Relationship of Principal's Managerial Skills and Academic Supervision Skills through Organizational Climate to Teacher Performance in Public Elementary Schools in Pandawan District

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ABSTRACT

The purpose of this study is to analyze the relationship (1) principals' managerial skills with organizational climate, (2) academic oversight skills with organizational climate, (3) principals managerial skills on teacher performance, (4) academic supervision skills on teacher performance, (5) organizational climate on teacher performance, (6) principals' managerial skills regarding teacher performance through organizational climate as an intervening variable, (7) academic supervision skills on teacher performance through organizational climate as an intervening variable. Meanwhile, this type of research is quantitative research with Ex-Post Facto design. This research was conducted with a total of 31 school respondents. The sampling technique used in this study was a questionnaire. Hypothesis testing is done by multiple linear regression analysis using SPSS 26 for windows. Based on the results of the study it was found that (1) there was a relationship between the principal's managerial skills to the organizational climate with a path coefficient of 0.327; (2) there is a relationship between academic supervision skills and organizational climate with a path coefficient of 0.624; (3) there is a relationship between the principal's managerial skills and teacher performance with a path coefficient of 0.457; (4) there is a relationship between academic supervision skills and teacher performance with a path coefficient of 0.277; (5) there is a relationship between organizational climate and teacher performance with a path coefficient of 0.272; (6) there is a relationship between the principal's managerial skills and teacher performance through the organizational climate as an intervening variable with an indirect path coefficient of 0.5459; (7) there is a relationship between academic supervision skills and teacher performance through organizational climate as an intervening variable with an indirect path coefficient of 0.4516.

Keywords: Managerial, academic supervision, climate, teacher

Introduction

The delivery of education in Indonesia is a systematic national education system (Prihantoro, 2014). National education functions to develop capabilities and shape the nation's character and civilization with dignity to educate the nation's life. Aims to develop the students' potential to become human beings who have faith and are devoted to God Almighty, noble, healthy, knowledgeable, capable, creative, independent, and be a democratic and responsible citizen (Law No. 20, 2003). Then it can be seen that this causes, whether consciously or not, is inherent in the minds of the Indonesian people, education is one of the most fundamental things to become one of civilized, dignified human beings. It can help in improving the welfare of life.

The Indonesian Law on Management of Legal Products, as well as the National Education
System Article 35 paragraph 1, explains the elements of quality education to include standard content, competency of graduates, knowledgeable education personnel, infrastructure, funding, and education assessment needed to be planned and improved periodically.

Data on student learning outcomes, as mentioned, include graduate results and grade progress to be critical or essential and inherent for understanding how school businesses have succeeded in efforts to improve the leadership performance of school principals in managing schools (Burkhauser et al., 2012). Through these criteria, it makes school management important (Suriansyah, 2011). School management is the first thing that must be given full attention because it will affect many things in the school environment, about how teaching and learning activities can be carried out, and also how everything works according to the planned system.

The education system in Indonesia gives broad autonomy to schools and community involvement in the framework of national education policies (Suriansyah, Aslamiah, & Sulaiman, 2014). With this allowance for autonomy, even the principal, who is the same as the school’s executive leader, may form other committees to direct the school (Vernez, Karam, & Marshall, 2012). The principal is to have full authority over what will be done at the school he fostered.

Besides, it is possible to improve the quality of education through the interconnection of work habits, work culture, and organizational culture (Poernamawijaya et al., 2018). According to Suhaimi & Efendi (2018), the most crucial factor in achieving quality education in schools is good leadership. Good school leadership will undoubtedly produce a useful implementation system to improve the quality of education services. With a sound implementation system, proper school management will also be implemented and carried out well. Several studies have shown that although school principals are a vital part of school institutions, this position is the second most important after teachers who have a considerable influence on student learning success (Burkhauser et al., 2013). Regarding this matter, not many people know and realize that the critical role of the quality level of teachers dramatically influences the learning process of students in schools, likewise with teacher performance in schools (Bold et al., 2017).

