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Investigate the Effect of School Environment on Students' Academic Achievements: Evidence from Khyber Pakhutunkhwa, Pakistan

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Abstract: *The main objective of this study is to investigate the impact of school environment (later on ScE) on students' academic achievements at the Secondary school level in Khyber Pakhtunkhwa. The previous studies focused on the school learning environment or classroom learning environment, but this study focused on the impact of the school environment on the students' achievements. This study used the primary data of all schools in Khyber Pakhtunkhwa, Pakistan, as population. The researcher collected data through a self-made questionnaire used to measure students' achievement in the percentage of class 9th students while other questions contained on five Likert scale from 377 students studying in class 10th of the different school of District Kohat, Peshawar, Charssadda, Mardan, Dir, Malakand and Swat. This study used the ordinary least square method, ANOVA, correlation, and descriptive statistics to analyze the data. This study concluded that the physical and psychological school environment has a positive impact on the student's academic achievement. Therefore, the school environment is compulsory for students' academic achievement (later on SAA) in the Khyber Pakhtunkhwa, Pakistan. This recommended that the government, policymakers, and school administration make efforts to ensure the provision of better infrastructure and related facilities for improving the existing learning environment to enhance students' academic performance.*

Introduction

Human capital (mostly scholar used secondary school certificate as proxy for human capital (later on HK) is too much important for economic development. Becker (1993) stated that HK as the knowledge and skill represented in an individual through education investment, which was subsequently effect on earning and employment. All individual achieve a certain level of HK, and which primarily effected through training and education (Sanchez et al., 1999). HK theories assumes that people differ in the value of HK they have accessible to spend in the places of work , and the scholars continually indicated that education is a significant predicator of professional success. However, concentration on education quality and degree in terms of institution's prestige ranking, students and teacher ratios and students expanses (Altonji & Dunn, 1996; Ng et al., 2005; Perna, 2003; Zhang, 2005).

Learning is a complicated process (Pimparyon et al., 2000). Similarly, Entwistle (1995) learning is the

process that influences the student's achievement, and the good learning-environment recognized the objective of learning and teaching is to support the student to learn more. This is an important fact that education needs learning environment as well as higher quality of teaching. According to Marton and Saljo (1976) there are two approaches that students adopt for learning. Limited students adopt a surface method of learning while others adopt a profound tactic to learning. The surface tactic of learning are alarmed with memorizing, retention the facts and figure and try to perform well in the examinations. While, the deep approach of learning is concerned with comprehensive learning, in which students try to comprehend the meaning of the words and sentences, getting ideas.

Secondary level education is most important to education for a child. Because of play the role of bridge between primary education and higher education. It make available an opportunity for a child to get further knowledge and skills in this level (Matthew, 2013). Secondary level education is nonchalantly considered as the education that children obtain, though the mean ages of exit and entrance differ noticeably among a variety of nations (Eubanks & Eubanks, 2009). The countries try to make strenuous attempts to achieve universal literacy and primary level education for all, while improving and expanding the quality of higher-education system, but in many countries, the secondary education has become the weakest connection in the chain of education(Maclean, 2001). UNESCO (2000) stated that primary-level education has prolonged substantially in most developing countries since1950s, which leads to increase the gross enrolment in secondary level education. However, as approach to secondary level education has prolonged, its overall quality has habitually been in decreased as a resource has been strained fragile and systems have become inefficient.

The secondary school education is acknowledged as an essential stage to examine the effectiveness of a nation's education system. Many developed countries like United States and European countries give more attention to sightsee better clarifications to the emerging and escalating problem faced by students. Majority of people are proficient before the expiration of their territory school years, which make the part of skilled labor force of a nation. The worth of secondary education is essential for the quality of territory education. The creation of foundations and character of upcoming leadership are placed (A.I.O.U., 1998).The secondary school education is the foundation stone for the growth of nation and higher studies. Therefore, it is necessary to give more care towards secondary school education and radical steps should be taken to make it more productive, successful and effective (Suleman & Hussain, 2014).

