

Effect of Head Teacher's Effectiveness on School Performance at Secondary School Level

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Abstract

This study was designed to measure the effect of head teacher's effectiveness score on school performance. Head teacher effectiveness is a process of measuring actions or behaviors based on quality performance standards of effective head teacher. School performance is the extent to which school personnel have achieved their short and long term educational goals. Using the multistage sampling technique, 1026 secondary school teachers were surveyed in Sahiwal Division who evaluated the effectiveness of their head teachers through Head Teacher Effectiveness Questionnaire (HTEQ) developed by the researchers based on quality performance standards. The HTEQ which included five factors—Instructional Leadership, School Climate, Teacher Evaluation, Organizational Management, and Communication and Community Relations—demonstrated high level of overall reliability ($\alpha=0.88$) with factor-wise reliability range from 0.77 to 0.85. School performance data were collected through monthly visit reports of Monitoring and Evaluation Assistants (MEAs) on factors such as Teacher Presence, Student Presence, Functioning of Facilities, School Cleanliness; and Student Achievement scores were collected from respective schools. The study found moderate positive relationship between head teacher's effectiveness scores and school performance ($r=.59$). The findings of the study revealed that head teacher's effectiveness significantly combined to predict school performance, explaining 36% of the observed variance in school performance. The study provided initial evidence of the validity of the HTEQ. The limitations and recommendations have also been suggested in the study.

Keywords: Head teacher's effectiveness; instructional leadership; school climate; teacher evaluation; organizational management; communication and community relations; school performance

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Introduction

The school principal, known as the head teacher, performs myriads leadership and management roles to maximize school performance (Grissom & Loeb, 2011). The head teacher is required to ensure high quality teaching by managing teaching and learning process effectively and using knowledge to realize the potentials of all teachers to achieve the success (Ch, Ahmad, & Batool, 2018; Fullan, 2010). An effective head teacher creates learning culture to promote academic excellence, equality, and high expectations of all students (Akram, Kiran, & Ilgan, 2016; King, 2002; Robinson, Lloyd, & Rowe, 2008) and provides vision, leadership, and direction to the school personnel to ensure that school targets are achieved (Leithwood, Seashore, Anderson, & Wahlstrom, 2004; Zheng, Li, Chen, & Loeb, 2017). A plethora of research found that effective head teachers focus on implementing policies and practices to ensure effective use of resources to achieve the desired objectives (Khan, Saeed, & Fatima, 2009; Leithwood & Riehl, 2003), creating environment conducive to learning and meeting the needs of the students (Ali & Siddiqui, 2016; Harris & Lowery, 2002), cultivating leadership in teachers to promote school vision, and working on establishing real differences in learners' achievement (Hargreaves & Fink, 2004; Kransnoff, 2015). Therefore, head teachers are often held accountable for their effectiveness based on how well their teachers taught and how much students learned.

Head teacher's evaluation is being made to judge his effectiveness on the basis of Performance Evaluation Report (PER) in public schools of Pakistan, which is perhaps problematic measure in term of reliability and validity. The basic purpose of the PER is to help the authorities to make judgment about the suitability for head teachers' promotion (UNESCO, 2006). There are six parts of PER used to measure head teacher's effectiveness. *First* part includes personal information, description of main duties, achievements of targets, and exceptional contributions which is filled by head teacher. *Second* part includes performance assessment, where reporting officer writes comments against the claims of head teacher. *Third* part of PER is filled by reporting officers, includes rating against some attributes of the head teacher such as behavior with public, financial responsibility, acceptance of responsibility, knowledge of laws or rules or procedures or IT skills, supervision and guidance, and ability to take decision at three levels such as very good, satisfactory, and unsatisfactory. Reporting officer writes comments about the head teacher's usefulness and fitness for promotion in *fourth* part. Reporting and countersigning officer rates the head teacher against overall grading and integrity in *fifth* part. Remarks of countersigning officer are written about disagreement if any and not mentioned aspects in part six. These parts perhaps cannot fully evaluate the effectiveness of head teachers, as they indicate that PER was developed for the purpose of promotion only. If we are really interested in measuring head teacher's

effectiveness, we must follow research-based standard measures to identify effective head teachers. It will be another way to measure the head teacher's quality.