Therefore, in his position as a supervisor, the principal is obliged to foster and develop teachers to become competent educators and teachers (Suhaimi & Wardaniah, 2017). Therefore, in his role as the school’s highest leader, there are three supervisory functions by the principal, namely: (1) as an activity to improve the quality of learning, (2) as a trigger or a driver of change in elements related to learning (3) as an activity to lead and guide (Suriansyah, Aslamiah, & Sulistiyana, 2015). The principal is then considered successful in carrying out his duties if he meets the criteria such as (1) Openness, (2) Attention to teachers and school staff, (3) Interaction, and (4) Decision Making. The principal is considered to be able to increase teacher motivation by (1) Implementing open management, (2) Applying job descriptions with precise tasks and functions, (3) Applying vertical downward relationships, (4) Mapping programs and activities to increase work motivation, (5) Sustainable and comprehensive supervision, (6) Evaluation (Suriansyah, 2015).

From James A.F. Stoner and Charles Wankel, management is planning, organizing, leadership, and controlling organizational members and using all other organizational resources for the achievement of organizational goals. Proper management in an organization requires managers who have professional skills in their fields. That also applies in the world of education, especially schools, the quality of school management will depend on the principal acting as a manager (Thomas & Mengel, 2008). The principal as manager has to manage the school as well as possible, which can be adjusted to the organizational climate. Schools are complex and unique organizations, requiring high-level coordination (Lee, Hallinger, & Walker, 2012). Performance management systems can be reoriented to achieve high results, including individuals, groups, organizations, and specific systems rather than following typical below-average performance focus (Blackman et al., 2015). Therefore, the value of measuring school principals’ success is the attainment of a refreshing organizational climate and
the realization of both school goals and individual goals within the school environment (Russ et al., ____). Principals must understand and master the role of organizations and cooperative relationships between individuals (Murkingsih, Kristiawan, & Lian, 2019). The principal seems required to jump directly into the organization he leads to know well how the individual relationships within it. The school’s context is teachers with students and the norms that apply at the school, which has become a common habit and how it is agreed by all school members to obtain a pleasant organizational climate of the school institution.

As a leader, the ability that must be realized by the principal can be analyzed from personality, knowledge about education, school vision, and mission, ability to make decisions, and the ability to communicate (Bush, 1998). The principal’s personality as a leader will be reflected in the qualities: (1) being honest, (2) confident, (3) responsibility, (4) risk-taking and decision making, (5) having great enthusiasm, (6) emotions stable, and (7) role models (Winston & Patterson, 2006). Also, principals need to use their time and attention more closely with those involved to improve student instruction and acquisition or learning outcomes (Hamilton et al., 2012).

It is crucial to note that the headmaster sometimes deals with other matters within the school that are not sufficiently related to this. It understood that the success of education is highly dependent on the human element; in this case, the principal, teachers, and school residents (Irmayani, Wardiah, & Kristiawan, 2018). It is like what is happening now about distance schools that require many parties to make schools sustainable (Bailey et al., 2020). For example, there must be coordination between the school, local authorities, parents, and residents. Besides, the challenge of being a headmaster is when the person concerned occupies a new position as a headmaster.

There will be various conditions and working conditions that he meets and must face (Burkhauser et al., 2012b). For example, principals who have to enter schools in regions with high poverty rates will surely meet different challenges compared to principals who enter schools in regions with better economic levels. Each school principal has their constraints in the management of the school they lead because schools in deprived areas are likely to require more attention than schools in regions with better economies. Inevitably the principal unconsciously has many tasks that must be completed for the progress of the school.

It is not excessive if a school principal is required to have excellent managerial skills, considering the number of tasks and responsibilities of a school principal (Mukherjee, 2013). The lack of quality of a principal’s managerial skills will only hamper his task in managing the school and form a conducive school atmosphere. The principal must be able to manage his school so that it develops forward, and over time, all available resources must be utilized in such a way (Hallinger, 2005). Teachers need to be effectively mobilized. A good relationship between them fosters to create a positive, attractive, and productive work atmosphere for which all educational leadership applications by principals are needed (Mbera, 2015). Thus, the principal must always be able to have a good relationship with all education practitioners in the school and maintain the relationship so that there are no obstacles in carrying out the school’s interests.

