

IDENTIFICATION OF FACTORS AFFECTING THE QUALITY OF EDUCATION IN RURAL AREAS' ELEMENTARY SCHOOLS

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Abstract

The purpose of the study was to identify the factors affecting the quality of education at elementary level in rural areas. The population included all the heads of public elementary schools of district Lodhran. The sample for the study was selected through a stratified random sampling with a sample of 176 head teachers. Self developed and validated survey questionnaire was used as a research tool to collect data from head teachers. Statistical tools such as Pearson correlation and confirmatory factor analysis was used to analyze the data. The results showed that physical facilities, cultural norms, quality teaching, parents' unemployment/poverty, cultural traditions, cultural attitudes, Govt. policies, health issues, teaching methods/techniques, parental attitude, infrastructure, vast and ventilated classrooms, festivals and events, financial constraints are the factors that affect quality education at elementary level. Moreover it was found that there is significant correlation among all identified factors that affect quality education at elementary level. Improving school Infrastructure, addressing financial constraints, and revising recruitment process are recommended to ensure quality education at elementary level.

Keywords: Elementary Schools, Factors, Quality of Education, Rural Areas

Introduction

Rural education in Pakistan suffers from conditions that hinder the effectiveness and feasibility of education for millions of children (Suhag & Khan, 2020). Such obstacles include infrastructural depravities, teacher accountability, scarcity, socio-economic factors, and a disorganized system of governance that slows down educational achievement and gives a feeling of consistent inequity in teaching between urban and rural areas.

An objective analysis of the factors causing low educational quality in the rural region of Pakistan reveals that school physical facilities are below par. Unfortunately, many of these schools in rural areas are 'hopeless' in terms of provision of basic needs like a light in students' hostels, clean water and sanitation facilities. UNESCO (2020) reveals that almost half of the schools in rural Pakistan have no electricity; this hampers the teaching schedule as schools are left with few hours in the day to teach, thus compromising the students' chance to learn. Furthermore, there is lacking adequate classroom environments and an absence of basic infrastructure, such as furniture, to help in the overcrowded classes, thus limiting the teacher's ability to present quality education to their students.

Lack of qualified teachers is another major problem affecting rural education; few teachers, especially in rural areas, are skilled enough to teach their students. According to Save the Children (2021), rural schools face a higher pupil-teacher ratio than the recommended one.

Socio-economic factors present a significant challenge towards education enrolment and completion in Pakistan's rural areas (Mughal et al., 2019). Enormous challenges still present

themselves as poverty strikes many families and they cannot meet the financial requirements for their children to go to school, let alone buy the school fees, uniforms, and other educational necessities.

Besides infrastructural, teacher-related, and socio-economic issues, conflict and security issues deteriorate the educational situation in rural areas of Pakistan (Mughal et al., 2019). Some parts of the country experience rampant insecurity and acts of violence that incessantly threaten and interrupt the provision of education services and the safety of learners, teachers and educational facilities. According to the World Bank (2018), conflict hinders education achievement and calls for appropriate interventions for the sustainable rebuilding of conflict-affected regions for effective learning.

Literature review

It is known that quality educational resources are the key to making learning relevant and effective for all and achieving positive educational outcomes. A perception that schools may not have enough chairs, desks, libraries and laboratories, most School facilities may be congested, thus limiting the teaching and learning processes (UNESCO, 2020). However, the lack of proper maintenance of facilities and inefficient sanitation can contribute to poor health among students and subsequent absenteeism which would demerit the results achieved in learning. Limited access to transportation as well as the geographical location of schools poses a major problem to students from rural areas. According to World Bank (2019), distance to school is normal long and requires a lot of time to cover and as such, students experience poor attendance and punctuality.

Research on the challenges of rural education in Pakistan has consistently highlighted several key issues that hinder the provision of quality education in these areas. According to Siddiqui (2019), rural schools face a number of infrastructural deficiencies, such as the lack of proper school buildings, insufficient classroom space, and inadequate furniture. Many schools in rural areas operate in substandard facilities, with a large percentage of them having no access to electricity or clean water, severely limiting the ability to create conducive learning environments. UNESCO (2020) reported that nearly 50% of rural schools in Pakistan do not have electricity, and many lack basic sanitation facilities. This absence of necessary infrastructure significantly affects both teaching quality and student engagement, leading to poorer educational outcomes compared to urban areas.

