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RESEARCH PAPER

Comparing Head Teachers' Effectiveness and School Performance through Teachers' Ratings

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Received: March 11, 2022 Accepted: June 19, 2022 Online: June 21, 2022 Keywords: Communication and Community Relations Head Teachers' Effectiveness Instructional Leadership Organizational Management School Climate School Performance Teacher Evaluation *Corresponding Author:	ABSTRACT The purpose of the study was to compare head teachers' effectiveness by using teachers' rating on quality indicators and their school performance through their gender and school location. Head teacher effectiveness is a process to measure that how quality indicators recommended by the state are implemented by head teacher in institution. School performance is defined as the extent to which long or short educational targets are achieved by the teachers, students and schools. In district Sahiwal, 1026 Secondary School Teachers evaluated their head teachers' effectiveness on HTEQ developed by the researchers by employing multistage sampling technique. For school performance, MEAs monthly visit reports were used to collect the data on the factors: teacher presence, school cleanliness, functioning of facilities and student presence, while data on student achievement score were obtained from their schools. To analyze the data, both of variables were compared by using T-test for independent sample. The study revealed that female teachers' rated their head teachers significantly more effective than male teachers' rated, while urban teachers' rated their head teachers significantly more effective than rural teachers' rated.			
malikirfan164@ya hoo.com	The study recommended that reasons might be explored for lower effectiveness and school performance of male head teachers through further studies.			
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Introduction

The school principal which is also known as head teacher performs various leadership and management role to maximize the performance of their school (Karatas, 2016). The head teacher ensures quality education by managing instructional process (Ch. et al., 2018), creates school climate supportive to learning (Robinson et al., 2008), and implements curriculum effectively by employing various resources (Khan et al., 2009) to improve the school performance (Zheng et al., 2017). Globally accepted qualities of an effective teacher are essential to comprehend due to the most influential role of head teacher for school improvement. Clifford et al. (2012) defined that head teacher effectiveness is the expected or intended effect of head teacher's work. The multiple research revealed that head teacher effectiveness is a

process to measure that how quality indicators are implemented by head teachers in the school that improve school outcomes (Jones et al., 2018; Stronge et al., 2013).

Previously, various research have been conducted to identify the effective head teachers by employing the quality indicators in different countries (Akram & Malik, 2021; Grissom & Loeb, 2011; Malik & Akram, 2020; McCullough et al., 2016; Ontai-Machado, 2016). To evaluate head teacher effectiveness, multiple models are being used based on quality indicators: New Leader Model (2012), Pennsylvania Model (2014), Wisconsin Framework of Head Teacher Leadership (2018), School Leader Impact Model (2015) and Stronge et al. Model (2008). In these models, Quality standard based framework is emphasized to evaluate the head teachers' effectiveness that improves the student achievement (Dee & Wykoff, 2015; Jones et al., 2018; Teh et al., 2014; Sander & Kearney, 2012; Stronge et al., 2008).

Mostly, evaluation of head teachers are being made based on quality standards in the world particularly from the USA, China, Canada, UK and Turkey (Karatas, 2016; Shelton, 2013; Zheng et al., 2017). However, in Pakistan, head teacher evaluation is not based on recognized and proven quality indicators which are being practiced in various countries. In Pakistan, Performance Evaluation Report (PER) is being employed involving some personal characteristics which is not valid and reliable document to evaluate the effectiveness of head teacher and make decisions about their promotion. It is essential to use research based quality indicators which might be another lens to recognize effective head teachers in Pakistan. Previously, the researchers developed reliable and valid tool based on quality indicators of Stronge et al. (2008) model such as instructional leadership, teacher evaluation, school climate, communication and community relations, and organizational management to recognize effective head teachers (Akram & Malik, 2021; Malik & Akram, 2020).

