# THE ROLE OF TECHNOLOGY TO ENHANCE SERVANT LEADERSHIP IN THE ORGANISATION

YULI SUDARGINI<sup>1</sup>, TRI JOKO RAHARJO<sup>2</sup>, SRI WARDANI<sup>3</sup>, SULHADI<sup>4</sup>

Postgraduate, Universitas Negeri Semarang<sup>1,2,3,4</sup>
yulisdg@students.unnes.ac.id
trijokoraharjo@mail.unnes.ac.id
menuksriwardani@mail.unnes.ac.id
sulhadipati@mail.unnes.ac.id

Abstract - The implementation of servant leadership in a technology-driven environment is the focus of this research. Effective leadership is crucial for the success of any institution or organization, particularly in an ever-changing external environment. The research aims to analyse the implementation of servant leadership by utilising technology. Leadership is a concept that takes precedence because leadership can determine whether or not any institution or organisation advances. Every institution or organisation will face environmental dynamics sooner or later. The most frequent environmental change is in the external environment. The purpose of this research is to compare the two sample groups before and after using servant leadership; the study involved 130 respondents as the sample. The research results show that servant leadership is essential in determining organisational management's success. The research implications show that the organisation becomes stronger when servant leadership is used. The research results demonstrate that servant leadership plays a significant role in determining the success of organizational management. Servant leadership emphasizes empowering and serving others, with a focus on developing and nurturing individuals to reach their full potential. By prioritizing the needs of their team members and fostering a supportive work environment, servant leaders can enhance job satisfaction, motivation, and performance. The implications of this research are far-reaching, highlighting the benefits of adopting a servant leadership approach in various organizational contexts. By implementing servant leadership practices, organizations can create a culture of trust. open communication, and collaboration. This culture can, in turn, lead to better organizational performance, improved productivity, and increased employee retention rates.

**Keywords**: Servant Leadership, Technology, Organisation

## INTRODUCTION

It is felt that the leadership style used by school principals is still not following the principles that encourage members of their organization to carry out their duties properly. As a result, teachers and educators have not yet found a comfortable environment and organizational culture. The discomfort of educators is shown through the low level of communication that exists between the principal and members of the organization below, which indicates that leadership is not being carried out optimally. The element of communication is an important factor that supports the achievement of organizational goals(McCleskey, 2014). This fact shows that the leadership style applied is not ideal in the school environment. Therefore, an appropriate leadership style is needed so that teachers and staff can carry out their jobs comfortably. The servant leadership style is considered appropriate to be applied in the school environment. The current leadership style of principals tends to create a low level of communication between leaders and their members. So far, school principals have used punishment without reward.

This study investigates the pattern of school principal services aimed at external and internal parties in depth. Service pattern is important to be studied further because it relates to user satisfaction. Service patterns are an aspect that can create organisational comfort by creating an organisational culture that is suitable for schools(Lukoto & Chan, 2017; Muafi et al., 2019). Service patterns have an important role in achieving organisational performance that has been prepared so that these achievements can be made in the presence of a conducive organisational climate(Kharisma et al., 2019). A conducive organisational climate encourages the creation of a performance achievement that meets predetermined targets(Murtedjo & Suharningsih, 2016; Zhao,

^**``````** 

2010). In addition, a principal's service pattern has implications for the presence of organisational citizenship behaviour of teachers and education staff(Donia et al., 2016). The service pattern is important for school development and the satisfaction of external parties, especially parents of students in educational institutions. The principal is a person who has responsibility in directing and managing the school to achieve the expected goals following the vision and mission of the organisation

