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Retracted: Teacher's performance management: The role of principal's leadership, work environment and motivation in Tegal City, Indonesia

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#### CHRONICLE

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#### ABSTRACT

The objective of this study is to describe the influence of principals' leadership, work environment, and affiliation motivation on improving the performance of certified teachers at Private Vocational Schools in Tegal City, Indonesia. To achieve this objective, the current study carried out a research survey in Private Vocational Schools of Tegal City. Therefore, data collection was achieved by using survey questionnaire and respondents of the study was school teachers. Thus, this study used quantitative research approach with cross-sectional research design. Data were analyzed by using latest technique, namely; Structural Equation Modeling (SEM) based on Partial Least Square (PLS). The results of the study showed that the leadership of the principal, the work environment, and the motivation to affiliate were well perceived by the teachers. Both principal leadership and work environment had direct effects on improving the certified teacher's performance. The teacher's performance can be explained by independent head leadership and work environment variables, however, for independent variables namely; motivation to affiliate did not have enough significant influence. Hence, teacher's performance can be improved through the leadership of principals and a conducive work environment.

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## 1. Introduction

Work environment

Motivation to affiliate

Teacher's performance is one of the important areas in the field of academia (Mwangi & Njuguna, 2019) because the teachers performance has special role in the field of education (Madrid et al., 2019). Teacher's low performance leads to huge loss in shape of student's academic career which generally shows long lasting effect on the education industry. Therefore, teacher's performance has central importance in education industry which needs to be considered by the scholars as well as practitioners. A professional teacher is required to have professional qualifications and academic competencies, having good communication skills with students, ownership of creative and productive souls, have a work ethic and a great commitment to the profession and always strives to develop themselves continuously (Sidi,

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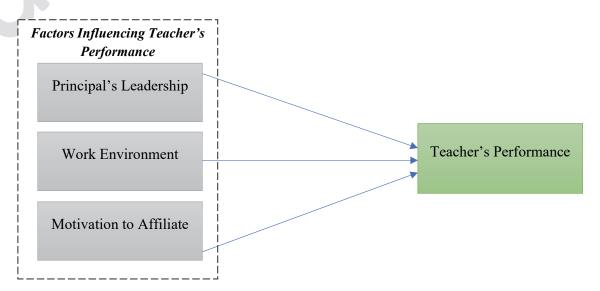
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2001). If the teacher does not have good competence, students will also have bad competencies. Improving the quality of education must start from an end to the teachers (Jirangkul, 2017). Without adequate competency, it can be ascertained that the teachers will not be able to perform their role as an educator optimally indicated by the ownership of educator certification. The emergence of various problems for teachers can be caused by the lack of optimal management of teachers including, in this case, performance management (Jones et al., 2006). The teacher development program has not comprehensively taken into account the factors that influence their performance (Ikhwandra, 2016). Therefore, this study is an attempt to highlight the important factors which may influence on teacher's performance of Private Vocational Schools in Tegal City, Indonesia.

Tegal is one of the largest cities in the northwest area of Central Java Province of Indonesia. It is located on the north coast of Central Java, about 175 kilometers from Semarang, the capital of the province. The current study focused on Tegal city because it has many private schools. These schools have low performance. As the low performance of any academic institutions is always based on teacher's performance, therefore, teacher's performance was considered in this study with other influencing factors. Based on the previous research, many studies have been used to determine the performance of teachers and in improving the performance of teachers (Sunengsih, 2015; Verawati, 2016; Ye, 2017). However, there are few research studies in describing the influence of principals' leadership, work environment, and motivation on improving the performance of certified teachers. Thus, the objective of this study is to describe the influence of principals' leadership, work environment, and motivation on improving the performance of certified teachers at Private Vocational Schools in Tegal City.

Leadership has central role in teachers performance (Andriani et al., 2018). A good leader leads the team in a smooth way. On the same direction, a good teacher is always a good leader. Therefore, principal's leadership always affects positively on his/her subordinates. A school principal always has good leadership skills to utilize teachers in such a way to get higher performance in terms of the student results. Along with principal's leadership, work environment also has crucial role in teacher's performance. It is evident from the studies that the work environment plays a significant role in teacher's performance (Kuncoro & Dardiri, 2017). Along with principal's leadership and work environment, motivation to affiliate also affect teacher's performance in private schools. It is the key element of good performance (Amin, 2015). The relationship of these factors with teacher's performance is shown in Fig. 1.