Previous research failed to employ quality indictors to recognize effective head teachers in Pakistan but Malik and Akram (2020) had made serious effort to fill that gap and also provided a valid and reliable tool based on important quality indicators of head teacher (Akram & Malik, 2021). However, in Pakistan, some studies used these indicators separately such as instructional leadership (Akram et al., 2017; Ch. et al., 2018), teacher evaluation (Akram, 2018; Akram & Zepeda, 2015; Siddiqui, 2010), school climate (Akram et al., 2018; Anwar & Anis-ul- Haq, 2014), and organizational management (Khan et al., 2009) that did not provide true picture of head teachers' effectiveness and also failed to compare their effectiveness based on quality indicators and their school performance through gender based and school location based. To recognize effective head teacher, the study used valid and reliable tool that predicted and correlated with school performance (Akram & Malik, 2021; Malik & Akram, 2020). There is dire need to conduct a study to make comparison among gender based and school location based to identify effective head teachers through employing all important quality indicators and their school performance that have not been compared before by taking these quality standards in Pakistan which might be further strengthen the idea that how much effectual head teachers are essential for their student achievement or school performance. The present study focused to recognize effective head teachers among gender-based and school-location based though involving these quality standards and also compare their school performance to fulfill the existing gap in the literature.

Theoretical Framework

Clifford et al. (2012) defined effectiveness as an ability to generate the desired results and capability to produce outcomes. The present study is theorized on the goal-oriented approach based on whether the goals are achieved through providing feedback that is essential for their effectiveness to obtain the desired results (Schermerhorn et al., 2004; Stronge et al., 2013). Previous studies revealed that evaluation of head teacher through their teachers on quality indicators provided reliable evidence as their ratings over the year were consistent and better to compare their head teachers' effectiveness (Grissom & Loeb, 2011; Malik & Akram, 2020; McCullough et al., 2016). The study framed on previous findings that to compare head teachers' effectiveness based on quality indicators, teachers' perception is the most suitable who are the main observer of leadership practices and necessary for school improvement.

Literature Review

Head Teacher Effectiveness and Quality Performance Standards

Stronge et al. (2008) identified some important qualities of head teacher: instructional leadership, teacher evaluation, school climate, communication and community relation, and organizational management. Through employing Instructional leadership, head teacher emphasized on the cultural of shared goals (Malik & Akram, 2020), staff collaboration, opportunities of learning for teachers (Brown, 2016), gather and analyze the data (Ch et al., 2018) and ensuring the effective use of resources that are most required to improve the student achievement (Akram et al., 2017). There are some studies revealed that female head teachers were better than male head teachers in demonstrating instructional leadership and student achievement were also found better who have more effective head teachers (Akram et al., 2018). School climate is the stakeholders' perceptions about friendly and sympathy interaction with head teachers (Nichols, 2019; Rapti, 2013). Various studies revealed that school performance were better who have effective head teacher as compared to less effective head teacher in making school climate positive and supportive to learning whether male or female and rural or urban head teachers (Ali & Siddiqui, 2016; Maxwell et al., 2017).

To review and rate the teachers' effectiveness, teacher evaluation is most required which provide feedback to teachers to improve their professional growth (Akram & Zepeda, 2015). Different studies revealed that student achievement were higher who have effective head teacher in making teacher evaluation based on quality indicators of teachers (Akram, 2019). Organizational management is another quality of effective head teacher that assist to adjust and monitor the structure of institution, use of time, space and all required resource, operate activities and use of data effectively to improve the school performance (Khan et al., 2009). There are various studies revealed the importance of effective head teacher having quality of organizational management for the school performance and female head teachers were found better in management of organization with better student achievement (Akpan & Usoro, 2008; Mukherjee, 2013; Ndinza, 2015; Shah, 2016). Keyton (2011) defined communication as an exchange of information and transmission of meanings and through involving the stakeholders, head teacher develops relationship with the community (Watson, 2019). A plethora of research revealed the importance of community relations and communication skill of head teacher to improve the results of organization and female head teachers were found better than male head teachers in that skill (Wahed & El-Syed, 2012; Waswa, 2017). Due to the importance of these qualities, the research employed these indicators to evaluate head teacher effectiveness and further made comparison through gender and school location based.