Service patterns are related to the processes carried out by the principal in providing appropriate services to relevant stakeholders. The service has several indicators in its achievement, including communication(Gašková, 2020; Wardoyo, 2015), motivation(Klassen & Chiu, 2010; Zulkarnaen et al., 2020), responsibility, competence (Lauermann & König, 2016; Pantić & Wubbels, 2010), reliability, and credibility(Untan et al., 2016). A school principal who provides services related to easy communication and has two directions to provide a form of comfort for members under him to express opinions and suggestions related to school management. The principal has the duty to provide motivation, encouragement and direction in achieving goals, one of which is related to the servant leadership indicator (Donia et al., 2016). Competence in achieving the duties of the Principal, which is also supported by empowering members of the organisation, makes it easier to achieve goals efficiently and effectively. Principal competencies related to leadership are conceptually defined that the principal has duties and responsibilities in the managerial aspect so the role of leadership and the style used is critical to elaborate in depth. Principals who have reliability can use their competencies to implement their duties and responsibilities so that schools can be managed optimally with the assistance of teachers and education staff to achieve goals. The principal's credibility is an image or image attached to the principal in his behaviour. The role of leadership in schools is important. The factor that determines the performance of educators such as teachers, is the leaders' ability in the organisation (Untan et al., 2016; Wahab et al., 2020). Leaders in schools need to know which leadership models are considered important by teachers and educators in schools(Zeni Mandraguna & Supriadi, 2020). Leaders who know the leadership style that is important for their subordinates, the leader can begin to adjust to attitude by making changes. Attitudes and leadership models that are in accordance with the wishes and expectations of their subordinates can motivate their associates to work enthusiastically so that the organisation can quickly achieve the success of the goals that have been set. (Gašková, 2020; Imamuddin & Purnami, 2019; Iqbal et al., 2020). The research aims to analyse before and after the implementation of technology-based servant leadership.

The urgency of researching the combination of servant leadership and technology lies in the need to address the growing demands of the modern workplace and educational environments. As technology continues to play an increasingly critical role in how we work, learn, and communicate, leaders and educators need to adapt their leadership styles to effectively engage and motivate individuals in a digital environment. Studying the intersection of servant leadership and technology can help researchers and practitioners understand how to leverage technology to enhance leadership effectiveness and create more positive organizational cultures. This research can inform the development of new tools, techniques, and strategies for promoting collaboration, feedback, and empathy in a digital environment, ultimately leading to better outcomes for both individuals and organizations.

The novelty of researching the combination of servant leadership and technology lies in the potential to create a new and innovative leadership model for the digital age. As technology continues to advance and become increasingly integrated into various aspects of our lives, including education and the workplace, it is important to explore how leadership styles can adapt and evolve to effectively lead and motivate individuals in these environments. By examining the principles of servant leadership, which emphasizes empathy, listening, and empowering others, and how they can be applied in a technology-driven context, researchers can potentially identify new strategies for leading and managing individuals and teams in a rapidly changing digital landscape. This could include exploring how technology can be used to enhance communication, collaboration, and feedback among team members, as well as how leaders can leverage technology to better understand and meet the needs of their team members.

## **````````**

## LITERATURE REVIEW

The principal is a strategic key to achieving an educational goal in an effective and efficient school. The quality level and quality of the school is determined through leadership in carrying out its duties and functions. A school principal has the main task of leading and managing each unit level in education. The school principal as the executor of managerial tasks, entrepreneurship development and executor of supervision of all educational staff. The principal, as a leader in carrying out his main duties, often neglects the implementation of services to school residents or related parties in education. The task of the leader must be able to organise and manage the school both by planning school programs, managing teacher resources, laboratories, school libraries,

Principals manage and become school managers and must have a soul to serve. Principals who do not have a soul to serve, the school will run stagnant and there will be no change whatsoever. This condition requires a change for the principal as a leader to apply the concept of servant leadership. The concept of servant leadership is to provide excellent service to all school members and teaching staff and to optimise the empowerment and development of school members with the sense of servant leadership of others.

