Implementation of Learning Leadership, School Principal Supervisor, and Teacher Performance on Students' Learning Outcomes

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This study aims to analyze empirically (1) the influence of the principal's learning leadership on MAN student learning outcomes in Jombang, (2) the influence of the principal's supervisor on MAN student learning outcomes in Jombang, (3) the influence of the teaching effectiveness MAN results of student learning in Jombang (4) the impact of the head's, supervisor's, and teachers' learning leadership on the learning outcomes of MAN students in Jombang. This research approach is quantitative, with a population of MAN teachers in Jombang and 310 teachers in Madrasah Aliyah (MAN) as respondents. The results of the study showed that (1) Principal learning leadership had no significant effect on MAN student learning outcomes in Jombang, (2) Principal supervisors had no significant effect on MAN student learning outcomes in Jombang, (3) Teacher performance in learning had a significant effect on student learning outcomes MAN in Jombang (4) Principal learning leadership, principal supervisor and teacher performance in learning simultaneously influence student learning outcomes of MAN in Jombang.

Keywords: learning leadership, principal supervisor, student learning outcomes, teacher performance

INTRODUCTION

Learning outcomes are student learning outcomes passed within a specific time limit in documents. The teacher makes every effort to achieve national goals with quality learning/output results. In 2020 the Government, through the Ministry of Science, Technology, and Universities, issued regulations replacing the National Examination (UN) and National Standardized School Examination (USBN) (Marwan et al., 2023). The Republic of Indonesia's Minister of Research, Technology, and Higher Education released a Higher Education Entrance Test Institute (LTMPT) (Campusnesia, 2022). This institution is responsible for 1) managing and processing data on prospective students who enter PTN 2 Applicants for State University Entrance Selection (SNMPTN) and Joint Selection for Higher Education Entrance (SBMPTN). Conduct computer-written tests and communicate UTBK results to participants and target PTNs. The

method is carried out so that the last measurement determines the 1000 highest scores and becomes a benchmark for quality schools/madrasas (LTMPT, 2022).

East Java is a province in Indonesia with 20,026 Madrasah (Aqilah & Lathifah, 2023; Satu Data, 2022). This number is the highest in Indonesia. Jombang is one of the regencies in East Java with the most significant number of State Madrasah Aliyah (MAN), namely ten institutions. Even though the number of Madrasahs in Jombang is the highest, the Madrasas have yet to be nominated for the best 1000 Madrasas in the last two years. Learning outcomes are a teaching and learning process and are said to be successful if there is a change in the students after following it and succeeding in achieving the learning objectives. Learning outcomes with the conceptual model built on Bloom's Taxonomy (revised) in developing WEB tools for teaching several lecturers recommend the tools used (Gil-jaurena & Softic, 2016).

Learning leadership is believed to improve student learning outcomes. This is consistent with the results of research by Wahyudi et al. (2019), Bastar et al. (2021), Gunawan et al. (2020), Hasanah (2020), Mulyadi (2020), Yahdiyani et al. (2020), Ali & Hasanah (2021), Majid et al. (2021), Suryani (2021), Sarinah (2022), Adangabe & Boateng (2022). This leadership can influence student tertiary entry scores both directly and indirectly, according to Hou et al. (2019), Shen et al. (2020), and Tringueros et al. (2020) assert that there is a substantial positive association between the qualities of leadership and student achievement. Britwum et al. (2022) found that learning leadership with the Laissez Faire model affected student achievement in High Schools in Ghana. Meanwhile, Smith & Gümüs (2022) leadership affects inequality in school achievement. Shava & Tlou (2018) found research results that leadership with a substantial breakthrough in the form of distributed leadership in schools improves student organization and achievement. Leadership style with the Path-Goal Theory is stated to influence school education goals, according to Rohimin et al. (2022). Regarding achievement, in reality, the existence of the principal's instructions shows an influence on student learning outcomes (Awadh, 2018). An almost similar statement was put forward by Cruickshank (2017), which stated that leaders could influence the quality of teaching and learning in schools, resulting in increased learning achievement by improving the conditions of teaching teachers, climate, and school environment. Research by Botha (2023) shows that combining transformational and integrated instructional leadership can improve student learning outcomes. Leadership needs to be given a different touch when faced with the distance learning period (Trinova et al., 2022). Instructional leadership affects student learning outcomes (Suyudi, 2022). Improving the quality of learning can be achieved with creative and innovative managerial abilities in managing schools (Rostini et al., 2022).