The effect of the ScE on SAA has been ignored and gives little or no attention at the secondary level by researchers and policymakers. The environment plays a key role in the life of every human being whether employee, employer, teachers, or students. Many people believe that better performance requires a good environment(Chukwuemeka, 2013). The arrangement of schools, poor ventilation, inadequate facilities, etc. have adversely affected the students' and teachers' health and students' academic performance (Udoh, 1980).

Children essential a healthy, stimulating, and safe environment in which they learn and grow well. Throughout the school-age, the children spend at least 6 hours daily at the school. They spend maximum time in the schoolyard or traveling between the home and school. To minimize the distance between the school and home needs careful designing and planning to improve experiences that support stewardship, health, and education (Byoung & Christopher, 2012).The school environment has the dominant significance in reshaping and shaping knowledgeable ability. Though, favorable and supportive school environments supplemented with plentiful learning services, and fortunate climate makes the student happier and focused on their academic accomplishments those results in high SAA. The effect of the environment starts to stimulate the development and growth of an individual right from of her/his mother' womb. The educational progression of development happens in psychological, cultural, social, and physical-environment. The fortunate ScE stipulates for learning-experiences. The children pass maximum time in the school, and the ScE is exercising an influence on recital through relationship, technique, teaching, and curriculum (Arul, 2012).

Though, educational-institutions have connected too close with society. The common condition of our universities, schools, and colleges is a great worry for the nation. The institutions play an imperative

role in the development of the students' personality. The students devote maximum hours of their life at school, in this way, the ScE is accountable for developing of value into them(Usaini et al., 2015). Kothari (1970) stated that the destiny of India was being molded in the classroom, which means that the school environment is too important for the nation and particularly for students. Therefore, students are the backbone of the nation strength, which requires a healthy ScE to backing them to achieve well.

The ScE has wide-ranging influences on SAA, including an important feature of their ethical, social and emotional expansion. When students found their ScE helpful and thoughtful, they are less probable to involve in violence, abuse, and behavior problems. The helpful schools substitute these constructive results by encouraging students' sense of conceitedness and belongings. These relations are used inter-changeably here to mention to students' sagacity of being in a respectable and close connection with adults and peers at school. Therefore, construction in a ScE is a means of encouraging academic accomplishment. Students' who understanding their school as a sympathetic community becomes more engaged, and motivated in their learning. Specifically, students keep an active link with the teacher and their acuities encourage their engagement and effort (Eric, 2005).

The geo-graphical position of schools has an important effect on the students' academic-achievement. The irregular scattering of resources, facilities, poor school planning, lack of roads, problems of qualified and skillful teachers in the remote areas or refusing appointment, poor communication, the nonchalant mindset of communities to school, and many other factors to widen the difference between the urban and rural secondary schools. Schools located in rural areas were not performing well due to the lack of skillful and qualified teachers and social amenities. Most teachers have preferred the schools situated in urban areas instead of schools situated in rural areas. The urban schools arranged coaching classes for students to promote the essence of competition and challenges, while the students studying in rural schools having limited experience and exposure. Along with these, the students of urban areas schools have performed better than the rural areas schools. In another way, the students of urban areas schools have a very advantage of good quality of the environment that enhances their academic performance than the rural areas schools (Owoeye & Yara, 2011). The urban-students are keeping a demanding environment in their daily life very much hurry burry and mechanical life; so, they feel that the ScE is not suitable for their studies. Therefore, the ScE must be augmented with up-to-date facilities to makes the students feel easy in their studies for higher academic achievement(Arul, 2012). If the school is located in a noisy area like near to airports, bus stands, industrial areas, and shopping areas, where the activities and noise disrupt the teaching and learning process and affect the SAA (Usaini et al., 2015).

The physical school-environment also affects SAA. The human resources, physical-facilities, and the connection among them govern the physical ScE. The students of the school with good laboratory-facilities perform well than the students of schools with less or no laboratory facilities. The insufficient space and poor facilities, classrooms, seats in classrooms, laboratories, and libraries have to affect the learning-environment (Usaini et al., 2015). The school infrastructure has also affected the students' academic performance. The good link between the teacher and students supports the school climate which help in the smooth running of the academic activities and then improves the students' academic performance (Chukwuemeka, 2013).