The focus of this concept is the performance that seeks to grow impact on the progress of the school and the community in the surrounding environment. The principal who becomes the leader not only regulates and manages the school but must also provide services. A school principal who consciously understands his position as a leader will carry out his main duties and functions in accordance with his character and heart, namely trying to provide services to all stakeholders involved in education. Principals who provide excellent service can achieve educational goals well.

Principals who serve have several characteristics: technical skills, monitoring and evaluating the learning process and its progress. The skills to build or establish relationships by forming partnerships with all residents in the school to create a harmonious atmosphere between school members and the community. Principals who serve also have conceptual skills, namely, being able to wisely solve all kinds of problems that exist in schools. The principal is also responsible and open with a strong desire to always learn. Able to take the initiative and find solutions in every problem. View future progress and easily understand the situation and conditions wisely.

## **METHOD**

Development research aims to develop subjects and objects that serve as development targets towards effective and efficient school management through motivation, communication, and delegation of authority. This research is a development model used to improve leadership service patterns in public high schools, especially for principals. This research is to develop a model of servant leadership in an online form. The leadership development resulting from this research can be used as a reference in the implementation of servant leadership by school principals.

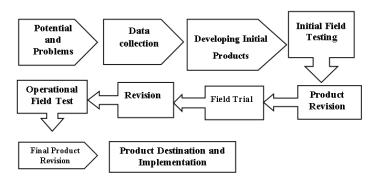


Figure 1. Data Collection Step

Data obtained through questionnaires were tested using the t test, namely the average of the same group with longitudinal data collection.

## **RESULTS**

The research conducted trials on teachers and education personnel. This trial was intended to analyse the differences in the level of implementation before and after Servant leadership was implemented by the principal. The test results show that before the implementation of the principal's servant leadership, the sum of the assessments of the principal's leadership has an average value of 44.99. However, with the implementation of the principal's servant leadership, the average number of teacher and education staff ratings is 60.48. The test was carried out using the paired t-test, the test results proved a significant difference between the two groups (pre and post-test). Research proves that the implementation of servant leadership increases the assessment of teachers and education staff towards school principals.

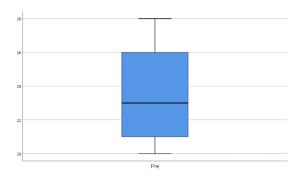


Figure 2. Normality Test for Teacher

Table 1. Teacher Pre and Post Test Results

Information	Means	Std Dev	Sig
Pre	44.99	8,11	0.000
Post	60,48	6,21	

The results of testing on student guardians were also carried out, the study had two groups, namely the pre and post-tests. The test results show that prior to the implementation of servant leadership, the average rating of student parents towards school principals was 30.14, but after the implementation of servant leadership, the average number of assessments increased to 49.62. The differences between the pre and post-groups showed significant results (sig. 0.000), indicating significant differences with the implementation of servant leadership. Further, the test is shown in Table 2.

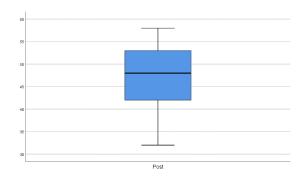


Figure 3. Normality Test for Students Parents



Table 2: Pre and Post Test Results for Student Parents

Informat ion	Mean s	Std Dev	Sig
Pre	30,14	6,12	0.000
Post	49,62	7.55	

## **DISCUSSION**

Implementation of Servant leadership refers to aspects of planning that have been prepared so that a school principal has a clear reference in implementing Servant leadership. This implementation has implications for education staff teachers and student guardians. A school principal has an important role in managing the organisation so that communication is established and the principal's leadership style influences the achievement of productivity and performance. Servant leadership built from the research model has a role in providing support for task implementation(Brouns et al., 2020). Servant leadership has a role in motivating teachers and educational staff in carrying out their duties. In addition to managing the organisation internally, the school principal also deals with student parents. A student's guardian aims to entrust their child to school so that they get cognitive, affective, and psychomotor aspects.