One of the principal's roles is to supervise education, according to Prasojo & Sudiyono (Isbianti & Andriani, 2021). The school principal as a supervisor influences learning outcomes, according to Susanti et al. (2021), Sukriyatun (2022), Taufan (2022), Thaba-Nkadimene (2021), Marey et al. (2020). Leaders also have a significant role in advancing Higher Education (PT) by exploring concepts that become more real by adjusting to the vision and mission (Stolze & Sailer, 2021). Ellyta et al. (2022) explain that academic supervision helps improve education, but parents' support is also very much needed by students. In order to carry out supervision properly, supervisors should conduct inspections, present inspection results, and provide assessments, training, and coaching (Yunus, 2022). Item et al. (2017) state that school principal supervision significantly affects student achievement. Yulaini (2018) emphasized that there is a relationship between learning facilities and student learning outcomes at school. The school principal has shown his role in influencing the learning process in schools (Ali, 2019). The school principal is responsible for improving teacher quality and motivating teachers to be creative and innovative so that, in the end, it will impact enhancing educational quality (Ahmad Mulyadi, 2021). The educator's incompetence to use school infrastructure indirectly impacts student achievement (Siregar & Tambunan, 2020). Academic supervision must use information technology to achieve efficient academic supervision (Elianur, 2022). Academic supervision is carried out to assist teachers in managing effective learning (Ellyta et al., 2022). Supervision has a very high effect on school effectiveness (Hernita et al., 2022).

Teacher performance is the teacher's ability to educate, teach, guide, direct, train, assess, and evaluate students in early childhood education through formal, basic, and secondary education (Presiden Republik Indonesia, 2005). According to Pujoandika & Sobandi (2021); Deke (2020); Suryani (2021); Kamil et al. (2022); Rinantanti & Tahir (2019); Hassidov (2017); Ratna et al. (2022); Kolovou et al. (2021); and

Francisco & Celon (2020). Taufan (2022) specified his research on English, Mathematics, Science, Filipino, and Araling Panlipunan; the results found that teacher performance influences student academic performance, even though only to a certain extent. The four principles of teacher competence affect student achievement according to Vries et al. (2022); these include 1) a competency-based approach, 2) adaptation to teacher needs, 3) explaining mechanisms fundamentally, and 4) supporting teachers to gain competency. The teacher's ability to accompany students in operating the latest technology will help students work better in the future by working in teams, according to Ludwig et al. (2017), learning outcomes using technology get better results also found by Ng et al. (2020), as evidenced by students using dynamic geometry increases higher than using a 3D pen. Even though the use of Information Technology is currently being widely used, research by Kugler et al. (2019) states that students still choose face-to-face classes. The teacher's ability to choose teaching methods affects learning outcomes, as evidenced by Nureva (2022), who has implemented the Student Team Achievement Division (STAD) learning model. Involving participants to be active in learning by the teacher also influences student learning outcomes, according to Wang et al. (2022). The teacher's ability in these skills is influenced by teacher education (Blomeke et al., 2016) because creative teaching influences student learning satisfaction (Suyudi, 2022). Science teachers who are able to master interactive motion graphics media can improve students' abilities (Hapsari et al., 2019). Teacher professionalism determines the success of learning (Bastar et al., 2021). According to (Endaryono & Djuhartono, 2021), teacher performance affects student learning outcomes. Nurkholidah (2021) found that the competence of educators was adjusted to Government Regulation No. 19 of 2005 concerning National Education Standards. Teachers who must adequately prepare lesson plans must improve their abilities because it will affect student learning outcomes (Rosni, 2021).