There are several factors which affect the quality of education in the rural areas, especially the socio-economic factors. In areas that are characterized by high levels of poverty it becomes difficult for parents to cater for expenses related to education like uniform, books and transport. UNICEF (2019) revealed that children from the poor families in the rural areas have lower chances of getting enrolled in the school as compared to the urban children and they are also vulnerable to drop out due to the financial difficulties. Pakistan has one of the highest out of school rates where over 40% of children in rural areas do not complete primary education mainly because of lack of financial resources (Ahmad et al., 2020).

Gender difference is one of the most crucial issues affecting rural education systems in most developing countries including Pakistan. Efforts have been made to enhance the gender balance in education although girls in the rural areas lag behind the boys in school enrollment. As stated by UNESCO (2020) the enrolment of girls in rural areas of Pakistan is 60% while for boys it is 80%. The cultural and economic differences are the major determinants of these differences. Another factor is that there are still gender stereotyping within the education system that limits girls' academic performance. In the rural areas for instance, schools are also unable to meet the needs of the young girls as far as facilities are concerned especially sanitation.

In addition, there is a scarcity of female teachers which in turn decreases the rate of enrollment of girls' education out of fear of impropriety and insecurity (Naz & Malik, 2020). Ahmed et al. (2019) stated that enhancing the gender-sensitive policies, for instance, employing more female teachers and constructing the separate facilities for girls can help in erasing these gaps and enhancing gender equity in education. Gender disparities present another significant issue in rural Pakistan. Female enrollment rates in rural schools are considerably lower than those of boys, often due to a lack of female teachers and inadequate facilities like separate washrooms, which discourage families from sending their daughters to school. The conservative attitudes prevalent in these areas further exacerbate this issue, as education for girls is often considered a low priority.

Significance of Study

This study is crucial for addressing educational inequalities between rural and urban areas in Pakistan, where access to quality education is significantly limited. By focusing on rural regions of district Lodhran, Punjab, Pakistan, the research aims to highlight the socio-economic, infrastructural, and cultural barriers that hinder educational progress. The findings will provide valuable insights for policymakers, enabling them to implement targeted interventions that improve educational outcomes in rural communities. In line with global standards such as the United Nations' Sustainable Development Goal 4 (Quality Education), this study contributes to the broader effort to promote inclusive and equitable education, fostering socio-economic development in underserved rural areas.

Additionally, the research has practical implications for improving teacher recruitment, training, and retention in rural schools. By addressing these core issues, the study can help enhance the quality of education delivered in rural regions, promoting long-term economic growth and community development. The study also aims to encourage greater community involvement in educational reforms, which can lead to more sustainable, locally-driven solutions that directly address the needs of rural populations. Through this research, stakeholders can collaborate to close the educational gap between rural and urban settings and create a more equitable society.

Research Objectives

The objectives of the study were:

1. To identify the factors influencing quality of education in rural areas in relation of infrastructure as perceived by head teachers of elementary schools.
2. To assess relationship between factors influencing quality of education at elementary level as perceived by head teachers of elementary schools.

Research Questions

Following research questions were addressed:

1. What are the factors influencing quality of education in rural areas in relation of infrastructure as perceived by head teachers of elementary schools?
2. Is there any relationship between factors influencing quality of education at elementary level as perceived by head teachers of elementary schools?

Research Design

This study employed quantitative cross sectional survey design in the attempt to identify the factors that have an impact on quality of education in rural elementary schools of district Lohran, Punjab, Pakistan.

Population

The population of the study was all the head teachers working in public elementary schools in district Lodhran Punjab, Pakistan.

Sample Size and Sampling Technique

In the present study, a stratified random sampling approach was used to select the sample. The sample of the study comprised 176 male and female head teachers from elementary schools within the district Lodhran so as to capture different perceptions on the factors that affect quality education.

Instrument

A questionnaire was constructed after evaluating the pertinent literature. A formal, written set of closed-ended questions is provided to each participant in a study to complete. Five-point rating scale was used to design the survey questionnaire. Using the reliability method data was assessed during pilot. Chronbach alpha, which examined the consistency of correlation coefficients among several variables used to compute reliability of tool. The reliability of these factors was evaluated by computing the correlation coefficient between variables and factors. Chronbach Alpha value was found to be 0.719, which was reliable.

