



The Impact of School Environment on The Performance of Students of Public High Schools at Khyber Pakhtunkhwa Pakistan

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Abstract

The Study explores the impact of school environment on the performance of students. The objectives of the study were to assess the existing environment of government Schools, to explore the impact of conducive school environment on the performance of students and to suggest some remedial measures for establishing conducive school climate. The study was carried out in the context of Khyber Pakhtunkhwa Pakistan. The population of the study was 374 public sector High Schools the same number of Principals and teachers were selected as sample from 6 districts of Khyber Pakhtunkhwa (Abbottabad, Charsadda, Kohat, Mardan, Nowshera and Peshawar). 1870 students were also included in the sample questionnaire as research instrument was developed for the data collection. Data analysis was handled with SPSS using algorithms for means, frequencies, averages and percentages. Overall analysis was carried out with the help of SPSS for applying various statistical process, tests and procedures. The key findings of the study were: majority schools were lacking the basic infrastructure like boundary walls, safety measure like gate and safety wire on the walls, clean drinking water, electricity, furniture and proper ventilation was missing, some suggestions were given at the end that the government should build proper boundary walls with enough height, electricity and fans may be provided to schools. Clean drinking water may be ensured and enough furniture may be provided to schools.

Keywords: Secondary School climate, School goals, Constructive competition, behavior, principals

INTRODUCTION

The world environment encompasses all the factors and elements inside and around one entity, be it the school, market, city or any bigger unit. The environment has a long lasting effect on the inhabitants on the unit and thus the environment plays a vital role in the development or otherwise of the population. An educational institution or a school in particular is not an exception to this fact.

Any schools primary goal is the promotion of the students' academic and psycho-social development. Parents sends their children to the school to be equipped with skills and knowledge to live up to the expectation of the society and to be a useful member of the society, either on macro level, miso or micro level of the society. In fulfilling these expectations of the parents and the society the school has a very important role. And subsequently, of utmost importance in the school environment.

School climate reflects learning atmosphere, tone, ideology, or milieu of a school. It is the sum of academic values, cultures, safety practices, and organizational structures within a school that cause it to function and react in particular ways. Teaching practices, diversity, and

relationships among administrators, teachers, parents, and students all contribute to school climate. All these factors have both individual and collective impact on the achievement of the pupils. This paper studies the dynamics of school environment and its various elements with the view to their impact on the students' achievement. Principals' opinion in this regard is analyzed and presented in shape of tables and graphs.

LITERATURE REVIEW

National Education Policy of 2009 stresses upon the provision of conducive learning environment for children in all levels of schools. The factors of conducive learning environment are ranges from physical environment to social environment and behavioral environment of the institute. All these factors have a different degree of effect on the learning climate.

The periodic review of school social, physical, and behavioral environments, as well as student and staff expectations and supports enable school leaders and personnel to play a key role in establishing and sustaining school norms that foster a positive culture and climate in which all students can thrive. (Elias et al. 2006).

Effectively implementing an Social and Emotional Learning (SEL) program requires changing teacher behavior, the classroom climate, and the school environment (Greenberg, Weisberg, et al. 2003). For example, effective SEL programming also involves creating school, family, and community environments that reinforce the lessons of the classroom. Methods of building such environments include infusing SEL concepts throughout the regular academic curriculum, actively engaging students in the learning process, providing opportunities for participation, collaboration, and service, creating a supportive learning community with respectful relationships and trust, and involving families and the community in schools. (Elias et al. 2009).

Making the change in human behavior is not an easy task. As in general with the change process, the human psychology opposes change unless it is driven by a certain stimulus, which in turn drives the thinking towards a positive attitude towards change. Children of age group 10-16 are in the development stage where their psychological state is not mature enough for a change process to begin according to the needs of society. To open the gates of change in a child's mind, the school has to provide a perfect environment.

There is a great impact of climate on performance of students, teachers, administrators, and even major stakeholders (Deal & Peterson, 2009). Majorly school climate can impact teacher efficiency, performance, teamwork, communication and satisfaction. (DuFour, 2007; Grayson & Alvarez, 2008). Parents and community are also the most effected ones by school climate, it can either re-energize them or make them dull and inactive (Deal & Peterson, 2009).

