



ORIGINAL CONTRIBUTION

## Effect of E-Leadership Practices on the Performance of Teachers

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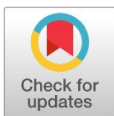
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**Abstract**— This study aimed to examine the effects of e-leadership practices on teachers' performance and the general e-leadership practices in the schools of Taxila, Pakistan. The study's main objectives were to examine effects e-leadership practices have on performance teachers' performance, analyze the challenges faced by teachers, and illustrate prevailing e-leadership practices in the schools of Taxila. The population of the study contains 110 teachers from the high schools of Taxila. 10% of the male teachers and 15% of the female teachers were chosen using the persuasive sampling technique for the purpose of data collection. A questionnaire was used as a research instrument to collect the data for the measurement of variables. The data were tabulated, analyzed, and interpreted using SPSS software. The mean, percentage, standard deviation, regression test, descriptive statistics, and ANOVA test were used to look at the data in light of the study's goal. The study analyzed the findings according to the categories. According to the findings, e-leadership positively impacts the teachers' performance. Yet, the teachers face issues due to inadequate resources, improper training, technical faults, and improper guidance. Due to such issues, the satisfaction level of the teachers with e-leadership practices is impacted. The study explores the implementation of the e-leadership model in educational institutions and its effect on teachers' performance. The study is significant to define the challenges teachers face in the e-leadership model.

**Index Terms**— E-Leadership practices, Performance of teachers, ANOVA, Social process, Social media platforms

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### Introduction

E-leadership is a social influence process that uses the latest technology to achieve the organization's specific targets by changing the team's attitude, feelings, and team performance. E-leadership is followed by a virtual setting where work is mediated by technology. In the present era of modern technology, all organizations, including educational institutions, implement an e-leadership model to improve productivity. The education sector of Pakistan also implements and promotes the e-leadership model to improve the teachers' performance in the educational institutions. Information technology is used to collect data, communicate, and disseminate information. E-leadership does not involve face-to-face interaction like traditional leadership, so the leaders assign and monitor the tasks online using information technology. For this purpose of communication, they use video conferencing, social media platforms, and e-mail services. The leaders assist the teachers and resolve the issues associated with their work by guiding them online through feedback (Ali & Kashif, 2019).

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The objectives of the study are i) to identify the effects of e-leadership practices on the performance of teachers and ii) what are the general e-leadership practices at the Schools of Taxila. This research study proves that the e-leadership model benefits heads, teachers, and managerial staff as it improves their performance. It is also beneficial for the students as their productivity is improved when the teachers perform well.

The skills and expertise of the teachers motivate the students to perform well. In this way, the overall effectiveness and efficiency of the educational institutions are improved. The image of the institutions also improved, and people acknowledged the efforts made in the education sector. Education is now connected to the internet and ensures that the students have the latest information. Hence, it is right to say that old methods are no more effective in the present era of modern technology (Capogna, Figus & Mustica, 2018).

This study important essential knowledge about the implementation of the e-leadership model in the schools of Pakistan and describes the challenges associated with e-leadership practices. This research study is significant as it tells how e-leadership improves the teachers' performance. It also highlights the importance of proper guidance by the e-leaders. The findings of the study are helpful to boost the performance of both the teachers and e-leaders. The study's recommendations are helpful to effectively and efficiently implement e-leadership practices in the educational institutions.

This study contributes to different aspects of the ongoing discussion on e-leadership and identifies the scope for further research on the efficient implementation of e-leadership practices.

### **Objectives of the study**

The objectives of the study include;

- To explore Prevailing E- leadership practices in Schools of Tehsil Taxila.
- To identify the Effects of E-leadership practices on the performance of teachers.

### **Research questions**

- What are the prevailing E- leadership practices in schools of Tehsil Taxila?
- What are the effects of E-leadership practices on the performance of teachers?

### **Related Literature**

E-leadership is a socially influenced and mediated process to change the people's attitude, feeling, thinking, and performance. The E-leadership model is proved successful in educational institutions and improved the teachers' performance (Yudha & Susanto, 2019). Due to this, the student's performance also was improved, which positively impacted the educational institutions' overall performance. E-leaders played a vital role in making e-leadership practices successful in the educational sector .

