

Development of School Effectiveness Model

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Abstract: In this study the researcher developed a model on school effectiveness. The theoretical framework for the study was models on school effectiveness by Creemers (1994) and Reynolds and Cuttence, (1992). The sample consisted of the teachers, heads and administrators of the secondary schools, planners from curriculum wing, faculty from University of Education and policy makers from the province of Punjab. The questionnaire on school effectiveness was developed by the researcher. The data were collected by postal mail. The results of the study showed that there was a consensus of all the teachers, administrators and planners on the school effectiveness model developed by the researcher. A strong correlation was found between different variables of school effectiveness. The finding of the study confirmed that the model is good to increase school effectiveness. Implications for Pakistani schools were discussed.

Keywords: school effectiveness models, environmental factors, professionalism, quality, evaluation, leadership and curriculum.

Introduction

Education system in Pakistan has been fraught with many problems since 1947, and the process of reformation is by no means easy. Furthermore, the dearth of research on education in Pakistan and indeed in the rest of the developing world leads educational sector officials and change agents to use models from developed countries to guide educational reforms. Therefore, the purpose of this study was to help educationists, educators, administrators as well as policy makers to improve both quantity and quality of education in Pakistan through the development of school effectiveness model.

Effectiveness is seen as an idea that schools with certain characteristics perform well and that other schools should adopt these characteristics to become effective. Effectiveness generally assumed as the capability of producing a desired effect.

One of the primary concerns of School Effectiveness Research is the question of what constitutes school effectiveness. Cheng (1996) sees it as a concept often used in the literature of school management and improvement and often confused with school

efficiency that is the capacity of a school to maximize its functions or the degree to which a school can perform school functions given a fixed amount of school input. This input-output perspective is also used by Lockheed and Langford (1998). Another more specific perspective, accepted by most researchers as a starting point, about school effectiveness is viewed from the perspective of schools in which students progress further than might be expected from consideration of its intake (Sammons and Mortimore, 1995, p.1). Related to this but further more focused is the view that growth in student achievement is the most appropriate criterion for assessing school effectiveness (Willms, 1992). It reflects a perspective of measuring school effectiveness by an improvement in student achievement. Other studies repudiate this stand and state that school effectiveness should not focus on mere academic achievement but other factors such as classroom behaviour, student participation rates, and attitudes towards learning (Rutter, 1983; Sammons et al., 1996). Mc Gaw et al. (1992) go even further to argue that a well-rounded personal development of individuals should be the basis for school effectiveness and not just mere academic achievement that leads us to the predicament of what exactly constitutes as school effectiveness. Reynolds et. al. (1996) is of the view that effectiveness is dependent on people and the resources available. However, what educators perceive as important outcomes of schooling may not tally with the view of pupils, parents, governors, the local community, government or the media (Stoll and Fink, 1996). Drever (1991) takes the view that effectiveness should be judged by the *product*, and that the ultimate product of schooling is the '*value added*': what pupils have gained from their years in school. Some researchers adopt the view that school effectiveness should not be viewed from the mere measurement of academic achievement alone. Other studies have indeed paid attention to social and affective outcomes (e.g. Rutter, 1979; Mortimore et al., 1988; Teddlie and Springfield, 1993).

In the 1970's researchers defined effective schools in a one-dimensional manner. Schools that scored lower or above a national standard or those who produced worse or better outcomes than could be expected on the basis of student intake characteristics were defined as less or more effective (Brookover et al., 1979; Rutter et al., 1979). Others argued that effective schools were to be seen as those consisting of two dimensions: quality and equity. Quality is viewed as the degree in which schools score

better or worse than is expected and the equity output was seen as the influence of schools to interact in the relationship between school input and output (Reynolds et al., 1994). This he views occurs when school processes result in observable positive outcomes among its students consistently over a period of time. This implies that the effectiveness of a school is dependent more on its 'processes' and gauged by its 'outcomes' than on its 'intake'.

Goldstein and Myers (1997) argue that schools differ in their effectiveness by curriculum subject and are differentially effective for different groups of pupils.

In practice, school effectiveness is a broader concept. There exists a conceptual hierarchy of bivalence where effective and ineffective schools are measured by characteristics (Ball, 1997). Yin (1996) argues that school effectiveness needs to be sub-classified under five levels-individual, institutional, community, society and international and five components-economic, social, political, cultural and educational.

Hoy and Miskel (2001) suggest that an organization can be termed effective if it has a high degree of goal attainment. Weber (1971) listed a number of characteristics for successful schools such as strong leadership, high expectations, and good atmosphere. Similarly, Edmonds (1979) listed five characteristics of an effective school: strong administrative leadership, high expectations for student's achievement, an emphasis on basic skills instructions, a safe and orderly climate conducive to learning and a frequent evaluation of pupil progress. The Phi Delta Kappa (1980) study presented a set of 12 generalizations that summarize what is known about causes of exceptionality in urban elementary schools (p. 203), as follows: leadership, teaching personnel, finance, resources and facilities, curriculum and instruction and community resources.

