ASSESSING TEACHERS' ATTITUDE TOWARD E-LEARNING IN PRIVATE SECONDARY SCHOOLS IN PAKISTAN

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ABSTRACT
This study aimed to assess teachers' attitudes toward e-learning in private schools in Pakistan. This study examined the differences in perceptions of teachers based on their gender, qualifications, and teaching experience. The population of the study was all private school teachers in Karachi. Simple random sampling methods were adopted for sampling. The data was collected from 250 teachers at private schools in Karachi, equally 125 male and 125 female teachers. Survey research was conducted through a questionnaire. A survey questionnaire with the author's permission was adopted for the study. A descriptive research design was adopted. Cronbach's alpha method was used to measure the reliability of the questionnaire. The data was analyzed by statistical package for social science (SPSS). The relationship between independent and dependent was measured through correlation and regression analysis. The result showed that teachers, either males or females (gender), had positive attitudes toward using e-learning. The professional qualification of teachers affected their attitude toward the use of e-learning, and the experience of teachers affected their attitude toward the use of e-learning. This study would help school administrators and policymakers to understand the teachers' attitudes toward e-learning based on gender, qualification, and teaching experience.

KEYWORDS
Private schools, E-learning, Attitude

INTRODUCTION

A school that is established and run by a private organization as opposed to the government often charges tuition and frequently adheres to a specific philosophy, point of view, etc. Over the past three decades, the private sector in Pakistan has steadily grown to become a significant provider of educational services. Compared to the early 1990s, private educational institutions are now much more prevalent. In the academic year 2017–18, the private sector accounted for 44.3% of all enrolled students

and 37.9% of all educational institutions nationwide (Pakistan Education Statistics, 2017). Compared to all educational institutions, private schools comprised 64.5% of middle schools and 57.2% of high schools. The percentage of primary school students attending private schools increased from 28% to 38% between 2008 and 2017 (Pakistan Education Statistics, 2017).

The use of technology in the teaching-learning process is called "e-learning." E-learning is the quickest way to learn and receive training because it doesn't need going to a physical classroom or training center. It can be considered the most effective instruction technique because it allows teachers to educate a numerious students while keeping the same level of education for all learners (Kisanga*,* 2016*)*. In many different countries, it is widely used and recognized in higher education. Since multiple studies have indicated that instructors' attitudes about e-learning have a significant role in its success, teachers' attitudes will be vital in promoting its sustained usage in the future (Xhaferi et al., 2018). There is a general agreement that advancements in technology and new advances in the educational process are necessary for the flexible, collaborative, and learner-centered environments that e-learning encourages (Rahayu & Wirza, 2020).

There are numerous ways to include online activities in e-learning. Electronic tools (like PCs, tablets, smartphones, and so on) to educate or prepare future teachers is a broad definition of e-learning. Electronic learning supports teaching-learning using digital resources and applications (Kimwise, 2017). The quick development and broad adoption of chat rooms, emails, informal groups, intelligent interactive media programs, web conferences, and web advancements shifted the traditional education methods to modern techniques. According to several experts, e-learning has paved the way for virtual learning and cutting-edge teaching methods (Connolly, Stansfield & Hainey, 2007).

It is common knowledge that attitude refers to one's beliefs and emotions regarding engaging in the desired behavior (Jones, 2020). Attitude refers to one's capacity to participate in and accept a certain activity (Rafiq, 2020). Prospective teachers' attitudes regarding online learning will influence how they use cutting-edge technology tools for their studies (Moreno, 2017). Investigating potential teachers' perceptions of an e-learning system can be useful for determining how widely it is used (Thongsri, 2020). To better prepare their pupils for the field of education, teachers may find it helpful to gauge their views toward e-learning. According to Hussain et al. (2018), Some sociodemographic criteria, such as gender, education, employment history, and another intellectual component, have had a considerable impact on how attitudes toward computers, the internet, and e-learning have developed in educational contexts (Alameri et al., 2020). A dichotomous variable that accepts the responses woman/man

or female/male serves as a gender indicator (Lindqvist et al., 2021). Experience is information or expertise acquired through regular participation in a specific job or activity (Ramadan et al., 2019). The continuous increase in the knowledge, skill and ability to perform the duties by training programs refers to teaching experience. There are numerous ways to gain teaching experience, some of which are more popular than others (Bag et al., 2020).

