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Teachers' performance effectiveness: Analysis of leadership style, work environment and trust.

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Abstract

Teacher performance is a fundamental element in the learning process, this study aims to analyse the influence of exogenous on endogenous variables, with work confidence being an intermediate variable. This study used path analysis as a research design; the total research participants are 360 high school teachers; data validation was carried out using Rasch analysis software model with Winteps version 4.4.7 to obtain standardised research instruments. Data validation was carried out with Smart-Partial Least Square version 3, stating that all data at R > 0.70 are valid and have high reliability. The results of the analysis show a positive influence of leadership style and work environment on trust, leadership style, work environment and confidence in the performance of teachers. In addition, there is also an indirect influence of leadership style on the teacher's performance by faith and the work environment on the teacher's performance by trust. In addition, data analysis generates trust as an intervention variable that effectively affects teacher performance. The results of the research require a follow-up of how the working environment can be improved to improve the quality of education at the macro level.

Keywords: Leadership style, teachers' performance, trust, work environment.

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1. Introduction

In general, high school graduates, and those who are equal, want to continue their education at public universities, citing the quality of education at public universities as good and relatively affordable costs. The number of graduates every year is not accommodated at public universities, which results in high school graduates having to apply to private universities. On the other hand, tuition fees are quite high at quality private universities. The data for high school and vocational graduates in 2021 is 3,283,242 students (Kesra, 2021). Currently, state universities in Indonesia can only accommodate about 38% of high school and vocational high school graduates each year (Na'im, 2018). Only qualified school graduates will be able to enter university, so the community increasingly needs the performance of effective school teachers. The district hopes schools can provide a quality learning process by producing academic outputs (Mutohar & Trisnantari, 2020).

Quality of high school graduates is not only determined by teacher performance but also supported by other elements contained in National educational standards: curriculum, learning process, competence of graduates, teachers and educational staff, equipment, management, funding and evaluation of education (National Standards of Education, 2005). Practical teacher standards are the only part of Indonesia that will examine in this study. Four competencies affect teacher performance: professional, pedagogical, social and personal competence (Laws of the Republic of Indonesia, About Teachers and Lecturers, 2005). Other elements that affect teachers' performance effectiveness in the organisational life are principal leadership, work environment and trust in leadership. The principal leadership style has an effect on the performance of the teacher (Abu Nasra & Arar, 2020, Aquino et al., 2021, Mislia et al., 2021, Parveen et al., 2022). Work environment affects the performance of a teacher (Ivanova & Suvorova, 2022). The trust of the principal may improve teacher performance (Fitria, 2018). The level of trust of the organisation can improve employee performance (Botwe et al., 2016). Leadership and trust style affect the performance of private teachers of junior secondary schools in Palembang (Fitria et al., 2017).

The aids in their research were different from the research we conducted. In their research, they used only one statistical analysis tool, but in our study, we used two types of tools: first, to validate instruments using Rasch models. Data analysis using Rasch models results in standardised data validation (Zamora-Araya et al., 2018). Rasch techniques can avoid undeserved answers from respondents (Boone, 2016). Second, researchers using Smart-PLS to analyse further data.

1.1. Conceptual or theoretical framework

This section will outline the theoretical background: leadership style, work environment, trust and teachers' performance. Furthermore, hypothesis testing will answer the research questions through statistical analysis.

A critical factor in the leadership success of an organisation is the essential leadership style (LS) of the individual. Three contingency dimensions determine the effectiveness of leadership, namely (1) leader–subordinate relationship: the level of reliance and the subordinates appreciation in the officer; (2) task structure: the degree to which the task is procedural (design or not); and (3) positional power: the standard of percussion of a leader who has power, such as appointment, dismissal, self-control, promotion and earnings increase (Langton et al., 2016). Leadership style will be different if applied to various institutions (Fries et al., 2021). Leadership style will affect subordinates' work (Rabiul & Yean, 2021). Leaders must communicate with low-level to high-level people (Abod AlOqlah, 2021). Accountability is an essential element in leadership ethics (Ghanem & Castelli, 2019). Based on the description above, what is meant by leadership style is a arrangement of behaviour of leaders who are

specific in commanding their undreling both individually and in groups in achieving goals, which appear to be level of confidence, subordinate respect, expertise in demanding responsibility, flexibility in communicating and accountability for all policies carried out.

