magnitude, strength, dan generality) with 19 items. The purpose of this study is to examine the influences of school principals' managerial skills on teacher self-efficacy. The effect of the principal's managerial ability variable and teacher self-efficacy (X) on the variable (Y) by first conducting a normality test, heteroscedasticity test, multicollinearity test, linearity test on the data, then the direct and indirect effects can be determined.

3. RESULT AND DISCUSSION

Result

This study conducted several data analysis tests consisting of normality test, heteroscedasticity test, multicollinearity test, and linearity test. The normality test aims to determine whether the data from the sample deviates or follows a normal distribution. We used the Kolmogorov-Smirnov Test technique in testing or normality with the data criteria being said to be expected if $p > 0.05$. From the results of the residual normality test, Kolmogorov-Smirnov Z was obtained with a significance level of 0.076 $p > 0.05$ on the managerial skills variable. Meanwhile, the self-efficacy variable obtained 0.105 $p > 0.05$, which means that both variables are normally distributed. The results of the normality test can be seen in Table 3.

Table 3. Residual Normality Test

Variable	Sig.	Interpretation
Managerial Skills	0.076	Normal
Self-Efficacy	0.105	Normal

Furthermore, the heteroscedasticity test aims to determine whether the variance of the residuals is the same or not the same for all observations. The heteroscedasticity test criteria are if the significance value > 0.05 , then there are no symptoms of heteroscedasticity in the regression model and H_1 is rejected. Meanwhile, if the significance value < 0.05 , there are symptoms of heteroscedasticity in the regression model and H_1 is accepted. From the results of the heteroscedasticity test, the significance value (sig.) on the managerial skills variable is 0.514. Thus the significance value is greater than 0.05 so it can be concluded that there are no symptoms of heteroscedasticity. After that the purpose of the multicollinearity test is to determine whether the regression model finds a correlation between the independent variables. A good regression model should not have a correlation between the independent variables (no multicollinearity symptoms). The results show that the tolerance value obtained on the managerial skills variable is 1.000 where the value is greater than 0.10. Then the VIF value on the managerial skills variable is 1.000 where the value is smaller than 10.00. Thus, it can be said that the managerial skills variable does not occur. Besides that the linearity test aims to determine whether the independent and dependent variables have a linear relationship or not. The test criteria will be accepted if $F_{count} > F_{table}$ or significance count $\alpha < 0.05$. From the results of the linearity test between managerial skills and self-efficacy (F linearity 1.391). The significance level of the variable is 0.070 $\alpha < 0.05$. This means that each independent variable is linearly related to the dependent variable. Additionally, we tested the hypothesis used simple regression to help of SPSS 22. The result is show in Table 4.

Table 4. Hypothesis Test Results

	Beta	T-value	Sig.	Result
(Constant)	85.518	57.473	0.000	supported
X	0.325	20.294	0.000	

Based on Table 4, it showed the hypothesis testing The results of simple linear regression analysis obtained $Y = 85.518 + 0.325X$ which means that the consistency value of variable X is 85.518 with a note that every additional 1% value on variable X, the value of its influence increases by 0.325. The significance value is $0.000 < 0.05$, which means that there is a significant influence between principals' managerial skills on teacher self-efficacy. It was known that H_1 were supported. Then, the t_{count} value is 20.294 and the t_{table} is 1.649, meaning that H_a is accepted and H_0 is rejected.

Discussion

Based on the results of data analysis, it is known that the results of the normality test between the managerial skills variable and teacher self-efficacy, both are normally distributed. There are no symptoms of heteroscedasticity and multicollinearity between the two variables. And the linear test results between managerial skills and teacher self-efficacy are linear with a significance of 0.070. Then the results of the hypothesis test used simple regression showed that the effect increased by 0.325. This means that the managerial skills variable has a strong influence on teacher self-efficacy. This finding is in accordance with previous research which is a significant effect between the principal's managerial skills and teacher self-efficacy (Onag et al., 2021). The significant influence between the two is related to the way the principal leads his organization. This shows that managerial skills are a factor that affects teacher self-efficacy. Increasing teacher self-efficacy depends on how the principal masters managerial skills well for the organization he leads. So that teachers become more confident in their work and teacher self-efficacy increases.