The teaching and learning process cannot be completed vacuum. In the formal-education process, it happens as an outcome of the interaction between the affiliates of the classroom. In classroom settings, the teaching-learning-process (TLP) includes learning environment, learning process, content, student, and teacher. The learning-environment or learning-situation means the circumstances in which learning comes to pass. Each classroom has a unique learning environment and teaching. A classroom setting has two main components, namely the human and physical-component. The physical-component is computers, books, multimedia, lightings, furniture, blackboard, etc. and the human components are students and teachers in the classroom. The model of interaction produces a specific atmosphere which may be called a learning environment or condition or situation (Malik & Rizvi, 2018).Arends (2007) stated that classes may seem like from the

distance but are distinct in its process and processes.

The physical ScE is conceived in such way that impedes the learning-process although scholars have recognized a close connection between the physical environment and the individual work. The reason behind this is that a student sitting in an intolerably hot, stuffy classroom listening to a teacher on very low or very high temperature would not understand and cool-space. Inappropriately, school-buildings are designed to fascinate people from out-side but they failed to give a comfortable and safe internal-atmosphere for teachers and students (Halstead, 1974).

The well organized and sound study is required to examine the different learning environment aspects that influence the SAA. The measurement and identification of these aspects are beneficial for the improvement of the SAA. The SAA is very essential for the educational mission and their goals. Lot of studies shown that environmental aspects to a very large extent effect on the psychological and physical potentials of a student. This has controlled to the assertion that numerous students flop to develop their capabilities due to scarce environmental encouragement. However, there are many environmental aspects which have donated to this poor-performance of the students due to inadequate school facilities, and home background etc. (Chukwuemeka, 2013).

The present research studied "the impacts of school-environment on the Students' academic achievements at Secondary school level in Khyber Pakhtunkhwa. The previous studies consider only one dimension or two dimension of the learning environment but this study was considered all dimension of the learning environment. The previous studies consider only one school or two schools or only one district but this study was considered all district of Khyber Pakhtunkhwa and sample data take from maximum schools, however, the selection was categories on tastes of the residence and demographic factors of areas etc. Prior studies investigated the environment of learning of one subject but this study considers all subjects to minimize the research gap. This study was different from other studies due to the methodological ways because the others studies used simple percentage, correlation and Cronbach alpha but this study used along with statistical tools OLS (ordinary least square) to quantify the effect of each variable. Along with these differences, we first time conduct this study on the impacts of ScE on the students' academic achievements at Secondary school level in Khyber Pakhtunkhwa in this area and also confident that our results are more authentic and easy to generalized in all schools situated in the Khyber Pakhtunkhwa as well as in Pakistan.

Secondary school has a central point in learning all over the world. The demographic factor and teacher's competencies had depressing effects on the students' academic achievements and quality education. The study was very important because the researcher pinpointed the new aspects of school and learning environment that lead to social responsibility and democracy. This study opened new ways and measures in the field of education in Khyber Pakhtunkhwa that would help to identify personal and professional competencies of the teachers and there impacts on the learning environment of schools. The study provided guidance for heads of secondary school to evaluate the teachers' efficiency and students learning outcome. The principals and headmasters would be able to focus their attention to what they observe and care during supervising the teachers and students output. This study would enable the students to apply democratic values in class room and school which would ultimately lead for democratic society. The study of school environment might prove beneficial for the student to enhance the social responsibilities and democratic values.

Literature Review

Lorsbach and Jinks (1999) stated that to understanding more about the reciprocal association among the learning-environment and SAA opinions beliefs that the researcher focus on learning environment and students' academic achievement. According to Adeyemo (2012) that scholar continually indicated that the environment of educational institutions was very important to effect the children's education. The psychologist and educationist give different factors that affect the students' academic performance. Some researcher argues that the school building is on the relationship between the educational outcome and school building physical characteristics. Historically, the school building assumption was found from very long time for learning process, but it's not the single requirement for teaching learning process. There are also a lot of factors which influence the students' academic performance like social