**Fig. 1.** Theoretical framework of the study showing the relationship between principal's leadership, work environment, motivation to affiliate and teacher's performance

## 2. Literature Review

Various teacher problems indicated the importance of efforts to improve teacher performance (Sumiyati, 2007). Teachers who have a low performance not only fail to meet performance standards but also have a bad influence on others (Jones et al., 2006). Teacher's performance can be stated optimally besides being driven by strong internal factors (Lixia, 2017), namely; individuals (commitment, motivation, and ability). It is also supported by adequate external (situational) factors like adequate rewards (Thanomton et al., 2018), supportive leadership and a conducive school working culture (Ruth, 2017). In the same context, besides the leadership role of the principal and the conducive environment for teachers, the next aspect that is not less important is motivation related to the work itself (work-related to motivation) so that these factors are considered very important in improving teacher performance (Jermsittiparsert et al., 2016). Teacher's performance is based on various factors such as professional development, responsibility, rewards and motivation. Various factors are given in Fig. 2.

A person's performance including teacher's performance is affected by different variables, namely; individual variables comprising abilities as well as skills both mental and physical, background of family, level of experience, demographics, organizational variables comprising of resources like rewards, leadership, and various psychological variables involving perceptions, attitudes, personalities, and motivational learning. Therefore, there are numerous factors influencing on teacher's performance. However, the current study is based on three major factors, namely; principal's leadership, work environment and motivation to affiliate. Teacher's performance is not only affected by principals' leadership, work environment, and motivation to affiliate, but also there are other elements outside of this study that are not examined. However, other factors are not discussed in the current study because the selected factors are the most influential factors in private schools. Teachers whose performance is good are likely to have good principal leadership, good work environment, and good motivation to affiliate. These factors are most crucial to promote performance.

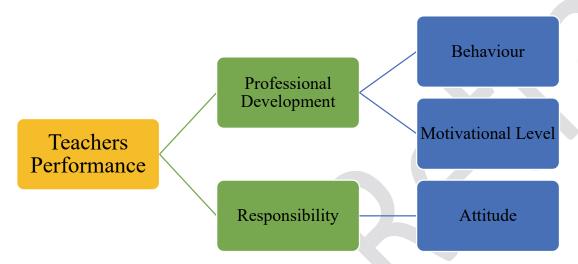


Fig. 2. Various Factors Effecting Teacher's Performance

The influence of the principal's leadership on improving teacher performance can be seen as important as teacher's performance. Because the leadership always plays an important role in every activity (Ross & Gray, 2006; Ul-Hameed et al., 2019). According to the literature, leaders always play an important role in students and teachers' performance. In this way, principal's leadership play an important role to boost teacher's performance. An effective principal's leadership has the ability to motivate teachers which increases the performance. It also has significant effect on the school success (Cheng, 1994) through teacher's motivation. The magnitude of the influence of the work environment on teacher performance

is also high. Work conditions always affect the employee satisfaction in any industry. Better working environment affects positively on employee performance, however, inappropriate working environment shows negative effects on employee performance. In the same direction, teaching work environment also has similar role in teacher's performance. It has significant contribution towards the performance of teachers (Crawford et al., 2008). It also includes the classroom environment which has important role in teacher satisfaction (Lee et al., 1991).

Additionally, motivation to affiliate is another important factor which causes to increase or decrease teacher's performance. If the teacher feels that he/she has the motivation to move forward and feel satisfied in working, then the teacher's performance will be better, and vice versa, if the motivation to affiliate is low, then the teacher's performance will also decrease. As it is clear from the literature that maintaining social bonds, community development, and promoting the human species could all be conscious or unconscious behaviours that underlie the motivation to affiliate with others (Axelrod & Hamilton, 1981). Thus, motivation to affiliate is an influential element towards teacher's performance.