More specifically, school climate is influenced by the extent to which members of the school community feel socially, emotionally and physically safe. Research proved that a sustainable, positive school climate has great impact on students' academic achievement, mental health, graduation rates, school connectedness, teacher retention and risk prevention (Cohen & Geier, 2010).

The need for a vigorous school climate is mostly important in secondary school settings where student behavior and regulation problems are often more tough than in elementary classrooms (Briggs, 2009; Langdon & Preble, 2008; Sugai et al., 2000). For pattern, bullying and

discrimination are much more likely to occur in secondary schools (Bradshaw, Sawyer, & O'Brennan, 2007; Langdon & Preble, 2008).

METHODOLOGY

The study was conducted on pre-designed interview questionnaires for Principals, Teachers and Students of public sector High/Higher Secondary Schools. Schools were selected randomly to eradicate any pre-condition. Sample schools included 374 schools from 6 districts of Khyber Pakhtunkhwa. Evidently 374 principals and an equal number of teachers were included. The questionnaires asked similar questions from all the three target groups, but with different perspective for each group. A 5-point rating scale was used for responses to the questions. In this paper though, the rating scale is projected as a collective rating points, from 1 to 5 where 1 represents the lowest score, or 'total dis-agreement' and 5 represents a highest score or 'total agreement' of the respondent.

Research Question

The research tried to report on the validity of the following questions:

1. What are the indicators that determine school climate conducive to both teaching learning process?
2. What is the impact of school climate on students' achievements based on school results?
3. What type of remedial measures can improve school climate for students' achievements?

Analysis of the Responses

A society's first expectation from schools is to provide a learning conducive environment to the pupils. The learning conducive environment is a combination of all the necessary factors in a right mix, so that the children inside the school are psychologically in such a state that the teachers' efforts are at a maximum comprehended and adopted by the students.

Mc. Evoy & Welker (2000) describes School climate in terms of three aspects of the school environment:

- A physical environment that is welcoming and conducive to learning,
- A social environment that promotes communication and interaction
- An academic and behavioral environment that promotes learning, Self-fulfillment and self-esteem

These three aspects of the school environment combine to provide the students and teachers with a right mix of enabling conditions, which opens the students mind for gaining new knowledge from the teacher and from the environment in the surroundings. Human minds are designed such that it works best when scale is happiness and motivation is high.

In light of the above, the opinion of the principles was sought to investigate the factors of 'learn-able' environment of a secondary school. We will discuss the three factors in separate paras, focusing on the opinion of respondents to the questions groups of the each enabling environment factor.

Physical Factors

According to Adeboyeje (2000) and Emetarom (2004), school facilities are the physical and spatial enablers of teaching and learning which will increase the production of results. School facilities serve as pillars of support for effective teaching and learning. Akinsolu (2004)

asserted that educational curriculum cannot be sound and well operated with poor and badly managed school facilities. From all indication, school facilities are physical resources that facilitate effective teaching and learning. They include blocks of classrooms, laboratories, workshops, libraries, equipment, consumables, electricity, water, visual and audio-visual aids, tables, desks, chairs, playground, storage space and toilets.

The process of learning is at its best when the mind is at peace. Physical facilities provide the peace of mind for teachers and students that are needed for the learning to be at its peak.

A study of working conditions in urban schools concluded that "physical conditions have direct positive and negative effects on teacher morale, sense of personal safety, feelings of effectiveness in the classroom, and on the general learning environment." Building renovations in one district led teachers to feel "a renewed sense of hope, of commitment, a belief that the district cared about what went on that building." In dilapidated buildings in another district, the atmosphere was punctuated more by despair and frustration, with teachers reporting that leaking roofs, burned out lights, and broken toilets were the typical backdrop for teaching and learning." (Corcoran et al., 1988).