The working environment (WE) is an organisational prerequisite with regard to the completeness of facilities and infrastructure and social aspects that support employees in the favourable execution of their work. The main environmental factors include lighting, noise, temperature and air quality (Bai & Wicaksono, 2020; Stelmach et al., 2016). There are three elements of the work environment, namely (1) a description of the conditions of the workplace; (2) the location of the workplace; and (3) characteristics relevant to the workplace, such as hazard level and noise level (Izzah et al., 2019). The work environment consists of job security and comfort of communication between organisational members (Raziq & Maulabakhsh, 2015).

Based on the description, the work environment is the existence of physical completeness, work apparatus and atmosphere that can support the implementation of work, which appears in the comfort of the room, the completeness of work equipment, the convenience of the work atmosphere, the ease of communication between members of the organisation and job security.

Subordinate trust (Tr) in leadership is vital in an organisation because employees' trust will work based on what the administration wants. That is reasoned because if there is no 'trust' in a person, then no matter what is said and done and no matter how good his vision is, everyone will not believe in him anymore. Teachers' trust in the principal can improve school performance (Zeinabadi & Rastegarpour, 2010). Trust in leadership competence will make employees work according to the rules (Nesic & Lalic, 2016). By increasing the leadership's trust competence, he/she can be a role model for his/her subordinates (Sel, 2022). Trust is a personality consisting of natural, bold, wise and responsible elements. High trust will upgrade the teachers acquirement in school (Rachmah et al., 2018). Entrenched the confession above, what is meant by employee trust is one's belief concerning the delegation of duties, authorities and responsibilities to others that are operationally following the achievement of organisational goals, which appear to be confidence in others, positive thinking towards others, honesty in actions, giving others opportunities to act and being responsible.

Teachers' performance (TP) results in work achieved professionally following work standards; in this case, good student learning achievement results from teachers' work. Professionally, teaching is an essential part of teachers' performance (Chen, 2017; Saeidi et al., 2021). Performance is the achievement of indicators of organisational goals (Mulyana & Wasitowati, 2021). Professional teacher frameworks have high-quality teaching with hands: subject knowledge, pedagogical, ethical values and understanding of systemic issues in education (Filgona et al., 2020). ICT competencies in the 21st century must be owned by teachers (Rivalina, 2014). Mastery of ICT competencies will increase teachers' performance effectiveness (Mislia et al., 2021). Employees who have good performance will increase institutional performance (Achyar et al., 2020, Muis et al., 2021). Performance is the achievement of targets by both individuals and groups (Fu et al., 2021; Kertiriasih, Sujana, & Suardika, 2018; Kriswantini & Sososutiksno, 2020). Performance is the achievement of an employment contract between employees and the organisation (Winarno & Hermana, 2019). Several factors can affect organisational performance, such as professional human resources (Ferine et al., 2021). Improving employee performance is necessary for the organisation to continue the business journey (Rusu et al., 2016). Individual job performance will increase with conformity between competence and employment (Jasiyah et al., 2018). Employee performance is influenced by unique competencies, including work experience, skills and work environment (Davidescu et al., 2020). Hence, the assessment of staff member performance is based on work standards, norms and workloads for which they are responsible (Sektiaji et al., 2021)

Based on references to teachers' performance, it is definite that teachers' conduct is the work result achieved through professional teacher work standards, with indicators such as subject knowledge, pedagogical, personal, social, commitment and ICT competencies. Conceptual framework in this research shows the direct and indirect influence of exogenous on endogenous variables (Figure 1); it consists of seven hypotheses.