School Performance

School performance is defined as the extent to which long or short educational targets are achieved by the teachers, students and schools. It is the combination of efficiency and effectiveness that means school targets are obtained through within time and less expensive (Habib, 2010). Some important models of school performance were reviewed: School Reforms Roadmap Model, Pakistan (2016), Louisiana Model (2016), and School Manual Model, Pakistan (2004) and five factors: teacher presence, school cleanliness, student presence, student achievement and functioning of facilities were used to measure school performance. *Teacher presence* that involves physical presence of teachers in classroom has direct effect on student achievement (Garrison, 2007). Student presence in school and classroom is highly required for their success (Hufford, 2014). Functioning of facilities involves functionality and provision of facilities in school that enhance student achievement (Kaur, 2016). School cleanliness involves cleanliness of all classrooms, corridors, toilets, lawn, playground, and surrounding of the school that must be according to hygiene (Chief Minister School Reform, 2016). School cleanliness is required for better environment and school improvement (Kausar et al., 2017). Student achievement is defined as the attainment of the objectives that can be measured with the help of test (Nyagosia, 2011).

Comparing of Head Teachers' Effectiveness and School Performance

There are some previous studies that told the importance of head teachers' effectiveness for their school success, and compare gender based and school location based difference of head teachers' effectiveness and their school performance. Kochan et al. (2000) investigated gender-based perception about essential skills of head teachers. Result indicated that female head teacher effectiveness were better than male head teacher effectiveness. Waters et al. (2003) investigated the effect of leadership on student achievement and found significant relationship between them that highlights the importance of effective head teacher in their success of school. Hallinger and Heck (2004) investigated association between the leadership and school effectiveness, revealed that leadership affects school effectiveness. Cotton (2003) provided five factors of effective head teacher: student learning, interaction and relationships, school culture, instruction, and accountability that also contribute in the student achievement.

Robinson et al. (2008) identified qualities of head teachers: developing goals and expectations, ensuring supportive and orderly environment, coordination, and evaluating instruction and curriculum that contribute in student achievement. Grissom and Loeb (2011) provided skills of head teachers: instructional management, internal and external relations, organizational management and administration that predicted and correlated with school performance. Tatlah and Iqbal (2012) revealed that female head teachers were found better for effective leadership skills with better school effectiveness than male head teachers. Day and Sammons (2013) revealed that the combination of different strategies adopted by the head teacher: developing a shared vision and strategic plan, leading teaching and learning, managing the

organization, establishing the healthy relations and professional community, holding accountability and strengthening community have positive effect on school success.

Another study revealed that female leadership practices and effectiveness were found better than male head teachers, while urban head teachers' leadership practices and effectiveness were found better than rural head teachers (Ibrahim & Al-Taneiji, 2013). Salfi et al. (2014) explored gender-based difference of leadership practices and female leadership practices were found more effective with better annual results of schools that involves all teachers in decision making, gives more respect, and fosters staff's confidence as compared to male head teachers. The study also found that leadership skills and school effectiveness of urban head teachers were better than rural head teachers. Ontai-Machado (2016) provided effective skills: positive school climate, prioritization of structured activities, shared leadership, and gathering and analyzing the data to enhance the performance. The study revealed that effective qualities of leaders were predicted and correlated with school performance.

Aziz et al. (2017) examined gender-based differences of teachers' perception about effective leadership qualities in Pakistan and male head teachers were found more effective in performing leadership qualities than female head teachers. Another study identified qualities of head teacher: direct participation and visibility, organization of instruction, internal environment and external relations, and planning that correlated with student outcomes (Zheng et al., 2017). Malik and Akram (2020) evaluated head teacher effectiveness by taking quality indicators of head teacher which are being practiced globally and revealed that effective head teachers were being produced better results than low or ineffective head teachers. After reviewing of the multiple studies, it can be clearly seen that effectual head teachers are most required for their school success. Various studies revealed that head teacher effectiveness based on quality indicators were predicted and correlated with school performance. Multiple studies also revealed that female teachers' rated their head teachers more effective than male teachers' rated and performance of female schools were also found better than male schools, while urban teachers' rated their head teachers more effective and were also better in their school results which further strengthen the idea that effective head teachers are being produced better results than ineffective head teachers in their schools. In Pakistan, previous studies lack to compare head teachers' effectiveness and school performance through gender and school location based by employing these quality performance standards which is direly needed to fulfill the existing gap in the literature.