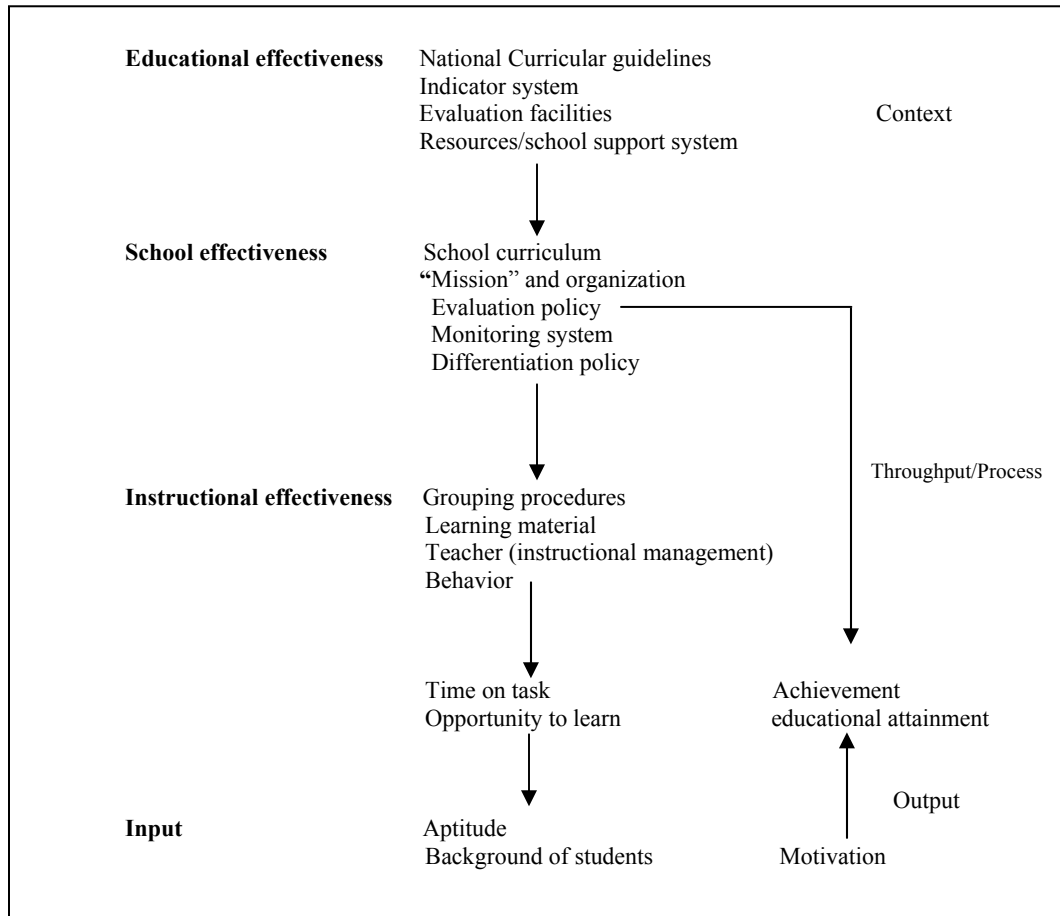
School effectiveness research has thus resulted in the development of causal models of educational attainment which attempt to demonstrate the nature and direction of links between particular school processes and student outcomes. Gaziel (1996) cites Cameron (1984) and Mackenzie (1983) in presenting six different models whereby effective schools can be classified, namely: goals, system resource, internal process, strategic constituencies, legitimacy, and organizational learning. The definition of an effective school varies depending upon which model is used. The table below shows the models and their resulting definitions.

Table 1

MODEL	DEFINITION OF SCHOOL EFFECTIVENESS	WHEN MODEL IS USEFUL
A School is effective if	Model is useful when...	
... GOALS	it can achieve its stated goals	goals are clear, consensual, time-bound, and measurable.
SYSTEM RESOURCE	it can acquire needed resources and inputs.	there is a clear relationship between inputs and outputs.
INTERNAL PROCESS	the school process is smooth and 'healthy'	there is a clear relationship between process and outcomes.
STRATEGIC CONSTITUENCIES	all the powerful constituencies are at least minimally satisfied.	the demands of the powerful constituencies are compatible
LEGITIMACY	it can survive as result of engaging in legitimate activities.	the survival and demise of schools must be assessed
ORGANIZATIONAL LEARNING	it can learn to deal with environmental changes and internal barriers	the schools is new and developing, or the environmental change cannot be ignored.