Historically, various models have been used to evaluate head teachers' performance. There are some models used to evaluate the head teacher's effectiveness such as Colorado model (2013), new leader model (2012), and Stronge model (2008). Colorado Education Department (2013) uses a model of head teacher evaluation, described that head teacher is responsible for the success of each learner in the institution and leadership is a challenging role that requires essential skills or quality standards provided by the state such as strategic leadership, instructional leadership, human resource leadership, school culture and equity leadership, managerial leadership, external development leadership, and leadership around measures of student achievement. A New Leader Evaluation model of Sanders and Kearney (2012) mentioned that head teachers can be evaluated on five actions regarding leadership practices such as learning and teaching, shared vision, strategic planning and systems, school culture and family engagement, talent management, and personal leadership and growth, and its outcomes. Stronge, Richard, and Catano (2008) described that effective head teacher can be evaluated on qualities such as instructional leadership, school climate, human resource administration, teacher evaluation, organizational management, communication and community relations, professionalism, and the head teacher's role in student achievement. Using the model of Stronge et al. (2008), the researchers used five essential factors the best fit in local context such as instructional leadership, school climate, teacher evaluation, organizational management, and communication and community relations in the study to measure the head teacher's effectiveness.

The previous literature in Pakistan context lacks in measuring head teacher's effectiveness through teachers on the basis of quality indicators such as instructional leadership, school climate, teacher evaluation, organizational management, and communication and community relations, which might provide productive feedback to head teacher (Aziz, Kalsoom, Quraishi, & Hasan, 2017; Niqab, Sharma, Ali, & Mubarik, 2015; Salfi, 2011; Salfi, Hussain, & Virk, 2014). That's why there is dire need of conducting studies on head teacher's evaluation to develop the instrument and as well as measure their effectiveness through teachers on the basis of quality standards to make the head teachers effective. This study will contribute to fill this gap.

Review of the Related Literature

Effectiveness is the capability of producing a desired result or the ability to produce desired output. When something is deemed effective, it means it has an intended or expected outcome, or produces a deep, vivid impression. Stronge, Xu, Leeper, and Tonneson (2013) theorized that effective principalship or headship is the combination of leadership, managerial and administrative behaviors and action taken by head teachers

that are appropriate to the given circumstances. Honest, accurate, and meaningful evaluation feedback is essential to improve the head teachers' effectiveness and their professional development which bridge the gap between current practices and desired performance. The more effective the head teachers in terms of all required behaviors or performance standards produce more effective and sustained results.

Head Teacher's Effectiveness and Quality Performance Standards

Highly effective head teachers are very essential for high student achievement and everyone knows it. But the question arises that how we define an effective leader and how it would someone assessed their effectiveness? What are the skills to become an effective leader? It is expected from them to promote and develop the school vision, empowering stakeholders to create and sustain the conditions that support the student success (Stronge et al., 2008). Head teacher effectiveness is a process for measuring actions or behaviors based on quality performance standards of effective head teacher. Effective head teachers are required to demonstrate frequent performance standards of effective head teacher (Hintz, 2014; Mendels, 2012; Stronge et al., 2013). The researchers found that Stronge et al. model (2008) contained essential skills of effective head teachers and some of them are very important to measure the effectiveness of head teachers such as *instructional leadership, school climate, teacher evaluation, organizational management, and communication and community relations*.

Instructional leadership is a dynamic form, where head teacher works with teachers to form the institutions by creating the cultural of shared goals, collaboration of teachers, learning opportunities of teachers (Fullan, 2010), gathering and analyzing the data for improvement, and providing the resources to promote student learning (Akram, Kiran, & Ilgan, 2015; Ch., Ahmad, & Batool, 2018; Cotton, 2003). In the presence of the instructional leadership, leader takes responsibility for improving teaching and learning in the entire school community and its effectiveness ultimately reflects in student achievement (Fullan, 2010; Leithwood & Riehl, 2003). A plethora of research found that instructional leadership practices affect the student achievement or school performance positively (Bendikson, Robinson, & Hattie, 2012; Heaven & Bourne, 2016; Hou, Cui, & Zhang, 2019; Louis, Lee, Walker, & Chui, 2012).