The problem of the learning outcomes of MAN students in Jombang and the absence of any Madrasahs in Jombang in the ranking determined by the LTMPT is exciting to undertake an empirical investigation into the factors that determine these learning results. It is crucial to study this phenomenon to discover how this trend can occur in Kab. Jombang is a district with the highest number of MANs, but none is included in the nomination of the 1000 best Madrasahs in East Java. Based on this background, the researcher is very interested in finding out the answers to these problems empirically by conducting a quantitative study with the title "Implementation of Principal Learning Leadership, Role of Principal as Supervisor and Teacher Performance in Learning Against Student Learning Outcomes in Jombang."

Based on this background, the researcher proposed the formulation of the problem (1) How does the principal's learning leadership influence the learning results achieved by MAN learners in Jombang? (2) How does the role of the principal as a supervisor affect the learning outcomes of MAN students in Jombang? (3) How does the educator's learning performance influence the learning results of MAN students in Jombang? (4) How does the principal's learning leadership influence the principal's role as a supervisor and teacher's performance in learning on MAN pupils' learning results in Jombang simultaneously? In line with this background, the aims of this research are (1) to investigate the impact of the principal's learning management on MAN students' learning outcomes in Jombang (2) to analyze the influence of the role of the principal as a supervisor on the learning outcomes of MAN students in Jombang (3) to analyze the effect of performance teachers in learning on the learning outcomes of MAN students in Jombang (4) Analyzing the influence of the principal's learning leadership, the role of the principal as a supervisor and teacher performance in learning on the learning outcomes of MAN students in Jombang simultaneously.

METHOD

This study uses two variables, namely manifest and latent. Latent variables are exogenous and endogenous (Hidayat et al., 2023). The principal's learning leadership, supervisory role, and teacher performance are the exogenous variables in the present research. The endogenous variable here is student learning outcomes. This study uses a purposive sampling technique, which determines the criteria based on certain considerations (Jogiyanto, 2011; Obilor, 2023). The population of this study was teachers at MAN Kab. Jombang. The reason for choosing this location is because (1) Jombang is a city of Islamic students

with many Islamic boarding schools, (2) There are a large number of Madrasahs in Jombang, namely 10 State Islamic Aliyah Madrasas (3) Jombang is a district that is not included in the ranking of 1000 Madrasahs based on LTMPT data. The sample selection criteria refer to the opinion of Krejcie and Morgan in (Alwi, 2015), which states that when the total population is 500, the sample is 50%. This study used 310 samples from the study population (584 totals).

Data was obtained from primary and secondary data. The primary data of this research is the response sent by the respondents. The secondary data is the result of other research obtained from studying the results of previous research or information obtained from the official website of the Jombang government. The sampling method that the researchers chose was non-probability sampling with an appropriate sampling technique (Rahman, 2023). Researchers collected data through online surveys using Google Forms. The Google Form address can be accessed via the link https://bit.ly/questionnaire-dissertation consisting of four-point scales or a Likert scale. Before being sent to respondents, the measuring tool was tested for validity and reliability. Testing the device's validity using a factor loading and cross-loading value of more than 0.5, the instrument was declared valid (Ghozali & Latan, 2015). The statistical method used to test reliability in this study was Cronbach's alpha test by looking at Cronbach's alpha value and composite reliability of more than 0.6 (Ghozali, 2015). The data analysis technique uses structural equation modeling (Structural Equation Modeling) (Kline, 2023). This modeling is usually called SEM (Oke et al., 2023).

RESULTS

After the analysis, the data was obtained from the direct effect of the variable. The Output Path Coefficient is calculated by examining the size of the direct effect (Direct Effect) of each independent (exogenous) variable on the dependent (endogenous) variable, as indicated in the Table 1.