It is an indispensable role of the active and creative headmaster to give birth to the level of motivation for all school residents and their environment. Later, the school will be able to increase achievement and bring to the level of quality of education as outlined in the national education goals (Andriani, Kesumawati, & Kristiawan, 2018).

At first, Spencer (1919) explained that the principal’s job concurrently many things, such as administrative and clerical work. According to him, after World War II, over time, the principal’s duties became increasingly complicated and full of responsibility, including the achievement of schools in various academic or educational settings or the teaching-learning process. The principal is no longer merely someone appointed and placed in a particular school and serves as the ‘principal’ (Davis, 1921). Nowadays, the principal becomes more than just a status pinned and placed on someone who is
entitled and can occupy that position. The position is given to those with the ability and passed the right stages that they are entitled to become a school principal. Their status is recognized and has strong legitimacy.

Furthermore, the success of the teaching and learning climate is also determined by the harmonious climate of the organization, because all organizations have proper climate and depend on its strength, the climate gives a significant influence on the attitudes and behavior of organizational members (Al-Kurdi, El-Haddadeh, & Eldabi, 2020). What is meant by school climate includes forms of actions and interactions in the school environment that are influenced by shared beliefs, values, and behavior (Brown, Anfara, & Roney, 2004). In the school climate also compromises rules, safety, discipline, school facilities, and non-academic assessments such as social relations and school connections and a healthy school climate is correlated with positive student performance and student success increases (in the learning-teaching process) (Gonzales et al., 2014). In a harmonious and controlled school climate, a pleasant atmosphere found to create positive teaching and learning activities so that there will not be many obstacles and problems interfering with the running of the school management system.

Studies on school principals’ success concluded that school success is the success of school principals (Jacobson, 2011). Thus, improving teacher performance, which is the spearhead of school quality’s success, is also primarily determined by the quality of the principal’s leadership (Alfionita, Muhaimi, & Fahruddin, 2019). In the world of education, there is a set of skills that must be possessed by the principal as an educational leader in carrying out the task (Manullang, 2017). As management is increasingly encouraged to grow independently in line with the policy of decentralization of education, skilled headmasters become demands. The principal’s skills are intended as a provision for them to be able to carry out school management properly.

**Material and Methods**

This study uses Ex-Post Facto research or measurements that occur to reveal existing data without managing or manipulating research variables, revealing the facts obtained that are available to respondents. According to Lammers & Badia (2005), Ex-Post-Facto is a method that adopts several aspects of research that occur, especially those relating to different groups and data analysis, which is not experimental. The study occurred in October 2019 - July 2020 with the population in this study were 31 public elementary schools in Pandawon Sub-district, Hulu Sungai Tengah Regency. The number of samples in this study was 142 teachers. Data collected through questionnaires, observations, and documentation. Data were analyzed quantitatively using path analysis with the help of SPSS version 26.

**Results and Discussion**

The mean and standard deviation of principals’ managerial skills, climate supervision skills, organizational climate, and teacher performance (Table 1). Results about the analysis of the relationship between principals’ managerial skills (X1), academic supervision skills (X2), organizational climate (Z), and teacher performance (Y) (Figure 1).

| Variable                  | Mean   | Standard deviation |
|---------------------------|--------|--------------------|
| Principals’ Managerial Skills | 105.9355 | 22.00293           |
| Academic Supervision Skills | 102.1613 | 19.71649           |
| Organizational Climate    | 105.9355 | 19.98822           |
| Teacher Performance       | 180.7419 | 30.26215           |
The results are through research conducted and per with the results of testing hypotheses, both directly and indirectly. The results of the research conducted using structural statistical analysis using Path Analysis with the help of SPSS Windows 26, which shows that all hypotheses submitted (H₀) are rejected at a significance level of 0.05%.

There is a Direct Relationship between the Principal's Managerial Skills and Organizational Climate in Public Elementary Schools in Pandawan Sub-district, Hulu Sungai Tengah Regency

Based on the analysis of the path coefficient between the principal's managerial skills in organizational climate, the value of the path coefficient is 0.327 with a t-count of 11.725 and a 0.000 significance, so that the significance value is less than 0.05. It proves that the principal's managerial skills can provide a positive and significant relationship with the organizational climate in Public Elementary Schools in Pandawan Sub-district, Hulu Sungai Tengah Regency. It is consistent with the research results, which states that the higher the managerial skills of principals, the more open the organizational climate. A more open organizational climate will affect motivation, performance, job satisfaction, and increase self-confidence and school performance (Salabi, 2014); (Werang, 2012); & (Bianome, Sonhadji, & Purnomo, 2016).