When principals in the sample High schools were asked about the physical facilities, they responded in the following manner:

Table 1: Availability of physical facilities:

Availability of:	Abbottabad	Charsadda	Kohat	Mardan	Nowshera	Peshawar
Drinking water	4.1	4.5	4.5	4.3	4.3	4.8
Lavatories	4.1	4.6	4.6	4.3	4.5	4.9
High boundary walls	4.3	4.6	4.9	4.4	4.2	4.8
Adequate staff room	4.1	4.6	4.6	4.8	4.5	4.3
Enough furniture	4.2	4.7	4.5	4.4	4.3	4.1
Ventilated classrooms	3.9	4.2	4.1	4.6	4.8	4.5
Laboratories	3.9	4.6	4.8	4.5	4.8	4.6
Equipment	3.9	4.3	4.9	4.6	4.7	4.6
Firstaid facility	3.9	4.2	4.8	4.6	4.8	4.6
Collective mean	4.0	4.5	4.6	4.5	4.6	4.6

Principals from all districts think that the availability of physical facility is very important factor of the enabling learning climate of the school. Overall, all the districts except Abbottabad are on the same wavelength (4.5 – 4.6). Which means that the principals’ opinion are similar on providing adequate physical facilities to enable the children to learn better.

If we take the factors individually, the principals from Abbottabad are up to the level of ‘Agreement’ only in the analysis. The rest of the districts are more inclined to towards ‘Total agreement’ and consider the availability of drinking water as the key factor in physical facilities. The reason relative low rating for Abbottabad could be the fact that Abbottabad is a hilly area, where summers are not as hot as in other areas of the province, and water is abundantly available in the surrounding environments in shape of springs, streams and rain water.

In the current wave of weak security situations and in the wake of some high grade acts of insurgence and attack, the provision of boundary walls is considered as important for providing the school security from external threats. Principals from all the districts opined in "Total Agreement" to provision of the boundary wall for giving peace of mind to students and children to make them teach and learn better.

Again, all the district except, Abbottabad pointed that adequate staff room is important for a learnable climate of school, so that the teachers can sit together and discuss professional issues in their free time.

Peshawar principals responded in terms of lowest score among the group in response to the question on importance of availability of furniture for a better school climate.

Kohat and Abbottabad principal scored at the level of "Agreement" for provision of ventilated classrooms for better learning climate in the school. All the other districts think that fresh air is important for mental growth of the children and will enable them in getting more ready for learning. Laboratory and equipment are used for experiments in 9th and 10th grades. All the districts agreed to its importance and provision in school for enabling the teachers to teach according to the curriculum and motivating the students to learn better. Similar is the case of first aid facilities. The responses are following the overall pattern in this category as well.

Factors of Social Climate

A happy working environment is the most productive environment. For teachers feel motivated and encouraged in a situation when they are supported by the principal and given due respect and opportunity to perform optimally.

According to Freiberg and Stein (1999) school climate is the heart and soul of the school and the essence of the school that draws teachers and students to love the school and to want to be a part of it. This renewed emphasis on the importance of school climate was further reinforced by a meta-analysis study performed by Wang et al. (1997), which found that school culture and climate were among the top influences in affecting improved students success. Their studies also establish that state and local policies, school organization and student demographics exerted the least influence on students learning.

The first major purpose of a school is to create and provide a culture that is hospitable to human learning (Barth 2001). School culture depends a lot on the leadership, its style and personality of the leader. The more supportive the leader, the more motivated and willing are the teachers. Resultantly the impact is transferred from teachers to the students.

Principals were asked about their opinion regarding factors for social climate and their impact on the students' performance. The responses are summarized in table 2.

Principals from all the districts agree that social climate is very important for the enabling learning environment and the resulting students' performance. Principals from Abbottabad responded at the level of "Agreed" (4.1), those from Kohat responded close to "Strongly Agree" (4.8). Other districts scored in the same level at 4.4-4.6.

Table 2: Impact of social climate

Factors of social climate	Abbottabad	Charsadda	Kohat	Mardan	Nowshera	Peshawar
Encouraging teachers	3.9	4.3	4.6	4.6	4.7	4.6
Teachers are praised	3.9	4.5	4.4	4.6	4.5	4.8
Good cooperation with teachers/staff	4.2	4.3	4.9	4.6	4.3	4.7
Friendly relations with teachers	4.2	4.2	4.9	4.5	4.6	4.7
Seek guidance from management/officers	4.2	4.5	4.9	4.5	4.5	4.5
Teachers are aware of developmental goals.	4.2	4.5	4.9	4.4	4.3	4.6
School development plan is discussed with teachers.	4.2	4.5	4.9	4.7	4.6	4.6
New ideas implemented for attractive school climate	4.2	4.6	4.9	4.5	4.1	4.8
Arrangement for classroom activities.	4.2	4.5	4.7	4.4	4.5	4.8
Cooperative towards students	4.2	4.6	4.9	4.6	4.2	4.1
Social environment/cooperation in the school	4.1	4.5	4.8	4.5	4.4	4.6

Principals from districts Kohat, Mardan, Nowshera and Peshawar scored at almost the same level (4.6-4.7) on the factor of encouraging teachers for better performance. Principals from Charsadda and Abbottabad responded at the level “Agree” in response to the same question. It shows that almost all the respondents are in favor of encouraging teachers to focus on their task and perform in a better way.