Conceptual Framework

Five quality indicators of head teacher based on Akram and Malik (2021) work: instructional leadership, teacher evaluation, school climate, communication and community relations, and organizational management were employed to evaluate head teachers' effectiveness. Five factors: teacher presence, school cleanliness, student presence, student achievement and functioning of facilities were used to measure school performance. Based on the provided framework, it was presumed that head teachers' effectiveness and school performance would be compared to comprehend the essentiality of effective head teacher for school outcomes.

Independent variable Head Teachers' Effectiveness Instructional Leadership School Climate Teacher Evaluation Organizational Management Communication and Community Relations Dependent variable School Performance Teacher Presence Student Presence Functioning of Facilities School Cleanliness Student Achievement

Material and Methods

It was a comparative study that used survey method to collect the data.

Population and Sample

From Sahiwal division (Sahiwal, Pakpattan, Okara districts), all secondary school teachers (SSTs) of male and female public high schools were the population who were being taught of 10th class for 2017-2018 session. Initially, simple random technique was employed and one district (Sahiwal) was selected. Secondly, all SSTs of the public high schools (N=1026) in that district were chosen as a sample of present study. Among them, male teachers were 570, while female teachers were 456 and location-wise, urban school teachers were 218, while rural school teachers were 808.

Instrumentation

The study used two tools for data collection in overall. First, the researchers used Head Teacher Effectiveness Questionnaire (HTEQ) developed by Akram and Malik (2021) to evaluate head teachers' effectiveness. All 83 items of the tool were grouped into five domains: instructional leadership, teacher evaluation, school climate, organizational management, and Communication and community relation. The response scales (ineffective, less effective, moderately effective, effective, or very effective) were ranged from the lowest to the highest level of quality indicators. To ensure reliability and validity, pilot testing were employed on 50 SSTs to obtain feedback and expert opinion were also received from five university professors of relevant field, and then item were modified accordingly. HTEQ revealed the highest level of reliability (α =0.88) by employing the Cronbach Alpha. Secondly, five factors: teacher presence, school cleanliness, student presence, student achievement and functioning of facilities were taken to measure school performance.

Data Collection

All public high schools of district Sahiwal were visited by the researchers to get permission from head teacher and distributed the HTEQ among SSTs to get the data. In district Sahiwal, data was collected from 570 male and 456 female SSTs (*N*=1026). Data of school performance for the factors: presence of teachers, functioning of facilities, student presence and cleanliness of school were gathered through MEAs visit reports and student achievement scores were through BISE Sahiwal annual results of 10th grade for 2017-2018 session. After that, all the data of school performance were summed up which was available in percent form and further used mean score of all the factors as overall score of school performance.

Data Analysis

A quantitative approach (comparative research) was employed in the present study. SPSS version 20 was used for data analysis. Analysis of data is being provided in the following.

Results and Discussion

Table 1
Gender Based Comparison of Head Teachers' Effectiveness

Gender Based Comparison of Head Teachers Effectiveness					
Gender	N	Mean	T	Sig (2-tailed	
Male	570	3.420	1 171	.000*	
Female	456	3.896	-4 .1/4		
Male	570	3.305	4.450	.000*	
Female	456	3.981	-4.4 32		
Male	570	3.214	2.000	.002*	
Female	456	3.701	-3.000		
Male	570	3.437	2 160	.002*	
Female	456	3.986	-3.109		
Male	570	3.512	_	.016*	
Female	456	3.835	-2.415		
Male	570	3.548			
Female	456	3.880	-3.803	.000*	
	Gender Male Female Male Female Male Female Male Female Male Female Male Female Male Male	Gender N Male 570 Female 456 Male 570	Gender N Mean Male 570 3.420 Female 456 3.896 Male 570 3.305 Female 456 3.981 Male 570 3.214 Female 456 3.701 Male 570 3.437 Female 456 3.986 Male 570 3.512 Female 456 3.835 Male 570 3.548	Gender N Mean T Male 570 3.420 -4.174 Female 456 3.896 -4.174 Male 570 3.305 -4.452 Female 456 3.981 -3.080 Female 456 3.701 -3.080 Male 570 3.437 -3.169 Female 456 3.986 -3.169 Male 570 3.512 -2.415 Female 456 3.835 -2.415	