Therefore, all these factors greatly influence attitudes and behaviours towards work (work-related attitudes) such as organizational commitment. With good conditions, the teachers will produce continuous good works in the form of behaviours that have positive consequences, while those that have negative consequences tend not to repeat the good work. Therefore, designing a good condition will influence sustainable behaviour as a consequence of the teachers. The conclusion is that the leadership of the principal and the work environment significantly have a either direct or indirect effect and also influence positively the performance of certified teachers. Conversely, motivation to affiliate does not have any significant influence on an organizational commitment to the performance of certified teachers.

The literature revealed that the better the leadership of a principal and a good work environment, the better the teacher's performance. Moreover, teacher's motivation to affiliate also have the same effect on teacher's performance. Hence, it is concluded that good teacher performance seems to be influenced by the leadership of good principals, good work environments, and high teacher affiliation motivation. However, this must be tested and proven first through statistical tools. Therefore, the hypotheses are proposed;

H<sub>1</sub>: Principal's leadership has relationship with teacher's performance.

H<sub>2</sub>: Work environment has relationship with teacher's performance.

H<sub>3</sub>: Motivation to affiliate has relationship with teacher's performance.

# 3. Methodology

This study used quantitative research approach with cross-sectional research design. The sampling technique used was a proportional random sampling. The instrument used in the study was a questionnaire which covered three aspects of principals' leadership, teacher work environments, and motivation to affiliate. Principals' leadership aspect was measured by a special model for principal leadership, while teacher work environment aspect was measured with a quality of work environment questionnaire (Setyowati & Sulasmono, 2015). Motivation to affiliate was measured by using four component models of motivation to affiliate. Teacher performance was measured with performance model measurements which consisted of abilities and skills (mental and physical), background (family, social level, experience, and demographics i.e. age, origin, and gender (Pramesti & Muhyadi, 2018). All of those variables were measured using a Likert scale. To test the hypotheses, Structural Equation Modeling (SEM) was used. SEM was carried out with the help of Partial Least Sqaure (PLS). PLS-SEM is based on two major steps which are followed from Hameed et al. (2018). Two steps of PLS-SEM are included; measurement model and structural model. Questionnaires was divided into various sections in response to the respondent's profile and major research variables including; teachers' performance, principle's leadership, work

environment and motivation to affiliate. Data were collected from the teachers and 300 questionnaires were distributed among them. Proportional random sampling was used in this study to collect the data.

## 4. Data analysis and Findings

As discussed earlier, this study used Structural Equation Modelling (SEM) by using PLS version 3. However, before implementation of PLS-SEM, data scrutiny was carried out to check the missing value, outlier and normality. Table 1 indicates this analysis which shows no missing value and outlier. Additionally, PLS-SEM is suitable to handle non-normal data.

**Table 1**Missing Value, Outlier and Normality

	No.	Missing	Mean	Median	Min	Max	SD	Kurtosis	Skewness
PL1	1	0	1.458	1	1	5	0.674	7.02	2.094
PL2	2	0	1.776	2	1	4	0.561	2.24	0.472
PL3	3	0	1.734	2	1	4	0.626	0.511	0.5
PL4	4	0	1.701	2	1	4	0.652	-0.216	0.497
PL5	5	0	2.07	2	1	4	0.67	-0.521	0.012
PL6	6	0	1.977	2	1	4	0.68	-0.265	0.209
PL7	7	0	1.972	2	1	4	0.626	-0.038	0.135
PL8	8	0	2.5	3	1	5	1.003	-0.729	0.014
WE1	9	0	2.327	2	1	5	0.894	-0.599	0.096
WE2	10	0	2.238	2	1	4	0.883	-0.811	0.129
WE3	11	0	2.21	2	1	5	0.83	-0.146	0.328
WE4	12	0	2.444	2	1	5	1.007	-0.83	0.155
WE5	13	0	2.093	2	1	5	0.768	1.251	0.712
WE6	14	0	2.089	2	1	5	0.695	0.986	0.468
MA1	15	0	2.453	3	1	5	0.835	-0.347	-0.094
MA2	16	0	2.336	2	1	5	0.848	0.183	0.268
MA3	17	0	2.201	2	1	5	0.692	0.348	0.136
MA4	18	0	2.234	2	1	5	0.78	1.649	0.752
MA5	19	0	2.28	2	1	5	0.777	1.172	0.669
TP1	20	0	2.224	2	1	5	0.841	-0.397	0.173
TP2	21	0	2.271	2	1	5	0.865	-0.334	0.097
TP3	22	0	2.028	2	1	5	0.779	1.478	0.847
TP4	23	0	2.093	2	1	5	0.803	0.183	0.482
TP5	24	0	2.201	2	1	5	0.821	1.552	0.936
TP6	25	0	2.327	2	1	5	0.783	2.036	1.117
TP7	26	0	2.159	2	1	5	0.679	1.361	0.604