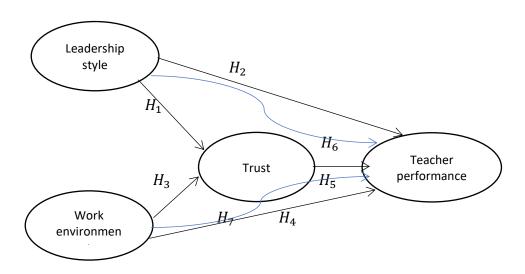


Figure 1Conceptual framework

H1: LS' significant direct effect on T.

H2: LS' has a significant direct effect on TP

H3: WE's directly positive effect on T.

H4: WE's directly positive effect on TP.

H5: T's directly positive effect TP.

H6: LS' positive indirect effect on TP through T

H7: WE's indirect positive effect on TP through T

1.2. Related research

Previous studies differed in research results that affected teachers' performance: leadership style did not significantly affect teachers' performance in high school teachers in the Jombang East Java district high school teachers (Kusvitaningrum et al., 2021), i.e., the principal leadership style on madrasah teachers' performance in Tanggerang Banten regency (Purwanto et al., 2020). But another study found that leadership style has a powerful consequence on teachers' performance (Chen, 2017; F. Saleem et al., 2020; Yulyanti & Hasanah, 2021). Furthermore, the work climate does not positively

affect teachers' conduct (Mulyana et al., 2021, Munandar, 2021). While in other studies, the outcome appearance that the work surroundings can improve teacher performance (Marsen et al., 2021; Son et al., 2020; Sudibjo & Nasution, 2020).

1.3. The purpose of the study

This study will establish a framework that teachers' performance effectiveness will increase if leadership style in accordance with the expectations of teachers; a conductively work environment; and there is teachers' trust in a good principal. The purpose of the research was answered through the following research questions: Is there a strident influence of exogenous on endogenous? Is there an indirect consequence exogenous on endogenous? Does trust as an intervention variable have a practical impact on teacher performance?

2. Research methodology

2.1. Participants

This research is a quantitative survey that uses multivariate analysis with a research design using path analysis to analyse exogenous variables against endogenous variables, both directly and indirectly. At least three variables can be used for the multivariate analysis. The multivariate technique statistically can predict the influence of several variables and their dependence on each variable (Shiker, 2012). This study used the Rasch model to obtain valid instruments, and the study then used Smart-PLS statistical analysis to continue for analysis data. Data analysis inquiry for path analysis are normality, homogeneity, and linearity (Streiner, 2005).

The research population is 5,000 high school teachers with civil servant status in Jakarta. Thus, the least possible sample size of the investegation is 357 by 95% accuracy (Adam, 2020). Sampling techniques used random sampling that provided equal opportunity to become a sample member of the population (Etikan & Bala, 2017). The study used a sample size of 360 respondents and their numerical unique are confirmed in Table 1.

Table 1Numerical Unique of the Study Participants

No	Component	Male	Female	Total
1	·			
	Gender	150 (41.67%)	210 (58.33%)	360 (100%)
2	Qualification			
	Bachelor's degree	92 (25.56%)	119(33.05%)	211 (58.61%)
	Master's degree	55(15.28%)	89(24.72%)	144 (40%)
	Doctorate	3(0.83%)	2(0.56%)	5 (1.39%)
3	Teaching experience			
	0–6	35 (9.72%)	38 (10.55%)	73 (20.27%)
	7–13	48 (13.33%)	64 (17.78%)	112(31.11%)
	14–20	36 (10%)	54 (15%)	90 (25%)
	21–26	20 (5.56)	35 (9.72%)	55 (15.28%)
	>26	11 (3.06%)	19 (5.28%)	30 (8.34)
4	Age			
	22–28	31(8.61%)	54(15%)	85(23.76%)
	29-35	47(13.05%)	53(14.72%)	100(27.77%)
	36-42	34(9.44%)	54(15%)	88(24.44%)
	43–49	27(7.50%)	33(9.17%)	60(16.57%)
	50-56	10(2.78%)	13(3.61%)	23(6.39%)
	>57	1(0.28%)	3(0.83%)	4(1.11%)

5	Staffing Level			
	I	0	0	0
	II	0	0	0
	III	72(20%)	93(25.83%)	165(45.83%)
	IV	78(21.67%)	117(32.50%)	195(54.17%)

Based on Table 1, the members' sample research consists of various teacher characteristics. The difference in respondent status is to obtain multiple opinions and get a comprehensive analysis. Management needs variation in respondent status research (Szabo, 2020).