characteristics, psychological and pedagogical factors etc. There are no disagreement among administrator, educational planers, and researchers about the fact that educational amenities are important elements in the exertion to realize the effective learning teaching process outcomes. Haron (1999) emphasizes that the quality of physical amenities has important impact on students' academic achievement and also has important impact on the well-being of the students and teachers. Adeboyeje (1994) asserts that the availability of satisfactory building of school, laboratories, desks, chairs and classrooms and others facilities are essential for the achievement of any educational objectives and goals. He also found that successful educational process. It enriches the usefulness in the purpose of the school of worth, impacts the association between community and schools and usefulness as youth center, entertaining and cultural civic. Moyer (1995) argued that the design of school building component and features have been demonstrated to have a quantifiable influences upon students learning and their achievement in schools. The overall influence a building of school has on students can be either negative or positive, depending upon the condition of school building. Overcrowded-building of school and classrooms have adverse effect on students' performance, particularly for poverty and minority students accurate and proper hearing is important to the ability of students to learn in the classroom. Noise sidetracks interest in learning and affects the SAA but also the condition of a building of school effect the effectiveness and work of a teacher along with student's slants to learning.

However, students learning was not only effected the students learning approach but also learning environment has important for students leaning and outcome (Entwistle et al., 2002) and (Entwistle, 2013). Many researcher found that learning environment does not only impact the student's learning method (Newble & Clarke, 1986), (Davis & Sales, 1996) and (Trigwell & Prosser, 1991) but also the students' academic achievement(Newble & Entwistle, 1986), (Wills, 1996) and (Wolf et al., 1989), level of motivation(Harth et al., 1992), and the degree of learning effectiveness(Dent et al., 2017). Furthermore, as evaluation of the environment of learning is considered an imperative aspect in the delivering quality-education (Dent et al., 2017).

Lot of studies conducted on the effect of classroom-environments have on the SAA (Schunk, 1996). The most important prerequisite of the motivation is encouraging, warm and supportive atmosphere, where students feel adequately protected to take dangers without panic of censure (Brophy, 1987). Also, student's incentive rises when teachers interrelate with students. Interrelation between students and teachers results in a upsurge of students' academic connection (Umbach & Wawrzynski, 2005). The motivation and involvement of students in extracurricular activities significantly affect the students' academic achievements (Pike & Killian, 2001) and (Ruban & McCoach, 2005).Diseth (2007) stated that students' perception and evaluation of the learning environment are accountable for the changes in the students' academic achievements, but previous research has infrequently included a simple comparison among these variables.

Kweon et al. (2017) investigate the association between green spaces, student socioeconomic variables, and academic achievement. The survey includes 219 District of Columbia schools. School-environment measures, demographic data, and performance data were gathered and analyzed. GIS was utilized to combine spatially reliant on information on students and results on standardized exams in reading. However, not all land-scapes provide the same benefits. Large expanses of land, or "featureless sceneries," such as campus lawns and sporting fields, have a detrimental impact on SAA.

There are many studies conducted on the effect learning environment classroom, school building, school environment, learning method, students approaches on SAA in the different area of Pakistan and others countries of the world. The results of the other studies are not reliable and not able to generalize each district (s) of Pakistan. Because they consider one class or one school or few schools for experiment but this study considers the numbers of schools of the nine district of Khyber Pakhtunkhwa. Different researchers conducted studies in the other district (s) and provinces in Pakistan as well as around the world, but we cannot generalized it for every district, because, demand for education, social aspects and demographic aspect are different from district to district. Others studies mostly used the descriptive analysis and correlation techniques to estimate the results, but, this study used along with previous studies techniques regression analysis and used ordinary least square techniques to estimate

the parameters while no other studies used this techniques to analyze the data. After the review of lot of literature, there is no study available in the Khyber Pakhtunkhwa, Pakistan and neither study is consider all the dimension of the learning environment. Therefore, this study was conducted to minimize the gap and quantify the different factors of learning environment to effect the academic achievement in Khyber Pakhtunkhwa, Pakistan. Furthermore, the outcome of this study is more authentic and reliable then other studies and generalized for the all district of Pakistan.