Through the teaching carried out by the teacher, the principal is oriented in providing support to achieve the aspects in Bloom's Taxonomy that are applied to students. The principal as a leader supports the tasks of teachers and education staff through discussions and consultations so that if teachers and education staff encounter difficulties, the principal can be actively involved in providing suggestions and directions. The process of carrying out these tasks is supported humanely. It actively communicates, so that the principal not only gives orders but actively communicates and looks for obstacles and difficulties in carrying out the tasks of his members.

The principal by supporting the completion of tasks and reducing obstacles in achieving the targets that have been set has an orientation towards achieving the performance of teachers and education staff who are supported by the work of the principal can achieve the performance targets that have been set. This performance achievement is a representation that the principal is able to manage the organisation optimally. The principal's support is manifested in an organisational culture that is comfortable for members of the organisation to work and members of the organisation feel that the principal has a role in helping carry out daily tasks. Previous research has proven that school principals have an important role in creating teacher professionalism in teaching students.

In addition, educational staff who are encouraged by the Principal are able to complete their tasks properly and provide humane services (Aboramadan, 2021). This research proves that the principal who has been given a workshop on Servant leadership is able to realise better organisational management. This is shown by tests which indicate that Servant leadership is more likely to support work implementation and performance achievement. The results of this study reinforce previous research which proves that the contribution of school principals in realising discipline motivation and job satisfaction of teachers and education staff is getting higher. The results of the study also reinforce previous research by proving that Servant leadership is a relevant leadership style for educational organisations (Afaq et al., 2018). This study concludes that the relevance of Servant leadership style is a concept that can encourage achieving more optimal performance in educational institutions. Servant leadership helps create the discipline of teachers and educational staff because leaders provide opportunities for members of the organisation to implement their tasks so that each member determines the size used. Discipline is the key to success in achieving the predetermined performance.

Supervision in research is carried out with detailed performance measurements. Performance measurement compares the planning of the tasks of teachers and education staff with the

education staff.

implementation carried out. Servant leadership encourages the implementation of tasks to be carried out optimally and to achieve the set targets. The evaluation aspect is carried out to assist in analysing the performance of teachers and education staff. The task of a leader is to evaluate the work that has been carried out by other members of the organisation so that it can be used as feedback and benchmarks for the implementation of tasks in the next period. (Allen et al., 2016). The implementation carried out by teachers and education staff is also associated with the leadership process which is carried out using Servant leadership. The process of implementing

Servant leadership will assist in implementing the duties and responsibilities of teachers and

Measurement of performance is an implication of the implementation of Servant leadership. When a leader can implement Servant leadership with indicators compiled in the planning process, it has linearity with the performance achieved by other organisational members, namely teachers and education staff. In addition, student guardians will feel that the performance carried out by teachers, education staff and school principals has had satisfactory results (Untan et al., 2016). Performance measurement on the model compiled is a measurement of the implementation of work that has been done. The implementation of this work has targets to be achieved at the end of the measurement period so the principal's job is to ensure that these targets can be achieved. Servant leadership helps achieve the targets that have been set so that teachers and education staff have the ability to achieve the goals that have been set.

Measuring the satisfaction of teachers and educational staff is an essential aspect. The measurement of satisfaction also involves student guardians as external parties related to the school principal's leadership. When teachers and education staff are satisfied with the principal's leadership, this represents that servant leadership can be implemented properly(Lemoine & Blum, 2021). Servant leadership implementation is an important part of school management where the relationship between education staff teachers and school principals is harmonious. Communication that exists smoothly between teachers of education staff and school principals represents that there is optimal coordination and discussion so that there are no misunderstandings in conveying directions and targets. Principals have an important role in creating job satisfaction so that teachers and education staff feel that the organisation has a comfortable work environment and a healthy organisational culture(Rodríguez-Carvajal et al., 2019).