LITERATURE REVIEW

Typically, the practice of transferring knowledge using technology is referred to as "e-learning" (Bozkirli & Er, 2021). E-learning is the most opportune technique of learning without having to go to school or training centers (Oweis et al., 2022). It may be thought of as the most effective method of instruction because it allows teachers to deal with many kids while preserving a high standard of learning for each student (Alasmari, 2022).

Technology use requires a particular mindset (Oweis et al., 2022). A person's attitude is often referred to as their view of something, whether favorable or unfavorable. Al-Saleh (2018) stated that a person's mentality significantly impacts their actions to accomplish goals and objectives. As previously said, the success of e-learning depends on teachers' attitudes about it because every information system's success depends on its users (Almaiah et al., 2020). The attitudes of teachers toward e-learning have been the subject of extensive global research (Xhaferi et al., 2018). According to Sangwan et al. (2021), teachers were generally supportive of e-learning. Guillasper et al. (2020) found that more than two-thirds of the faculty's teaching staff had favorable opinions about e-learning. According to Xhaferi et al. (2018), many teachers were against the idea of using e-learning in place of traditional instruction. Alqudah et al. (2021) surveyed academics about their opinions on e-learning as a stand-alone method of instruction, and 86.4% of them disagreed with it. Less research has been done on how teachers feel about electronic learning in schools. Karmakar, Banasree & Behera. (2015) discovered that teachers at higher secondary schools had neither favorable nor unfavorable sentiments regarding e-learning. Alasmari (2020) examined teachers' viewpoints at the secondary and tertiary levels and discovered that they were largely in favor of e-learning in Pakistan. The findings indicate that most teachers had unfavorable opinions on online education.

Conceptual Framework

According to the World Health Organization (WHO), the socially ingrained characteristics of boys, girls, men and women are considered gender (Adams et al., 2022). Comparatively, male teachers are more passionate about online education (Liaw et al., 2011). There is no substantial correlation between gender and computer and e-learning attitudes. Additionally, a weak correlation between gender and

adopting different e-learning types was observed (Suri & Sharma, 2013). The similar demographic characteristics has an advantage in terms of academic perceptions and attitudes of a teacher. Graham et al. (2020) asserts some evidence of a deterioration in teaching quality for teachers with 4-5 years of experience but no comparable decline for newly hired teachers (0-3 years of experience). The findings imply that professional development based on research would benefit all educators and that educational standards may rise. Adadu et al. (2017) found that schools with a high number of teachers with more than 10 years of experience performed better than those with less than 10 years experienced teachers.

Ademola et al. (2021) stated that teacher qualifications are the lowest academic requirements for lecturers at a given educational level in each nation. Additionally, professional qualification affects teaching quality. Since teacher attitudes change with experience and qualification, there was a significant difference in student achievement between those who were taught by teachers with higher qualifications and those with lower qualifications, between those who were trained and those who were not, and between those who had been teaching for a long time and those who had just started (Liaw et al., 2011).

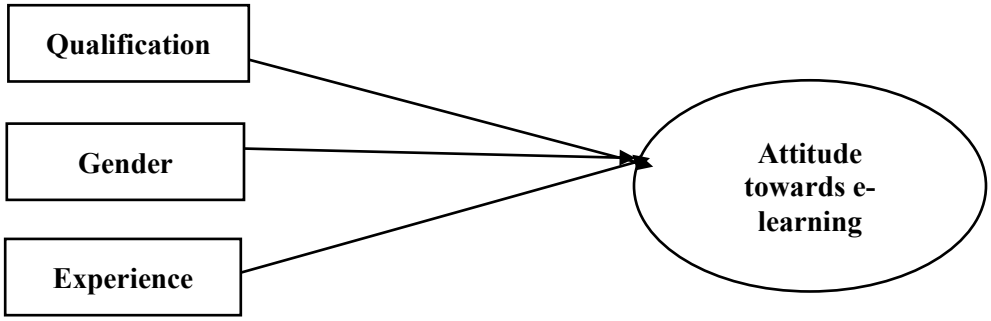

Figure 1. Conceptual Framework of Study

RESEARCH OBJECTIVES

1. To examine the relationship between male and female teachers' attitudes towards using e-learning.
2. To examine the relationship between professionally qualified and unqualified teachers' attitudes towards using e-learning.
3. To examine the relationship between high and less-experienced teachers' attitudes toward using e-learning.