Educational institutions are places of learning and development, so the teachers and principals must coordinate, collaborate, and support to bring improvements in the teaching and learning process. For this purpose, e-leadership practices are mandatory in the institutions so that the needs of the students and teachers are fulfilled well, and the principals perform their duties effectively (Darics, 2020). Successful countries of the world like the United States, England, and Scotland improved their education system with the help of the e-leadership model. Using the latest technology in educational institutions makes the teaching and learning process engaging and interactive. The students are motivated to learn the concepts well with the implementation of ICT. Technology helps leaders to transform their leadership tasks efficiently (Torre & Sarti, 2020).

The structure of educational institutions highlights the need for e-leadership practices to improve the teachers' performance (Khan, Rehmat & Butt, 2020). Leaders should invest in teachers, work to change negative attitudes within schools, and seek to build social communities that motivate teachers and make them able to do their work in the best possible ways to achieve higher academic performance (Nkabala & Kanakulya, 2020). To improve teachers' performance, schools need to pay attention to the training and motivation of the teachers at all levels. These technologies include the internet, e-mail, instant messaging, video conferencing systems, text messages, and social media (Herrera, 2020). E-leadership practices change not only the performance of the educational institutions but also bring an improvement in the culture of the schools. The implementation and monitoring of the curriculum become easy, and the decision-making is also improved as the decisions are made based on data (Daniëls, Hondeghem, & Dochy, 2019). Effective interaction with students and parents improves the reputation of educational institutions. The students are satisfied well, and the involvement of the parents improves results (Oh & Chua, 2018). Yet, the leaders are required to expand the implementation of the school management system among the parents and students and monitor the activities in the educational institutions (Cortellazzo, Bruni & Zampieri, 2019).

E-leadership has many advantages for educational institutions. It improves the productivity and image of the institutions in the industry by improving the skills of the teachers and students (Liu et al., 2018). A positive culture is formed in the institutions, which

promotes collaboration among the individuals and creates an environment of trust. The use of technology improves the teachers' hard and soft skills, which in turn has a good impact on the performance and expertise of the students. Hence, the teaching and learning process becomes truly beneficial for the students (Farid, Kanwal, Ameer, & Karim, 2021; Haes, 2017).

E-leadership is different from traditional leadership. In the e-leadership model, the leader is known as an e-leader, and his leadership is virtual leadership. The e-leader is connected with distributed teams and coordinates and communicates with them through electronic media. As a virtual leader, the e-leader has to inspire the team members from a distance, and he is required to develop self-management capabilities (Ibrahim, Yaakob, & Yusof, 2018). Interfacing with the environment has a crucial role in a virtual setting. Despite different geographical locations, e-leaders are required to satisfy the team. The training and development programs are conducted online for the team members. E-leaders monitor the work of all the individuals and provide them constructive feedback so that they are motivated to perform well and improve their performance with the leader's assistance (Van et al., 2019).

Implementation of the e-leadership model is vital in educational institutions these days because of technological advancements. Organizations now prefer electronic processes of operation for efficiency and accuracy (Yin, 2017). Situations like the COVID-19 pandemic also demand e-leadership as people are required to work from home in such conditions (Pierzchalski, 2020). Hence, it is necessary for teachers and leaders to build e-leadership practices so that they can perform the operations well in virtual settings (Van et al., 2017). They must develop the skills like accurate, brief, and concise communication, establishing relationships, caring for others, and supporting the team. These skills can make them perform well even in virtual settings (Contreras et al., 2020).

Some issues are also associated with e-leadership practices. For instance, training and development of teachers is the main issue in many regions, especially in the rural settings where modern facilities are not available for the training and development of teachers. The teachers are unfamiliar with e-leadership practices, and some are not digitally literate for virtual settings or online work (Jam, Singh, Ng, & Aziz, 2018; Ockery & Bawa, 2018). Similarly, there is a lack of resources for e-leadership practices, such as the devices being old or a limited quantity being available at the educational institutions. Some leaders are also not familiar with e-leadership practices, so they cannot guide the teachers well on the issues when they need their assistance during online work (Holt, Hall & Gilley, 2018).

The success of the e-leadership model depends on the teachers and leaders. E-leadership practices demand an excellent workforce (Roman et al., 2019). So, the authorities should have a proper plan for the training and development of the teachers and e-leaders. It is mandatory to provide them with all the required resources, so they do not face issues while working online (Sivathanu & Pillai, 2018). The e-leaders are also required to gauge understanding, transparency, and clear expectations to work efficiently with the e-leadership model. They must be good listeners and identify the causes of issues (Uhlin & Crevani, 2019; Waheed & Kaur, 2016). They have to build bonds even in the virtual setting. The excellent workforce familiar with e-leadership practices will truly bring positive changes in the education sector by improving the productivity of educational institutions (Sahay & Baul, 2014).