T-test for independent sample was performed to compare male and female teachers' perceptions of their head teachers' effectiveness and female teachers' rated their head teachers significantly more effective than male teachers' rated in implementing instructional leadership, t(1024)=4.174, p=.000, school climate, t(1024)=4.452, p=0.000, teacher evaluation, t(1024)=3.080, p=0.002, organizational management, t(1024)=3.169, p=0.002, and communication and community relation, t(1024)=2.415, p=.016. Further, in overall, female teachers' rated their head teachers significantly more effective than male teachers' rated in demonstrating head teachers' effectiveness, t(1024)=3.803, p=0.000. It is concluded, therefore, male and female teachers perceive their head teachers' effectiveness differently.

Table 2
Gender Based Comparison of School Performance

Gender based Comparison of School Performance						
Factors	Gender	N	Mean	T	Sig (2-tailed	
Teacher Presence	Male	570	93.8	14.94	.000*	
	Female	456	96.1		.000	
Student Presence	Male	570	90.3	-2.29	022*	
	Female	456	92.7		.022*	
Functioning of Facilities	Male	570	97.5	-3.27	.001*	
	Female	456	99.9			
School Cleanliness	Male	570	89.9	C 01	000*	
	Female	456	91.8	-6.01	.000*	
Student	Male	570	73.0	1711	.000*	
Achievement	Female	456	85.1	-17.11		
	Male	570	90.1	-13.43	.000*	

Overall School	г 1	456	00.7
Performance	Female	456	92.7

T-test for independent sample was employed and female high schools' performance were found significantly better as compared to male high schools' performance on factors: teacher presence, t(1024)=14.94, p=.000, student presence, t(1024)=2.29, p=0.022, functioning of facilities, t(1024)=3.27, p=0.001, school cleanliness, t(1024)=6.01, p=0.000, and student achievement, t(1024)=17.11, p=.000. In overall, female high schools' performance were found significantly better than male high schools' performance, t(1024)=13.43, p=0.000.

Table 3
School Location Based Comparison of Head Teachers' Effectiveness

School Location based Comparison of Head Teachers Effectiveness						
Factors	Gender	N	Mean	T	Sig (2-tailed	
Instructional	Rural	808	3.302	0.146	.002*	
Leadership	Urban	218	3.807	0.140		
School Climate	Rural	808	3.412	-0.350	.032*	
School Climate	Urban	218	3.870	-0.330	.032	
Teacher Evaluation	Rural	808	3.441	1.135	.041*	
Teacher Evaluation	Urban	218	3.785	1.133		
Organizational	Rural	808	3.219	-0.151	.000*	
Management	Urban	218	3.920	-0.131	.000	
Communication &	Rural	808	3.357	1.289	.040*	
Community Relations	Urban	218	3.881	1.269	.040	
Overall Head Teachers'	Rural	808	3.451	0.153	.003*	
Effectiveness	Urban	218	3.790	0.133	.005"	
		•	•	•		

Table 3 showed that urban teachers' rated their head teachers more effective as compared to rural teachers' rated in implementing the instructional leadership, t(1024)=0.146, p=0.002, school climate, t(1024)=0.350, p=0.032, teacher evaluation, t(1024)=1.135, p=0.041, and organizational management, t(1024)=0.151, p=0.000, and communication and community relations, t(1024)=1.289, p=.040. Further, in overall, urban teachers' rated their head teachers more effective than rural head teachers' rated, t(1024)=0.153, p=0.003.