TABLE 1
ANALYSIS OF THE DIRECT EFFECT OF EXOGENOUS VARIABLES ON ENDOGENOUS VARIABLES

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDE)	P Values
Learning Leadership (Exogenous 1) -> Learning outcomes (Endogenous)	0.078	0.075	0.087	0.902	**0.368**
Principal supervisor (Exogenous 2) -> Learning outcomes (Endogenous)	0.021	0.024	0.094	0.222	**0.824**
Teacher performance (Exogenous 3) -> Learning outcomes (Endogenous)	0.522	0.533	0.053	9.870	**0.000**

Source: Authors' findings

The size of the parameter value for the variable that has an exogenous one on endogenous is 0.078, indicating that exogenous one has a positive effect on endogenous. On the other hand, the higher the value of exogenous 1, the greater the increase in endogenous (De Alcubierre et al., 2023). Exogenous one unit increases endogenous one unit by 7.8%. Based on bootstrap or resampling computations, where the predicted coefficient test exogenous one on endogenous, the bootstrap result is 0.075 with a t-count value of 0.902 and a p-value of 0.368 > 0.05, implying that the direct effect of exogenous one on endogenous is not substantial or statistically significant (Jiang et al., 2023).

The impact of the parameter value for the dependence of exogenous 2 on endogenous is 0.021, indicating that exogenous 2 has a positive effect on endogenous, or that the greater the value of exogenous 2, the greater the value of endogenous. A one-unit rise in exogenous two results in a 2.1% increase in endogenous. Based on calculations utilizing bootstrap or resampling, the bootstrap result is 0.024 with a t-count value of 0.222, and the p-value is 0.824 > 0.05 for the estimated coefficient test exogenous two on

endogenous, so accept H_0, which indicates that the immediate impact of exogenous two on endogenous is neither significant or statistically significant.

The average value of the value coefficient for the variable external three on endogenous is 0.522, indicating that exogenous three has a positive effect on endogenous. In addition, the higher the value of exogenous 3, the higher the value of endogenous 3. A one-unit rise in exogenous three increases endogenous by 52.2%. Based on bootstrap or resampling calculations (Mokhtar et al., 2023), where the estimated coefficient test exogenous 3 on endogenous bootstrap results are 0.533 with a t-count value of 9.870, the p-value is 0.000 0.05 so Accept H1 or which signifies that the direct effect of exogenous 3 on endogenous statistics is meaningful or statistically significant. So according to this model, exogenous three significantly affects endogenous because the p-value <0.05. Meanwhile, exogenous one and exogenous 2 have no significant effect on endogenous because the p-value is > 0.05.

Goodness of Fit Test (R-Square)

The goodness-of-fit model test can be evaluated through the use of R-square. The coefficient of determination (R2) measures how exogenous constructs can explain endogenous constructs. The coefficient of determination (R2) will most likely be between 0 and 1. As a guide for interpretation, R2 values of 0.75, 0.50, and 0.25 indicate a strong, moderate, and weak model (Evermann & Rönkkö, 2023; Sarstedt et al., 2016). In addition, Chin (1998), in Ghozali & Latan. (2015) also provides R2 values of 0.67, 0.33, and 0.19 indicate strong, moderate, and inadequate models, respectively.

TABLE 2
R SQUARE TEST RESULTS

	R Square	R Square Adjusted
Learning outcomes	0.338	0.331

The R Square value of the influence of exogenous 1, exogenous 2, and exogenous 3 on endogenous is 0.338, with an adjusted r fair value of 0.331, according to the Table 2. It can be explained that the independent variable exogenous influences endogenous by 0.338 or 33.1% at the same time. Because Adjusted R Square is greater than 33%, the effect of the exogenous variable on the endogenous variable is moderate (Martiarena & Temudo, 2023).