## **Research Design**

The research title is 'Effects of E-Leadership Practices on Teachers Performance in Tehsil Taxila.' The study used a quantitative survey design, and the data was gathered using a rating scale questionnaire. The data was collected through Convenient sampling technique. The gathered data was compiled in the form of a table and calculated through SPSS 21. By this, the effects of e-leadership practices on teachers' performance and prevailing e-leadership practices in the high schools of Taxila were explored.

## **Population**

The population of the study includes male and female teachers of high schools in tehsil Taxila.

## **Sample**

The study sample contains ( $N= 110$ ) teachers from Tehsil Taxila, Punjab. There was a total of 110 teachers. The participants' age varied between 23 and 50 years old. I informed the participants about the survey through e-mail. The survey was conducted online due to the lack of time and resources. The teachers participated voluntarily.

**Data Analysis**

**Prevalence of e-leadership in schools**

Table I  
Prevailing e- leadership in the public schools of tehsil Taxila

E-Leadership	N	Minimum	Maximum	Mean	Std. Deviation
e-communication skills	110	9	35	40.75	6.063
e- social skills	110	8	20	19.11	1.719
e- technological skills	110	4	15	14.17	1.575
e-leadership resources	110	6	30	42.11	6.002
Valid N (listwise)	110				

Table I reported the prevailing e-leadership in public schools. To analyze research question one, descriptive statistics were used, which reported mean, standard deviation, maximum and minimum scores for monitoring strategies, the items of the survey were scored on a 5-point Likert-scale (Strongly Disagree=1), (Disagree=2), (Undecided=3), (Agree=4), (Strongly Agree=5).

For the E-communication skills, the minimum value was nine, and the maximum value was 35. It produced a mean score of 40.75 with a standard deviation of 6.063. For the E-social skills, the minimum value was eight, and the maximum value was 20. It produced a mean score of 19.11 with a standard deviation of 1.719.

For the E-technological skills, the minimum value was four, and the maximum value was 15. It produced a mean score of 14.17 with a standard deviation of 1.575. For the E- leadership resources, the minimum value was six, and the maximum was 30. It produced a mean score of 42.11 with a standard deviation of 6.002.

**Effects of e-leadership practices on the performance of teachers.**

This research objective is analyzed through the regression test.

Table II  
Model Summary

Model	R	R Square	Adjusted R	Std. Error of the Estimate
1	.891a	.793	-.086	.193

The R-square is 0.793, indicating a 79% variation in the explained variable. So, there is the best fit model in the data.

Table III  
ANOVA

	Model	Sum of Squares	df	Mean Square	F	Sig
1	Regression	1.390	19	.073	0.85	.038
	Residual	7.701	9	0.086		
	Total	9.091	109			

The significant value is less than the level of significance. It means that the overall model is statistically significant.

Table IV  
Coefficients<sup>a</sup>

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.315	.379	3.470	.001	
Relationship with leaders	.111	.076	.147	1.465	.046
Communication with leaders	.030	.062	.051	.485	.029
E-leadership is convenient	.060	.072	.085	.827	.006
Get information on time by leaders	.022	.072	.031	.304	.012
Fast and reliable internet connection	-.069	.081	-.094	-.849	.398
Face technical issues during an online presence	.116	.053	.216	2.179	.032
e-leadership is effective for educational institutions	-.025	.069	-.039	-.355	.724
Adequate digital literacy skills	-.075	.073	-.107	-1.039	.302
Get adequate training on e-leadership practices	-.069	.074	-.098	-.931	.054
Leaders guide the teachers	-.028	.062	-.046	-.454	.651
Environment of school supports e-leadership	-.045	.088	-.055	-.509	.012
E-leadership practices save money	-.053	.100	-.059	-.529	.018
E-leadership practices save time	-.101	.096	-.114	-1.055	.024
E-leadership practices effectively implemented	-.087	.068	-.133	-1.288	.201
Enough resources in institution	.023	.056	.044	.402	.029
E-leadership is better than traditional leadership	.020	.061	.035	.333	.740
Feel comfortable with e-leadership	-.006	.103	-.006	-.055	.053
E-leadership practices made work easy	-.050	.104	-.052	-.478	.034
Leaders are well trained	-.003	.065	-.005	-.046	.964

a. Dependent Variable: E-leadership improves productivity.