Furthermore, the research by other study shows the same thing that there is a significant influence between managerial skills and teacher self-efficacy (Marimbun et al., 2023). Based on this research, it can be said clearly if the increase in teacher self-efficacy is influenced by managerial skills. Previous research shows that there is a positive and significant correlation between school principals' managerial skills and teacher self-efficacy (Sakiz et al., 2020). The perceived managerial skills of the principal can significantly increase teacher self-efficacy. It should also be noted that managers who are motivated to apply managerial skills that prioritize fairness, effective communication, servant leadership, and problem solving, can support teacher self-efficacy in their schools. In addition, this study shows that the managerial skills perceived by school principals promise to increase teacher self-efficacy. Managerial skills are indeed needed by an organization to improve the quality of teachers and school staff. In addition, teacher self-efficacy is the foundation for the teacher himself to have confidence in his abilities. If a teacher has good self-efficacy then he will become a quality teacher in his work. Overall, teacher self-efficacy is seen as a teacher's confidence when teaching in class, leading school meetings, and doing all their activities at school (Azizah, 2021; Ma et al., 2021).

Moreover previous study stated that managerial skills are the ability of a manager to lead the organization he leads which consists of conceptual skills, human skills, and technical skills (Penagos Guzmán et al., 2023). In addition, good managerial skills also involve skills related to responsibilities such as planning, time management, problem analysis, and decision making (Abdinoor, 2020; Bayog et al., 2023). If principals have effective managerial skills, then teachers' self-efficacy will continue to increase. In turn, teachers who have a high level of self-efficacy can demonstrate their skills in classroom management and provide effective learning instruction to their students at school. In addition, this research provides a practical contribution to the world of education, especially for the practice of teaching teachers and principals in their leadership in an educational institution.

This study also has research limitations there is the study only discusses two variables regarding managerial skills with teacher self-efficacy. So, that the results of this study do not apply to different locations and variables. Furthermore, this research only uses a quantitative approach. Thus, the conclusion is only based on statistical testing of research data without being complemented by a qualitative approach to deepen the research. With the limitations of this research that have been conveyed, the researcher hopes that it can be refined by further research. Suggestions for future researchers are this research can be used as reading material or a reference that will examine the managerial skills of school principals and teacher self-efficacy, especially with a qualitative approach because this research is only limited to a quantitative approach. Even in order to obtain comprehensive data with more credible results, future researchers can use a mixed approach to cover the shortcomings of this research.

4. CONCLUSION

School principals' managerial skills are leadership that involves three skills, namely technical skills, conceptual skills, and human skills. This study aims to examine the influences of school principals' managerial skills on teacher self-efficacy. The results show that there is a significant influence between school principals' managerial skills and teacher self-efficacy. The finding of this study is that principals' managerial skills have a strong influence on teacher self-efficacy. Therefore, good principals' managerial skills are considered very important to increase teacher self-efficacy. Furthermore, this study has limitations. First, this study only used a quantitative approach to examine the influences of school principals' managerial skills on teacher self-efficacy. Therefore, there is a need to understand in a mixed method manner the reasons behind the influence of these two variables. In addition, given that the sample used was cluster random sampling only from public primary schools in Bandar Lampung city. Future

research could use a larger sample drawn from more elementary schools in various provinces in Indonesia and even countries in the Southeast Asian region. Despite its limitations, this study conveys important implications for policy and practice in developing countries, especially Indonesia, to improve teacher self-efficacy in primary schools.

