Impact of School Climate on Students’ Achievement at Secondary Level in Pakistan.

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Abstract  School climate indicates three key dimensions of the school i.e. physical, academic and social climate. All three dimensions in the Pakistani school context were focused and examined. The key objectives of the study were to assess the Schools’ physical, social and academic climate and study its impact on students’ learning also to recommend remedial measures for improvement of school climate. Schools Principals were the population of the study selected through random sampling technique from Abbottabad,Charsadda, Kohat, Mardan, Nowshera, and Peshawar districts. The data was collected through questionnaires developed on five points Likert scale from the Principals and teachers. A total of 395 Secondary Schools schools were selected. Regression test used for data analysis. The study identified that school climate plays an important role in enhancing their achievement in academics. It proved that the school environment has a direct impact on the learning and teaching process.

Key Words  School, Climate, Learners, Achievement

Introduction  The school atmosphere is a broad and wide-ranging concept, which is related to the perception of the citizens regarding the ongoing actions of an educational institution. It might be the thought of the citizens regarding the campus leadership qualities, communication, anticipation, public relation and good governance. The atmosphere comprises the symbols of students, parents and school personnel inside the premises that show values, aims, standards, mutual associations, instructions, education, learning processes and managerial structures. According to Baker, J. Grant, s., and Morlock, L. (2008) that school climate is explained closely related to culture. In some institutional researches, the dissimilarities linking school climate and culture are adorned. Frequently the climate is sighted as performance-based, whereas civilization is taken as the implementation of rules and regulations in the institutions. It is the sum total of academic standards, environment, protection processes, and institutional rules and regulation inside the school which provides the basis, meanings and responses in the right direction. Teaching workshops, associations between the principal, teachers, parents and pupils are all pertinent components of the school climate (Schwarzer, & Hallum, 2008). The impact of school climate on students’ achievements in Government Boys secondary schools of Khyber Pakhtunkhwa needs priority because school efficiency and quality of education largely depend on school climate. It is mainly set up by school principal and teachers as a living environment, which includes all kinds of sociological and psychological interaction among the institutional members. The climate of the school is just like the personality of an individual which varies from one institution to another. No single factor determining a school climate. A school climate constitutes students’ and staff characteristics, patterns and rules of operating the school, interactions between students and staff, Teacher attitudes, social attitudes of peers, physical and materials resources and emotional tones.

Education managers have to keep in mind the assurance of a high standard of general education and decide the way how to apply their curricula in co-operation with interested groups, it’s bearing to society and commitment and relevance to the community for the jointly determined procedures and objectives. The prospectus should be outlined in association with establishment stimulating the sense of responsibilities with the purpose of accomplishment of the neighboring managements and healthcare (Lee, et. al., 2011). Research shows that there in Pakistan some of the parents take part in the educational activities of their children, by doing so they can remove almost all the deficiencies and problems of their children. The parents always influence student’s achievements and give them away for their future (Cohen et. al., 2009).
Objectives of the Study

a. To assess School Climate in terms of physical, climate and academics in Government Boys Secondary Schools.
b. To review the results students of sample schools and compare it with indicators of school climate.
c. To recommend remedial measures for improvement of school climate.

Research Questions

1. What is School Climate in terms of physical, climate and academics in Government Boys Secondary Schools?
2. What is the impact of school climate on students’ achievements?
3. What remedial measures can improve school climate for students’ achievements?

Literature Review

According to Bender, Donohue, and Heywood, (2005) the school atmosphere provides teachers and students the environment to succeed in their mission. In other words, we have to supply material services to schools. These services consist of the fine planned edifice, open and spacious classrooms with obligatory thrilling applications, a well equipped library, laboratory with proper collection of books, unlocked rooms for a range of activities, adequate furniture, audiovisual aids, and clean surroundings and playground etc.

Research conducted by Wang et al., (2010), examined the civilization as well as the school atmosphere which developed student success. Their well-established studies show that academic institutions along with learners’ demographic construct applied the slightest authority on student education.

Linking institutions which encourage great educational values, suitable management along with with collegiality supply an atmosphere much favorable for student’s accomplishment as well as attainment (Hussain 2011). Learners’ attainments are affected by the environment of the school as well as the culture of the society (Gue, 2011) along with the organization head straightly pressurized by the society and atmosphere. What sort of distinctiveness of an institute’s atmosphere is supposed to be the most important to organize and efficiently give confidence and boost student attainment?

