

Impact of Environmental Factors on Student's Educational Background and Their Future Performance

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ABSTRACT

This study examine the impact of environmental factors on student's educational background and their future performance among 500 male and female students of high school classes four tehsils of district Bhakkar. Environmental factors have both type of impacts positive and negative impacts on students educational development and their future development such as physical, moral, Socioeconomic status , Parental involvement and Peer influences .In this study objectives were to investigate (1).Identifying strategies to create a conducive learning environment (3) Developing interventions to mitigate negative environmental impacts (4) Raising awareness about the importance of environmental factors in education hypotheses and research questions were designed for the purpose of testing and answering through the collected empirical data from the sample group and these objectives testified by hypotheses. The population of the study included all the govt high school from which the researcher selected 500 respondents through stratified random sampling techniques. The design selected for the study was survey. The researcher designed research instruments for data collection from the respondents of the study, one was a Likert scale questionnaire

INTRODUCTION

Environmental factors can have a significant impact on students' educational background and their educational performance. Different types of environmental factors which are home based or out directly and indirectly involved on students future educational performance and these may be physical, cultural, moral, social, parental or school environment based.

According to Dymont J (2005) the physical environment of a school can also impact students' educational background and performance. Students who attend schools with well-maintained facilities and classrooms that are conducive to learning are more likely to perform better academically than students who attend schools with poorly maintained facilities and classrooms.

Blair, D (2009) explore Cultural factors, such as race and ethnicity, can also influence students' educational performance. For example, students from minority backgrounds may experience discrimination, which can lead to lower self-esteem and academic achievement.

Dymont, J. E., & Bell, A. C. (2008) are view that the social environment of a school can also impact students' educational background and performance. Students who attend schools with supportive and inclusive social environments are more likely to thrive academically than those who attend schools with negative social environments.

Socioeconomic status: Students from low-income families may have limited access to resources such as books, technology, and extracurricular activities. This can impact their educational background and future performance by limiting their opportunities for learning and personal growth.

Muñoz, S. A (2009) says Research shows that students whose parents are involved in their education are more likely to perform better academically. This involvement can take many forms, such as helping with homework, attending parent-teacher conferences, and volunteering at school.

Lester, S., & Maudsley (2006) explore that the quality of the school can also impact a student's educational background and future performance. Schools with fewer resources may have larger class sizes, fewer extracurricular activities, and fewer advanced placement courses.

Dan Davies, D, Jindal-Snapet (2013) explore that Students can be influenced by their peers, both positively and negatively. Peer pressure can affect academic performance, and students who are surrounded by peers who value education and learning are more likely to perform well.

Gilavand A, Espidkar F, Gilavand (2016) says that the home environment can also impact a student's educational background and future performance. Students who have a supportive home environment with a stable family structure are more likely to succeed academically.

Overall, environmental factors can have a significant impact on a student's educational background and future performance. Addressing these factors can help ensure that all students have the opportunity to succeed academically.

LITERATURE REVIEW

The environmental factors that surround students can have a significant impact on their educational background and future performance. Some of the aims of understanding these impacts include:

Identifying the factors that influence students' academic achievement: Environmental factors such as socioeconomic status, family background, school quality, and neighborhood conditions can all have an impact on a student's academic achievement. Understanding these factors can help educators and policymakers develop strategies to mitigate negative impacts and support students who face barriers to academic success.

Mainly improving educational outcomes for all students by identifying and addressing environmental factors that contribute to achievement gaps, educators and policymakers can work to improve educational outcomes for all students, regardless of their background or circumstances. Supporting students' social and emotional development: Environmental factors such as school climate, safety, and social relationships can impact students' social and emotional development, which in turn can influence their academic success. By understanding these impacts, educators can develop strategies to support students' social and emotional well-being, which can contribute to their long-term success. Promoting equity and reducing disparities: Understanding the environmental factors that contribute to disparities in educational outcomes can help educators and policymakers develop targeted interventions to promote equity and reduce disparities. This can include efforts to improve school quality, increase access to resources, and provide targeted support to students who face systemic barriers to success.

Overall, understanding the impact of environmental factors on students' educational background and future performance is critical for promoting equity, improving outcomes for all students, and supporting students' holistic development.