PLS-SEM steps are given below. First of all, measurement model was analysed to insure the reliability and validity. Fig. 3 shows the measurement model and also shows the factor loadings. Factor loadings for all the items are above 0.5. The Cronbach alpha and composite reliability (CR) is also above 0.7 with average variance extracted (AVE) above 0.5 (Hair et al., 2017). Table 2 shows the factor loadings and Table 3 shows the other results of measurement model.

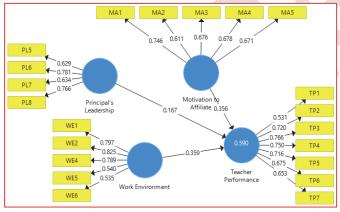


Fig. 3. Measurement Model Assessment

**Table 2** Factor Loadings

	Motivation to Affiliate	Principal's Leadership	<b>Teacher Performance</b>	Work Environment
MA1	0.746			
MA2	0.611			
MA3	0.676			
MA4	0.678			
MA5	0.671			
PL5		0.629		
PL6		0.781		
PL7		0.634		
PL8		0.766		
TP1			0.531	
TP2			0.72	
TP3			0.766	
TP4			0.75	
TP5			0.716	
TP6			0.675	
TP7			0.653	
WE1				0.797
WE2				0.825
WE4				0.789
WE5				0.54
WE6				0.535

**Table 3**Construct Reliability and Validity

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
Motivation to Affiliate	0.705	0.711	0.809	0.559
Principal's Leadership	0.766	0.792	0.797	0.599
Teacher Performance	0.815	0.821	0.864	0.578
Work Environment	0.742	0.773	0.83	0.503

There are various methods to access discriminant validity, such as AVE square root, Heterotrait-Monotrait ratio and cross-loadings. However, the current study used cross-loadings to examine discriminant validity. The results are shown in Table 4.

**Table 4** Cross-Loadings

Closs Loadin	59			
	Motivation to Affiliate	Principal's Leadership	Teacher Performance	Work Environment
MA1	0.746	0.485	0.522	0.531
MA2	0.611	0.485	0.378	0.53
MA3	0.676	0.385	0.494	0.442
MA4	0.678	0.292	0.459	0.363
MA5	0.671	0.331	0.468	0.389
PL5	0.324	0.629	0.355	0.348
PL6	0.368	0.781	0.445	0.401
PL7	0.274	0.634	0.287	0.197
PL8	0.6	0.766	0.508	0.604
TP1	0.385	0.39	0.531	0.493
TP2	0.523	0.47	0.72	0.569
TP3	0.534	0.493	0.766	0.513
TP4	0.484	0.456	0.75	0.458
TP5	0.487	0.355	0.716	0.447
TP6	0.445	0.295	0.675	0.445
TP7	0.455	0.311	0.653	0.388
WE1	0.532	0.542	0.516	0.797
WE2	0.473	0.497	0.517	0.825
WE4	0.6	0.442	0.604	0.789
WE5	0.334	0.296	0.352	0.54
WE6	0.345	0.235	0.412	0.535

All the steps of measurement model are provided above. It is insured that the data is reliable to proceed for further analysis. Therefore, PLS structural model was used to test the hypotheses which was developed in section two of this article with the support of previous studies. While analysing the data with the

help of PLS-SEM, t-value is important to consider. The cut of point of t-value is 1.96. The process of hypotheses testing is given in Fig. 4 and results are given in Table 5.