Kelly (2013) explained “the space interpretation of the school curriculum”. His accentuates to syllabus discovers, its manifestation inside building as well as an understanding of the school plan, “in a controlled environment that facilitates teaching and learning process, protects the physical wellbeing of the occupants. Since teaching and learning do not take place in space, school facilities give meaning to the planned curricula and extra-curricular activities”.

According to Kroff, (2006) the boundary wall elaborates much security compensation such as inside exacting; suitable grill supports the safety measures attracting values of the offense avoidance. Throughout ecological plan structure by allocating institute foundations like a known, spacious substance of gap justifies respect, permitting observations by the organization, workers as well as law enforcement agencies, restricting entrance to the region that are not extremely evident, as well as at the last limiting entrance exit point.

The classroom will be accordingly planned as well as decorated to make an atmosphere for learners encouraged learning. The educational value should be kept in view while structuring and decorating. The reality can be a fundamental feature contributing to the expansion of the learners (Hackman and Wageman 2007).

Desks wood and non-wood, as well as foundation supplies for class 1st to 4th, 25 sets furthermore desk along with two seats of timber/or steal bottom equipment for classes 5th to 6th. “V-VI 50 units Tablet Armchairs make of wood/or non-wood is also very important (McLean, Fairman, and Moore, 2006).

The students’ and teacher’s graces are mostly affected by the structure of school buildings, examination as well as student-teacher communications, parents’ participation, obedience, inspiration along with person to person contacts (Schneider, & Duran, 2010).

Drinking water is an important and most valuable facility in the school climate. A proper water supply should be accessible inside the school building (McLean et al., 2006).

Recreational areas should contain several rooms’ apparatus wide grounds for group sports as well as supplementary assemblage actions and cemented regions for courtyard sports competition. Commonly, it is advantageous to afford conveniences to lessen the conflict which is required for children’s simple activities and for their upper-grade sports events. Suitable buffer zones may be provided for the different space apparatus (Hackman and Wageman 2007). If the teachers and students have all the material services at their disposal, then we can think to have changed in the thoughts of both the teachers and the taught (Cohen, et al, 2009). According to Jackson and Andrew (2004), best schools were using the available resources and teaching strategies very effectively and with care. They are trying to get maximum benefits from the existing facilities.
Khan (2017) stated that there is a deep connection between learners & climate. The learners interact with the climate and here interaction means using the climate, facilities, resources and space for educational purposes. He further emphasized that making the best climate for learning is connected with the overall community lifestyle, way of living and standard.

Gregory et al. (2012) described that till now, teachers are not empowered much other than classrooms, the term ‘self-efficacy’ for a teacher power which induces her the responsibility to compete for students learning, the assistance of students in different programs ultimately the students’ achievement. Erwin (2004) reported that best teachers are those who could translate the full vision of the best learning environment into the learners and the prospective instructors so that they could further make efforts for developing the school climate as an ideal one for the learners’.

The study of the literature review showed that school climate has positive impact on the students’ achievements. Reason being that the social and psychological outcomes of the teachers/ students’ relationship enhance students’ interest in curricular and co-curricular activities, which help in the improvement of students’ achievements in the school. The environment of positive competition among students is created, which promotes students’ achievements.

**Research Methodology**

The study is quantitative in nature using a descriptive survey. The data were collected from the participants consisting of principals and teachers of Government Boys Secondary Schools of Khyber Pakhtunkhwa.

**Sample of the Study**

Six districts namely Abbottabad, Charsadda, Kohat, Mardan, Nowshera, and Peshawar were selected as the sample of the study, adopting a convenient sampling technique. All the schools of the selected six districts were selected as a sample including 395 Principals and 395 teachers.

**Data Collection Tool**

The researcher used a questionnaire for the collection of data from the targeted population. The questionnaire was divided into three main sections comprising the physical, academic and social climate of schools. Reliability was checked with the help of Cranach’s Alpha test and the value was 0.984.

**Analysis of the Data**

The Regression test was used to investigate the impact on the variables having an influence on the other variables. The data collected from the participants to establish the relationship between school climates on students’ achievement.

The simple linear equation is presented as $Y = a + bx$

However, in the Statistics different notations are being used.

$Y_i = \beta_0 + \beta_1 X_i$

Where $Y$ is dependent i.e. student’s achievement, $\beta_0$ is the intercept or constant, $\beta_1$ is coefficient or Slope of $X$.

As in this study, the aim is to explain students’ achievement based on the different characteristics of school climate. In the regression model the key dependent variable ($Y$) to measure perspectives of the students, teachers and principals in terms of physical facilities, academic facilities and social climate.