2.2. Procedure

The researchers compiled a research instrument from four variables to be studied: determining the indicators of each variable; arranging the instrument grid; creating items for each hand; and consult devices that have been engineered to the language. Before the research instrument was distributed to respondents, it was tested for validity and reliability using the Rasch model. The Rasch model analysis results gave high validation and reliability (Yasin et al., 2018). Rasch measurement model makes the best construction and design test (Chan et al., 2014).

After obtaining research permission from authorised agencies, researchers distributed 400 instruments through Google Forms, emails and WhatsApp to high school teachers as respondents within 2 months. To facilitate the results of answers from respondents, researchers coordinated with the principals about the filling of research. Nearly 400 respondents answered, i.e., as many as 360 respondents (90%). The researchers conducted the study from September 2021 to March 2022 on high school teachers in Jakarta. We can assure that our research does not contain maleficent elements; this research is conducted ethically.

2.3. Measurement

The respondents answered the questionnaire based on four variables, namely leadership style (LS), work environment (WE), trust (Tr) and teachers' performance (TP); each variable has some indicators. Each indicator has four questions, and the respondents answered the question on a 5-point Likert scale in the range of 1 = greatly disagree and 5 = greatly agree. The researchers compiled research instruments based on variable indicators determined by researchers; before writing a statement for a device, researchers first created a master plan for the device as a guideline to regulate the four variables of the device. The master plan for each instrument is given below.

2.3.1. Leadership style (LS)

There are 6 dimensions in the leadership style with 20 code item numbers; an example of the code item is LS12: leadership style (LS); confidence level (1st indicator); and item number (2nd indicator).

Table 2Leadership Style Framework

No.	Dimension	Code item number	Total
1.	Confidence level	LS11; LS12; LS13	3
2.	Subordinate respect	LS21; LS22; LS23	3
3.	Direction	LS31; LS32; LS33;	3
4.	Responsibility	LS41; LS42; LS43	3

5.	Effective in communicating	LS51; LS52; LS53; LS54	4
6.	Accountability.	LS61; LS62; LS63; LS64	4
To	otal		20

2.3.2. Work environment

There are five dimensions of the work environment and each indicator had four code item numbers.

Table 3Work Environment Framework

No.	Dimension	Code item number	Total
1.	School climate	WE11; WE12; WE13;WE14	4
2.	Work facilities	WE21; WE22; WE23; WE24	4
3.	The work atmosphere comfort	WE31; WE32; WE33; WE34	4
4.	Comfort of communication	WE41; WE42; WE43; WE44	4
5.	Job security	WE51; WE52; WE53; WE54	4
	Total		20

2.3.3. Trust

There are five dimensions of trust and each indicator has four code item numbers.

Table 4Trust Framework

		Trust truffle work	
No.	Dimension	Code item number	Total
1.	Trust of someone	Tr11; Tr12; Tr13; Tr14	4
2.	Positive thinking	Tr21; Tr22; Tr23; Tr24	4
3.	Honest	Tr31; Tr32; Tr33; Tr34	4
4.	Provide opportunities	Tr41; Tr42; Tr43; Tr44	4
5.	Responsibility	Tr51; Tr52; Tr53; Tr54	4
	Total		20

2.3.4. Teachers' performance

There are 6 dimensions of the teachers' performance with 20 code item numbers.