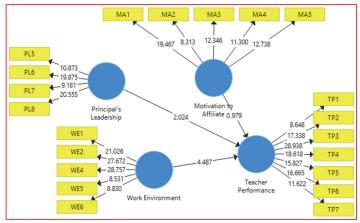


Fig. 4. Structural Model Assessment

**Table 5**Hypotheses Results

	(β)	(M)	SD	T Statistics	P Values
Motivation to Affiliate → Teacher Performance	0.356	0.362	0.37	0.979	0.899
Principal's Leadership → Teacher Performance	0.167	0.166	0.082	2.024	0.044
Work Environment → Teacher Performance	0.359	0.357	0.08	4.487	0

It is clear from the results that independent variables have positive and significant relationships with dependent variable. Relationship between principal's leadership and teacher's performance has t-value 2.024 with beta value 0.167. It shows that principal's leadership has significant positive effect on teacher's performance. On the same direction, work environment was found to have significant positive effect on teachers' performance with t-value 4.487. Favourable work environment had the ability to increase teacher's performance. Finally, motivation to affiliate had no role on teacher's performance as the relationship found t-value 0.979. Therefore, these results supported H<sub>1</sub> and H<sub>2</sub>, however, did not support H<sub>3</sub>. Finally, the R-Square (R<sup>2</sup>) value and predictive relevance (Q<sup>2</sup>) were examined. R<sup>2</sup> is shown in Fig. 3 which is 0.590 and it shows that principal's leadership, work environment and motivation to affiliate can bring 59% of the changes in teachers' performance. Q<sup>2</sup> value should be above zero to achieve certain quality of the model (Chin, 1998) which is shown in Table 6 and Fig. 5.

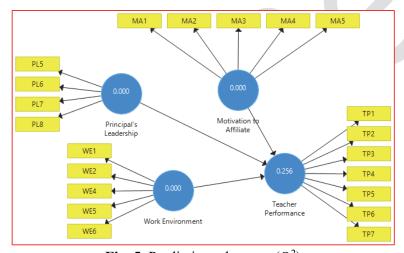


Fig. 5. Predictive relevance  $(Q^2)$ 

**Table 6** Predictive relevance (Q<sup>2</sup>)

	SSO	SSE	$Q^2$ (=1-SSE/SSO)
Motivation to Affiliate	1,070.00	1,070.00	
Principal's Leadership	856	856	
Teacher Performance	1,498.00	1,114.77	0.256
Work Environment	1,070.00	1,070.00	

#### 5. Discussion and Conclusion

The findings of the study showed that if the leadership of the principal is implemented well it will affect the performance of the teachers, working in a conducive school environment and will increase the motivation to affiliate and grow and develop in the direction of achieving common goals. This effect will improve the performance to the maximum level. The type of someone's leadership influences the work process because leadership is related to how the decision is made and how to maintain the relations between superiors and subordinates. The effect size ( $f^2$ ) of principal leadership in the Private Vocational School in Tegal City was 0.4 on teachers performance with small effect (Chin, 1998).

There is a positive and significant influence of principals' leadership, work environment, and motivation to affiliate with teacher performance. Better principal's leadership shows positive outcome towards teachers' performance. This highlighted that if the principal is better at carrying out his/her leadership tasks, the teacher's performance will be high and equally if the principal in carrying out his/her leadership tasks is less / not good, then the teacher's performance will also low. In connection with these findings, it is important for principals to understand the subordinate-oriented model of leadership, principles and change, future-oriented, pressing on aspects of feeling expression, task-oriented, and behavioral in carrying out their work, giving autonomy in learning, developing abilities, approaching function in improving teacher performance, by being a leader (how one becomes a leader), behaving (how leaders behave), and making success (what makes the leader effective) (Shobron & Suyanto, 2016).

Teacher performance improvement or the level of performance of the teacher can be influenced by the leadership of the principal. This indicates that the teacher's performance will not be born alone but needs the active role of the principal as the leader through a leadership function approach to improve teacher's performance in carrying out their duties (Muhammad & Yaumi, 2015). The principals can carry out their duties as professional leaders, provide good examples of teachers, so this will also be a high-performance motivation for teachers to be able to work better at schools.

Teachers who feel satisfied with their work will have a positive attitude to their work so that they are encouraged to do their best work, resulting in a good performance. Good performance is based on the satisfaction (Hussain et al., 2013) which can be achieved through leadership. If someone feels satisfied with his/her work, then he/she will have a positive attitude in his/her work. Such a positive attitude is a good performance. Such characteristics are important to face global competition by having the willingness to strive toward achieving organizational goals. The teachers feel a sense of trust, pride, loyalty and respect and finally they will get motivated, so that ordinary people will become extraordinary.