Adapted from Gaziol (1996,p.480)

The basic structure of models of school effectiveness has been outlined by Creemers & Scheerens (1994) shown in the Figure 1. Scheerens (2000) adds that school effectiveness is a field characterized by many approaches, concepts and models. Such models attempt to explain the multilevel structure and linkages between levels of the context-input-process-output chain.



In his educational effectiveness model, developed from theories about how students learn, Creemers (1994) stresses the impact of three key concepts-quality, time for learning and opportunity.

After reviewing the literature and following the Creemers & Schreenes model the researcher tried to develop indigenous model of school effectiveness for Pakistani schools.

Education System in Pakistan

Pakistan is the second largest country in the Muslim world, but its literacy rate as well as development in the social sector is one of the lowest in the world. Almost one-third (32.6%) of the population live below the poverty line. The country's economy is reeling

from heavy debts procured from international agencies such as the International Monetary Fund (IMF) primarily due to mismanagement and corrupt practices of political leadership. The situation is further compounded by the low literacy rate of the country and poor educational standards.

As soon as Pakistan was founded in 1947 all the major educational policies emphasized a commonality of core themes, which include, a) ideological base, b) national unity, c) individual development, d) societal development, e) economic progress, f) equality of education, g) quality of education. Later, the National Education Policy, 1998, added to the list the emphasis on setting up realistic goals, public-private collaboration, administrative reforms and the development of skills. In the Education Sector Reforms, 2000, the focus has been more in the areas of basic education and literacy, higher education, public-private partnership, and good governance rather than the previous rhetoric of ideology and Islam. The general aim of all policies has been to improve the literacy rate in the country. However, Critics, while analyzing Pakistan's education policies and reforms have lamented the inability of Pakistan's education sector to curb illiteracy and promote quality education due to ill-advised education policies of various regimes, for example the English-Urdu medium divide, poor implementation of reforms due to inefficiency, massive corruption and the rise of the *madrassahs* (religious schools). It is a country-wide feeling that the education system is in mess and is widely criticized for lack of co-ordination among different agencies. Some of the pressing issues related with the effectiveness of the schools are discussed below.

Educational Issues Confronting Pakistan

Pakistan faces serious challenge in the field of education. The literacy rate, in 2009, was estimated 57 percent with 69% males and 45 % females. In the province of Punjab it is 59%, Sindh, 59%, Khabar Pukhtun khaw % 50 and in Balochistan it is 45%. (Literacy rate in Pakistan). However, elementary education and literacy are extremely important for the development of a country. The low literacy rate is due to the lack of effectiveness of schools which creates such problems as discussed below:

The female population in Pakistan exceeds 50% of the total population. Moreover, there is one girls' school for two boys' schools. Besides this inequality of

opportunities, there are many other factors which result in a lower participation rate for females that is problems of transport, feeling of security on the part of the parents, religious taboos, “purdha” (face veiling), house hold responsibilities and illiterate parents.

The second issue is related with low enrollment of girls in rural schools. The reason is that the schools in rural areas are situated at long distances and are not properly equipped and staffed. The other reasons are poverty and ignorance; parents want their children to be productive in financial terms, so they prefer to send them to work instead of schools.

There is high drop out rate of students in Pakistani schools. The factors influencing drop out, other than ineffectiveness of schools, are economic, socio-cultural, psychological, geographical, administrative and teacher related. Bhatti (1987) regards curricula being irrelevant to the local needs as one major reason for dropout. Moreover, insufficient school facilities, poor teaching strategies, unattractive school environment, and lack of awareness about the benefits of education on the part of parents are the other main reasons for dropout.

There are host of other issues related to outdated curriculum and examination system, lack of coordination of principal and staff, traditional teaching methods, lack of community involvement and lack of accountability. The teachers’ involvement in curriculum development is not encouraged. Due to the poor quality of exam papers and corrupt practices the results of examinations are no longer regarded as reliable indicators of student performance. Teacher education in the public sector in the last 50 years has remained traditional and status quo. Text Books are not up-to date so as to match the needs of the teachers, mental abilities of the pupils and latest technological advances. Management and Supervision of schools need rigorous improvement. Regarding physical facilities mostly the schools are not well equipped and well constructed.

To meet the above mentioned challenges there is immense need to improve the school effectiveness by implementing different interventions for better out put of the students. Researcher after reviewing the literature and investigating educational issues tried to develop a model for school effectiveness which would help to make the schools a place where the educational outcomes could be achieved.

Statement of the Problem

This study was aimed at developing a school effectiveness model for public sector schools in Pakistan.