School climate is the more or less perception of the teachers and other stakeholders about sympathy and friendly interaction with school managers (Duff, 2013; Rapti, 2013). For building and sustaining positive school climate, head teacher involves all stakeholders (Cotton, 2003), develops a culture of trust (Kouzes & Posner, 2017), gives respect and high expectation to staff (Harris & Lowery, 2002), and makes decision by involving all stakeholders (Marzano, Water, & McNulty, 2005). The result of different studies revealed that effective practices of school climate affects the student achievement

positively, and high performing school has better school climate than with poor school climate (Ali & Siddiqui, 2016; Linares, 2012; Maxwell, Reynolds, Lee, Subasic, & Bromhead, 2017; Nichols, 2019).

Teacher evaluation is a formal process, used to review and rate the performance of teachers and effectiveness in classroom. The findings of teacher evaluation are used to give feedback to teachers and enhance the professional growth (Akram & Zepeda, 2015; Darling-Hammond, 2015; Stronge, 2006). Teacher evaluation is essential to ensure quality instruction, student learning, meets the objectives, instructional improvement, and holding accountable for their instruction (Akram, 2018; Philips, Balan, & Manko, 2014). The professional growth and accountability of the teachers are the main purposes of the teacher evaluation and head teachers prevails good practices by establishing mutual trust, making effective two-way communication through informing all procedure in teacher evaluation (Ladd, 2016; Delvaux et al., 2013; Stronge et al., 2008). The findings of different studies revealed that teacher evaluation correlates and affect the student outcomes and school performance (Akram, 2019; Akram & Zepeda, 2015; Aziz, 2010; Darling-Hammond, 2015; Mathus, 2017; Siddiqui, 2010).

Organizational management can be described as head teachers monitor and adjust the structure of organization including that how tasks are assigned and performed, utilization of time and space, allocation and use of all required resources, operating activities, and using of data for improvement of the school (Khan, Saeed, & Fatima, 2009; Leithwood & Riehl, 2003; Paturusi, 2017; Revees, 2006). Effective management is very important to improve the quality education, effective use of resources, provide guidance to workforce, and enhance motivation to improve their performance (Muraina, 2017). A plethora of research found that organizational management skills of head teachers affect the student achievement and school performance (Grissom & Loeb, 2011; Jacobson, 2011; Mukherjee, 2013; Ndinza, 2015; Sebastian, Allenswoth, Wiedermann, Hochbein, & Cunningham, 2019).

Communication and community relations of head teachers are essential to interpersonal relationships, organizational process and its structure (Arlesting, 2008; Hoy & Miskal, 1996). Effective head teachers communicate clear objectives, encourage the staff to meet them (Fullan, 1998), and develop good relation with community through involving in decision making process that improve the school performance (Leithwood & Riehl, 2005). The performance of those teachers and students were found better, which were communicated effectively and established the community relations by the head teachers (Waswa, 2017). Communication and community relations skills affect the student achievement and school outcomes (Wahed & El Sayed, 2012; Watson, 2019).

School Performance

School performance is another variable of this study, and can be defined as the extent to which students, teachers, and institutions have achieved their short and long term educational goals. School performance is the combination of effectiveness and efficiency, and indicates whether the objectives of school were achieved in a timely and costly manner (Maslowski, 2001). There are some models used to measure the school performance such as Louisiana Model (2016), School Manual (2004), and Chief Minister School Reforms Roadmap Model (2016). Louisiana Model (2016) used to measure school performance through measuring academic performance, financial performance, and organizational performance. Three dimensions of school performance have been mentioned in School Manual (2004) i.e. quantity targets, administrative targets, and quality target. Quantity targets consist of 100% enrollment of students and their retentions. Administrative targets consist of complete removal of absenteeism, school management, discipline, teacher presence, student presence, uniform, cleanliness of school and its surrounding, library, science lab, participation of parents and sports. Quality target consists of annual results that should not be less than average results of districts and boards both subject wise and as a whole. Fourteen indicators of school performance has been described in Chief Minister School Reforms Roadmap Model (2016) that are based on three parameters i.e. access, governance and quality. *Access* parameter consists of student presence, teacher presence, missing facilities, proper utilization of funds. *Governance* parameter consists of district staff school visits, district review committee meetings, functioning of available facilities, timeliness of data, school cleanliness, restricting illegal fee, and non-teaching staff. *Quality* indicators consist of use of teacher guides, administrator visits, and annual results of the schools. Combining to the above mentioned models of school performance that best fit in Pakistan context, school performance was measured through *student presence*, *teacher presence*, *functioning of facilities*, *school cleanliness*, and *student achievement*.