F Square Test

The F Square test is used to evaluate the level of influence between variables by using effect size or f-square (Finch & French, 2023). An f-square value of 0.02 suggests a minor effect, 0.15 indicates a moderate effect, and 0.35 indicates a big effect. If the f-square value is less than 0.02, it can be ignored or regarded as having no effect (Sarstedt et al., 2016).

TABLE 3
F-SQUARE TEST RESULTS

	Hasil Belajar (Endogenous)
Learning outcomes (Endo)	
Learning Leadership (Exo1)	0.003
Principal supervisor (Exo2)	0.000
Teacher performance (Exo3)	0.281

So, based on the F Square Table 3, endogen variable 1 and endogen variable two on the endogen variable have a small or negligible size effect. In contrast, exogenous variable three on the endogen variable has a significant effect size.

Inner Model Multicollinearity

Smart PLS v.3.2.7 2018 evaluates collinearity using the Variance Inflation Factor (VIF). In statistics, multicollinearity is fairly widespread. When multiple independent variables or exogenous constructs are highly connected, the model's predictive power suffers (Chapman, 2023; Sekaran, 2006). The VIF score must be less than five because greater than five shows collinearity between constructs (Sarstedt et al., 2016). The VIF Inner model results below demonstrate multicollinearity, or the occurrence of strong intercorrelation between independent variables. Based on Table 4, additionally, there does not exist a VIF>10 value, indicating that there is no multicollinearity. The absence of a strong correlation between independent variables supports this fact.

TABLE 4
VIF INNER MODEL VALUE

	Learning outcomes (Endogenous)	Learning Leadership (Exogenous 1)	Principal supervisor (Exogenous 2)	Teacher performance (Exogenous3)
Learning outcomes (Endo)				
Learning Leadership (Exo1)	3.271			
Principal supervisor (Exo2)	3.384			
Teacher performance (Exo3)	**1.468**			

Fit Model

The SMSR value must be less than 0.05 in order for the model to meet the model fit criterion (Cangur, 2015). According to the SMARTPLS website, the limits or criteria for model fit include the following. RMS Theta value or Root Mean Square Theta < 0.079, SRMR or Standardized Root Mean Square value < 0.10 or < 0.08, and NFI value < 0.9.

TABLE 5
FIT SUMMARY AND RMS THETA

	Saturated Model	Estimated Model
SRMR	0.065	0.065
d_ULS	9.326	9.326
d_G	4.301	4.301
Chi-Square	6135.798	6135.798
NFI	0.650	0.650
rms Theta	0.105	

Based on an SRMR value of 0.065, where RMS Theta or Root Mean Square Theta is 0.065 0.080, SRMR or Standardized Root Mean Square is 0.060 0.08, and NFI is 0.650 0.9. So, one of the three assessment models fits the fit model criteria. As a result, the model fits the data.

DISCUSSION

The Influence of the Principal's Learning Leadership on the Learning Outcomes of MAN Students in Jombang

Learning Leadership is a leader who can act according to the school's vision and mission, formulate goals, develop, create culture, adhere to goals, be inspirational, work hard, develop curriculum, manage students, and build mutual trust between school members. Based on the P value on the output path coefficient, it is known that the p-value of the estimated coefficient of learning leadership (Exogenous 1) is 0.368> 0.05. This means accepting H0. This also implies that the direct effect of Exogenous 1 on Endogenous is insignificant.

Several studies whose research results are consistent with the results of this study are research conducted by Sopandi (2019) which found that the leadership of the school principal had no significant effect on student achievement. This is because the school principal has yet to be able to plan teacher needs because the distribution and placement of teachers in schools are uneven and balanced, especially Islamic education teachers. Another researcher, Wahyudi et al. (2019), stated that learning leadership only functions in formulating the school's vision and mission. The Foundation formulated the school's vision and mission so that the principal is not directly involved in formulating the school's vision and mission. However, this is not just the principal's unwillingness, only because it is constrained by the different policies implemented in a foundation.