Table 5 *Teachers' Performance Framework*

No.	Dimension	Code item number	Total
1.	Subject knowledge	TP11; TP12; TP13	3
2.	Pedagogical	TP21; TP22; TP23	3
3.	Personal	TP31; TP32; TP33; TP34	4
4.	Social	TP41; TP42; TP43; TP44	4
5.	ICT competencies	TP51; TP52; TP53	3
6	Commitment	TP61; TP62; TP63	3
	Total		20

3. Results

The research instruments were already composed, and then the researchers tested the validity and reliability using the Rasch model (with Winsteps version 4.4.7.) with 200 respondents outside the research sample. Instrument testing through the Rasch model will obtain standardised research

instruments (Yasin et al., 2018). Rasch models can convert nominal and ordinal data on the Likert scale to layoff and scale data, accurately providing precise results for item testing (Hamzah et al., 2019).

3.1. Validity test

The instrument's validity was tested used the Rasch model. The instrument testing of 200 respondents by performing multiple calibrations resulting in invalid items (item outfit) and good (item fit).

Table 6 *Validity of Items Results*

Variable	Valid items	Total item valid
Leadership style (LS)	LS11; LS13; LS21; LS22; LS23;	14 items fit (all indicator
	LS31; LS33; LS41; LS42; LS53; LS54	represented)
	LS61; LS63; LS64	
Work environment (WE)	W11; WE13; WE23; WE24 WE31;	12 items fit (all indicator
	WE33; WE42; WE43;	represented)
	WE51; WE52; WE53; WE54	
Trust (Tr)	Tr11; Tr12; Tr14; Tr21; Tr22; Tr23;	14 items fit (all indicator
	Tr24; Tr32; Tr33; Tr41; Tr43; Tr51;	represented)
	Tr52; Tr54	
Teachers performance (TP)	TP11; TP12; TP22; TP31; TP32;	13 items fit (all indicator
	TP33; TP34; TP41;TP42; TP44;	represented)
	TP53; TP62; TP63	

Furthermore, valuable items had become research instruments distributed to research samples, namely as many as 400 respondents of senior high school teachers in Jakarta, but 360 instruments were filled at the specified time. The researchers conducted a study from October 2021 to March 2022.

3.2. Instrument reliability results

The results of calculating instrument reliability against valid instruments using Smart-PLS are conferred in Table 7.

Table 7 *Reliability Instrument*

Variable Cronbach's alpha		Composite reliability	Average variance extracted (AVE)	
LS	0.951	0.956	0.611	
WE	0.954	0.959	0.663	
Tr	0.956	0.961	0.637	
TP	0.956	0.961	0.654	

Table 7 shows that a reliability value of Cronbach's alpha and composite was r > 0.70. The AVE had a value of r > 0.50. Thus, all barometers were persistent in calculating their structure so that the research could continue (Ringle et al., 2014).

4. Discussion

Data analysis demands for path analysis are normality, homogeneity and linearity (Streiner, 2005). In this study, on normality tests using Kolmogorov–Smirnov, all data are distributed normally with sigs. >0.05; on homogeneity tests with Levene's tests, all homogeneous data are sigs. >0.05; and the data linearity test with the t-test obtained all p-values >0.05, showing that the self-reliant and reliant variables have a linear exchanged.

4.1. Measurement model

Coefficient tests on each substructure determine exogenous variables' direct and indirect effects on endogenous variables. A hypothesis can be accepted if the PLS bootstrapping calculation analysis has a p-value <0.050, as shown in Table 3. So it proves that there is a very significant effect of external variables on autogenously variables.

The next step is to determine a coefficient of *t*-statistics as a research hypothesis testing. The calculation results of Smart-PLS Bootstrapping produce *t*-statistics results, as shown in Figure 2, with a summary of the calculation of the direct effect and indirect effect in Table 8.

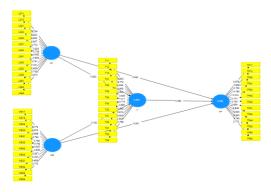


Figure 2
Path Coefficient Output

4.2. Structural model

The evaluation results of all hypotheses using path analysis are presented in Table 8.