Teacher presence involves physical presence of the teachers in the classroom, is most important aspect of effective education system and goals of education cannot be achieved without teacher presence. Teacher presence and school success is highly interlinked and had a direct impact on student achievement (Lapointe & Gunawardena, 2004). *Student presence* involves physical presence of the students in the classroom and school that is essential for school success and such students perform better than absent or irregular students in their examination (Richardson & Swan, 2003; School Manual, 2004). *Functioning of facilities* includes the provision and functionality of facilities that promote the student learning (Kaur, 2016; School Manual, 2004; Uko, 2015). *School cleanliness* involves cleanliness of the school and its surrounding that must be according to hygiene, is very essential for learning environment, performance of teachers, student achievement and school performance (Kausar, Kiyani, & Suleman, 2017; Maxwell,

2016). *Student achievement* can be defined as level of achievement of learners in terms of knowledge, skills, and experience of learning against prescribed objective, and measured through standardized test or annual results (Hamilton-Ekeke, 2013).

Measuring Head Teacher's Effectiveness and School Performance

There are various studies relevant to measuring head teacher performance. For example, Salfi (2011) revealed in his study that effective head teachers developed a common and shared vision, and promoted collaborative culture, support and trust. They empowered the staff to lead and gave them responsibilities through distributed leadership, shared decision making involving all stakeholders, developed and maintained good relationships within school community. Further, it has been emphasized on the professional development of teacher and head teachers, and involvement of all stakeholders in the process of school improvement. The study concluded that school performance can be improved through adopting effective strategies or qualities by the head teachers. This study described the effective practices to some extent and did not fully cover the quality performance standards of effective head teachers, but emphasized on the use of effective practices by the head teacher to enhance the school success.

Ontai-Machado (2016) examined the relationship between teachers' perception of effective practices of head teachers and school effectiveness. The study identified effective practices: prioritization of structured activities, building a positive school climate, creation of structures for sharing leadership, and gather and analyze data to improve the student learning that are strongly correlated with the school effectiveness. Multiple regression analysis also revealed that teachers' perceptions of these effective practices are the predictors of the school effectiveness. This study indicated that effective qualities of head teacher are essential for student outcomes and school success.

Grisson and Loeb (2011) investigated the head teacher effectiveness and collected data from head teachers, teachers and parents through survey to identify the effective head teachers skills for school outcomes. Five skills of effective head teachers were identified in the study such as instructional management, internal management, organizational management, administration, and external administration, but only organizational management skills of head teachers significantly predict student achievement and other success measure of the school ($r=.15$). The result showed that effective head teachers demonstrate the ability of instructional leadership with organizational management skills, has positive impact on school performance. This study described some essential skills of effective head teacher that were correlated and predicted the school performance, indicated that required skills or qualities of effective head teachers are essential for school performance.

Hallinger and Heck (2004) examined the relationship between effective leadership of head teachers and school effectiveness and found the similar result that head teacher leadership has indirect effect on student achievement and school effectiveness. While the effect was relatively small, but statistically significant and indicated that head teacher's effectiveness contribute to the school effectiveness and student outcomes.

Cheng (1994) investigated the relationship between head teacher's leadership and school performance. The results of the study revealed that effective head teachers solve the conflicts of staff, and promote professional development and improve the instruction. Effective head teacher is highly linked with organizational effectiveness, positive organizational culture, positive relationships with staffs, more participation in decision making, more job satisfaction and commitment, student achievement, and high performance of the school. The study found significant relationship between effective leadership practices and student achievement ($r=.61$), indicated that effective leadership practices are essential to enhance the student learning.