Methodology

This study used the descriptive statistics, correlation among the variables and regression analysis to investigate the impact of school environment on student's academic achievement in secondary school level in Khyber Pakhtunkhwa, Pakistan. This study used the cross section primary data and used all schools situated in the province Khyber Pakhtunkhwa, Pakistan as population. Due to the time, security, communication and transportation and financial constrained this study focused on those areas both urban and rural which situated near with Peshawar. The study collected data through self-made questionnaire from 377 students studying in class 10^{th} of the different school of District Kohat, Peshawar, Charssadda, Mardan, Dir, Malakand and Swat. This study collect the data from schools through personal visit to schools and also write request letter to school head along with questionnaire to some school situated for away. The questionnaire used to measure the student achievement in percentage of class 9^{th} class fine exam while other question contained on five Likert scale (1=strongly disagree, 2=disagree, 3=neutral, 4=agree and 5=strongly agree). The sample size was selected through online reosoft sample size calculator at 5% level of significance. Furthermore, the validity value of the instrument is 0.716.

Table 1: Description of Variables

S.No	Variable	Measurement	Symbol
1	Percentage in the last examination	Percentage	SAA
2	Assignments given by Teachers.	Rank	AT
3	Teachers encouragement	Rank	TE
4	Teachers mark and revise assignments on time.	Rank	TMA
5	School infrastructure	Rank	SI
6	School laboratories	Rank	Slob
7	School administration	Rank	SADM
8	School library	Rank	SLIB
9	Frequent internal exams.	Rank	FIE
10	Consultation with teachers after class.	Rank	CT
11	Consultation with principle regarding problems.	Rank	CP
12	School building facilitates	Rank	SBF

Model of the study

This study used the following modified model. The model was also used by Yigermal (2017) to investigate the determinants of academic performance of undergraduate students, and Tapia-Fonllem et al. (2020) to examine the association between the school environment and the students well-being.

$$SAA_i = \beta_0 + \beta_1 AT_i + \beta_3 TE_i + \beta_4 TMA_i + \beta_5 SI_i + \beta_6 SLob_i + \beta_7 SADM_i + \beta_8 SLIB_i + \beta_9 FIE_i + \beta_{10} CT_i + \beta_{11} CP_i + \beta_{12} SBF_i + \mu_i \quad \text{..... (1)}$$

Where

β_0 represent intercept, $\beta's$ represent the coefficients of the independent variables, μ_i represent the error term, and subscript '*i*' represent that data is cross sectional.

Results and Discussion

Descriptive Analysis

Table 2 shows that description of the each variable and it's significant. The table shows that the 28 percent are agreed and 61 percent strongly agree with that the conducive infrastructure of school. The Chi-square value is significant and good fit. Therefore, majority of respondents agree with that the conducive infrastructure of school. The 74 percent are agreed and 11 percent strongly agree with that the school laboratories are well equipped with basic requirements. The Chi-square value is significant and good fit. Therefore, majority of respondents agree with that the school laboratories are well equipped with basic requirements. The 43 percent are agreed and 55 percent strongly agree with that the school administration is cooperative and facilitates us to solve our problems. The Chi-square value is significant and good fit. Therefore, majority of respondents strongly agree with that the school administration is cooperative and facilitates us to solve our problems.

The 62 percent are agreed and 22 percent strongly agree with that the school library is well stocked with variety of required books and co-curricular materials. The Chi-square value is significant and good fit. Therefore, majority of respondents agree with that the school library is well stocked with variety of required books and co-curricular materials. The 75 percent are agreed and 5 percent strongly agree with that the school administration arranges frequent internal exams. The Chi-square value is significant and good fit. Therefore, majority of respondents agree with that the school administration arranges frequent internal exams are necessary for student's academic performance. The 30 percent are agree and 13 percent strongly agree while 20 percent not sure with that they free to consult with teachers after class it they not understand a concept. The Chi-square value is significant and good fit. Therefore, majority of respondents agree with that they free to consult with teachers after class it they not understand a concept.