Table 8Direct and Indirect Effects of the Structure

	Directa	na mancee	Lijeets of the	Structure		
Hypotheses	Original	Sample	Standard	t-	<i>p</i> -value	Decision
	sample	mean	deviation	statistics	<0.050	
LS on Tr (p31)	0.852	0.853	0.012	70.246	0.000	Accepted
LS on TP (p41)	0.562	0.565	0,026	21.784	0.000	Accepted
WE on Tr (p32)	0.160	0.160	0.014	11.702	0.000	Accepted
WE on TP (p42)	-0.061	-0.062	0.011	5.726	0.000	Accepted
Tr on TP (p43)	0.483	0.480	0.027	18.076	0.000	Accepted
LS on TP through	0.411	0.409	0.021	19.572	0.000	Accepted
Tr(p431)						
WE on TP through Tr	0.077	0.077	0.009	8.469	0.000	Accepted
(p432)						

PLS bootstrapping analysis was used to produce direct and indirect effects among the variables, as shown in Table 8. All hypotheses had a significant p-value < 0.05. It proves that there were seven significant influences from exogenous variables to endogenous variables, either directly or indirectly, which are explained below, and that answers the entire research question in this exploration. The results of this study found two categories that describe the condition of school management in Jakarta: the leadership style of the principal who received a significant response from the principal; and the work environment of senior high schools in Jakarta require improved management from related institutions.

4.3. Intervening variable

Trust as an intervention variable indirectly affects the independent variables of employees, namely p431 and p432. Based on Table 8, leadership style has a significant incidental influence on teachers' performance over confidence with t-statistics = 19.572 and p-value < 0.000. The work environment has a significant incidental impact on teachers' performance over trust, with t-statistics = 8.469 with a value of p < 0,000. Based on t-statistics that the influence of p431 > p432, the discussion and implications results of the analysis (H1–H5) using PLS-SEM answer the number one question, showing that there is a direct exogenous influence on the endogenous.

The hypothesis analysis of H1 states that there is a powerful direct consequence of LS on Tr. The results of the study are following previous research stated that empowering leadership style affects teachers' health, using SEM with a sample of 401 teachers in the central district of Denizli (Atik & Celik, 2020). Transformational leadership positively affects diversity in 204 respondents' non-profit organisations (Yasir et al., 2016). Likewise, the hypothesis finding of H2 states that there is a powerful direct consequence of LS on TP. The analysis results were supported by the results of a research, based on the results of a literature review study from 2010 to 2020, which states that there was a positive influence of leadership style on teacher performance (Yulyanti & Hasanah, 2021). A research with a sample of 351 high school teachers showed that there is a direct influence of leadership style on teachers' performance (Ilyas & Abdullah, 2016). Leadership style positively affected job performance (Eide et al., 2020); Ferine et al., 2021; Saeidi et al., 2021).

The result of the H3 analysis is that there is a straight consequence of WE on Tr. The results of this study are relevant to conducting research on 297 teachers in Selangor, which showed that the work surrounding had a significant outcome on teacher trust (Mansor et al., 2021). At the same time, the results of the H4 analysis were that WE had a conclusive impact on teachers' performance. The study results are relevant to research on high school teachers in Palembang, which showed that the work surrounding has a positive effect on teacher trust (Diantawati et al., 2021). Moreover, research on high school teachers in Bogor showed that the work environment positively affects teacher trust (Sudibjo & Nasution, 2020). Likewise, the results of the H5 analysis, namely Tr, have a significant direct effect on TP. That was relevant to the research on junior high school teachers in Jakarta capital city: trust directly effects TP (Virgana, 2021). Then a study was carried out on 130 high school teachers in Sukabumi West Java (Rachmah et al., 2018) and a research was conducted on 326 junior high school teachers in Palembang (Fitria, 2018).

Further analysis of the direct influence of LS, WE and Tr on TP showed that p41 had the most considerable statistical value of 21,784, which means that LS had the most significant influence on TP. In other words, the leadership style of high school principals in Jakarta was exquisite and followed the expectations of its teachers. The level of teacher's trust in the evidence in the principal's leadership was 72.59%; 27.41% was influenced by other factors; and p42 had the smallest statistical value of 5,726%. Thus, the results of this study embrace follow-up, namely how to improve infrastructure, how comfort of work can be enhanced and achieve better teacher performance.