Waters, Marzano, and McNulty (2003) examined the effect of head teacher's leadership on student achievement. Twenty-one leadership responsibilities of effective head teacher were identified in the study, and found significant correlation between head teacher's leadership and student achievement or school success ($r=.25$). The results of the study revealed that head teacher should fully aware about the leadership responsibilities and use the information to address existing and potential problems which may enhance the student achievement and school performance. Effective head teachers must demonstrate awareness about the knowledge, skills, strategies and resources to improve the student achievement. This study described the importance of head teacher's leadership for student achievement and association of both the variables with each other.

After reviewed the literature, it is clearly sought out that effectiveness of head teacher is very essentials for organizational effectiveness and perhaps there is no study to measure the head teacher effectiveness that involved quality indicators as given by Stronge et al. (2008) in Pakistan. On the other hand, head teacher effectiveness is being measured on the basis of performance evaluation report (PER) in Pakistan that is not able to fully evaluate the head teachers. This study might provide help to fulfill the gap to evaluate the head teachers by taking quality standards of effective head teacher and it will be another way of head teacher evaluation, their accountability and professional growth. School performance is highly linked with effective head teacher and must be measured by taking quality measures of school performance, not student achievement only.

Research Objectives

The objectives of this study are to:

1. Describe head teacher's effectiveness and school performance at secondary school level.

2. Find out the relationship between head teacher's effectiveness and school performance at secondary school level.
3. Find out the effect of head teacher's effectiveness on school performance at secondary school level.

Research Questions

The study includes the following research questions.

1. What do secondary school teachers perceive of head teacher's effectiveness?
2. What is the level of school performance of secondary schools?
3. What is the relationship between head teacher's effectiveness, measured through teachers' perspectives and school performance?
4. What is the effect of head teacher's effectiveness on school performance?

Conceptual Framework

The study provides a visual and written product of the interrelated concepts of head teacher's effectiveness and its effect on school performance. For measuring the head teacher's effectiveness, five qualities or standards of effective head teachers (Instructional Leadership, School Climate, Teacher Evaluation, Organizational Management, and Communication and Community Relations) based on work of Stronge et al. (2008) were selected. For measuring school performance, factors such as Teacher Presence, Student Presence, Functioning of Facilities, School Cleanliness, and Student Achievement were used. Based on the conceptual model, it was assumed that a head teacher's effectiveness would predict school performance.

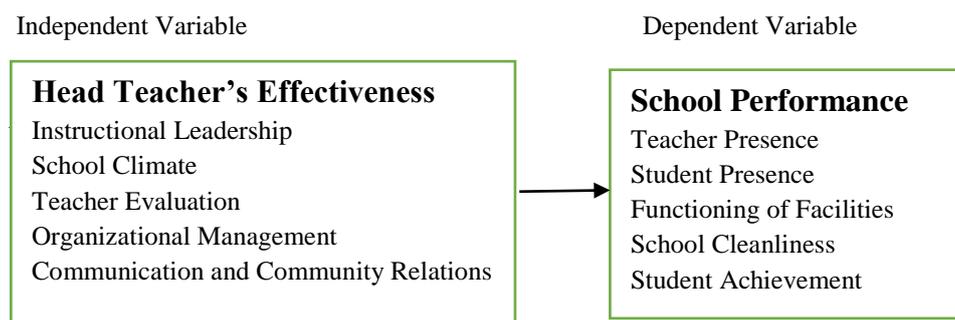


Figure 1: Conceptual Model

Research Methodology

It was a correlational research that employed survey method for data collection.

Population and Sample

The population of the study comprised all male and female Secondary School Teachers (SSTs) of public high schools of Sahiwal division (Sahiwal, Okara, and Pakpattan districts) who taught to 10th grades during the session (2017-2018). Multistage sampling technique was used for data collection. Initially, one district (Sahiwal) was selected through simple random sampling technique. At the second stage, all secondary school teachers of all schools in district Sahiwal (N=1026) were selected as sample of the study. Among them, 570 teachers were male, while 456 were female teachers. Location-wise, 808 teachers were from rural, while 218 teachers were from urban schools.