A work conducive environment is developed with the mutual cooperation and good relation among the stake holders. Encouraging teachers, cooperation with them and praising their work should create a very pleasant working environment. Principals from all the districts responded at the level of Agreement to Strong Agreement to the questions regarding encouraging, cooperation and praising teachers with respect to improving students’ achievement. The principals are strongly in favor of these factors if improvement in the students’ achievement is desired. The scores for 4 factors (Encouraging, cooperation, praising, and friendly relations) range from 3.9 to 4.9. Abbottabad scored 2 scores of 3.9 (encouraging, praising) while highest scales (4.9) were also returned 2 times by Kohat (cooperation, friendly relations). The remaining 20 scores ranged from 4.2 to 4.8, which is again strongly in favor of the 4 factors.

Seeking guidance from management/ officers seems to be a common practice in schools and thus is regarded as a positive factor on students’ achievement. The lowest rating being 4.2 (Abbottabad) and the highest being 4.9 (Kohat). The remaining 4 districts scored 4.5 unanimously.

The approach of holistic school development is very rarely implemented in the public sector schools in Pakistan. But an in-formal approach can be traced in the school addressing various areas of development. The teachers are generally aware of the development goals for their school. Highest rating was returned by Kohat (4.9) while the lowest was returned by Abbottabad (4.2). The remaining 4 districts scored between 4.3 and 4.6, meaning strong agreement to the involvement of teacher in school development and innovation in school.

The principals are also strongly of the opinion that they are responsible for providing materials and facilities for classroom activities. Abbottabad, again, is at the lowest in opinion at 4.2 while Peshawar has taken the lead in strongly agreeing at 4.8. The remaining 4 districts are also closely following up and scoring in the range of 4.4 to 4.7.

The principals attitude towards students also supports the students motivation to participate in learning and ultimate show good results. The principals also agreed to this fact. Peshawar respondents replied at the level close to agreement (4.1), while the principals from Kohat responded close to strong agreement. Abbottabad and Nowshera scored 4.2 and Mardan and Charsadda scored 4.6 to this question.

Factors of Social Climate

The focus of all efforts, facilities and investments is in the classroom. The ultimate result of students achievement is achieved through the environment of classroom, that's why the climate within the classroom plays a pivotal role in the improvement of students performance. Facilities provided to the students inside the classroom, coupled with the right climate can do wonders in any particular classroom, because the student majority of time is spent inside the class. The center of all efforts and initiatives should be the climate within the class.

One of the first areas that make a noticeable impact on student success is the physical environment of the classroom. This can pertain to a variety of details. It can be structure, resources, color. All of these can play a role in determining whether the classroom will be conducive for learning. Each may not have a large effect individually, however together they can work to strengthen a student's ability to learn. (Hannah, Ryan 2013)

Table 3: Learning Facilities and Climate

Learning facilities and climate	Abbottabad	Charsadda	Kohat	Mardan	Nowshera	Peshawar
AV aids	3.8	4.6	4.8	4.5	4.8	4.6
Spaces and facilities in classroom	4.0	4.3	4.9	4.6	4.7	4.6
space of co-curricular activities	4.2	4.3	4.6	4.4	4.8	4.6
scheme of work	4.1	4.6	3.8	4.6	4.6	4.7
inform teacher on new methods	4.2	4.3	4.9	4.2	4.4	4.8
Healthy competition among teachers	4.2	4.6	4.9	4.5	4.1	4.8
Teachers behave friendly with students	4.2	4.5	4.9	4.7	4.1	4.6
Learning facilities and climate	4.1	4.5	4.7	4.5	4.5	4.7

Learning facilities and climate is a key to improving students' performance. Principals from 5 out of 6 districts tend to agree strongly to the importance of learning facilities and climate for better performance of students. They rating being 4.5/4.7. The lowest scorers, Abbottabad, score 4.1, which in its self is above the level of agreement but still is the lowest of the lot.