If you look back at the questionnaire distributed to the respondents, the average of the three lowest scores on the learning leadership variable are statements 26, 31, and 32. These statements are that the principal pays attention to learning time from distractions (noise and other disturbances). The principal provides incentives for learning (Brauckmann et al., 2023). The principal promotes professional development. Based on these responses, respondents stated the need for school principals to maximize noise disturbances disrupting student learning concentration. Student learning outcomes can also be improved if learning leaders incentivize teachers to learn. This opportunity allows the teacher to maximize competence so that it has an impact on student learning outcomes. Principals also need to pay attention to the professional development of teachers so that teachers can develop and be more professional in improving student learning outcomes.

Based on the theoretical studies and previous studies described previously, learning leadership does not directly affect student learning outcomes because this leadership will keep learning from outside interference (Riyadi et al., 2023). The results of this study support the research of Sopandi (2019) and Wahyudi et al. (2019). This opinion is also supported by Bafadal et al. (2022); leadership has been carried out optimally but has yet to implement learning that can compete with other schools. This is triggered by the high level of satisfaction of parents and students to get services in learning. As for several things that need to be improved by the principal, according to responses from respondents, 1) The principal pays attention to study time from distractions (noise and other distractions) 2) The principal provides incentives for learning 3) The principal promotes professional development (Bergmark, 2023).

As explained in the Path-goal Theory that leadership behavior consists of at least four characteristics, namely Directive, Supportive, Participative, and Achievement-oriented Northouse (2015) and Syahril (2019); then if the leader has an Achievement-oriented leadership style that gives complete trust to his subordinates to develop but subordinates are the type that needs a leader to guide, so, of course, this will not meet the meeting point. So that the leadership style will not affect the variable it leads. Jombang is a City of Santri, and the habit of tawadlu' towards superiors and kiai can significantly affect the achievement-oriented leadership style. However, this can be different if this leadership is implemented in big and metropolitan cities.

Many factors influence the success of leadership, as quoted from Usman (2007) and Dixon et al. (2023) state that many factors influence the success of a leader, one of which is organizational culture. Although transactional and authoritarian leadership can affect teacher performance, transformational and authentic leadership does not, according to Purwanto et al. (2020) in Tangerang. Despite the many theories developing in the world, Hashem (2022) states that in Jordan it is different from other regions where the population prefers leaders who prioritize local values by paying attention to local culture, namely "al-faza'a". Another thing that needs to be considered by a school leader is other external factors—for example, the support of parents of students. Leaders who can maximize the role of parents will improve student learning outcomes, as Ardiyanto (2022) suggested.

Based on the contingency theory, it is stated that there is no leader quality that can excel in all situations, Muhajir et al. (2023) there is no single leadership style that is effectively applied to all situations. That is, a leader may master several leadership theories, but no leader is able to apply his leadership skills in every condition and condition of different subordinates. Based on this problem, it is possible that the leader has implemented a particular leadership model. However, the teachers at MAN Jombang need leadership with a transactional model. Namely, leadership that focuses on supervision, organization, and group performance to support their tasks in improving student learning outcomes.

Principal Supervisors Have No Significant Effect on Student Learning Outcomes of MAN in Jombang

Based on the P value on the output path coefficient, it is known that the p-value coefficient of the estimated role of the principal as a supervisor (Exogenous 2) is 0.824> 0.05. This means accepting Ho. This also implies that the direct effect of Exogenous 1 on Endogenous is insignificant or non-significant. Previous research conducted by Mardiyanti & Setyaningsih (2020) found that the principal's supervisor needed to be more professional and pay more attention to the performance of administrative staff, which meant that the principal paid little attention to facilitating change. This study states that the supervision carried out by supervisors and school principals could be more optimal, so administrative staff performance could be better, which causes administrative services for students to be of inferior quality, which results in student learning outcomes.