RESEARCH HYPOTHESES

1. The gender of teachers has a positive effect on the use of e-learning.

2. The professional backgrounds of teachers have an impact on their views toward using e-learning.
3. The experience of teacher affects their attitude toward the use of e-learning.

RESEARCH METHODOLOGY

Research Design

The investigation's objective is descriptiveness. Using descriptive research clarifies several aspects of the problem (Soltys et al., 2021). To describe the characteristics of the analysis unit, descriptive research is used. The categorization, conceptualization, and development of hypotheses to assess relationships are the explanatory elements of the investigation. Because the results of the quantitative technique are statistically summarised, and the data were obtained through a questionnaire, both the qualitative and quantitative approaches were applied. A cross-sectional temporal horizon is used to collect data for analysis. In cross-sectional time frames, observations are made one at a time, and judgments are made based on those observations.

Targeted Population

The faculty at the private schools in Karachi, Pakistan, is the target population or analysis unit.

Sample Size

The study's sample is 250 individuals. Survey questionnaires were filled from 250 teachers at private schools.

Data Collection Tool

A similar study was conducted by (liaw et al., 2007) in China to assess teachers' attitudes toward e-learning. Therefore, their survey questionnaire was adopted with the author's permission for this study. The survey questionnaire was comprised of two parts. The first part consisted of demographic information, including gender, professional qualification, and experience in teaching. The second part of the questionnaire was comprised of 17 statements with 7 points Likert scale. 1 (strongly disagree) to 7 (strongly agree).

Data Collection

Data were collected through an online survey. Emails and messages were sent to teachers. Additionally, teachers were contacted through phone calls and asked to fill out the online survey form. Google Forms was used for the online survey.

Data Analysis

This experiment utilized two scales. The first scale, a categorized scale, is used to evaluate the respondents' demographic characteristics. The dichotomous scale is also

employed in demographics. For each question on a dichotomous scale, there are only two possible answers: yes or no. The second was a Likert scale with 7 responses, i.e., 1 (strongly disagree) to 7 (strongly agree). The Cronbach alpha technique is used to gauge the validity of a survey. Utilizing social science statistical tools, the data are examined (SPSS).

DATA ANALYSIS AND RESULTS

Demographical analysis

Table 1: ***Gender***

		Frequency	Percent	Valid percent	Cumulative percent
Valid	Male	106	42.40	42.40	42.40
	Female	144	57.60	57.60	100
	Total	250	100	100	

Table 1 shows the total number of respondents in this study is 250, of which 106 (42.40%) respondents are male and 144 (57.60%) are female. In this study, female respondents are greater than males.

Table 2: ***Professional Qualification***

		Frequency	Percent	Valid percent	Cumulative percent
Valid	Professionally Qualified	138	55.20	55.20	55.20
	Professionally Unqualified	112	44.80	44.80	100
	Total	250	100	100	

Table 2 reveals the total number of respondents is 250, of which 138 (55.20%) respondents 'are professionally qualified and 112 (44.80%) respondents are professionally unqualified as having no professional qualification.

Table 3: ***Teaching experience***

		Frequency	Percent	Valid percent	Cumulative percent
	Less than 10 years	185	74	74	74
Valid	Above10 years	65	26	26	100
	Total	250	100	100	

According to Table 3, from 250 total respondents, 185 (74%) respondents have experience of less than 10 years of teaching, and 65 (26%) respondents have more

than 10 years of teaching experience.

Table 4: ***Reliability Test***

Cronbach s Alpha	N of items
.852	22

The reliability of survey results is demonstrated by Cronbach's alpha coefficient in Table 4. The result is more than 852, 7, and the data from the selected sample are trustworthy.