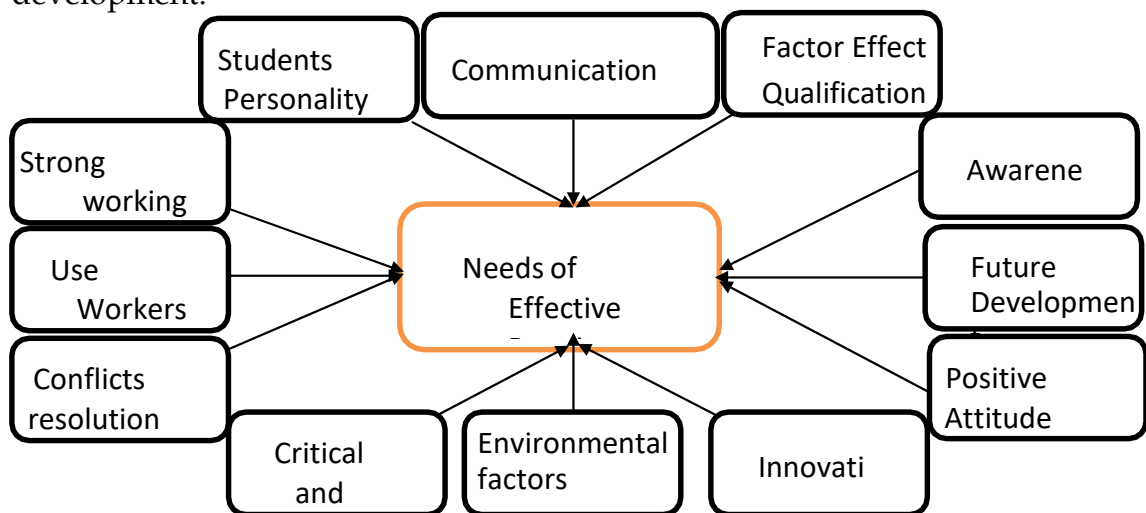


Figure 1. Conceptual Framework

METHODOLOGY

Participant or population were school students admitted in different classes and their class wise group had been taken. Sample was taken via simple random sampling techniques with the help of Krejice and Morgan table 1970 and sample size is 350. Quantitative approach was used.

RESULTS

After data collected from respondents it analyzed by SPSS and other statistical significance and also means, frequency, standard deviation and values. Further analyzed tables are as

Table 1. Impact of Environmental Factors on Student's Educational Background and Their Future Performance

		Freque ncy	Percent	Mean	SD	t value	P value
Valid	Group A	432	49.1	1.5309E2	31.68393	-6.373	.000
	Group B	272	50.9	1.6753E2	29.18251		
	Total	704	100.0				

This section deals with the demographic information of respondents of the sampled groups. The table 4.1 describes the representation of sampled group from school students bhakkar for the study. A total of 432 (49.1%) Group A members and Group B 272 (50.9%) were investigated for this study.

The mean differences between groups respondents were significant as shown by the t value -6.473 with p value .000

Table 2. Gender-wise Description and Comparison

		Freque ncy	Percent	Mean	SD	t value	P value
Valid	Male	432	66.7	1.5865E2	31.53571	-1.697	.072
	Female	272	33.3	1.6268E2	26.97348		
	Total	704	100.0				

Like table 1 the table 2 illustrates gender-wise representation of the respondents from universities and Madaris of Khyber Pakhtunkhwa for this study. A total of 476 which is 67% of the sample group belong to male gender and 238 which make 33% of the sample belong to female gender.

The differences between male and female respondents on educational leadership is not significant as the mean scores 1.5865E2 and 1.6268E2 of male and female were not different which were verified by the t value -1.697 that is not significant at .072 which is higher than .05.

Table 3. Environmental Factors Percentages Age Wise

		Frequency	Percent	Mean squares	F	P value
Valid	10 to 12	398	55.7	2119.113	2.347	.072
	12 to 14	248	34.7			
	14 to 15	56	7.8			
	15 and above	12	1.7			
	Total	714	100.0			

Table 3 presents physical age of respondents of the study. This description reveals that 56% of the respondents belong to the age group of 10 to 12 while 35% belong to the age group of 12 to 13 and only 8% and 2% belong to the age groups and above.