The integration of technology has the potential to enhance the effectiveness of servant leadership practices. Technology can provide leaders with real-time data and insights that can inform decision-making and enable leaders to respond more quickly to emerging issues (Grobler & Flotman, 2020). This can be particularly beneficial in fast-paced environments where decisions must be made quickly and effectively (Afaq et al., 2018). Additionally, technology can facilitate communication and collaboration among team members, regardless of their physical location, enabling leaders to connect with their team members remotely and engage in virtual coaching and mentoring.

However, it is important to recognize that technology is not a replacement for interpersonal relationships and the emotional intelligence required for effective servant leadership (Eva et al., 2019). While technology can enable more efficient communication and collaboration, it cannot replace the importance of face-to-face interactions and building trust through personal connections (Untan et al., 2016). Therefore, it is essential that leaders continue to prioritize interpersonal communication and relationship-building as they integrate technology into their leadership practices (Kuykendall & Slater, 2020).

Another consideration is the potential for technology to create new forms of inequality and discrimination in the workplace (Kauppila et al., 2022). For example, remote work arrangements can create new barriers for individuals with disabilities, those who lack access to reliable internet and technology, and those who require in-person interactions to perform their jobs effectively (Song et al., 2022). Therefore, it is important for leaders to consider these potential disparities and take steps to address them, ensuring that technology is used in a way that is inclusive and equitable for all team members. In summary, the integration of technology can enhance the effectiveness of

servant leadership practices, particularly in the areas of communication and collaboration. However, leaders must recognize that technology is not a replacement for interpersonal relationships and should be used in a way that is inclusive and equitable for all team members.

### CONCLUSION

The school management process also provides feedback for the next planning process so that the evaluation is carried out by measuring the level of satisfaction of teachers and education staff while working. In addition, satisfaction is also carried out by analysing the parents of students. The results of the study show that there are significant differences with the existence of Servant leadership implemented by the principal. The results of this study have formed a model that can be implemented to measure the optimal level of supervision by measuring performance and satisfaction. These two measurement tools are an instrument that can be used by schools in analysing the implementation of the principal's Servant leadership. The results of this study also reinforce previous research which states that Servant leadership has an effective measurement level, namely satisfaction. Based on the description that has been explained both from the planning, organising, implementing and monitoring aspects, a model can be developed that is in accordance with field trials

### **ACKNOWLEDGEMENT**

Author would like express gratitude to the Universitas Negeri Semarang which supported the research