Significance and Rationale of the Study

In Pakistan despite the strong commitment to international call for 'Quality Education for ALL', the literacy rate is low. Elementary education and literacy are extremely important for the development of a country. The impact of schools on children's development is important for learning (Coleman 1996). Farrell (1993) and Farrell & Oliveira (1993) argue that the less developed a country is, the more impact schools have on student learning. Fuller and Heyneman (1989) reported similar findings, asserting "the independent influence of school factors appears to be much greater in the third world than within industrial countries" (p.13). "In the poorer countries of the world, particularly those in Africa, south Asia and Latin America Public financing for education is unable to keep pace with rapidly increasing populations and school enrollments, resulting in a notable deterioration of school quality"(Hartwell and Vargas-Baron 1998, p.1).

Quality of education in general is unsatisfactory in Pakistani schools, so improvement is necessary if the country is to develop. There's little research work in Pakistan regarding school effectiveness. Therefore, a crucial step in the school effectiveness campaign in Pakistani schools is to conduct research on how exemplary schools function and see whether the models so far applied around the Globe, specifically based on research from developed countries, are useful in Pakistani context. Western models are good if applied in their own context. In a developing country, like Pakistan, it becomes difficult for people to implement those models due to different context, lack of resources, skills, and coordination of community. So it becomes necessary for the researchers to identify school problems in their own context and solve it. The present research is an effort to develop an indigenous model of school effectiveness to promote the quality of education in Pakistan.

Objectives of the Study

The main objectives of this study were to:

1. Explore the term school effectiveness

2. Determine the indicators of school effectiveness
3. Validate the indicators of school effectiveness through research
4. Develop the school effectiveness model for Pakistani schools

Method

Population

The policy makers, curriculum planners, implementers, faculty of University of Education and teachers concerning secondary education in 36 districts of the Punjab, were the population of the study.

Sample

A sample of 800 participants was collected for the study. To get a representative sample 38 districts were divided into two strata i.e. Low / High literacy rated districts in Punjab. Eighteen districts (High literacy=9, low literacy=9) were randomly selected for the study. Each district was further divided into rural and urban schools. From each district 4 urban and 4 rural school were selected. List of secondary schools was obtained from DPI Punjab and was updated and then was verified by DEOs. Twenty teachers (Male=10, Female=10), and eight administrators i.e. Executive District Officers (EDO) (N=1), District Education Officers (DEO) (N=1), Assistant Education Officers (AEO) (N=2), Head Teachers (HT) (N=4) were randomly selected from each district. Members of Curriculum Wing from Punjab Text Book Board and faculty of University of Education were also selected for the study.

Research Instrument

School effectiveness model was developed, taking into consideration:

1. Review of literature on school effectiveness.
2. Review of previously developed models for countries other than Pakistan
3. Discussion with experts

A questionnaire was designed using 5 point Likert Scale for data collection. Questions were based on 17 school effectiveness indicators such as school goals (2 items), curriculum (6 items), classroom instructions (10 items), evaluation (4 items),

class room management (6 items), leadership (8 items), safe environment (4 items), orderly environment (3 items), professionalism (4 items), community involvement (2 items), student motivation (3 items), home environment (2 items), high expectations (3 items), professional development of teachers (2 items), social skills (2 items), quality assurance(4 items) and coordination (2 items). These 17 variables having 67 items constituted the school effectiveness questionnaire. The questionnaire was designed to administer on two groups of respondents i.e. the teachers and the administrators (i.e., EDOs, DEO, AEO, HT) to find out their opinion about school effectiveness in Pakistan.

Pilot Study

A pilot study was conducted on a sample of 240 respondents. The aim of the pilot study was to identify items that did not yield meaningful data. The respondents found some items irrelevant, some difficult and some were measuring other than the school effectiveness. These items were removed from the questionnaire. The pilot study helped to see if all the instructions were clear and how long it would take the respondents to complete the instruments.

Procedure

After piloting, the questionnaires were sent by post to Director Public Instruction Punjab for data collection from the participants of different districts of Punjab. The data was collected from April to September, 2009. A follow-up plan was implemented, and reminders were issued when required. All questionnaires had cover letters to make request for the cooperation and assured that their information would be used only for research purposes and kept strictly confidential. The researcher received positive response by getting 80 % questionnaires back.

Data Analysis

The collected data was cleaned and made ready for analysis. To answer the research questions different statistical techniques were applied on the data. Descriptive statistics was used to get mean scores and standard deviation of the responses. Pearson product-moment correlation was applied to see the relationship between different variables of school effectiveness. t-test was used to find out the group differences on study variables.

Section 1: Demographics Information

This section deals with demographic characteristics of the respondents. Frequency and percentage of demographics variables were related to Gender, Age, Academic qualification and Professional qualification of the participants.

The sample was consisted of 452 (56.5%) males and 348 (43.5%) females. The minimum age of 34(4.3%) respondents was 20; whereas, 174 (21.8%) respondents were above 50, rest of respondents ranged between these limits. The Minimum Academic qualification of the respondents was B.A , only 44(5.5%) respondents fall in this category, whereas most of the respondents (530, 66.3%) were MA/MSc. B.Ed was most common professional qualification among respondents.