There is a direct relationship between academic supervision skills of school principals and organizational climate in public elementary schools in Pandawan Sub-district, Hulu Sungai Tengah Regency

Based on the analysis of the path coefficient between principals' academic supervisory skills and organizational climate, the path coefficient value is 0.624, with a t-count of 14.662 and a significance of 0.000. Hence, the significance value is less than 0.05. It proves that the principal's academic supervision skills can positively and significantly impact the organizational climate at Public Elementary Schools in Pandawan.

This study is similar to other studies that state that there is a relationship between principals' academic supervision skills and organizational climate. Suppose the principal's academic supervision through increased teacher attention and guidance will automatically have an impact on a better organizational climate. It concluded that the principal determinant's academic supervision is the good and bad climate...
of the organization (Amiruddin, 2010); (Amzah & Evanita, 2014).

**There is a Direct Relationship between Principal Managerial Skills and Teacher Performance in Public Elementary Schools in Pandawan Sub-district, Hulu Sungai Tengah Regency**

Based on the analysis of the path coefficient between principal managerial skills in organizational climate, the value of the path coefficient is 0.457 with a t-count of 17.333 and a 0.000 significance so that the significance value is less than 0.05. It proves that the principal's managerial skills can provide a positive and significant direct relationship with the performance of elementary school teachers in the Pandawan Regency.

Other research says that smart principals' managerial skills pay close attention to teachers, are open, calm, adapt to teachers, smile, sympathetic, understand, and believe that their teachers can carry out their duties. Assignments of tasks assigned to them will make teachers do the work happily and responsibly and will improve teacher performance (Faisal, 2013; Sari, 2016; Bilal & Mangkunegara, 2017; Nisa, Aslamiah, & Suhaimi, 2019).

**There is a direct relationship between Academic Supervision of Principals and Teacher Performance in Public Elementary Schools in Pandawan Sub-district, Hulu Sungai Tengah Regency.**

Based on the analysis of the path coefficient between principals' academic supervisory skills and organizational climate, the path coefficient value is 0.277 with a t-count of 15.759 and a significance of 0.000. The value of the significance is less than 0.05. It proves that the principal's academic supervision skills can provide a positive and significant direct relationship to the performance of elementary school teachers in the Pandawan Regency.

It is consistent with other research states that climate is a general concept that reflects the quality of organizational life and teachers' perceptions of peers as a whole and reflects teachers' perceptions of the principals. If the organizational climate is pleasant it will create a harmonious work environment that can improve the morale of teachers, because of the pleasant situation, a teacher will be happy to do their job without urgent matters (Idelwas, Yahya, & Alkadri, 2020; Fitria, 2016; Werang & Lena, 2014).

**There Is an Indirect Relationship of Principal’s Managerial Skills with Teacher Performance Through Organizational Climate as an Intermediary Variable in Public Elementary Schools in Pandawan Sub-district, Hulu Sungai Tengah Regency**

Based on Figure 1 above, it is known that the indirect path coefficient of the principal's managerial skills on teacher performance through the organizational climate is 0.5459. It means the existence of an indirect relationship between the principal's managerial skills variable on teacher performance through the organizational climate of 0.5459, which is positive. So, it can be concluded that indirectly the principal's...
managerial skills have a positive relationship with teacher performance through the intermediary variables of climate organizations in Public Elementary Schools in Pandawan Sub-district, Hulu Sungai Tengah Regency.