Daud & Keban (2021) conducted almost the same research results by stating that school principals as supervisors were not optimal in conducting supervision because supervision was carried out only as an administrator and was not sustainable, while academic supervision was not carried out because it was in a pandemic. If cross-checked on the questionnaire distributed to respondents, then the three lowest answers, then the things that need to be considered are 1) The principal provides direct assistance to the teacher, 2) The principal provides assistance in groups to the teacher, and 3) The principal conducts classroom Action Research guidance (PTK).

The teacher believes that the principal, as a supervisor, needs to maximize direct teacher assistance so that student learning outcomes increase. In addition to direct assistance, school principals must also assist in groups because group mentoring can improve teachers' ability and impact student learning outcomes (Pathiranage & Karunaratne, 2023). Teachers highly expect Classroom Action Research Guidance (PTK) because PTK is one way to improve teachers' teaching abilities. Student learning outcomes will increase when the teacher's teaching ability is high quality (Wang et al., 2023). The principal supervisor's lack of influence on student learning outcomes can be due to various reasons. Among these reasons is that the principal has a limited role. The role of the principal is more focused on supervising professional development and evaluating teacher performance. Sirojuddin et al. (2022) state that supervision can improve teacher abilities. One of the supervision roles is characterized by the teacher guiding students, according to Herlinawati et al. (2021). However, the most important thing is that student learning outcomes are influenced by factors from within the students themselves, namely motivation (Sawawa et al., 2018; Tanjung et al., 2021). Therefore, the limited role of the supervisor in direct learning and the many other factors in learning outcomes result in no effect on the supervisor's role in learning outcomes in MAN Kab. Jombang.

Based on the problems in this study, transactional leadership is still the prima donna's hope in implementing the leadership model expected by MAN teachers in Jombang because it is known that teachers most desire transactional leadership. This follows the opinion of Purwanto et al. (2020), who conducted research within the MAN area in Tangerang and found that the transactional leadership model influences teacher performance to improve student learning outcomes.

The Effect of Teacher Performance in Learning on Student Learning Outcomes of MAN in Jombang

Teacher performance is when educators educate, teach, guide, direct, train, assess, and evaluate young students in formal, elementary, and secondary education (Undang-Undang RI, 2005). The p-value of the predicted coefficient of the principal's position as a supervisor is known based on the P value of the output path coefficient (Exogenous 2) is 0.000 <0.05. This implies that H1 or the direct influence of Exogenous 3 on Endogenous is statistically significant or significant. The results of this study support research conducted by Pujoandika & Sobandi (2021)); Suryani (2021); Rinantanti & Tahir (2019); Hassidov (2017); Ratna et al. (2022); Kolovou et al. (2021); Francisco & Celon (2020) and Taufan (2022). Pujoandika & Sobandi (2021) stated that teacher performance impacts student learning outcomes because qualified teachers will influence student learning outcomes. Another research was conducted by Deke (2020) in Kab. Southwest Sumba claimed that teacher effectiveness has an impact on student learning outcomes. Suryani (2021) has done it in a different place, namely at SD IT Mambaul Ulum Batam, with the results stating that teacher performance positively affects student learning at the SD. Likewise, Kamil et al. (2022) obtained the same results in different research locations, stating that teacher performance influences student learning outcomes at SDN Bontosua.