Section II: Priority School Effectiveness Factors

Table 2 List of School Effectiveness Factors According to the Preferences of the Respondents

School Effectiveness Factors	Mean	Std. Deviation
1. Professionalism	3.99	0.77
2. Coordination	3.97	0.64
3. Safe Environment	3.89	0.94
4. Professional Development of Teachers	3.78	1.00
5. Community Involvement	3.77	0.95
6. High Expectations	3.76	0.82
7. Orderly Environment	3.76	0.78
8. Quality Assurance	3.71	0.89
9. Students Motivation	3.71	0.78
10. Social Skills	3.70	0.94
11. Evaluation	3.69	0.87
12. Leadership	3.68	0.81
13. School Goals	3.68	0.98
14. Classroom Management	3.67	0.77
15. Home Environment	3.65	1.02
16. Instruction	3.61	0.81
17. Curriculum	3.56	0.91

Table 2 shows list of School Effectiveness factors with their Mean scores and standard deviations of opinions of all respondents. The table shows that the respondents think that all the factors included in the model are important to make a school effective.

These results show that how do our teachers, head teacher, curriculum experts and administrators rank the school effectiveness factors. The table is showing that professionalism and coordination factors are needed to be addressed on priority for the improvement of school effectiveness.

The researcher also applied t-test to see the gender differences on school effectiveness factors. Table 3 is showing the responses of males and females on the 17 factors related with school effectiveness.

Table 3 Comparison of Male and Female on School Effectiveness Factors

School Effectiveness Factors	Male		Female		t-value	Sign. Level	Comments
	Mean	S.D	Mean	S.D			
School Goals	3.36	1.01	3.94	0.88	-8.66	P<.001	Male<Female
Curriculum	3.25	0.94	3.82	0.81	-9.20	P<.001	Male<Female
Instruction	3.36	0.74	3.82	0.80	-8.33	P<.001	Male<Female
Evaluation	3.46	0.90	3.88	0.80	-6.97	P<.001	Male<Female
Classroom Management	3.51	0.68	3.81	0.81	-5.56	P<.001	Male<Female
Leadership	3.48	0.72	3.85	0.84	-6.57	P<.001	Male<Female
Safe Environment	3.73	0.92	4.02	0.93	-4.39	P<.001	Male<Female
Orderly Environment	3.58	0.73	3.90	0.79	-5.87	P<.001	Male<Female
Professionalism	3.90	0.73	4.06	0.79	-2.93	P<.05	Male<Female
Community Involvement	3.70	0.92	3.83	0.97	-1.92	n.s	Male=Female
Students Motivation	3.63	0.69	3.77	0.83	-2.54	P<.05	Male<Female
Home Environment	3.45	1.09	3.82	0.93	-5.17	P<.001	Male<Female
High Expectations	3.60	0.81	3.89	0.81	-5.02	P<.001	Male<Female
Professional Development of Teachers	3.62	0.94	3.91	1.03	-4.10	P<.01	Male<Female
Social Skills	3.54	0.87	3.82	0.98	-4.20	P<.01	Male=Female
Quality Assurance	3.54	0.88	3.85	0.87	-4.97	P<.01	Male<Female
Coordination	4.04	0.55	3.92	0.70	2.63	P<.05	Male>Female

Table 3 shows the results of independent samples t-test on School Effectiveness factors. In majority factors there is a statistically significant difference between males and females. Females give more importance to most of the school effectiveness factors as

compare to males. The largest difference is on school goals ($t=8.66$, $p=.001$) and Curriculum ($t=9.20$, $p=.001$). The least statistically significant difference is on students' motivation ($t=2.54$, $p<.05$). For two factors, e.g. social skill and Community involvement no significant difference is found. It means that there is harmony between males and females regarding these factors. Males give more importance to Coordination as compared to females.

Researcher performed t-test to find out the differences on the responses of teachers and administrators on school effectiveness model.

Table 4: Comparison of Teachers and Administrators on School Effectiveness Factors

School Effectiveness Factors	Teacher		Admin.		t-value	Sign. Level	Comments
	Mean	S.D	Mean	S.D			
School Goals	3.65	1.03	3.77	0.77	-1.68	n.s	Same
Curriculum	3.57	0.97	3.53	0.70	0.61	n.s	Same
Instruction	3.62	0.82	3.58	0.75	0.61	n.s	Same
Evaluation	3.71	0.88	3.61	0.86	1.35	n.s	Same
Classroom Management	3.70	0.78	3.58	0.72	1.91	n.s	Same
Leadership	3.68	0.84	3.70	0.68	-0.33	n.s	Same
Safe Environment	3.88	0.98	3.92	0.76	-0.58	n.s	Same
Orderly Environment	3.75	0.81	3.80	0.67	-0.83	n.s	Same
Professionalism	3.99	0.79	4.01	0.69	-0.33	n.s	Same
Community Involvement	3.70	0.96	4.01	0.85	-4.14	P<.01	Teach<admin
Students Motivation	3.71	0.78	3.71	0.78	0.00	n.s	Same
Home Environment	3.66	1.02	3.62	1.04	0.45	n.s	Same
High Expectations	3.73	0.85	3.87	0.72	-2.18	P<.01	Teach<admin
Professional Development of Teachers	3.77	1.02	3.83	0.95	-0.73	n.s	Same
Social Skills	3.68	0.92	3.73	1.01	-0.59	n.s	Same
Quality Assurance	3.75	0.89	3.59	0.85	2.18	P<.01	Teach>admin
Coordination	3.98	0.65	3.95	0.59	0.58	n.s	Same