### **REFERENCES**

- [1] Aboramadan, M. (2021). Servant leadership and followers' creativity: does climate for creativity matter? Evidence-Based HRM, 9(1). https://doi.org/10.1108/EBHRM-01-2020-0012
- [2] Afaq, A., Sajid, M. A., Arshad, A., & Shaheen, I. (2018). Servant Leadership and Teachers' Job Satisfaction: The Mediating Role of Teachers' Empowerment. *Journal of Managerial Sciences*.
- [3] Allen, G. P., Mark Moore, W., Moser, L. R., Neill, K. K., Sambamoorthi, U., & Bell, H. S. (2016). The role of servant leadership and transformational leadership in academic pharmacy. *American Journal of Pharmaceutical Education*, 80(7). https://doi.org/10.5688/ajpe807113
- [4] Brouns, T., Externbrink, K., & Aledo, P. S. B. (2020). Leadership beyond narcissism: On the role of compassionate love as individual antecedent of servant leadership. *Administrative Sciences*, 10(2). https://doi.org/10.3390/admsci10020020
- [5] Cahyono, Y., Jihadi, M., Arifin, Z., Purnamasari, W., Wijoyo, H., Putra, R. S., ... & Purwanto, A. (2020). Do Servant Leadership Influence Market Performance? Evidence from Indonesian Pharmacy Industries. Systematic Reviews in Pharmacy, 11(9), 439-451.
- [6] Donia, M. B. L., Raja, U., Panaccio, A., & Wang, Z. (2016). Servant leadership and employee outcomes: the moderating role of subordinates' motives. European Journal of Work and Organizational Psychology, 25(5), 722-734. https://doi.org/10.1080/1359432X.2016.1149471
- [7] Eva, N., Robin, M., Sendjaya, S., van Dierendonck, D., & Liden, R. C. (2019). Servant Leadership: A systematic review and call for future research. *Leadership Quarterly*, 30(1). https://doi.org/10.1016/j.leaqua.2018.07.004
- [8] Gašková, J. (2020). Servant leadership and its relation to work performance. *Central European Business Review*, 9(3). https://doi.org/10.18267/j.cebr.236
- [9] Grobler, A., & Flotman, A. P. (2020). The validation of the servant leadership scale. SA Journal of Industrial Psychology, 46. https://doi.org/10.4102/SAJIP.V46I0.1754
- [10] Imamuddin, I., & Purnami, A. S. (2019). Kontribusi Kepemimpinan Kepala Sekolah, Komunikasi Intepersonal dan Komitmen Organisasi Terhadap Kinerja Guru. *Media Manajemen Pendidikan*, 2(1). https://doi.org/10.30738/mmp.v2i1.3422
- [11] Iqbal, A., Latif, K. F., & Ahmad, M. S. (2020). Servant leadership and employee innovative behaviour: exploring psychological pathways. *Leadership and Organization Development Journal*, 41(6). https://doi.org/10.1108/LODJ-11-2019-0474
- [12] Kauppila, O. P., Ehrnrooth, M., Mäkelä, K., Smale, A., Sumelius, J., & Vuorenmaa, H. (2022). Serving to Help and Helping to Serve: Using Servant Leadership to Influence Beyond Supervisory Relationships. *Journal of Management*, 48(3). https://doi.org/10.1177/0149206321994173
- [13] Kharisma, M., Prasilowati, S. L., & Ayuningtyas, E. A. (2019). PENGARUH BUDAYA ORGANISASI DAN KEPUASAN KERJA TERHADAP KINERJA KARYAWAN DENGAN KOMITMEN ORGANISASI SEBAGAI VARIABEL INTERVENING. *Jurnal Pengembangan Wiraswasta*, 21(2). https://doi.org/10.33370/jpw.v21i2.342
- [14] Klassen, R. M., & Chiu, M. M. (2010). Effects on Teachers' Self-Efficacy and Job Satisfaction: Teacher Gender, Years of Experience, and Job Stress. *Journal of Educational Psychology*. https://doi.org/10.1037/a0019237
- [15] Kuykendall, B., & Slater, C. . (2020). Servant-Leadership and Trust between Teachers and Principals.