Data Collection

Data collection was carried out over several weeks, allowing sufficient time to reach all selected schools and respondents. The process is closely monitored to ensure that it follows the planned schedule and that all necessary data is collected. The researcher maintains detailed records of the data collection process, including the dates, locations, and any issues encountered. This ensures that the data is complete and that any gaps or inconsistencies can be promptly addressed. The collected data is then compiled and entered into a database for analysis. The data collection process is designed to be rigorous and systematic; ensuring that the data collected is reliable and representative of the study population.

Analysis and Interpretation of Data

Confirmatory factor analysis and Pearson correlation was applied to analyze the data.

Table 1 Factor Loading

S/No.	Factors													
	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12	F13	F14
S1	.800													
S2	.822													
S3	.720													
S4	.695													
S5	.651													
S6	.692													

S7	.746													
S8	.712													
S9	.797													
S10	.751													
S11	.789													
S12	.743													
S13	.615													
S14	.532													
S17	.546													
S18	.508													
S29		.896												
S30		.894												
S42		.896												
S43		.894												
S44		.791												
S45		.465												
S31			.659											
S32			.462											
S33			.527											
S34			.747											
S35			.798											
S36			.747											
S52			.639											
S21				.838										
S22				.756										
S23				.627										
S26					.883									
S38					.420									
S39					.883									
S46						.765								
S47						.866								
S48						.727								
S53							.800							
S54							.731							
S55							.677							
S27								.891						
S40								.891						
S49									.794					
S50										.845				

2	Pearson Correlation	3.66	.89	-	1														
	Sig.			.130	.085														
3	Pearson Correlation	4.00	.72	.335**	.007	1													
	Sig.			.000	.928														
4	Pearson Correlation	4.06	.84	.529**	-.075	.142	1												
	Sig.			.000	.324	.060													
5	Pearson Correlation	3.56	.97	.237**	-.019	.226**	.177*	1											
	Sig.			.002	.806	.003	.019												
6	Pearson Correlation	4.21	.79	-.219**	-.030	-.140	.017	-.174*	1										
	Sig.			.003	.694	.063	.825	.021											
7	Pearson Correlation	3.60	.86	-.086	.027	.315**	-.070	.023	.209**	1									
	Sig.			.258	.724	.000	.354	.761	.005										
8	Pearson Correlation	3.50	1.27	.190*	.100	.149*	.102	.428**	.003	-.050	1								
	Sig.			.011	.187	.048	.177	.000	.970	.509									
9	Pearson Correlation	4.00	.90	-.066	.034	-.021	-.032	-.057	.148	.331**	-.041	1							
	Sig.			.384	.654	.779	.674	.450	.050	.000	.585								
10	Pearson Correlation	4.17	.85	.335**	.078	.138	.159*	.244**	-.112	-.080	.221**	-.089	1						
	Sig.			.000	.303	.068	.035	.001	.141	.291	.002	.243							

11	Pearson Correlation	4.25	.72	.475**	-.019	.193*	.369**	.079	-.050	.008	.168*	.040	.198**	1			
	Sig.			.000	.806	.010	.000	.297	.512	.918	.026	.594	.009				
12	Pearson Correlation	3.82	.90	.669**	-.151*	.069	.435**	.071	-.065	-.095	.159*	-.005	.276**	.375**	1		
	Sig.			.000	.045	.364	.000	.352	.393	.209	.035	.945	.000	.000			
13	Pearson Correlation	3.66	.93	.198**	.007	.112	.224**	.059	.033	-.043	.071	-.199**	.115	.091	.149*	1	
	Sig.			.008	.922	.137	.003	.436	.667	.567	.350	.008	.130	.231	.048		
14	Pearson Correlation	3.96	1.14	-.115	.025	-.080	-.092	.010	.060	.023	-.077	.026	-.059	-.029	-.112	-.042	1
	Sig.			.127	.739	.294	.226	.896	.429	.765	.313	.731	.496	.702	.140	.581	

Table 2 shows that there is significant correlation among identified factors at the 0.01 and 0.05 level (2 tailed) that affect quality education at elementary level.