Note. Admin= administration, SD= Standard Deviation, n.s= not significant

Table 4 depicts the comparison of teachers and administrators on school

effectiveness factors. It shows that there is strong harmony between teachers and administrators on all the effectiveness factors except on community involvement, high expectations and Quality assurance. This harmony also allows concluding that these factors are very important with varying intensity. The only statistically significant difference of mean is on community involvement ($t=4.14$, $p<0.01$), high expectations ($t=2.18$, $p=0.01$) and quality insurance ($t=2.18$, $p<0.01$). Teachers give more importance to quality assurance as compare to administrators. In case of community involvement administrators give more importance as compare to teachers.

Researcher tried to find out the difference of opinions of rural and urban participants on the factors of the model.

Table 5 Comparison of Urban and Rural participants on the School Effectiveness Factors

School Effectiveness Factors	Urban		Rural.		t-value	Sign. Level	Comments
	Mean	S.D	Mean	S.D			
School Goals	4.09	0.68	3.98	0.74	2.19	$P<.05$	U>R
Curriculum	3.97	0.53	3.89	0.84	1.60	n.s	Same
Instruction	3.95	0.82	3.83	1.04	1.81	n.s	Same
Evaluation	3.85	0.71	3.78	0.93	1.19	n.s	Same
Classroom Management	3.84	0.94	3.74	0.84	1.59	n.s	Same
Leadership	3.84	0.92	3.74	0.89	1.56	n.s	Same
Safe Environment	3.81	0.78	3.70	0.95	1.79	n.s	Same
Orderly Environment	3.79	1.06	3.68	1.03	1.49	n.s	Same
Professionalism	3.79	0.70	3.68	0.85	1.99	$p<.05$	U>R
Community Involvement	3.78	0.81	3.67	0.84	1.88	n.s	Same
Students Motivation	3.77	0.78	3.64	0.90	2.18	$p<.05$	U>R
Home Environment	3.74	0.70	3.61	0.97	2.17	$p<.05$	U>R
High Expectations	3.70	0.63	3.61	0.95	1.57	n.s	Same
Professional Development of Teachers	3.70	0.75	3.58	0.90	2.04	$p<.05$	U>R
Social Skills	3.68	0.94	3.54	0.94	2.11	$p<.05$	U>R
Quality Assurance	3.66	0.99	3.53	0.86	1.99	$p<.05$	U>R
Coordination	3.59	0.89	3.46	1.09	1.84	n.s	Same

Table 5 shows the comparison of urban and rural participants on school effectiveness factors. Results of independent samples t-test revealed that on some quality factors there is harmony between urban and rural participants. On some school factors there is statistically significant difference. Urban participants give more importance as compare to rural on school goals ($t=2.19$, $p=.05$), Professionalism ($t=1.99$, $p=.05$), students motivation ($t=2.18$, $p=.05$), Home Environment ($t=2.17$, $p=.05$), professional development ($t=2.04$, $p=.05$), social skills ($t=2.11$, $p=.05$) and Quality Assurance ($t=1.99$, $p=.05$).

Correlation

Researcher reduced 18 factors of school effectiveness model explored by the study into four domains accordance to their conceptual relevance; (A) Environment, (B) Professionalism, (C) Quality and (D) Management domain. Model shows the inter-correlation of four domains of school effectiveness with each other. Environment domain is strongly related ($r = 0.87$, $p < .01$) with Professionalism. Professionalism domain is significantly correlated ($r = 0.87$, $p < .01$) with Quality domain. Participants perceived that Quality is significantly correlated with Management ($r = 0.90$, $p < .01$). Following figure is showing the relationship of school effectiveness domains.