5. REFERENCES

- Abdillah, M. H., Tentama, F., Widiana, H. S., & Zurqoni. (2023). Self-regulation, self-evaluation, and self-efficacy: How does its impact on employability? *International Journal of Evaluation and Research in Education (IJERE)*, 12(3), 1165–1173. <https://doi.org/10.11591/ijere.v12i3.25076>.
- Abdinoor, N. M. (2020). Socio-economic status, career decision-making self-efficacy, career maturity, and gender with secondary school students in northern Kenya. *International Journal of Multidisciplinary and Current Educational Research*, 2(4), 160–167. <https://www.ijmcer.com/wp-content/uploads>.
- Amril, A., Ahyani, N., & Rahman, A. (2023). The managerial skills of principal and academic supervision on teacher's performance. *Journal of Social Work and Science Education*, 4(1), 251–260. <https://doi.org/10.52690/jswse.v4i1.375>.
- Anggraini, P. G., & Sholihin, M. (2023). What do we know about managerial ability? A systematic literature review. *Management Review Quarterly*, 73(1), 1–30. <https://doi.org/10.1007/s11301-021-00229-6>.
- Arikunto. (2012). *Prosedur Penelitian Suatu Pendekatan Praktik*. Remaja Rosdakarya.
- Ayalew, H. R., Muthoni Itegi, F., & Nyaga Muchanje, P. (2022). Principals' conceptual managerial skills and teachers' instructional effectiveness in secondary schools, central gondar zone, ethiopia. *European Online Journal of Natural and Social Sciences*, 11(2), 336–346. <https://european-science.com/eojnss/article/view/6327>.
- Azizah, L. (2021). *Memahami Self Efficaci atau Efikasi Diri*. Gramedia Blog.
- Bandura, A. (1977). *Self-efficacy: The exercise of control*. Freeman.
- Bayog, E. G., Angeles, E. L., Doong, M. F., & Santos, C. S. (2023). A path model of teachers' teaching effectiveness as estimated by managerial, intellectual and communication skills. *Southeast Asian Journal of Multidisciplinary Studies*, 3(1), 1–17. <https://cmc.edu.ph/research/index.php/journals/article/view/110>.
- Bellibaş, M. Ş. (2023). Empowering principals to conduct classroom observations in a centralized education system: Does it make a difference for teacher self-efficacy and instructional practices? *International Journal of Educational Management*, 37(1), 85–102. <https://doi.org/10.1108/IJEM-02-2022-0086>.
- Chan, S., Maneewan, S., & Koul, R. (2023). An examination of the relationship between the perceived instructional behaviours of teacher educators and pre-service teachers' learning motivation and teaching self-efficacy. *Educational Review*, 75(2), 67–94. <https://doi.org/10.1080/02619768.2021.1892639>.
- Coban, O., Ozdemir, N., & Bellibaş, M. Ş. (2023). Trust in principals, leaders' focus on instruction, teacher collaboration, and teacher self-efficacy: Testing a multilevel mediation model. *Educational Management Administration & Leadership*, 51(1), 95–115. <https://doi.org/10.1177/1741143220968170>.
- Creswell, J. W. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches*.
- Erisa, V., Mahmud, H., & Rustan, E. (2023). Analysis of principal managerial skills in state senior high schools. *Kontigensi: Jurnal Ilmiah Manajemen*, 11(1), 353–361. <https://doi.org/10.56457/jimk.v11i1.413>.
- Estiani, S. W., & Hasanah, E. (2022). Principal's leadership role in improving teacher competence. *Nidhomul Haq: Jurnal Manajemen Pendidikan Islam*, 7(2), 229–241. <https://doi.org/10.31538/ndh.v7i2.2281>.
- Giraud, L., Zaher, A., Hernandez, S., & Akram, A. A. (2022). The impacts of artificial intelligence on managerial skills. *Journal of Decision Systems*, 1–34. <https://doi.org/10.1080/12460125.2022.2069537>.
- Gordon, D., Blundell, C., Mills, R., & Bourke, T. (2023). Teacher self-efficacy and reform: A systematic literature review. *The Australian Educational Researcher*, 50(3), 801–821. <https://doi.org/10.1007/s13384-022-00526-3>.
- Gozum, A. I. C., Metin, S., Uzun, H., & Karaca, N. H. (2023). Developing the teacher self-efficacy scale in the use of ICT at home for pre-school distance education during covid-19. *Technology, Knowledge and Learning*, 28(3), 1351–1381. <https://doi.org/10.1007/s10758-022-09616-8>.
- Gumus, E., & Bellibaş, M. Ş. (2023). The relationship between the types of professional development activities teachers participate in and their self-efficacy: A multi-country analysis. *European Journal of Teacher Education*, 46(1), 67–94. <https://doi.org/10.1080/02619768.2021.1892639>.
- Gumus, S., & Bellibaş, M. Ş. (2020). The relationship between professional development and school principals' leadership practices: The mediating role of self-efficacy. *International Journal of*