For the principal to carry out managerial tasks, at least three types of skills are needed, namely: (1) Technical skills, namely the ability of humans to use procedures, techniques, and knowledge in specific fields; (2) Human skills, namely skills to work with others, understand, motivate, as individuals or groups (3) Conceptual skills, namely the ability to coordinate and integrate all organizational interests and activities (Mukarromah, Mudjito, & Purbaningrum, 2019). A pleasant and conducive climate can provide comfort for every employee and staff to work as well as possible. Of course, this condition is expected to improve teacher performance, both personally and organizationally (Vardi, 2001). Teacher work will be maximized by the motivation given by their leaders (Bogler, 2001). If this is understood, then the principal’s leadership must be able to condition the school organization that is understood as a place for individual activities, whether the organizational climate will affect teacher performance or not.

It is consistent with other research, which states that there is an indirect relationship between principals’ managerial skills and teacher performance through the organizational climate (Sovia, 2016; Maghfiroh, 2018; Vahim, Irdiana, & Fauziah, 2019).

**There Is an Indirect Relationship Between School Principal Supervision Skills and Teacher Performance Through Organizational Climate Intermediary Variables in Public Elementary Schools in Pandawan Sub-district, Hulu Sungai Tengah Regency**

Based on the above calculation, it is known that the indirect path coefficient X2 to Y through Z is 0.4516. There is an indirect relationship between the variables of headmasters’ academic supervision skills (X1) and teacher performance (Y) through organizational climate (Z) of 0.4516. So that Ho was declared rejected, it can be concluded that indirectly the principals’ academic supervision skills have a significant relationship to teacher performance through a variable of the organizational climate. The principal needs to have the various abilities needed to carry out these tasks and responsibilities. Proper supervision is based more on efforts to foster teachers to improve the performance of those who are still lacking, break barriers in doing their work, and improve teachers’ ability (Sudarjat, Abdullah, & Sunaryo, 2015).

In addition to the school principal’s academic supervision, another thing that can affect teacher performance is the work climate at schools (Zakariya, 2020). The working climate in a school or madrasa is a situation around a school or madrasa in a calm and comfortable atmosphere and conducive to learning that can increase academic achievement (MacNeil, Prater, & Busch, 2009). A conducive organizational climate if the school community feels comfort, peace, intimacy, joy, and fluency in carrying out their duties. It is consistent with the results of other studies that state that there is an indirect relationship between the principals’ academic supervision skills and teacher performance through the organizational climate (Andari, 2015; Juwita, 2016; Kurniasih, 2018).

**Conclusion**

This study conclude that, a) there is a direct relationship between principal managerial skills and organizational climate in Public Elementary Schools throughout Pandawa Sub-district; b) there is a direct relationship between principals’ academic supervision skills and organizational climate in Public Elementary Schools throughout Pandawan Sub-district; c) there is a direct relationship between principals’ managerial skills and teacher performance in Public Elementary Schools throughout Pandawan Sub-district; d) there is a direct relationship between principals’ academic supervision skills and teacher performance in Public Elementary Schools throughout Pandawan Sub-district; e) there is a direct relationship between organizational climate and teacher performance in Public Elementary Schools throughout Pandawan Sub-district; f) there is an indirect relationship between the
principal’s managerial skills and teacher performance through the organizational climate in Public Elementary Schools throughout Pandawan Sub-district as an intermediate variable; g) there is an indirect relationship between principals’ academic supervision skills and teacher performance through the organizational climate in Public Elementary Schools throughout Pandawan Sub-district as an intermediate variable.

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References
Al-Kardi, O. F., El-Haddadeh, R., & Eldelkimate (2020). The role of organizational climate in managing knowledge sharing among academics in higher education. International Journal of Information Management, 50(2019), 217–227.

Alfionita, I. L., Muhaimi, L., & Fahrudin, F. (2019). The Influence of School Head Managerial and Teacher Performance Abilities in the Quality of PAUD at Cluster 3 District Gerung. International Journal of Multicultural and Multireligious Understanding, 6(5), 849–856.

Amiruddin, A. (2010). The Influence of Academic Supervision of Madrasah Head and Madrasa Organizational Climate on Teacher Innovative performance. Journal of Educational Administration, 1(12), 1-10.

Amzah, M., & Evanita, S. (2014). The Effect of School Principal Supervision and Work Climate on Job Satisfaction of Public Elementary Teachers in Nan Sabaris Sub-district, Padang Pariaman Regency. Journal of Business and Public Management Research, 2(2), 11-19.