The 72 percent are agreed and 13 percent strongly agree while 5 percent not sure with that they free to consult with principle. The Chi-square value is significant and good fit. Therefore, majority of respondents agree with that they free to consult with principle. The 46 percent are agreed and 52 percent strongly agree while 2 percent not sure with that there are sufficient facilities in our school building. The Chi-square value is significant and good fit. Therefore, majority of respondents agree with that there are sufficient facilities in our school building. The 67 percent are agreed and 22 percent strongly agree while 6 percent not sure with that their parents' income is enough for their expenses. The Chi-square value is significant and good fit. Therefore, majority of respondents agree with that their parents' income is enough for their expenses. The 51 percent are agreed and 42 percent strongly agree while 5 percent not sure with that there home environment is suitable for study. The Chi-square value is significant and good fit. Therefore, majority of respondents agree with that home environment is suitable for study. The 60 percent are agreed and 32 percent strongly agree while 5 percent not sure with that there have enough facilities in our home. The Chi-square value is significant and good fit. Therefore, majority of respondents agree with that have enough facilities in our home.

Table 2: Descriptive Analysis

S.No	Statement	SDA	DA	N	A	SA	Chi-Square (p-value)
1.	The school infrastructure is conducive for learning.	0%	1.6%	9.8%	27.9%	60.7%	311.29 (0.000)
2.	The school laboratories are well equipped with basic requirements.	2.1%	3.7%	8.5%	74.3%	11.4%	704.34 (0.000)
3.	The school administration is cooperative and facilitates us to solve our problem.	0%	0%	1.9%	43%	55.1%	176.50 (0.000)
4.	The school library is well stocked	2.9%	4.2%	8.2%	62.3%	22.3%	466.75

	with variety of required books and co-curricular materials.						(0.000)
5.	The administration arranges frequent internal exams.	11.1%	2.7%	6.4%	75.3%	4.5%	728.90 (0.000)
6.	I am free to discuss topic with teachers next to class.	17.5%	18.8%	20.4%	30%	13.3%	28.77 (0.000)
7.	I am free to discuss the principle at whatever time about problem.	6.2%	2.4%	4.8%	72.1%	12.5%	651.63 (0.000)
8.	There are sufficient facilitates in our school building.	0%	0%	1.9%	46.4%	51.7%	169.68 (0.000)
9.	My parents' income is enough for our expenses.	2.4%	1.9%	6.1%	67.4%	22.3%	580.97 (0.000)
10.	My home environment is suitable for study.	0%	2.9%	4.8%	50.7%	41.6%	276.32 (0.000)
11.	We have enough facilities in our home.	0%	0%	7.7%	60.2%	32.1%	156.24 (0.000)

Note: Used SDA for Strongly Disagree, DA for Disagree, N for Neutral, A for Agree, SA for Strongly Agree
Source: author compilation

Correlation Matrix

Table 3 shows the correlations results between the variables. There are positive and noteworthy correlation between the school library, internal exams arrange by school administration, consultation with teacher after class, consultation with teacher after class, consultation with school head have positive and significant correlation with students' academic achievement. While, facilities in school, and school infrastructure have insignificant correlation with students' academic achievements.

Table 3: Correlation among the Variables

Variables	Pearson Correlation (Sig.)
Percentage in the last examination	1
The school infrastructure is conducive for learning.	0.086***(0.095)
The school laboratories are well equipped with basic requirements.	0.161*(0.002)
The school administration is cooperative and facilitates us to solve our problem.	-0.044 (0.393)
The school library is well stocked with variety of required books and co-curricular materials.	-0.249* (0.000)
The administration arranges frequent internal exams.	0.147*(0.004)
Consult teachers after class,	0.171* (0.001)
Consult the principle about problem.	0.108** (0.036)
There are sufficient facilitates in our school building.	0.032 (0.540)

*Note: *** & *** Shows significant at the 0.01, 0.05 and 0.10 level (2-tailed).*
Source: author compilation

Regression Results

Table 4 demonstrations the effect of ScE on SAA, in which this study considered standardized coefficient. The assignments given by teachers to students have positive but insignificant effect on SAA. The teacher encouragement, school administration, and give marks and revise assignment have negative but insignificant effect on SAA. The school infrastructure and consultation with principle regarding problems have positive but insignificant effect on SAA.