Table 4
School Location Based Comparison of School Performance

School Education bused Comparison of School I Citofinance						
Factors	Gender	N	Mean	T	Sig (2-tailed	
T1 D	Rural	808	91.04	-0.86	.003*	
Teacher Presence	Urban	218	95.21		.005	
C. 1 . D	Rural	808	87.39	-2.76	00/*	
Student Presence	Urban	218	92.90		.006*	
Functioning of	Rural	808	94.24	1.07	.049*	
Facilities	Urban	218	99.94	- 1.97		
School Cleanliness	Rural	808	85.37	5.18	.000*	
School Cleaniness	Urban	218	92.25			
Student Achievement	Rural	808	72.45	0.18	.043*	
Student Achievement	Urban	218	78.27			
Overall School	Rural	808	87.18	2.22	00(*	
Performance	Urban	218	91.72	-2.22	.026*	

Table 4 showed that urban schools' performance were found significantly better as compared to rural schools' performance on the factors: teacher presence, t(1024)=0.86, p=.003, student presence, t(1024)=2.76, p=0.006, functioning of facilities, t(1024)=1.97, p=0.049, school cleanliness, t(1024)=5.18, p=0.000, and student achievement, t(1024)=0.18, p=.043. Further, in overall, urban schools' performance were significantly better than rural schools' performance, t(1024)=2.22, p=0.026.

Discussion

The intention of present study was to compare head teachers' effectiveness and their school performance through gender based and school location based. The study revealed that female teachers' rated their head teachers significantly more effective than male teachers' rated, while urban teachers' rated their head teachers more effective as compared to rural teachers' rated. The study also revealed that performance of female high schools were better than performance of male high schools, while the performance of urban high schools were better as compared to the rural high schools which further strengthen the idea that effective head teachers were being produced better results as compared to low or ineffective head teachers in their schools. There are some following studies which results are consistent with this study. Kochan et al. (2000) revealed similar results that female head teachers were better in effectiveness with better school results as compared to male head teachers. Waters et al. (2003) study confirmed the importance of effective head teachers in their school success.

Robinson et al. (2008) revealed same findings that head teachers having essential qualities contribute in student achievement. Grissom and Loeb (2011) identified quality standards of head teacher that predicted and correlated with school performance. Tatlah and Iqbal (2012) found that female head teachers were more effective with better student results. Ibrahim and Al-Taneiji (2013) were found same results that female head teachers were better in leadership and school effectiveness than male head teachers, while urban head teachers were better in leadership and school effectiveness. Salfi et al. (2014) provided leadership practices and revealed that female leadership practices were better having better school effectiveness than male leadership practices, while urban head teachers were better in leadership qualities and school effectiveness than rural head teachers which are consistent with the present study. Most important study conducted by Malik and Akram (2020) revealed that head teachers' effectiveness measured on quality standards correlated and predicted school performance.

The results based on HTEQ provided evidence of the prior findings that head teachers' effectiveness measured on quality indicators can predict and correlate with school performance. In the present study, female teachers' rated their head teachers more effective and their school performance were also found better as compared to male teachers' rated, while urban teachers' rated their head teacher more effective and school performance of their schools were also found better than rural teachers' rated. The results based on HTEQ were consistent with various studies that further also proved the hypothetical affirmation as a means of findings that effectual head teachers can produce better annual results of schools, maximize the school performance and run the school effectively through exercising all important quality indicators in their schools rather than low or ineffective head teachers.

Conclusion

The present study measured head teachers' effectiveness based on quality indicators and school performance, and further compared both of the variables through gender based and school location based. The study revealed that female teachers' rated their head teachers more effective than male teachers' rated, while urban teachers' rated their head teachers more effective as compared to rural teachers' rated. Further, the study also revealed that performance of female high school were better as compared to performance of male high school, while performance of urban high schools were better than performance of rural high schools. The study confirmed that effective head teachers identified through important quality indicators are being produced better school annual results as compared to low or ineffective head teachers.

Recommendations

Performance Evaluation Report (PER) is being used to evaluate head teachers in Pakistan which is not valid and reliable documents. There is dire need to employ quality indicators in the school to identify effective head teachers. HTEQ based on Akram and Malik (2021) work provides new lens to identify effective head teacher which might be used in public schools as alternative of PER. Female head teachers showed higher effectiveness and school performance; reasons might be explored for lower effectiveness and school performance of male head teachers through further studies. Similarly, urban head teachers showed higher effectiveness and school performance; rural head teachers need to focus on improving their effectiveness through employing quality indicators and school performance. The present study involved one district (Sahiwal) of Punjab which is relatively smaller sample size, so the generalization over the other districts may kindly be made with caution.

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