**Table 1.** Responses of principals about school climate.

<table>
<thead>
<tr>
<th>Sr.no</th>
<th>Statement</th>
<th>SA</th>
<th>A</th>
<th>UD</th>
<th>DA</th>
<th>SDA</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Water availability</td>
<td>183</td>
<td>177</td>
<td>21</td>
<td>6</td>
<td>8</td>
<td>395</td>
</tr>
<tr>
<td></td>
<td></td>
<td>46.33%</td>
<td>44.81%</td>
<td>5.32%</td>
<td>1.52%</td>
<td>2.03%</td>
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<tr>
<td>2</td>
<td>Responses regarding school furniture</td>
<td>183</td>
<td>177</td>
<td>21</td>
<td>6</td>
<td>8</td>
<td>395</td>
</tr>
<tr>
<td></td>
<td></td>
<td>46.33%</td>
<td>44.81%</td>
<td>5.32%</td>
<td>1.52%</td>
<td>2.03%</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Classroom and student strength</td>
<td>164</td>
<td>203</td>
<td>17</td>
<td>5</td>
<td>6</td>
<td>395</td>
</tr>
<tr>
<td></td>
<td></td>
<td>41.52%</td>
<td>51.39%</td>
<td>4.30%</td>
<td>1.27%</td>
<td>1.52%</td>
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</tr>
<tr>
<td>4</td>
<td>Effective teaching methodology</td>
<td>216</td>
<td>149</td>
<td>19</td>
<td>4</td>
<td>7</td>
<td>395</td>
</tr>
<tr>
<td></td>
<td></td>
<td>54.68%</td>
<td>37.72%</td>
<td>4.81%</td>
<td>1.01%</td>
<td>1.77%</td>
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<tr>
<td>5</td>
<td></td>
<td>204</td>
<td>165</td>
<td>18</td>
<td>3</td>
<td>5</td>
<td>365</td>
</tr>
<tr>
<td>Item No</td>
<td>Summary</td>
<td>Mean</td>
<td>Agree</td>
<td>Mostly Agree</td>
<td>Slightly Agree</td>
<td>Disagree</td>
<td>Strongly Disagree</td>
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<td>--------</td>
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</tr>
<tr>
<td>6</td>
<td>Availability of laboratories</td>
<td>51.65%</td>
<td>41.77%</td>
<td>4.56%</td>
<td>0.76%</td>
<td>1.27%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Equipment and resources</td>
<td>51.39%</td>
<td>41.77%</td>
<td>4.30%</td>
<td>1.27%</td>
<td>1.27%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hardworking teachers are praised by the school management</td>
<td>48.86%</td>
<td>44.56%</td>
<td>4.30%</td>
<td>0.51%</td>
<td>1.77%</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Teacher schedule for completion of courses</td>
<td>47.59%</td>
<td>45.06%</td>
<td>4.30%</td>
<td>1.52%</td>
<td>1.52%</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Teaching methods and strategies</td>
<td>48.86%</td>
<td>44.81%</td>
<td>4.56%</td>
<td>0.51%</td>
<td>1.27%</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Teachers spending of time</td>
<td>55.44%</td>
<td>36.20%</td>
<td>5.06%</td>
<td>1.01%</td>
<td>2.28%</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Teachers arrangement for classroom activities</td>
<td>51.90%</td>
<td>41.77%</td>
<td>4.30%</td>
<td>0.76%</td>
<td>1.27%</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Feedback to teachers</td>
<td>51.39%</td>
<td>42.53%</td>
<td>4.30%</td>
<td>0.51%</td>
<td>1.27%</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Awareness of effective teaching way</td>
<td>47.85%</td>
<td>44.81%</td>
<td>4.56%</td>
<td>1.52%</td>
<td>1.27%</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>School development goals</td>
<td>45.06%</td>
<td>48.61%</td>
<td>4.56%</td>
<td>0.51%</td>
<td>1.27%</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Guidance from the management officers</td>
<td>49.87%</td>
<td>43.29%</td>
<td>4.56%</td>
<td>0.51%</td>
<td>1.77%</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Friendly relation with teachers</td>
<td>54.68%</td>
<td>37.22%</td>
<td>4.81%</td>
<td>1.27%</td>
<td>2.03%</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Good environment among staff members</td>
<td>49.11%</td>
<td>44.56%</td>
<td>4.05%</td>
<td>0.76%</td>
<td>1.52%</td>
<td></td>
</tr>
</tbody>
</table>