- International Journal of Servant-Leadership, 14(1).
- [16] Lauermann, F., & König, J. (2016). Teachers' professional competence and wellbeing: Understanding the links between general pedagogical knowledge, self-efficacy and burnout. *Learning and Instruction*. https://doi.org/10.1016/j.learninstruc.2016.06.006
- [17] Lemoine, G. J., & Blum, T. C. (2021). Servant leadership, leader gender, and team gender role: Testing a female advantage in a cascading model of performance. *Personnel Psychology*, 74(1). https://doi.org/10.1111/peps.12379
- [18] Lukoto, K., & Chan, K. Y. (2017). The perception of innovative organisational culture and its influence on employee innovative work behaviour. PICMET 2016 Portland International Conference on Management of Engineering and Technology: Technology Management For Social Innovation, Proceedings. https://doi.org/10.1109/PICMET.2016.7806707
- [19] Lusiani, M., Abidin, Z., Fitrianingsih, D., Yusnita, E., Adiwinata, D., Rachmaniah, D., ... & Purwanto, A. (2020). Effect of servant, digital and green leadership toward business performance: evidence from Indonesian manufacturing. Systematic Reviews in Pharmacy, 11.
- [20] McCleskey, J. (2014). Situational, transformational, and transactional leadership and leadership development. Journal of Business Studies Quarterly.
- [21] Muafi, Fachrunnisa, O., Siswanti, Y., El Qadri, Z. M., & Harjito, D. A. (2019). Empowering Leadership and Individual Readiness to Change: the Role of People Dimension and Work Method. *Journal of the Knowledge Economy*, 10(4), 1515-1535. https://doi.org/10.1007/s13132-019-00618-z
- [22] Murtedjo, M., & Suharningsih, S. (2016). Contribution to Cultural Organization, Working Motivation and Job Satisfaction on the Performance of Primary School Teacher. *International Journal of Higher Education*. https://doi.org/10.5430/ijhe.v5n4p86
- [23] Pantić, N., & Wubbels, T. (2010). Teacher competencies as a basis for teacher education Views of Serbian teachers and teacher educators. *Teaching and Teacher Education*. https://doi.org/10.1016/j.tate.2009.10.005
- [24] Quddus, A., Nugroho, B. S., Hakim, L., Ritaudin, M. S., Nurhasanah, E., Suarsa, A., ... & Sudargini, Y. (2020). Effect of ecological, servant dan digital leadership style influence university performance? evidence from indonesian universities. Systematic Reviews in Pharmacy, 11(10), 408-417.
- [25] Rodríguez-Carvajal, R., Herrero, M., van Dierendonck, D., de Rivas, S., & Moreno-Jiménez, B. (2019). Servant Leadership and Goal Attainment Through Meaningful Life and Vitality: A Diary Study. *Journal of Happiness Studies*, 20(2). https://doi.org/10.1007/s10902-017-9954-y
- [26] Song, Y., Tian, Q. tao, & Kwan, H. K. (2022). Servant leadership and employee voice: a moderated mediation. Journal of Managerial Psychology, 37(1). https://doi.org/10.1108/JMP-02-2020-0077
- [27] Sunarsi, D., Rohaeni, N., Wulansari, R., Andriani, J., Muslimat, A., Rialmi, Z., ... & Fahlevi, M. (2020). Effect of e-leadership style, organizational commitment and service quality towards indonesian school performance. Syst. Rev. Pharm, 11, 472-481.
- [28] Untan, L. A., Kasim, A. L. bin, Sin, I., & Raman, A. (2016). Servant-Leadership as a Predictor of Teacher's Trust on Headmaster in Betong Division of Sarawak, Malaysia. *International Journal of Humanities and Social Science Research*, 2(February).
- [29] Wahab, J. A., Mansor, A. Z., Hussin, M., & Kumarasamy, S. (2020). Headmasters' instructional leadership and its relationship with teachers performance. *Universal Journal of Educational Research*, 8(11 A). https://doi.org/10.13189/ujer.2020.082112
- [30] Wardoyo, C. (2015). The Measurement of Teacher's Personality Competence and Performance Using Embedded Model. *Journal of Education and Practice*.
- [31] Zeni Mandraguna, R., & Supriadi, A. (2020). KEPEMIMPINAN AUTENTIK KEPALA SEKOLAH DAN MOTIVASI KERJA GURU DAN PENGARUHNYA TERHADAP DISIPLIN KERJA GURU SEKOLAH MENENGAH SWASTA. *Edum Journal*, 3(2). https://doi.org/10.31943/edumjournal.v3i2.72
- [32] Zhao, J. (2010). School knowledge management framework and strategies: The new perspective on teacher professional development. *Computers in Human Behavior*. https://doi.org/10.1016/j.chb.2009.10.009
- [33] Zulkarnaen, Z., Supriyati, Y., & Sudiarditha, I. K. R. (2020). Pengaruh budaya sekolah, gaya kepemimpinan transformasional, dan motivasi kerja terhadap kinerja guru SMK. *Jurnal Akuntabilitas Manajemen Pendidikan*, 8(2). https://doi.org/10.21831/jamp.v8i2.33867