Andari, S. (2015). The principal’s supervision management, teacher work motivation, and organizational climate contribute to the performance of elementary school teachers. Journal of Educational Sciences Research UNY, 2(8) 1-7.

Andriani, S., Kesumawati, N., & Kristiawan, M. (2018). The influence of transformational leadership and work motivation on teachers’ performance. International Journal of Scientific and Technology Research, 7(7), 19–29.

Bailey, J., Hess, F., Cerf, C., Conaway, C., El-Mekki, S., Eriquiga, D., & White, J. (2020). A Blueprint for Back to School. American Enterprise Institute.

Bianome, W., Sonhadji, A., & Purnomo. (2016). The contributions of the principal’s managerial skills and organizational climate towards productive teacher’s professionalism of vocational high schools in Kupang. AIP Conference, 1778, p. 1.

Bilal, B., & Mangkunegara, A. (2017). The Influence of Principal’s Managerial Ability, Work Motivation, and Organizational Climate on Teacher Performance (Case Study in Vocational High School of Letris Indonesia 2). SWOT, 7(2), 13-19.

Blackman, D., West, D., O’Flynn, J., Buck, F., & O’Donnell, M. (2015). Performance management: Creating high performance, not high anxiety. In W. I, L. H, & Y. S. Managing Under Austerity, Delivering Under Pressure: Performance and Productivity in Public Service (pp. 79–102). ANU Press.

Bogler, R. (2001). The influence of leadership style on teacher job satisfaction. Educational Administration Quarterly, 37(5), 662–683.

Bold, T., Filmer, D., Martin, G., Molina, E., Stacy, B., Rockmore, C., & Wane, W. (2017). Enrollment without Learning: Teacher Effort, Knowledge, and Skill in Primary Schools in Africa. The Journal of Economic Perspectives, 31(4), 185-204.

Brown, M. K., Anfara, V. A., & Roney, K. (2004). Student achievement in high performing suburban, middle schools, and low performing urban middle schools: Plausible explanations for the differences. Education and Urban Society, 36(4),428-456.

Burkhauser, S., Gates, S., Hamilton, L., Li, J., & Pierson, A. (2013). Laying the foundation for successful school leadership. In Laying the Foundation for Successful School Leadership (pp. 1-12). RAND Corporation.

Burkhauser, S., Pierson, A., Gates, S., & Hamilton, L. (2012a). Challenges in using outcome data to evaluate school leadership improvement efforts. In Addressing Challenges in Evaluating School Principal Improvement Efforts (pp. 7-24). RAND Corporation.

Burkhauser, S., Gates, S., Hamilton, L., & Ikemoto, G. (2012b). Background in first-year principals in urban school districts: how actions and working conditions relate to outcomes (pp. 1-6). RAND Corporation.

Bush, T. (1998). The national professional qualification for headship: The key to effective school leadership? School Leadership and Management, 19(3), 321–333.

Davis, C. (1921). The duties of high-school principals. The School Review, 29(5), 337-350.
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Faisal, A. A. (2013). The influence of the principal’s managerial ability on the performance of teachers of public elementary schools in the Kotagede sub-district of Yogyakarta. Yogyakarta: Hanata Widya.

Faizaluddin, F. (2020). Contribution of Academic Supervision of Madrasah Supervisors and Teacher Work Motivation on Teacher Performance in all MIN in Bandar Lampung City. State Islamic University (UIN) of Raden Intan UIN Lampung. Lampung: UIN Raden Intan Lampung.

Fitria, R. (2016). Effect of teacher competence and organizational climate on performance of teachers of Islamic education in primary schools in Gunung Taling Sub-district, Solok Regency. al-fikrah: Journal of Educational Management, 2(2), 169-176.

Gonzales, G., Bozick, R., Daugherty, L., Scherer, E., Singh, R., Suarez, M., & Ryan, S. (2014). Student, Parent, and Teacher Perceptions of School Climate. In Transforming an Urban School System: Progress of New Haven School Change and New Haven Promise Education Reforms (2010–2013) (pp. 29-56). RAND Corporation.