**Interpretation**

Data results reflected that 183(46.33%) were strongly agreed that water facility available in the schools. Principals responded that the school has enough furniture which is clear from the Likert scale mean and percentage 183(46.33%). Item No 3 was about students’ and teachers’ strength and data result mean and percentage as 203 (51.39%). It is clear from the results 4(1.01%) that all the teachers were using effective teaching methodology in teaching. The analysis shows that the availability of Laboratories in schools is satisfactory, regarding the strongly agree points 193(48.86%). Item 6 data shows that the equipment and resources are adequate in the schools as indicated by mean value 203(51.39%). Teachers praised from the management were as 2(0.51%). Inferring from, the responses collected from principals it was observed that 366 (92.65%) out of grand total 395 teachers have scheduled for completion of their courses in a school. The conclusion of the statistics showed that 193(48.86%) out of a cumulative total of 395 of the schools showed that teachers exercise different strategies and methods for teaching. Data finding with strongly agree points 219(44.55%) shows that a great number of teachers spend most of the time in the teaching and learning process. Responses 205 (51.90%) show that the teacher was doing classroom activities in most of the schools. Giving feedback is supported by most of the principals of the schools as a result of 203(51.39%). Results revealed that teachers are in strive to achieve the development goals as clear from the agreement points 192 (46. 61%). Data findings show that management officers guide their teachers for improvement in their teaching methodologies 187 (49.87%). The result shows that teachers have positive relations with students as indicated by the Likert scale mean and percentage 216 (54.68%). Different principals supported the statement about the good environment between students and teachers as according to the mean of table 194 (49.11%). The results show that school climate plays an important role in building and developing the students’ achievement. The result highlights the fact that the school environment is positively associated with students'
achievement. The present analysis is based on the data collected from the students and it was found that there is an impact of the school environment on student’s achievement in terms of student’s perspective. Moreover, the graph shows that school climate was observed to have a significant relationship with students’ achievement.

**Regression Test**

The statistical analysis which is used to find out the nature of the relationship between two or more variable is called Regression analysis. It deals with the estimation of the value of the dependent variable on the basis of the independent variable, that is, it shows how much change has been brought by the effect of an independent variable independent one. In other words, it gives us the percentage of change caused by a unit change in the dependent variable. The regression analysis was used on the data after ensuring the following:

- The test of normality showed that the data is normally distributed. The values of skewness and kurtosis for dependent variable Students’ achievement were -.620 and .680 respectively, for the independent variable “School Climate” these values were -.352 and -.632. The data were assumed to be distributed normally.
- No multicollinearity issue was found in the model. For detecting the multicollinearity issue the value of the variance inflation factor was used. In this research model, the value for the independent variable (School Climate) and dependent variable (Students’ achievement) the VIF value was “1” which was below the threshold value “3” so no evidence of multicollinearity was found.
- Variables were measured without error, that is, reliability test was conducted. The Cronbach's alpha (α) value for the questionnaires of students, teachers and principals was 0.984, 0.803 and 0.816 respectively so no issue of reliability was found.

**Conclusion**

Based on the results, it was concluded that a conducive school climate affects the students’ achievement positively. While an un-conducive and un-friendly school environment affects students’ performance negatively. It was confirmed from the results of six districts that there was a positive relationship between school climate and student achievement. It was inferred that cooperation, coordination, the good relation among staff, students and between staff and principal create a conducive environment for teaching and learning, which promote students, achievements. It was unfolded that updating teachers about modern methodologies and techniques are essential for their capacity buildings, which have a positive impact on students’ achievements. It is also concluded that the use of the resources always plays an important role in making learning centers more fruitful only if the practitioners use the resources with justice and full attention with the aim of getting a maximum result from those resources.