H6 and H7 analyses' answer the second research statement that there is a significant exogenous indirect influence on endogenous. The analysis result of H6 (p431) stated a positive indirect influence of LS on TP through Tr. This was evidenced by the statistical value of 19,572, with a sig value. <0.000. Likewise, the results of H7 (p432) show a significant indirect influence that WE on TP through Tr, with a statistical value of 8,469 and sig. <0.000. Previous research showed that personality and organisational culture indirectly affect teachers' performance through trust (Virgana, 2021). Then,

there was an indirect influence of leadership style on teachers' performance through trust at public universities in Pakistan (A. Saleem et al., 2020), of which the study with 233 faculty members who had a large indirect influence (p321) was $0.719 \times 0.368 = 0.2646$ (26.46%). Meanwhile, our study, with a sample size of 360 high school teachers, had a large indirect influence (p431) of $0.852 \times 0.483 = 0.4115$ (41.15%). Differences in analysis results are possible because there are differences in sample size and locus from the study.

Answering the third research question was to analyse the magnitude of the results: p431 and p432 where P431 had a magnitude of p41 = 31.58% and p421 = 41.15% and thus the magnitude of p431 > p41, with the conclusion that in p431 trust has an effective influence on teachers' performance. Furthermore, in p432: the magnitude effect of p42 = 0.37% and the importance of the impact of p432 = 7.73%; thus, the magnitude of the influence of p432 > p42, with the conclusion that in p432 trust had an effective influence on teachers' performance. The results of a study on 600 primary school teachers in Hong Kong, trust as an intervening variable has a large influence of leadership style on teacher performance through trust (p321) greater than (p31). The magnitude of the influence of p321 is 3.05%, while the results of our study the magnitude of the influence of p431 (the influence of leadership style on teacher performance through trust) is 41.15% (Li et al., 2017). Some of the causes of the difference in the magnitude of the influence of p321 and p431, due to different research locus; number of samples; social culture, however, we conclude that trust as an intervening variable effectively influenced teacher performance.

5. Conclusion

In this study, the analyses of the consequence of exogenous on endogenous variables resulted in the proof of seven significant hypotheses, because based on the statistical analysis, it meets the *p*-value requirement of <0.05. The result analyses the consequence of the work environment on teachers' conduct which requires a follow-up programme. The investigation found that it has the smallest *t*-statistics. Some programmes to follow-up on the research results are, first, holding in-house training activities related to improving a comfortable work atmosphere; second, inventing learning tools that require improvement of both quality and quantity. While the leadership style has had the most significant influence on teachers' performance, the government should appreciate the principals who have succeeded in fostering their subordinates. Thus, after implementing the study results, the researchers expected an increase in teachers' performance to improve the quality of education in Indonesia.

6. Limitations and recommendations

Every study has some limitations beyond the reach of the researchers, and so in this study, firstly, the research population was limited to the education and culture department and did not involve other departments because getting recommendations across departments requires a long enough mechanism. Considering that researchers have time and financial limitations, secondly, a limited sample in the capital city of Jakarta does not represent other areas in Indonesia. It was limited to the sample size of 360 respondents; thirdly, the results of the study cannot be generalised, but other researchers may use them as a reference; fourthly, the results of the analysis are highly dependent on the honesty and rigor of the respondents.

Some recommendations based on this research are as follows: first, the study examined only four independent variables of teachers' performance: leadership style, work environment, trust and dependence. Therefore, other researchers can use other variables that accurately affect teachers' performance. Second, based on the *t*-statistics in this study, the influence of the work environment on

teachers' performance had the lowest score, and so the authorities must have a programme on improving the work environment in secondary schools in Jakarta; third, it is also necessary to maintain the visionary leadership style of the principal to improve the management and service of education.

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