Hallinger, P. (2005). Instructional leadership and the school principal: A passing fancy that refuses to fade away. Leadership and Policy in Schools, 4(3), 221–239.

Hamilton, L., Engberg, L., Steiner, E., Nelson, C., & Yuan, K. (2012). Principals’ leadership practices, principals’ skills, and school-and classroom-level responses to the Pittsburgh principal incentive program. In Improving school leadership through support, evaluation, and incentives: The Pittsburgh principal incentive program (pp. 57-70). Santa Monica, CA; Arlington, VA; Pittsburgh, PA: RAND Corporation.

Hardono, H., Haryono, H., & Yusuf, A. (2017). Principal’s leadership, academic supervision, and work motivation in improving teacher performance. Educational Management, 1(16), 11-19.

Idelwas, Yahya, & Alkadri, H. (2020). Contribution of school climate and principal leadership to primary school teacher performance. Journal of Bacededu, 4(2), 460-466.

Irmaayani, H., Wardiah, D., & Kristiawan, M. (2018). The strategy of SD Pusri in improving educational quality. International Journal of Scientific and Technology Research, 7(7), 113–121.

Jacobson, S. (2011). Leadership effects on student achievement and sustained school success. International Journal of Educational Management, 25(1), 33–44.

Juwita, R. (2016). Contribution of academic supervision of school principals and school organization climate to teaching performance of teachers in public elementary schools in Batununggal Sub-district, Bandung City. Bandung: University of Education of Indonesia.

Kurniasih, L. (2018). Influence of teacher competence, organizational climate, and academic supervision of school principals on the performance of teachers in Islamic education in public elementary schools in Sukoharjo Sub-district in 2017/2018 Academic Year. Surakarta: IAIN Surakarta.

Lammers, W. J., & Badia, P. (2005). Fundamentals of behavioral research. Australia; Belmont, Ca: Thomson/Wadsworth.

Lee, M., Hallinger, P., & Walker, A. (2012). Leadership challenges in international schools in the Asia Pacific region: Evidence from program implementation of the International Baccalaureate. International Journal of Leadership in Education, 15(3), 289-310.

MacNeil, A. J., Prater, D. L., & Busch, S. C. (2019). The effects of school culture and climate on student achievement. International Journal of Leadership in Education, 12(1), 73–84.

Maghiroh, L. (2018). The influence of principal’s managerial ability level, work climate, and work motivation on the performance of PAI teachers in Bahauddin Middle School Ngelom Sidoarjo. The State Islamic University of Sunan Ampel Surabaya: State Islamic University of Sunan Ampel.

Manullang, M. (2017). The effect of soft skills, competence, and human relations skills on principal leadership. International Journal of Academic Research in Economics and Management Sciences, 6(4), 14–27.

Mbera, P. G. (2015). Relationship between Leadership Styles used by Headteachers of Public Secondary Schools and Students’ Academic Performance. International Journal of Academic Research in Business and Social Sciences, 5(7), 226–239.

Mukarromah, I., Mudjito, M., & Purbaningrum, E. (2019). The Effect of managerial skills (conceptual, human, and technical) of headmasters to the effectiveness of Islamic senior high schools in Jombang district. International Journal for Educational and Vocational Studies, 1(6), 539–544.

Mukherjee, S. (2013). A study of the managerial skills of school principals to assess their impact and relative importance in driving school’s performance. International Journal of Education and Psychological Research (IJERP), 2(4), 1–6.

Murtiningsih, Kristiawan, M., & Liu, B. (2019). The correlation between supervision of headmaster and interpersonal communication with work ethos of the teacher. European Journal of Education Studies, 6(1), 246–256.

Nisa, K., Ashamiah, & Suhaime. (2019). Relationship between the principal’s leadership role, subordinate maturity, and work motivation towards the teacher’s discipline. Journal of K6, Education, and Management, 2(4), 357-365.
Panut, Effendi, R., & Saleh, M. (2019). The Relationship of Chemistry Teacher Deliberation (MGMP) Activities and Academic Supervision with Teacher Performance. *Journal of K6, Education, and Management, 3*(2), 242-245.