**Summary**

The fundamental inspiration of education is to provide spiritual, material, logical, communal training to the students so that they can become an integral part of civilized society. These objectives can only be attained when the climate of the school is favorable along with the availability and consumption of accessible material services within the schools. These are material services, which not only aid the teachers to enhance their instructional method in the classrooms but also help them participate in the essential domain of the progress of students’ attainment. The school atmosphere is typically embellished with accessibility and availability of material services and education resources. The material facilities promote a great deal in teaching-learning practices. These services have been classified as fundamental facilities. The fundamental facilities comprise electric supply, safe and drinkable water, bathrooms, boundary walls and other facilities comprises of a library, science laboratory, computer’ laboratory, playing areas, carding/accommodation, transportation and audio-visual aids. Moreover, some secondary facilities also affect the school climate based on their provision and proper management. These facilities include; school furniture including seats and tables, a classroom environment that is physical factors and climatic factors like proper ventilation, thermal comfort, temperature and humidity, adequate lighting as well as the effect of indoor air quality. These facilities contribute education process effective. Their significance is amplified when we speak of secondary education. Secondary Education is a vital and serious stage. It provides a base for employment as well as tertiary education. Moreover, the study also enlightens the importance of the school building that the teacher’s grace is mostly affected by the structure of school buildings, examine as well as student-teacher communications, parents’ participation, inspiration along with person to person contacts. It also affects the students’ ratio in the organization, if the building of an institution is attractive as it attracts the students as well as their parents. Overall the best school climate can give the best to the students and ultimately, they will achieve excellence accordingly. Encouragement, motivation and appreciation are very much required for the improvement of student performance.
Discussion
This research intended to establish that school climate could affect the abilities of the students, their teacher’s performance with job outcomes i.e. organizational commitment and job performance with the insertion of a moderator variable skill. A realistic school climate enhances the relationships among the students and teachers and assures that the institute offers a healthy and safe atmosphere. A healthy school climate affects the academic standards, protection, environment, school rules and regulation. It also shows the tone, ideology of an institution. This is supported by a review of the literature and from the analysis of various studies conducted by Ghaith (2003), Wang Selman et al., (2010).

The term school climate is interrelated to the perception of the citizens regarding the ongoing performance of an institute or this might be inferences drawn by the citizens regarding the campus leadership’s qualities, communication, anticipation, public relation, and regulation. The concepts of school climate could be considered in many ways, which consists of many important elements such as, ability of protection and relaxation, relationship amongst persons within school, coaching and education process, organizational atmosphere, school up-gradation, accomplishment, inspiration, integrity and equality, continuance of rules and regulation, society as well as parents’ contribution. School climate has also affected by the physical environment, social environment, behavioral situation, expectations and supports. The inference drawn was similar to the analysis of different studies in the review of literature given by Uline and Tschannen-Moron (2008) and Meyer and Conner (2008).

The research has also concluded that encouraging possessions of a strong and well-organized school environment positively affect student’s performance. It also helps in overcoming the students misbehaving activities like; aggression, taking drugs, absentia and suspensions, disruptive activities, violent behavior, delinquency. Physical condition plays an important role in the teaching-learning process and making a conducive environment for learning. It includes the school external shape like construction of rooms, size and the number of students and workforce inside rooms, organization as well as association amongst educational places inside schools, access to property, security, calmness, good seating arrangement, air, temperature, well-equipped library, modern laboratory equipment, playgrounds, classroom conditions, lighting facilities, lavatories, clean drinking water, hygienic colorful cafeteria, audio-visual aids, whitewash of the school boundaries and classrooms, attractive and well-maintained garden. These findings are in keeping with review of literature on school climate conducted by different authors like (Briggs, 2009) and (Kelly, D.2013).

Recommendations
• Based upon the teachers’ students’ and Principals’ perspectives, it was recommended that education department may focus on the capacity building to improve the understanding level of teachers’ and Principals’ in terms of physical, social and academic components of school climate so that they can improve the students’ achievement.
• Department and school managers may ensure proper discipline among schools to promote efficiency in order to reduce cheating in exams.
• The government should provide proper physical facilities to promote the basic facilities to students and teachers.
• A coalition consisting of law enforcement, religious groups, business class, learners’, instructors and parents need to be established for making the climate of learning place ideal and peaceful.
• School community may set some standards for the conducive environment with clear aims and procedures to give awareness to the people about the suitable and best school environment.
• Departmental managers and school community may avoid punitive approach and should restore justice practices, so that a pleasant, democratic and friendly school climate may be developed.
• School managers and departmental authorities may ensure the protection of its students and staff from all threats related to dirty climate.
• Schools may prepare some plans for addressing school safety and climate.
• School management may encourage youth to participate in promoting the neat and clean climate education in the learners and masses.
References
Husain, Naushad (2011) Influence of Intelligence on Adjustment of Teacher
Kelly, D. (2013). “After Sandy Hook, Schools Start the Year with Heightened
Kropff, Jennifer L. (2006) Gender and Racial Difference in Academic Motivation of
Lee, T., Cornell, D., Gregory, A., Fan, X (2011). High suspension schools and
Regression analysis of the covariation between middle school students’ perceived school climate and behavioral problems. Journal of Research on Adolescence, 20, 274–286
Research, policy, practice, and teacher education. Teachers College Record, 111(1), 180–213.