These results showed that majority of respondents belong to young age group of 10 to 12 which reveals that majority of learning in schools. Furthermore, from the perspectives of differences among the selected age groups the f value 2.347 and the p value is .072 which is higher than

Table 4. Impact of Environmental Factors on Student's Educational Background and Their Future Performance

S #	Statements	Group A		Group B		t	P value
		Mean	SD	Mean	SD		
1	Students of institution has clear Vision	4.10	1.044	4.48	.879	-5.333	.000
2	Inspires the followers towards Vision	3.99	.987	4.36	.947	-5.050	.000
3	Persuades goodness and prevent	4.03	.927	4.44	.901	-5.890	.000
4	Takes as responsibility	4.03	.991	4.42	.944	-5.356	.000
5	Producing competent future professionals	4.05	1.037	4.51	.835	-6.520	.000
6	Environmental reformation	3.76	1.268	4.52	.839	-9.678	.000
7	Inspires others	3.72	1.244	4.55	.787	-10.925	.000

Table 4 illustrates the perceptions of students and mean scores 4.10 with SD 1.044 showed that the respondents of universities were agreed that their educational leaders have clear vision for their institutions. Similarly, the mean score 4.48 with SD .879 of the perceptions of the school learner about the practices and concept of educational performance reflected that they were agreed. Based on the results, the t value -5.333 which was significant at .000 showed

Research Results

Table 5. Impact of Environmental Factors on Student’s Educational Background and Their Future Performance

S#	Statement	Group A		Group B		T	p value
		Mean	SD	Mean	SD		
1	Develop Students through moral teachings	3.64	1.277	4.39	.922	-9.048	.000
2	Tackling environmental issues	3.78	1.051	4.29	.877	-6.944	.000
3	Competent and creative to inspire	3.93	1.045	4.29	.905	-4.932	.000
4	Consults in decision making	3.79	1.128	4.15	1.192	-4.047	.000
5	School organizational gains	3.77	1.099	4.35	3.157	-2.993	.003
6	Role model, what he expects from others	3.77	1.028	4.15	1.080	-4.749	.000
7	Prefers doing things in ethics manner	3.94	1.012	4.44	.881	-7.091	.000
8	Exhibits educational background	3.90	1.000	4.36	.860	-6.623	.000
9	Future Trustworthy and self-accountable	3.91	1.021	4.29	.949	-5.070	.000
10	Motivate others through spiritual activities and performance	3.79	1.058	4.34	.896	-7.464	.000

Above table show Impact of environmental factors on student’s educational background and their future performance in different types of indicators. Most top indicator such develop students through moral teachings means score 3.64 while in group B 4.39. First statement shows that Group B level of educational performance more affected by environmental factors

DISCUSSION

The impact of environmental factors on students' educational background and future performance is a complex and multifaceted issue. Numerous studies have shown that environmental factors such as family background, socioeconomic status, parental education level, and access to resources like quality schools, teachers, and educational materials can significantly influence students' academic success. Students from disadvantaged backgrounds are more likely to experience educational challenges, such as low academic achievement, high dropout rates, and limited opportunities for post-secondary education. They are also more likely to face socio-economic barriers to success, such as poverty, inadequate housing, lack of access to healthcare, and limited access to technology.

CONCLUSIONS AND RECOMMENDATIONS

However, it is essential to note that while environmental factors can have a significant impact on a student's educational outcomes, they are not deterministic. Many students from disadvantaged backgrounds have gone on to achieve great success in their academic and professional lives. To overcome the negative impact of environmental factors, students may need additional resources, such as mentoring programs, after-school programs, access to academic support, and other interventions that can help them succeed academically and prepare for the future. In conclusion, environmental factors play a significant role in shaping students' educational background and future performance. However, with the right resources and support, students can overcome these challenges and achieve success in their academic and professional lives.

There are several implications that could help decrease the environmental impact of students' education:

- Reduce the use of paper: Encourage teachers and students to use electronic devices such as laptops, tablets, and smartphones to take notes, read materials, and complete assignments. This can significantly reduce the amount of paper used in schools.
- Promote waste reduction and recycling: Schools can implement recycling programs and encourage waste reduction through composting and reducing the use of single-use plastics.
- Encourage sustainable transportation: Encourage students to use bicycles, public transport, or walk to school instead of using cars. This can reduce greenhouse gas emissions and air pollution.
- Integrate sustainability into the curriculum: Incorporate environmental sustainability into the curriculum, including topics such as climate change, conservation, and renewable energy. This can help raise awareness and promote a culture of environmental responsibility among students.
- Reduce energy consumption: Schools can reduce energy consumption by using energy-efficient lighting, heating, and cooling systems, and by turning off lights and electronics when not in use.
- Engage in eco-friendly activities: Encourage students to participate in eco-friendly activities, such as planting trees, cleaning up litter, and conserving water. This can help students learn about the importance of protecting the environment and develop a sense of responsibility.