The relationship with leadership, communication with leaders, timely information by the leaders, adequate digital literacy skills, guidance, environment of school, e-leadership saves time, e-leadership saves money, and e-leadership makes the work easy are statistically significant because their *p*-values are less than 0.05 which is considered the level of significance.

## Findings and Discussion

According to the findings, e-leadership practices improve the performance of the teachers. The results of the research study show that if the relationship with the leaders is improved, communication with the leaders is effective, the teachers get information from the leaders on time. There are enough resources in the institutions, e-leadership practices improve productivity more. E-leadership can become more convenient for teachers when E-leadership practices are applied efficiently and effectively in the educational sector. The variables, including the relationship with the leaders, effective communication with the leaders, information on time, and enough resources, positivity impact the productivity offered by e-leadership.

Some of the educational institutions do not have enough resources for e-leadership practices. The teachers and e-leaders are also not trained and digitally literate well. So, the e-leadership model is not giving its potential benefits entirely to improve productivity. Overall, lack of fast and reliable internet connection, technical issues during online presence, inadequate digital literacy skills, lack of training on EDXZ-leadership practices, improper guidance, and insufficient resources are the factors that reduce productivity. These factors are the main issues with general e-leadership practices in the schools of Taxila. It is right to say that these issues associated with prevailing e-leadership practices negatively impact the productivity offered by the E-leadership model and make it less effective for the educational institutions.

According to previous research, the main issues with implementing e-leadership in Pakistan are insufficient resources like the digital tools. Furthermore, the previous studies disregard the latest trends in the market and the need for a better education system by increasing productivity. But, the results of this study indicate that insufficient resources are not the only problem with the implementation of e-leadership; leaders and educators need proper training and development to become more productive.

## Conclusion

To sum up, e-leadership practices are convenient. Due to e-leadership, a lot of time and money is saved as there are online programs, and the teachers do not travel to other areas. Instant and timely information is provided to the teachers, and all the teachers get the same information. The communication between the teachers and leaders is improved. Moreover, an atmosphere of trust and cooperation is formed among the employees of different departments. Video conferences have made the online setting enjoyable. Timely feedback by

the leaders keeps the teachers motivated and connected. In this way, productivity is improved. Yet, the e-leadership model needs to be implemented effectively and efficiently.

The government should pay attention on the concerns associated with e-leadership practices in the educational institutions so that the success of E-leadership model can be ensured. For this purpose, the main thing is the training and development of the leaders and teachers which cannot be ignored at any cost. There is a need to conduct training on e-leadership model and digital literacy. The development of the leaders and teachers will ensure smooth running of the operations educational sector. In this way, performance of the teachers will be improved more. Moreover, there is a need to provide adequate resources at the educational institutions such as the latest devices like laptops and other equipment for e-leadership practices. Lack of resources limits the effectiveness of e-leadership and it should be resolved immediately. Internet services also need to be made better to avoid the issues during online presence.

### **Limitations**

The study has some limitations. Firstly, it follows a specific setting which is the Taxila region in Pakistan. In fact, it is the significant limitation of the study. Consequently, e-leadership practices in other parts of the country are not examined in the study. So, the information presented in the study and the results drawn through it are restricted to a specific area. It cannot be appropriate to generalize the results to e-leadership practices in educational institutions of Pakistan as a whole or e-leadership practice at the educational institutions across the world. The size of the sample is small due to the lack of time and resources.

### **Recommendations**

On the basis of the research, it is recommended to ensure proper training for the teachers so that they can work efficiently in virtual setting. The leaders are also advised to pay more attention towards the queries of the teachers as the some of the teachers are not guided well about their tasks. Moreover, the leaders are required to be familiar with the latest technology. They should also have in depth knowledge about e-leadership practices so that they can guide the teachers well. Ultimately, they should upload the information on time and provide constructive feedback to all the teachers about their work.

### **Further Research Directions**

It is recommended to conduct further research with a large sample size including the schools in different areas of Pakistan to have more in depth knowledge of the effects of e-leadership practices on the performance of teachers in Pakistan. Further studies can find the role of e-leaders and its impact on the performance of teachers. It is also recommended to conduct qualitative research so that the views and thoughts about e-leadership practices can be highlighted.

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