The school laboratories have encouraging and noteworthy consequence on student's academic accomplishment. The same results was found by Olufunke (2012) in the case of schools in Nigeria and determined that laboratory with adequate equipment was more essential for the quality students

achievement. Akani (2015) also found the same results and concluded that the use of laboratory helps the students to learn well and improve the academic performance. Molla and Muche (2018) give the same finding that lack of laboratories was the main cause of students bed academic performance. The school library has optimistic and noteworthy effect on SAA. The similar results was given by Lance (2002) and stated that library was mandatory for students learning and academic achievement and Chan (2008) was found that the school library needs for students better academics performance. Todd (2002) also the same result as well that school-library has noteworthy effect on SAA. The school conduct frequent internal exams have positive and noteworthy effect on SAA. The same results were found by Abdulghani et al. (2014) and Parker et al. (2004).

The consultations with teachers after class have positive and significant effect on SAA. This results were in line with the Oluwatimilehin and Owoyele (2012) and Goldman et al. (1997) concluded that the teachers constancy bring positive changes in the students' performance. The facility in the school building has positive and noteworthy effect on SAA. The same findings were given by Earthman (2002) found that school building with adequate facilities play a vital role in the SAA and Owoeye and Olatunde Yara (2011) found that facilities in the school building have noteworthy and positive effect on SAA.

Table 4: The Effect Of School Environment On Students Academic Achievements

Variables	Std. Error	Beta	t-value	Sig.
Constant	0.077	0.807*	10.488	0.000
Assignments given by Teachers.	0.012	0.018	0.264	0.792
Teachers encouragement	0.013	-0.075	-1.095	0.274
Teachers mark and revise assignments on time.	0.006	-0.059	-1.131	0.259
School infrastructure	0.006	0.034	0.590	0.556
School laboratories	0.006	0.104***	1.881	0.061
School administration	0.008	-0.041	-0.735	0.463
School library	0.005	0.197*	-3.409	0.001
Frequent internal exams.	0.004	0.167*	3.098	0.002
Consultation with teachers after class.	0.003	0.121**	2.071	0.039
Consultation with principle regarding problems.	0.004	0.021	0.375	0.708
School building facilitates	0.007	0.105**	2.015	0.045

*Note: *,** & ***. Shows significant at the 0.01, 0.05 and 0.10 level.*

Source: Author compilation

Table 5 demonstrates the model summary of the model 1, the effect of school-environment on SAA. The R^2 value is 0.121 which indicated that the 12 percent variations occurs in the model due the independent variables, while, the Adjusted R^2 value is 0.094 which indicated that the 9 percent variations occurs in the model due the explanatory variables. The standard-error of the estimates is 0.0712 shows that there are very low variations in the model.

Table 5: Model Summary

Model	R	R^2	Adjusted R^2	Std. Error	R^2 Change	F Change	df1	df2	Sig. F Change
1	0.348[a]	0.121	0.094	0.0712	0.121	4.564*	11	365	0.000

Table 6 presents the analysis of variance (ANOVA) of the model 1, the effect of ScE on student's academic achievements. The F-statistic value is 4.564 with p-value 0.000, and one percent level of significance. Which means that overall modal is significant.

Table 6: ANOVA Results

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	0.255	11	.023	4.564*	.000b
	Residual	1.852	365	.005		
	Total	2.106	376			

Conclusion and Recommendations

The main objectives of this study to investigate the impacts of school-environment on the students' academic achievements at Secondary-school level in Khyber Pakhtunkhwa. This study used the cross section primary data and used all schools situated in the province Khyber Pakhtunkhwa, Pakistan as population. The study collected data through self-made questionnaire from 377 students studying in class 10th of the different school of District Kohat, Peshawar, Charssadda, Mardan, Dir, Malakand and Swat. This study used the ordinary least square method, ANOVA, correlation, and descriptive statistic to analyze the data. This study concluded that the physical and psychological school environment has positive impact on the students' academic achievement in the Khyber Pakhtunkhwa, Pakistan. This study recommended that the government needs to focus on the provisions of school infrastructure, building and other facilities, the provisions of good physiological environment and the provisions of library, and laboratory school to improve student's academic performance.

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