- Educational Management*, 34(7), 1155–1170. <https://doi.org/10.1108/IJEM-10-2019-0380>.
- Karuniasih, N. L. A. G. (2022). Exploring Readiness of Teachers Toward English Remote Teaching. *Journal of Educational Study*, 1(3), 134–149. <https://doi.org/10.36663/joes.v1i3.204>.
- Ma, K., Chutiyami, M., Zhang, Y., & Nicoll, S. (2021). Online teaching self-efficacy during COVID-19: Changes, its associated factors and moderators. *Education and Information Technologies*, 26(6), 6675–6697. <https://doi.org/10.1007/s10639-021-10486-3>.
- Marimbun, A., Tampubolon, H., & Tambunan, W. T. (2023). Pengaruh Efikasi Diri Dan Manajerial Skill Kepala Sekolah Terhadap Komitmen Kerja Guru Di Sma Pgrl Getengan Tana Toraja. *Jurnal Dinamika Pendidikan*, 16(2), 251–258. <https://doi.org/10.51212/jdp.v16i2.212>.
- Mathews, H. M., Myers, A. M., & Youngs, P. A. (2023). The role of teacher self-efficacy in special education teacher candidates' sensemaking: A mixed-methods investigation. *Remedial and Special Education*, 44(3), 209–224. <https://doi.org/10.1177/07419325221101812>.
- Mugani, P. (2022). Capacity building and developing managerial skills of business studies teachers. *Asia-Africa Journal of Education Research*, 1, 109–130. <https://journals.iapaar.com/index.php/aaer/article/view/45>.
- Naidoo, K., & Naidoo, L. J. (2023). Designing teaching and reflection experiences to develop candidates' science teaching self-efficacy. *Research in Science & Technological Education*, 41(1), 211–231. <https://doi.org/10.1080/02635143.2021.1895098>.
- Northouse, P. G. (2016). *Leadership theory and practice* (seventh). United States of America: Sage Publication, Inc.
- Onag, Z., Cevik, S., & Erdem, Y. (2021). Is there a relationship between the time management skills of sports manager candidates and career decision self-efficacy? *African Educational Research Journal*, 9(3), 696–703. <https://eric.ed.gov/?id=EJ1307312>.
- Otto, L., & Lumapenet, H. (2022). Technological leadership and crisis management skills of the school administrators towards school development in the special geographical area of mbhte-barmm. *International Journal of Advance Research and Innovative Ideas in Education*, 8(3), 3934–3937. <https://www.researchgate.net/profile/Husna>.
- Pallant, J. (2011). *SPSS Survival Manual*. Open University Press.
- Pan, H. L. W., & Cheng, S. H. (2023). Examining the impact of teacher learning communities on self-efficacy and professional learning: An application of the theory-driven evaluation. *Sustainability*, 15(6), 4771. <https://doi.org/10.3390/su15064771>.
- Penagos Guzmán, F., Hernández Castorena, O., & García Solarte, M. (2023). Managerial skills and organizational performance: competitive advantage. *Mercados y Negocios*, 24(48), 75–94. <https://doi.org/10.32870/myn.vi48.7688>.
- Polatcan, M., Arslan, P., & Balci, A. (2023). The mediating effect of teacher self-efficacy regarding the relationship between transformational school leadership and teacher agency. *Educational Studies*, 49(5), 823–841. <https://doi.org/10.1080/03055698.2021.1894549>.
- Riani, S. S., & Ain, S. Q. (2022). The role of school principal in implementing education quality management. *Jurnal Ilmiah Sekolah Dasar*, 6(2), 204–211. <https://doi.org/10.23887/jisd.v6i2.45216>.
- Sakiz, H., Ekinci, A., & Sancam, H. (2020). Teachers' perceptions of their school managers' skills and their own self-efficacy levels. *International Journal of Leadership in Education*, 23(5), 585–603. <https://doi.org/10.1080/13603124.2018.1562094>.
- Sánchez-Rosas, J., Dyzenchouz, M., Freiberg-Hoffmann, A., García-Rubiano, M., & Okinishi, M. (2023). Transformational leadership and collective teacher self-efficacy: The mediating role of satisfaction with job resources. *International Journal of Instruction*, 16(1), 801–820. <https://doi.org/10.29333/iji.2023.16145a>.
- Skaalvik, E. M., & Skaalvik, S. (2023). Collective teacher culture and school goal structure: Associations with teacher self-efficacy and engagement. *Social Psychology of Education*, 1–25. <https://doi.org/10.1007/s11218-023-09778-y>.
- Uakarn, C., Chaokromthong, K., & Sintao, N. (2021). Sample size estimation using yamane and cochrane and krejcie and morgan and green formulas and cohen statistical power analysis by g* power and comparisons. *Aphait International Journal*, 10(2), 76–86. <https://so04.tci-thaijo.org/index.php/ATI/issue/download>.
- Ullah, Z., Khan, M. I., Farooqi, R., & Khan, D. (2023). Effectiveness of female head teachers managerial skills in improving teachers performance. *Journal of Social Sciences Review*, 3(2), 165–170. <https://doi.org/10.54183/jssr.v3i2.238>.
- Webster, K., & Litchka, P. (2020). Planning for effective school leadership: Teachers' perceptions of the leadership skills and ethical behaviors of school principals. *Educational Planning*, 27(1), 31–47. <https://eric.ed.gov/?id=EJ1250500>.