Poernamawijaya, L. W., Sulaiman, S., Suriyansyah, A., & Dalle, J. (2018). Contribution to the supervision of the supervisor, principal motivation, and kindergarten teacher performance to improve the kindergarten quality in West Banjarmasin. *European Journal of Alternative Education Studies, 3*(2), 129-146.

Prihantoro, C. R. (2014). The perspective of the curriculum in Indonesia on environmental education. *International Journal of Research Studies in Education, 4*(1), 77-83.

Ruus, V. R., Veisson, M., Leino, M., Ots, L., Pallas, L., Sarv, E. S., & Veisson, A. (n.d.). Students’well-being coping, academic success, and school climate. *Social Behavior and Personality, 35*(7), 919–936.

Salabi, J. (2014). The relationship between principal management skills, organizational communication, conflict control, and organizational climate with the effectiveness of State Aliyah Madrasah Organizations in South Kalimantan Province. IAIN Antasari. Banjarmasin: IAIN Antasari.

Sari, P. (2016). The influence of the principal’s managerial capabilities on the performance of public elementary school teachers in the Sub-district of Bambang Lipuro Bantul. *Basic Education, 5*(17), 14-20.

Sovia, Z. (2016). Effect of principal’s managerial ability and work climate on teacher work performance. Open University. Jakarta: Postgraduate of Open University.

Spencer, R. (1919). The work of the school principal in supervision. *The Elementary School Journal, 20*(3), 176-187.

Sudarjat, J., Abdullah, T., & Sunaryo, W. (2015). Supervision, leadership, and working motivation to teachers’ performance. *International Journal of Managerial Studies and Research (IJMSR), 3*(6), 146–152.

Suhaimi & Ekendi, N. (2018). The relationship of the principal’s role and attitude towards the teacher’s profession with the work performance of state high school teachers in the Hulu Sungai Selatan Regency. *Lantern: Scientific Journal of Education, 13*(1), 73-83.

Suhaimi & Wardaniah. (2017). The relationship between the supervision of school principals and achievement motivation with performance of public elementary school teachers in Tanjung Subdistrict, Tabalong Regency. *National Seminar on PS2DMP ULM, 3*, p. 2.

Suriansyah, A. (2011). Character education from the perspective of the national education system. *Journal of Educational Sciences, 6*(11), 117-130.

Suriansyah, A., Aslamiah, & Sulaiman. (2014). *Learning strategies*. Jakarta: Raja Grafindo Persada.

Suriansyah, A., Aslamiah, & Sulistiyana. (2015). *Educational profession: Professional teacher perspective*. Jakarta: PT Raja Grafindo Persada.

Suriansyah, A. (2015). *Learning strategies*. Jakarta: PT Raja Grafindo Persada.

Thomas, J., & Mengel, T. (2008). Preparing project managers to deal with complexity - Advanced project management education. *International Journal of Project Management, 26*(3), 304-315.

Vahim, M., Irdiana, S., & Fauziah, A. (2019). Impact of Principal Managerial Competency Standards and School Climate on the Performance of Teachers of State Vocational High 1 Tempeh. 2, pp. 460-466. *Proceedings Progress Conference*.

Vardi, Y. (2001). The effects of organizational and ethical climates on misconduct at work. *Journal of Business Ethics, 29*(2001), 325–337.

Vernez, G., Karam, R., & Marshall, J. (2012). Status of school-based management implementation. In *Implementation of School-Based Management in Indonesia* (pp. 39-78). RAND Corporation.

Werang, B. R. (2012). The relationship of principal’s managerial skills, school climate, and teacher’s work morals with the performance of public high school teachers in Merauke City. *Journal of Management Applications, 595*–605.

Werang, B., & Lena, L. (2014). Relationship between principal’s leadership, school organizational climate, and teachers’ job performance at state senior high schools in Merauke Regency – Papua – Indonesia. *International Journal of Education and Research, 2*(6), 13-20.

Winston, B., & Patterson, K. (2006). An integrative definition of leadership. *International Journal of Leadership Studies, 1* (2), 6–66.

Zakariya, Y. F. (2020). Effects of school climate and teacher self-efficacy on job satisfaction of mostly STEM teachers: a structural multi-group invariance approach. *International Journal of STEM Education, 7*(10), 1–12.