Correlation Analysis

Table 4: ***Correlation Table***

	Professionally Qualified	Professionally Unqualified	Females	Males	1 to 10 years of experience	above 10 years of experience
Professionally Qualified	1					
Professionally Unqualified	0.34**	1				
females	0.42**	0.23**	1			
Males	0.51**	0.41**		1		
1 to 10 years of experience	0.56**	0.38**	0.29**	0.56**	1	
above 10 years of experience	0.36**	0.31**	0.61**	0.48**	0.43**	1

Table 5 shows the correlation analysis reveals the following key relationships between teacher demographics and their attitudes toward e-learning in private secondary schools in Pakistan:

Professionally Qualified Teachers

A moderate correlation (0.34) with professionally unqualified teachers suggests some overlap in attitudes.

A strong correlation (0.56) with teachers having 1 to 10 years of experience indicates professionally qualified teachers are more likely to have fewer years of experience.

There is a moderate correlation (0.42) with female teachers and a slightly stronger correlation (0.51) with male teachers, implying professional qualifications align more with male teachers.

Professionally Unqualified Teachers

A moderate correlation (0.38) with teachers having 1 to 10 years of experience suggests that less experienced teachers are more likely to be unqualified.

A weaker correlation (0.31) with those having over 10 years of experience indicates that unqualified teachers are less common among those with longer tenure.

There is a moderate correlation (0.41) with male teachers and a weaker correlation (0.23) with female teachers, showing that unqualified teachers are more likely to be male.

Gender

Female teachers show a strong correlation (0.61) with those having over 10 years of experience, indicating a higher likelihood of experienced female teachers.

Male teachers have moderate correlations with both experience groups: 0.56 (1 to 10 years) and 0.48 (above 10 years), showing a more balanced distribution across experience levels.

These findings suggest that professional qualifications, gender, and experience are key factors influencing teachers' attitudes toward e-learning.

Descriptive Analysis

Table 5 Sample mean, standard deviation, and correlation in variables with a confidence level of 95% (N= 250).

	Variable	*n*	*M*	*SD*	*1*	*2*	*3*	*4*	*5*	*6*
1	Professionally Qualified	138	0.55	0.14	1					
2	Professionally Unqualified	112	0.44	0.86	.56	1				
3	Female	106	0.42	0.17	.82	.52	1			
4	Male	144	0.57	0.19	.65	.84	.30	1		
5	1 to 10 years	185	0.74	0.15	.90	.78	.84	.72	1	
6	More than 10 years	65	0.26	0.13	.44	.62	.19	.72	.33	1
7										.59

The mean value of .55 shows that 55% of respondents are qualified with professional education. The standard deviation of 0.14 shows that 14 % of respondents deviate from the qualification. Thus included +-1SD in 0.14. The average respondents were 13% to 114% respondents have a professional qualification. The mean value for unqualified respondents is .44, which means 44% of respondents have no professional qualification. The 0.86 standard deviation value shows that 86% of respondents have no professional qualification. By +- 1 SD, 86% to 186% of respondents have no professional qualification. The mean value for female respondents is .42, which means

42% of respondents are females. The 0.17 standard deviation value shows that 17% of respondents are females. By +- 1 SD, 16% to 117% of respondents are females. The mean value for male respondents is .57, which means 57% of respondents are males. The 0.19 standard deviation value shows that 19% of respondents are males. By +- 1 SD, 18% to 119% of respondents are males. The mean value of 0.74 shows that 74% of respondents have below 10 years of experience. The standard deviation of 0.15 shows that 15 % of respondents variate. Thus, including +-1SD, the average respondents were 13% to 114% of respondents who have below 10 years of experience. The mean value of 0.65 shows that 65% of respondents have more than 10 years of experience. The standard deviation of 0.26 shows that 26 % of respondents variate. Thus, including +-1SD, the average respondents were 15% to 126% of respondents have more than 10 years of experience. P>.05, p>.01 with a 95 % confidence level. There is a strong positive correlation between the variables. The significance above 0.05 shows a strong positive interrelation between variables. The inter-correlation within variables is above .5, which shows a strong positive relationship among them.