Instrumentation

In overall, two instruments were used for data collection. First, the researchers developed Head Teacher Effectiveness Questionnaire (HTEQ) based on the work of Stronge et al. (2008) Qualities of Effective Head Teachers, which perhaps fit in Pakistan context. The researchers carefully developed 83 items that were grouped into five domains and response scales were ranged from lowest to highest level of frequency of effective head teacher quality standards such as Never, Rarely, Sometimes, Often, or Always. Pilot testing was conducted on 50 teachers to get their perspectives on the validity and reliability of the HTEQ. For content validity, the researchers sought feedback of five university professors. In the light of the feedback of teachers and experts, the items were modified accordingly. The Cronbach Alpha was calculated the reliability and HTEQ demonstrated a high level of reliability ($\alpha=0.88$) and factor-wise range from 0.77 to 0.85.

Secondly, the school performance was measured keeping in view the documents of school performance such as School Manual (2004) and Chief Minister School Reforms Road Map (2016) that are being used in Pakistan. Both of these documents were prepared to measure the school performance by the School Education Department, Government of Punjab, Pakistan. Punjab Monitoring and Implementation Unit (PMIU) rank schools using above mentioned school performance factors. School performance data were collected through monthly visit reports of Monitoring and Evaluation Assistants (MEAs) on factors such as Teacher Presence, Student Presence, Functioning of Facilities, School Cleanliness; Student Achievement scores were collected from respective schools.

Data Collection

List of all schools and their secondary school teachers (SSTs) were obtained from the office of District Education Officer of district Sahiwal. One of the researchers visited all public high schools in Sahiwal district and met the school administrator and got written permission to distribute Head Teacher Effectiveness Questionnaire (HTEQ) among their Secondary School Teachers (SST) in the school. After that, the researcher distributed a consent letter to each teacher, and the teacher put signature on the consent form after reading and returned it to the researcher. The friendly and unbiased environment was provided to the respondent to express freely. The researcher then distributed the Head Teacher Effectiveness Questionnaire (HTEQ) to each teacher. After the teacher had completed the Head Teacher Effectiveness Questionnaire (HTEQ), the researcher collected the HTEQ from the teachers. The researcher visited 1026 Secondary School Teachers (SST), 570 male and 456 female, in Sahiwal district. Further, the researcher collected the data of *School Performance* through monthly Monitoring and Evaluation Assistant (MEAs) visit reports and school annual results of 10th grades for the academic year of 2017-2018. The data about teacher presence, student presence, functioning of facilities, and school cleanliness were collected through MEAs monthly visits reports that are available online. The student achievement data were collected through Board of Intermediate and Secondary Education (BISE) Sahiwal results of 10th grades of each school for the academic year of 2017-2018. All data on school performance was available in percent form. For analysis purpose, all percent scores were taken as raw data, they were summed up, and mean score of all factors was used as an overall school performance score.

Data Analysis

A quantitative approach (correlation research) was used in the study. The researchers entered the data into SPSS version 20. Data analysis is given below.

Table 1

Factor-wise and Overall Reliability of Head Teacher's Effectiveness Questionnaire (HTEQ)

Scales	No. of Items	Cronbach Alpha
Instructional Leadership	22	.85
School Climate	24	.80
Teacher Evaluation	18	.78
Organizational Management	14	.80
Communication and community Relations	05	.77

Overall Head Teacher's Effectiveness	83	.88
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Initially, the reliabilities of the HTEQ were calculated based on five factors using Cronbach Alpha. Table 1 shows high Cronbach alpha reliabilities in overall as well as factor-wise.

Table 2*Teacher's Perception of Head Teacher's Effectiveness (N=1026)*

Factors	Mean	SD
Instructional Leadership	3.80	0.652
School Climate	3.88	0.636
Teacher Evaluation	3.62	0.742
Organizational Management	3.91	0.674
Communication & Community Relations	3.76	0.862
Overall Head Teacher's Effective Score	3.79	0.634

The teachers perceived that their head teachers highly demonstrated organizational management (M=3.91, SD=0.674), whereas the lowest demonstrating quality of the head teachers was perceived of teacher evaluation (M=3.62, SD=0.742). Level of teacher's perception of overall head teacher effectiveness (M=3.79, SD=0.634) showed that head teachers exhibit an above average effectiveness on five factors of head teacher's effectiveness.