Figure

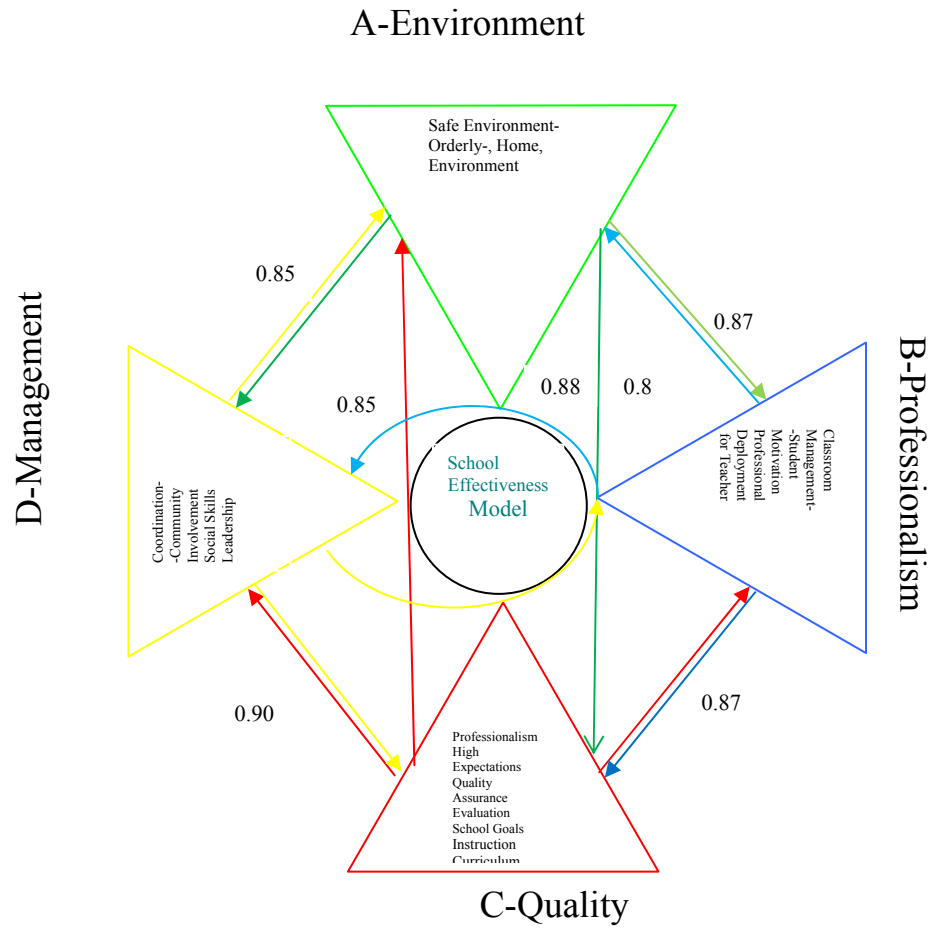


Figure 3 is showing significant inter-correlation of four factors with each other.

Discussion

The researcher realized the need for quality education in Pakistan. After reviewing models of school effectiveness developed by western people researcher decided to make a model of school effectiveness which could be best suited in our country. By reviewing literature and conducting focus groups the indicators of school effectiveness were

identified and questionnaire was developed. The sample consisted of teachers, head teachers and administrators at secondary level. It also included policy makers, curriculum developers and faculty of University of Education. The data analysis of 800 respondent revealed that all the indicators of school effectiveness model were important, but some of them were of top priority to make the schools effective by achieving its goals.

Priority factors of the Model of School Effectiveness

Professionalism is the top priority indicator by the respondents to make a school effective. Professionalism is accepting responsibility for one's own professional development and growth. Professionally developed trained teaching force was considered an essential factor in school effectiveness by the subjects of the study. It can be inferred that professionalism is needed to be addressed on top priority for the improvement of a school. Coordination between 'head teacher and teachers' and 'teachers and students' was the second most important factor necessary for effective schools according to the participants.

Safe and orderly environment was third important school effectiveness factor. Edmonds (1979) listed five characteristics of an effective school: a safe and orderly climate conducive to learning, strong administrative leadership, high expectations for student's achievement, an emphasis on basic skills instructions, and a frequent evaluation of pupil progress. On the items related with safe orderly environment such as 'Equipped labs are provided' and 'Appropriate furniture is provided' the respondents mean was 3.89 (SD=0.94) which shows that safe and orderly environment is the basic requirement of the students for the learning of the students (Table 2). The school facilities should be well maintained and provide for an atmosphere conducive to learning.

The next factor that was considered important by the participants was the Professional Development of the teachers. Professional development is continuous development of teachers through seminars, training sessions and workshops.

Parent and community involvement was a factor cited by all groups interviewed, as an important factor in school effectiveness. Yin (1996) argues that school effectiveness needs to be sub-classified under five levels-individual, institutional, community, society and international. All should participate to make the schools effective. This study indicated a mean score of 3.8 (SD=0.95) which depicted that the community involvement

is a strong correlate of school improvement. In this study, respondents supported a system that includes community members and community involvement in schools decisions, to help the schools' performance effectively.