By implementing these recommendations, schools can significantly decrease their environmental impact and promote a culture of sustainability among students.

REFERENCES

- Ahmadi Afusi Z, Zarghami Z, Mahdinejad J. A Study on Designing Open Space School and its Relation, with Improving Happiness among Students. *Indian Journal of Fundamental and Applied Life Sciences*, 2014; 4(S3): 924- 31.
- SapnaCh, Sianna A., Victoria C, Andrew N. Designing Classrooms to Maximize Student Achievement. *Policy Insights from the Behavioral and Brain Sciences*, 2014; 1(1): 4-12
- Gilavand A, Hosseinpour M. Investigating the Impact of Educational Spaces Painted on Learning and Educational Achievement of Elementary Students in Ahvaz, Southwest of Iran. *Int J Pediatr* 2016; 4(2): 1387-96.
- AfrouzGh. Education of Exceptional Children, Tehran: Tehran University Publications; 2005; 201-202.
- Gilavand A. The Comparison of Iranian and Foreign Students' Motivations to Choose Dentistry Field of Study. *Int J Pediatr*. 2016; 4(6): 1993-2010.
- Gilavand A, Espidkar F, Fakhri A. A comparative evaluation of depression and anxiety rate among native and non-native students of dentistry school at Ahvaz JundishapourUniversity of medical sciences. *Educational Development of Jundishapur*. 2015;6(2):185-90.
- Gilavand A, Jamshidnezhad A. The Effect of Noise in Educational Institutions on Learning and Academic Achievement of Elementary Students in Ahvaz, South West of Iran. *Int J Pediatr* 2016; 4(3): 1453-63.
- Gilavand A, Gilavand M, Gilavand S. Investigating the Impact of Lighting Educational Spaces on Learning and Academic Achievement of Elementary Students. *Int J Pediatr* 2016; 4(5): 1819-28.
- Lewinski P. Effects of classrooms' architecture on academic performance in view of telic versus paratelic motivation: a review. *Front Psychol*. 2015; 6: 746.
- Profusek PJ, Rainey DW. Effects of baker-miller pink and red on state anxiety, grip strength, and motor precision. *Percept Mot Skills*, 1987; 65(3):941-42.
- Schauss AG. The physiological effect of color on the suppression of human aggression: Research on Baker- Miller pink. *Int. J. Biosoc. Res*. 1985; 2(3):55-64.
- Bennett CP, Hague A, Perkins C. The use of Baker-Miller pink in police operational and university experimental situations in Britain. *Int J Biosoc Med Res* 1991; 13(4): 118-27.
- Gilliam J E, Unruh D. The effects of baker-miller pink on biological, physical and cognitive behaviors. *Journal of Orthomolecular Medicine*, 1988; 3(4): 202-6.
- Elliot AJ, Maier MA, Moller AC, Friedman R, Meinhardt J. Color and psychological functioning: the effect of red on performance attainment. *J. Exp. Psychol. Gen* 2007; 136(6):136-54.
- Gimbel T. *Healing with Colour*. London: Gaia; 1997; 1(1):135-44.
- Pile J. *Colour in Interior Design*. New York, NY: McGraw-Hill; 1997. P. 69-112.
- Gifford R. *Environmental Psychology*. Colville, WA: Optimal books; 2007. P.191-6.
- Stone N. Designing effective study environments. *J Environ Psychol* 2001; 21(6):179-90.