Regression analysis

Table 6 regression effect

Effect	Estimate	SE	95% CI		p
			LL	UL	
Fixed effects					
qualified	.63	0.02	5.56	6.11	0.06
unqualified	.74	0.05	5.09	5.77	0.09
females	.71	0.03	5.53	6.18	0.07
Males	.54	0.04	5.10	5.80	0.08
1 to 10 years of experience	.52	0.04	5.36	6.03	0.08
above 10 years of experience	.70	0.02	5.40	5.91	0.06
Random effects					
Within-group variance	.62	0.001	5.4	5.96	<.001
Between-group variance	53	0.003	5.5	5.98	<.001

The fixed and random effect within variables is as above results of standard error (SE), estimation, lower and upper confidence interval with 95% confidence level and significance p-value greater than .001(p>.001) show a strong positive relationship between and with a group of variables.

DISCUSSION

This study explores the attitudes of Pakistani private school teachers toward e-

learning, examining the impact of gender, qualifications, and teaching experience. Both male and female teachers show a generally positive attitude, with little gender difference. Teachers with professional qualifications (B.Ed., M.Ed.) are more favorable toward e-learning, likely due to formal training in educational technology. Experience is positively correlated with acceptance of e-learning, challenging assumptions that younger teachers are more tech-savvy. Seasoned educators adapt well due to broader pedagogical knowledge. Barriers like limited infrastructure, lack of training, and time constraints may hinder adoption. Addressing these through professional development and resource allocation can improve implementation. Teachers' positive attitudes likely enhance student engagement and learning outcomes by creating more dynamic, personalized learning environments. Policymakers should focus on continuous training, reliable infrastructure, and blended learning models to support teachers and maximize the benefits of e-learning.

In Pakistani private schools, the attitudes of teachers toward e-learning are examined in this study. For their children to compete with the educational standards of wealthy nations, parents must spend large tuition costs. Therefore, I explore in this study if private school instructors' perspectives on online education. Is there a connection between a teacher's gender, credentials, and teaching experience and how they feel about using e-learning? Numerous aspects of the subject are explained via descriptive research. The characteristics of the analysis unit are characterized via descriptive research. The categorization, conceptualization, and development of the hypotheses used to evaluate relationships constitute the study's explanatory component. The total number of respondents in this study is 250, of which 106 (42.40%) respondents are male and 144 (57.60%) are female. 138 (55.20%) respondents 'are qualified with professional education as B.Ed. and M.Ed., and 112 (44.80%) respondents are unqualified as no professional qualification graduate. 98 (39.50) respondents have experience of 1 to 5 years in teaching, 87(34.50%) respondents have 6 to 10 years' experience, and 65(26%) respondents have more than 10 years' experience. The correlation value of.571 demonstrates that there is a much stronger association than is generally the case between teachers' attitudes about using e-learning and their experience. It is generally agreed upon to use the Durban Watson average, which is 1, as a standard value for comprehensive regression analysis. The alternate hypothesis must be accepted, and the null hypothesis must be rejected because the significance value is 0.000. This leads to the conclusion that online learning is usually favored by teachers of both sexes. A teacher's attitude toward adopting e-learning is influenced by their professional background, amount of knowledge, and skill set.

RECOMMENDATIONS

Based on research on teachers' attitudes toward e-learning in Pakistani private schools, here are a few recommendations:

Schools should offer regular training programs focused on e-learning tools and digital pedagogy, especially for teachers without formal qualifications in education (B.Ed., M.Ed.).

Schools must invest in reliable internet access and provide necessary digital devices to facilitate the adoption of e-learning, especially in under-resourced areas.

Introduce blended learning models that combine traditional teaching with online components to allow teachers to gradually integrate e-learning into their practices.

Utilize the experience of senior teachers by involving them in peer mentoring programs to help less experienced teachers adapt to e-learning tools.

Implement regular assessments of e-learning effectiveness and gather feedback from both teachers and students to continuously improve the learning environment.

These recommendations aim to foster a supportive environment for the adoption and effective use of e-learning in Pakistani private schools.

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