On 'Instruction' factor the respondents answered favorably on these items 'Lesson should fully structured', 'Student's Participation should be encouraged', 'Teaching methodologies should be used according to the nature of subject'. The most agreed statements in the area of Instruction in this study was "taught content is verbally summarized at the end of the topic" and "regular feedback on student's homework is given" because respondents ranked them very high, their percentage of being agreed with these statements was 75% and 72% respectively.

Leadership is a key factor in bringing about change. Weber (1971) listed a number of characteristics for successful schools such as strong leadership, high expectations, and good atmosphere. Leaders, who tend to be proactive, participate and share leadership have better relations with the staff and the community. They get community support, in the form of resources and facilities. In this study majority of the participants agreed with the statement that 'frequent meetings with staff are arranged', and 'teachers are supported by the head'. However, respondents were indecisive about few other statements.

Other Effective School factors in the hierarchy were, High Expectations (Mean= 3.76, SD= 0.82), Quality Assurance (Mean = 3.71, SD=0.89), Students Motivation (Mean= 3.71, SD= 0.78), Social Skills (Mean=3.70, SD=0.94), Evaluation (Mean=3.69, SD=0.87), School Goals (Mean=3.68, SD=0.98), Classroom Management (Mean= 3.670, SD=0.77), Home Environment (Mean=3.65, SD=1.02) Instruction (Mean= 3.61, SD= 0.81) and Curriculum (M=3.56,SD=0.91). These results have been supported by different studies. The Phi Delta Kappa (1980) study presented the following factors the causes of exceptionality in urban elementary schools": Leadership, Teaching personnel, Finance, Resources and facilities, Curriculum & Instruction and Community Resources (p. 203).

Our research questions were 'What are the factors that make a school effective?' and What should be an effective Model for Pakistani School? The present research answers that if we apply the above mentioned factors in any school it will bring

improvement in teaching-learning situation and help to meet the educational objectives in Pakistan.

Group Differences

To answer the third question 'Are there gender differences in the perception of school effectiveness?' researcher applied independent sample t-test to the data. Results revealed that there were significant gender differences in mean scores of school effectiveness variables. The largest difference was on school goals ($t= 8.66, p<.001$) and Curriculum ($t=9.20, p<.001$). Females showed high mean on all the variables of School Effectiveness except on Community Involvement, and Social Skills. It means that females give more importance to the school variables as compared to males. On Community Involvement and Social Skills variables both males and females have similarity of opinion.

Our fourth research question was 'Do rural and urban participants have different opinion about school effectiveness? The t-test revealed significant mean differences of rural and urban participants regarding variables of school effectiveness. Urban participants give more importance to the variables of Instructions, Evaluation, Leadership, Orderly Environment, Professionalism, Home Environment, and Quality Assurance as compare to rural participants. No significant mean differences were found on School Goals, Curriculum, Classroom Management, Safe Environment, Community Involvement, Student Motivation, High Expectations, Professional Development, Social Skills, Co-ordination.

Teachers and Administrator's mean scores were subjected to the test of significance. Results of independents samples t-test revealed that there is strong harmony between teachers and administrators on school effectiveness factors. The statistically significant difference between teachers and administrators was found only on the factors of Community Involvement and Quality Assurance. Teachers give more importance to quality while administrators give more importance to community involvement.

Correlation among School Effectiveness Factors

The different factors of school effectiveness in the framework do not exist independently of one another. The interrelationships between them are important in developing a

strategy for school improvement model. Model is showing significant inter-correlation of all four domains of school effectiveness that are Environment, Professionalism, Quality and Management ($p < .01$).

Recommendations and Suggestions for Further Research

The findings of this study have implications for increasing the effectiveness of school efforts in Pakistan. It is recommended that future interventions take the following factors into consideration:

The primary focus should be on improving school leadership through empowering and improving the principals. Recruiting highly motivated teachers with hands-on training and coaching is an essential step in improving the quality of schools. The community should be involved in local school governance to increase local accountability. Parents can provide oversight of the day-to-day performance of the school. Infrastructure needs to be improved, based on local determination of needs. Decentralized, practice-oriented training for teachers, both pre-service and in-service, needs to be emphasized with such themes as time management, creation and use of didactic materials and the lesson cycle, with frequent follow-up and coaching in lieu of formal training in centralized institutions.

Future studies could investigate links between cultural dimensions and school effectiveness factors. The relationship could be studied in more depth to see if there are specific school effectiveness factors which vary in relation to cultural aspects. Research using a similar approach should be conducted in other countries with similar educational and social contexts to look for commonalities. Present study focuses on the teacher, head teacher and educational authorities while there is a need for future studies to consider the views about effective schools from the perspective of stakeholders, students, parents, local community and heads of NGO. This model would be a gauge to view the school effectiveness in private sector. A nationwide experimental study can be conducted to see the effectiveness of this model.

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