According to Kolovou et al. (2021), teacher performance correlates with student achievement. Besides that, another study by Rinantanti &Tahir (2019); Hassidov (2017); Ratna et al. (2022); Kolovou et al. (2021); and Francisco & Celon (2020) and Taufan (2022) obtained almost similar results. In terms of the influence of teacher performance on student learning outcomes, Pido et al. (2023) stated that 48.8% of learning outcomes were influenced by teacher performance. Darlina et al. (2022) also stated that teacher performance in online learning greatly influences student learning outcomes. Citradevi (2023) states that Canva's current application can influence student learning outcomes. The teacher's ability to apply the jigsaw learning model, according to Sumartono (2023), can improve student learning outcomes. Wahyuningsih (2023) has different experiences implementing learning with playing and music methods, improving student learning outcomes. Sutiban (2021) has a different way of improving student learning outcomes: implementing demonstration learning. The resulting research by Magfirotul et al. (2020) is no exception which states that the Two Stay Two Stray (TSTS) cooperative learning can improve student learning outcomes. As well as research on the CRH active learning model (Hasinah, 2022), the Contextual Teaching And Learning model (Nurmailis, 2021), and the inductive thinking learning model (Irwansyah & Mahariyanti, 2022) can improve learning outcomes.

The things that greatly influenced the cross-checking of the respondents' answers with the highest score results were questionnaires with statements 1) The teacher can give several forms of assessment to students, 2) The teacher supports children's critical thinking, and 3) The teacher knows how to teach. These three statements are the things most mastered by teachers that affect student learning outcomes (Bukit et al., 2023). Whereas things that need to be improved because they get the lowest average score according to the teacher's response are that teachers need to improve themselves in 1) Teachers need to understand the latest research (PCK), 2) Teachers need to increase their ability to use technology in teaching 3) Teachers feel the need to implement learning strategies and combining technology and teaching content in class 4) Teachers need to be able to choose the technology in teaching. Existing research shows that teacher performance has an impact on student learning outcomes.

The Simultaneous Influence of the Learning Leadership of School Principals, Principal Supervisors, and Teacher Performance in Learning on Student Learning Outcomes of MAN in Jombang

Hamel & Uswim (2021) informed, according to their research findings, that school principals play a crucial role in improving student learning achievement because of the efforts of school principals in assisting the administrative process of teacher certification to carry out internal supervision, which is carried out continuously to improve learning outcomes. Leadership is closely related to the role of a manager. According to Minsih et al. (2019), principal leadership significantly influences student learning achievement. Student learning achievement is said to be influenced by the role of the school principal.

Dewi & Karwanto (2020) explained that the exemplary shown by the school principal in discipline and professional development, as well as the application of supervision carried out by the school principal, increased student achievement. This needs to be done by a leader because leadership is a means and infrastructure for every human being in education. The simultaneous effect of three variables, exogenous variable 1, exogenous variable 2, and exogenous variable 3, on Endogenous, can be seen by looking at the R Square value. The R square value can be seen in Table 2. which is equal to 0.338 with an updated r fair value of 0.331; the independent variable can be described as Exogenous simultaneously influences Endogenous by 0.338 or 33.1%. Adjusted R Square value 33.1% > 33%. This 33.1% value is in the moderate influence category.

CONCLUSION

The principal's learning leadership has no significant effect on the learning outcomes of MAN students in Jombang. This is evidenced by the p-value of 0.893 > 0.05 so that it accepts H_0 or indicates that the direct influence of exogenous variable one on endogenous variables is either insignificant or statistically significant. Principal supervisors have no significant effect on student learning outcomes of MAN in Jombang. The p-value of 0.355 > 0.05 pieces of evidence this, so accept H_0, this suggests that the direct influence of exogenous variable two on endogenous variables is not statistically significant. Teacher performance in learning significantly affects MAN student learning outcomes in Jombang. The p-value of 0.000 <0.05 evidences this, so it accepts H_1 or means that exogenous variable three directly affects the endogenous variable, which is statistically significant or significant. The learning leadership of school principals, principal supervisors, and teacher performance in learning simultaneously influences the learning outcomes of MAN students in Jombang. This is shown by the R2 value of 0.338 or 33.1%. Because Adjusted R Square is 33.1% > 33%, it may be determined the impact of exogenous variables 1, 2, and 3 on Y includes a moderate effect. For future research can be done more focus of leadership in Islamic school boarding (i.e. Pesantren, Indonesia).

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