- Chiang C, Lai C. Acoustical environment valuation of joint class- rooms for primary schools in Taiwan. *Build. Environ.* 2008; 43(4):1619–1632.
- Mills, J. H. Noise and children: a review of literature. *J. Acoust. Soc. Am.* 1975; 58(4):767-779.
- DiSarno N.J.,Schowalter,M.,andGrassa,P.Classroom amplification to enhance student performance. *Teach. Except.Children.* 2002; 34(6):20-26
- Zannin PHT, Passero CRM, Zwirtes DPZ. Assessment of acoustic quality in classrooms based on measurements, perception and noise control, in *Noise Control, Reduction and Cancellation Solutions in Engineering.* ed. Siano D, editor. Rijeka: InTech - Open Access Publisher; 2012.
- Zannin PHT, Zwirtes DPZ. Evaluation of the acoustic performance of classrooms in public schools. *Appl. Acoust.* 2009; 70: 625-35.
- Zannin PHT, Marcon CR. Objective and subjective evaluation of the acoustic comfort in classrooms. *Appl. Ergon* 2007; 38: 675-80.
- Kruger,E.L, Zannin,P.H.T. Acoustic, thermal and luminous comfort in classrooms. *Build. Environ.* 2004; 39:1055-63.
- The Noble Quran, Chapter 24: Verses, 1-64.
- Noorbakhsh S. *Light in the wisdom of Sohrevardi.* Second Edition. Tehran: Saeed Mohebi Publication; 2005.
- Bright ideas: Exploring the importance of light on learning. Available at: <http://www.euronews.com/2016/02/05/brightideas-exploring-the-importance-of-light-onlearning/>.
- Barrett P, Davies F, Zhang Y, Barrett L. The impact of classroom design on pupils' learning: Final results of a holistic, multi-level analysis. *Building and Environment*,2015; 89: 118-133.
<http://dx.doi.org/10.1016/j.buildenv.2015.02.013>
- Mott M, Daniel H. Robinson, Walden A, Burnette J, Angela S. Rutherford. *Illuminating the Effects of Dynamic Lighting on Student Learning* SAGE Open April-June 2012: 1-9
- Samani, A. S., "The Impact of Indoor Lighting on Students' Learning Performance in Learning Environments: A Knowledge Internalization Perspective." *International Journal of Business and Social Science*, 2012; 3(24): 127- 136.
- Yacan, Safak, "Impacts of Daylighting on Preschool Students' Social and Cognitive Skills". *Interior Design Program: Theses*, 2014; Paper 11.
- Boray P. F., Gifford R., Rosenblood L. Effects of warm white, cool white and full-spectrum fluorescent lighting on simple cognitive performance, mood and ratings of others. *J. Environ. Psychol.* 1989, 9, 297–307. 10.1016/S0272-4944(89)80011-8 [Cross Ref]
- Malone K, TranterT. *Children's Environmental Learning and the Use, Design and Management of Schoolgrounds.* *Children, Youth and Environments.* 2003; 13(2).
- Barros, R. M., Silver, E. J., & Stein, R. E. K.. School recess and group classroom behavior. *Pediatrics*,2009; 123(2): 431-436.

- Dyment J. "Gaining ground: The power and potential of school ground greening in the Toronto District School Board: Evergreen." 2005.
- Blair, D. The child in the garden: an evaluative review of the benefits of school gardening. *Journal of Environmental Education*, 2009; 40(2): 15-38.
- Dyment, J. E., & Bell, A. C. Grounds for movement: green school grounds as sites for promoting physical activity. *Health Education Research*, 2008; 23(6): 952-962.
- Muñoz, S. A. Children in the outdoors: a literature review. Sustainable Development Research Centre, 2009.
- Lester, S., & Maudsley, M. "Play, naturally: A review of children's natural play." Children's Play Council, 2006.
- Dan Davies, D, Jindal-Snape D, Collier C, Digby R, Haya P, Howea A, Creative learning environments in education—A systematic literature review. *Thinking Skills and Creativity*, 2013; 8(5): 80– 91.
- Gilavand A, Espidkar F, Gilavand M. Investigating the Impact of Schools' Open Space on Learning and Educational Achievement of Elementary Students in Ahvaz, Southwest of Iran. *Int J Pediatr*; 2016; 4(4): 1663-1670.
- BazzarChamazkoti R. The Role of Educational Environment on Students Achievement in Elementary Period, *European Academic Research*, 2014; 2(5): 6240-57.
- Linnerud, K., Holden, E., Gilpin, G., & Simonsen, M. (2019). A normative model of sustainable development: how do countries comply?. In *What Next for Sustainable Development?*. Edward Elgar Publishing.
- Linnerud, K., Holden, E., Gilpin, G., & Simonsen, M. (2019). A normative model of sustainable development: how do countries comply?. In *What Next for Sustainable Development?*. Edward Elgar Publishing.
- Zhang, X., Gao, P., & Snyder, M. P. (2021). The exposome in the era of the quantified self. *Annual Review of Biomedical Data Science*, 4, 255-277.