Principals form Abbottabad scored lower than the level of "Agreement" (3.8) for provision and use of AV aids in classroom as a means of improving students' achievement. In the same category other districts scores between 4.5 and 4.8. The response of Abbottabad is really an alarm. AV aids are considered as a key factor in active learning and the school managers'

ignorance to this factor to some extent shows the lack of awareness about active learning methodology.

Abbottabad and Charsadda returned the score of 4.0 i.e. level of agreement in response to a question on provision of space and facilities for improved students' performance. Principals from other districts scored at 4.6 and above on the importance of providing space and facilities to improve students' performance.

All the principals agreed to the fact that those co-curricular activities are important for students' development. When question was asked about the importance of space for co-curricular activities, they all scored above the level of agreement. Lowest score was reported by Abbottabad (4.2) and the highest by Nowshera (4.8).

Principals from Kohat scored lower than the level (3.8) of agreement on the need of scheme of studies or a schedule for completion of their course work in the allocated time for a full year. The school management needs to understand that it is necessary for the teachers to develop the required skills in students to be able to proceed further to higher classes and to be able to perform at an optimum level, Principals from the remaining 5 districts scored between 4.1 and 4.7, Peshawar being the highest at 4.7.

Informing teachers on new methodologies and their professional grooming seems to be a favorable area for principals. All scored above the level of agreement and which highlights the need for teachers' development for improved learning achievements. Abbottabad and Mardan scored lowest at 4.2 while Kohat scored highest i.e. 4.9.

Healthy competition among teachers has a direct impact on students' performance, because that is the teachers' ultimate performance tester. Nowshera scored the lowest in this category (4.1) while Kohat scored the highest (4.9).

Principals are aware of the role of teacher's attitude in preparing students learning. Nowshera principals scored at 4.1, slightly above the level "Agree", while principals from Kohat scored 4.9, the highest, almost at the level of "Strongly Agree". The remaining 4 districts scored between 4.2 and 4.7.

CONCLUSION

The purpose of all the efforts, both inside and out the school is to make the schools more effective, in terms of students achievement, both in formative and summative assessments. School climate plays a vital role in achieving this goal and all the 3 types of climate, as mentioned above, within the school have an equal stake in this matter.

Multiple factors of school climate (physical, social and learning) were discussed and all have proved to be important for the school effectiveness. It has been seen in the analysis in the previous parts that apart from some very few areas of climate most of the factors are agreed to be playing major role in enhancing students understanding and their achievements. For example, according to the opinion of principals from Abbottabad, factors like, ventilated classroom, laboratories, equipment and first aid facilities have a lesser impact on students' achievement. All the other factors are regarded as important. Principals from the remaining districts graded all the factors including these 4 factors and necessary for school effectiveness.

Factors of social climate or inter-personal relations are also rated as important for achieving the school goals. The majority of principals from all the sample districts and school strongly agreed to this factor. Inter-personal relations between principal-teacher, teacher-student, teachers-management and principal-student have an inevitable role in improving students' performance. Good and positive relations promote a culture of mutual trust and understanding and eliminated the element of fear from all the parties, ultimately promoting a learning friendly environment in the school. The more the students are relaxed and free from fear, the more they are willing to learn and are able to learn new things.

Learning climate undoubtedly has far reaching and long lasting impact on students' performance. Factors like availability of AV aids, space for classroom and co-curricular activities, availability of professional guidance and support to teachers are all regarded as important by the principals from all sample schools. Healthy competition among teachers helps in providing students with better teaching practices and modern methods, which motivate them to participate in learning process.

It is hereby recommended to the authorities responsible for development and improvement of schools that the school administration is encouraged and facilitated to provide all the factors of a learning conducive climate to the students. On part of the principals, it is recommended that they need to keep a very good working relation with teacher and to make sure that they provide the necessary learning environment to the students. The principals in the study have strongly agreed to the impact of supporting teachers professionally. They should provide support to the teachers in teaching methodologies, availability of resources, materials and perfect environment for them to teach.

The principals should keep a very close relation with teachers and to give them confidence. The principal should also have a close contact with students to have a cross check on the teachers and to motivate them to put their best efforts in learning. Parents and community should also be involved in the whole school development. They have a huge stake in school and needs to play their due part.

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