Table 3*Descriptive Statistics of School Performance Factors*

Factors	Mean	SD	Min	Max
Teacher Presence	95.08	2.634	84.6	100
Student presence	92.50	2.457	82.8	97.1
Functioning of Facilities	99.70	2.001	80.6	100
School Cleanliness	90.77	4.799	67.1	98.6
Student Achievement	78.41	12.72	49.7	100
Overall School Performance	91.29	15.88	78.4	97.3

Table 3 showed that the maximum level of school performance was on teacher presence (M=95.08) and minimum level was on student achievement (M=78.41). The level of school performance on remaining factors were found following: student presence (M=92.50), functioning of facilities (M=99.70), school cleanliness (90.77). Finally, the researcher found the level of overall school performance (M=91.29), showed that schools performance were excellent.

Table 4

Relationship between Head Teacher Effectiveness and School Performance (N=1026)

Factors	School Performance				
	TP*	SP*	FF*	SC*	SA*
Instructional Leadership	.473*	.387*	.212	.249*	.579*
School Climate	.316*	.464*	.021	.216*	.475*
Teacher Evaluation	.223*	.166*	.030	.044	.497*
Organizational Management	.392*	.245*	.298*	.396*	.448*
Communication & Community Relations	.463*	.240*	.215*	.220*	.507*

Overall Relationship=.597*

* p=.05 level (2-tailed Sig.)

*TP=Teacher Presence, SP= Student Presence, FF=Functioning of Facilities, SC=School Cleanliness, SA=Student Achievement

According to Table 4, significant positive correlations were found between instructional leadership and all components of school performance except functioning of facilities. The highest relationship was found between *instructional leadership* and *student achievement* ($r=.57$), followed by *teacher presence* ($r=.47$), and *student presence* ($r=.39$). Significant positive correlations were found between school climate and all components of school performance except functioning of facilities. The highest relationship was found between *school climate* and *student achievement* ($r=.48$), followed by *student presence* ($r=.46$), and *teacher presence* ($r=.31$). Significant positive correlations were found between teacher evaluation and all components of school performance except functioning of facilities and school cleanliness. The highest relationship was found between *teacher evaluation* and *student achievement* ($r=.50$), followed by *teacher presence* ($r=.22$). Significant positive correlations were found between organizational management and all components of school performance. The highest relationship was found between *organizational management* and *student achievement* ($r=.45$), followed by *school cleanliness* ($r=.40$), and *teacher presence* ($r=.39$). Significant positive correlations were found between communication and community relations and all

components of school performance. The highest relationship was found between *communication* and *community relations* and *student achievement* ($r=.51$), followed by *teacher presence* ($r=.46$), and *student presence* ($r=.24$). Finally, significant positive relationship was found between *overall head teacher's effectiveness* and *overall school performance* ($r=.59$).

Table 5*Multiple Regression Analysis*

Model	Sums of Square	df	Mean Square	F	Sig.
Regression	4275.698	5	855.140	3.42	.004
Residual	244356.807	1020	249.369		
Total	258632.506	1025			

- a. Predictors: (Constant), Head Teacher Effectiveness, communication and community Relation, organizational Management, Teacher Evaluation, School Climate, Instructional Leadership
 b. Dependent Variable: School Performance

Table 5 showed that five factors of Head Teacher's Effectiveness significantly combined to predict school performance ($R^2=.36$, $F(5, 1020)=3.42$, $p=.004$). R square value showed that, in overall, 36 percent variance in school performance was explained though five factors of Head Teacher's Effectiveness.