It was also found out that the work environment has a direct influence on teachers' performance. This was indicated by testing the hypothesis that the work environment has a significant influence on teacher performance. Thus, it becomes clearer that respondents responded positively. Work environment effect size on teacher performance is equal to 0.158 which is moderate. It means that if the work environment created is a conducive/pleasant climate, it will provide positive support for teachers in work. The better the ability of the principal in carrying out his/her leadership, the performance of the teacher in carrying

out his/her duties as an educator in the school. Teacher performance commitment is influenced by factors such as leadership, intelligence, job satisfaction, working motivation, collaboration, suitability of employee placement, and organizational climate.

Another factor is a conducive/good environment. It will encourage teachers to perform more optimally in accordance with their interests and abilities. A pleasant organizational climate is one motive for employees to produce peak performance. Therefore, at the school level, the organizational climate needs attention from an education manager (a school principal). A suitable work environment is expected to influence the teacher to achieve his/her goals. In addition, the factor that plays an important role in improving teacher performance is the physical work environment. It always has crucial role to achieve good performance (Pradnyana et al., 2019).

However, there are insignificant results and have no influence on motivation to affiliate. This was proved by testing the unproven hypothesis 3 because the acquisition of motivation is affiliated with teacher performance so that the influence is none. This indicates that if the teachers feel that they have the motivation to affiliate, they will move forward and feel satisfied in their work, so the teacher's performance will be better, and vice versa, if the motivation to affiliate decreases, then the teacher's performance will also decrease. This unproven testing is due to many factors related to motivation to affiliate because the process of raising one's motivation comes from inner components and outer components. This finding is supported by previous research that working environments strengthen commitment. It fluctuates according to one's factors, in which motivational factors should influence commitment which results in improved performance. Teacher performance will increase if the principal provides autonomy in learning, developing skills, and increasing respect for teacher work. Thus, it can be expected that through the leadership of a good principal, a variety of new thoughts will be found. Opening opportunities to grow and develop in positions will be fulfilled.

From the results of the above research, it was revealed that the average performance of Private Vocational School teachers at Tegal City was good, which indicated that there were no Tegal City Vocational School teachers who had low or bad performance. This means that most respondents answered the teacher's performance in the good category. It reached 51%, that the certified teacher's performance was categorized well. The performance covered the implementation of the curriculum, mastery of the material, the application of multi-learning methods, holding high professional standards, the increasing number work from time to time, no reduce in the quality of work. In addition, the quantity of work they produce exceeds the average, they can complete the work promptly, the frequency of completion of work time is high, and they can use their free time to complete their tasks and delayed work.

From this finding, it is expected that in the future there will be an increase in the quality of the teaching and learning process so that the quality of education in these schools will also increase. This can happen because the improvement in the quality of education in the schools depends and cannot be separated from the performance of the teachers. From the findings of the hypotheses, it is clear that there is a positive as well as significant relationship between the principals' leadership as well as work environment and teacher performance. This highlighted that if the principal is better leader, the teacher's performance is also better (LESTARI et al., 2019). Meanwhile, work environment variable indicates that if the work environment created is a conducive climate / fun, it will provide positive support for teachers in their work. Thus, principal's leadership and work environment has key role in teacher's performance.

## 6. Conclusion

Based on the results of the study, it can be concluded that the leadership of the principal, work environment, and motivation to affiliate are well perceived by the teachers. Principal leadership has a direct

effect on improving teacher performance; the work environment also has a direct effect on the performance of certified teachers, with the intention that teacher performance can be explained by independent variable of principal leadership as well as work environment variables, however, for independent variables namely motivation to affiliate did not have sufficient effect. Therefore, good teacher's performance can be improved through the leadership of principals and a conducive work environment.

## 6.1 Recommendations and Future Directions

Suggestion that can be given from the results of the research obtained is that each teacher should improve his/her performance as an educator. Principal leadership should be improved in schools to improve the performance. Moreover, top management should provide better teaching environment which will improve the performance of teachers. Future search should include other factors which can affect the teachers' performance. Other factors should include; role of top management, domestic condition of teachers, stress level and educational level. In addition, in future, researchers should study various problems in the field of education and provide the solution.

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