Table 6

Factor-wise Regression Analysis

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta (β)		
Instructional Leadership	.0492	.034	.082	4.174	.003
School Climate	.0546	.043	.084	4.122	.002
Teacher Evaluation	.0480	.032	.080	3.080	.005
Organizational Management	.0530	.039	.079	3.187	.007
Community and Community Relations	.0858	.044	.156	3.806	.003

- a. Dependent Variable: School performance

Further, based on Table 6, all five factors, individually, significantly predicted School performance as *Instructional leadership* ($\beta=.082$, $p=.003$), *School Climate* ($\beta=.084$, $p=.002$), *Teacher Evaluation* ($\beta=.080$, $p=.005$), *Organizational Management* ($\beta=.079$, $p=.007$), and *communication and community relations* ($\beta=.156$, $p=.003$).

Discussion

The purpose of the study was to measure the effect of head teacher's effectiveness on school performance. The study found that teachers rated their head teacher's effectiveness an above average on the Head Teacher's Effectiveness Questionnaire (HTEQ), means head teachers are implementing quality performance standards in their schools effectively. The school performances of public high schools were found at the excellent level. The result of the study also revealed that head teacher's effectiveness was significantly correlated with school performance ($r=.59$). The findings were consistent with the findings of various previous research (Cheng, 1994; Grisson & Loeb, 2011; Hallinger & Heck, 2004; Ontai-Machado, 2016; Water, Marzano, & McNulty, 2003), showed that effective head teacher is essential for school performance. All five head teacher's effectiveness predictors measured through HTEQ were also significantly predicted school performance including student achievement. The findings were also consistent with various previous researches (Grisson & Loeb, 2011; Hallinger & Heck, 2004; Ontai-Machado, 2016). The HTEQ-based results confirmed the previous studies findings and theories that measuring the head teacher effectiveness on the basis of quality performance standards correlate and predict the student achievement and school outcomes. The HTEQ provided valid and reliable measure of head teacher evaluation. The five factors also showed low to moderate intercorrelations, showing discrimination among factors. The overall reliability ($\alpha=0.88$) for the HTEQ was also relatively high. Overall, the results of the current study are encouraging. The findings contribute to better understanding of the complex head teacher's effectiveness construct through individual as well as collective lens. This preliminary study provided evidence of the reliability of the HTEQ that used to measure the head teacher's effectiveness. The HTEQ helped to produce a significant level of variance among teacher's perception on the quality indicators of effective head teachers. The results also confirmed the theoretical assertion as a means of finding that effective head teachers in public schools are not only demonstrating higher level of performance on certain effective head teacher quality indicators, but their student achievement and school performance are also at higher level. Stronge et al. (2008) work has potential application of the complex head teacher evaluation construct, measured through HTEQ.

Conclusion and Recommendations

Head Teacher Effectiveness Questionnaire (HTEQ) was developed by the researcher to investigate the extent to which research based factors contributed to school performance. The findings of the study showed significant relationship and effect of head teacher's effectiveness scores measured through HTEQ on school performance, and are consistent with previous research findings as well. The study confirmed that measuring the head teacher effectiveness on the basis of quality performance standards correlate and predict the school performance. The findings of the study provide evidence of the head teacher's effectiveness quality performance standards, and provincial as well as federal governments might ask to policymakers to prepare a document for head teacher based on these standards to make the head teachers effective. Since head teachers were not evaluated by the teachers before, the policymakers may adopt and introduce the HTEQ in public schools, and take steps toward implementing these quality standards. The present study provides better results to practitioners. Head teacher evaluation is being made on the basis of Performance Evaluation Report (PER) in Pakistan and making decision for head teacher promotion. The PER involves indicators of head teacher characteristics only, that are not essential related to head teacher's effectiveness. On the other hand, the HTEQ provides a new lens to measure head teacher's effectiveness because HTEQ is based on Stronge et al. (2008) research-based head teacher quality indicators. The district authorities may consult with head teachers and teachers and test HTEQ in the public schools and provide an alternative of PER for head teachers. In that way, district authorities, teachers, and head teachers might be able to evaluate the head teacher's effectiveness in another way to make valid decisions for head teacher promotions etc. This study was limited to one district of Punjab, so the generalization may kindly be made with caution. Further studies might be conducted over larger sample size selected randomly to get more vivid picture of head teacher effectiveness.

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