Discussion

The study found that physical facilities, cultural norms, quality teaching, parents' unemployment/poverty, cultural traditions, cultural attitudes, Govt. policies, health issues, teaching methods/techniques, parental attitude, infrastructure, vast and ventilated classrooms, festivals and events, financial constraints are the factors that affect quality education at elementary level. Similar studies also analyses factors affecting quality of education at primary level in Pakistan. Buildings, infrastructure, teaching materials and computer facilities appear as the most important physical elements that enhance the perceived educational quality (Ahmad and Baloch, 2022; Farooq et al., 2013; Shahzad et al., 2013).

Education quality is highly related to teachers' professional qualifications, school management, and parental engagement, though teacher absenteeism has negative impacts (Ahmad & Baloch, 2022). In family income, adverse home environments for learning or favorable environments for learning determine the normative values (Ahmad & Baloch, 2022). The curriculum and examination systems call for improvement (Ahmad & Baloch, 2022; Shahzad et al., 2013). Instruction modes and evaluation procedures are considered important elements that define the educational outcomes (Shahzad et al., 2013). The papers have recommended adequate physical facility, qualified teachers, and clear examination systems as a way to enhance the quality of Primary Education in Pakistan (Ahmad & Baloch, 2022; Farooq et al., 2013; Shahzad et al., 2013).

Moreover it was found that there is significant correlation among all identified factors that affect quality education at elementary level. Similarly Mursiani (2023) found out that only leadership style of the administrators had a mediated relationship with school quality through

teacher leadership styles and school climate; however, both teacher leadership styles as well as school climate bore a direct relationship with quality education. According to Ahmad et al. (2023), several factors have been found to be directly associated with, or supportive of, quality education and education for all and these include teachers, school administrators, curricula, instructional facilities, parents and homes respectively. Teacher education, training, effectiveness, motivation, and knowledge have been on the side of enhancing education quality (Ahmad et al., 2023). On the other hand, teacher's absence, old curriculum, and a faulty examination model had negative effects on the quality of education (Ahmad et al., 2023). The studies employed cross-sectional questionnaires, interviews, focus group discussions and employed quantitative and qualitative analysis. According to Ahmad et al., (2023), there is a need to recruit well qualified, professional and well trained teachers in the school in order to improve on the quality of education offered in the primary schools.

Conclusion

It may be concluded that physical facilities, cultural norms, quality teaching, parents' unemployment/poverty, cultural traditions, cultural attitudes, Govt. policies, health issues, teaching methods/techniques, parental attitude, infrastructure, vast and ventilated classrooms, festivals and events, financial constraints are the factors that affect quality education at elementary level. Moreover it was found that there is significant correlation among all identified factors that affect quality education at elementary level. This study highlighted the complex difficulties that affect the quality of education in countryside areas especially district Lodhran. Important challenges like poor infrastructure and insufficient teachers affect the learning results for children in these areas. Due to absent essentials like electricity and clean water and overcrowded classrooms the learning environment proves grim for teachers and students. In addition to this the deficit of skilled teachers and excessive student-to-teacher ratios obstructs the ability for students to attain the one-on-one guidance essential for growth. The challenge is heightened by financial and job-related struggles which push a lot of learners mainly girls to exit school early.

The unequal treatment of genders is an urgent problem because traditions usually emphasize boys' learning over girls'. This investigation underlines the necessity for community and parental participation that is presently very low. The work urges a broad framework aimed at boosting the quality of education in rural Pakistan. Proposed measures contain advancing infrastructure development and attracting competent teachers with attractive incentives to reduce gender gaps through tailored policies and promoting active involvement of parents in the communities. Additionally integrating technology and refreshing the curriculum are crucial actions to close the educational divide between rural and urban regions. A complete initiative focused on these interrelated problems can markedly boost the educational quality in rural settings.

Recommendations

1. Improving School Infrastructure

- **Upgrade facilities:** Schools need investments in basic infrastructure, including electricity, clean water, and sanitation facilities, particularly gender-segregated toilets to support female students.

- **Build more classrooms:** To reduce overcrowding, the government should prioritize constructing additional classrooms with proper ventilation, furniture, and learning resources, creating a conducive environment for teaching and learning.

2. Enhancing Teacher Recruitment, Training, and Retention

- **Incentivize rural teaching:** To attract and retain qualified teachers, the government should offer financial incentives such as higher salaries, housing allowances, and hardship bonuses for teachers in rural areas.
- **Provide professional development:** Continuous teacher training and development programs are essential to ensure educators are equipped with modern teaching methods and can manage diverse classrooms effectively.
- **Reduce pupil-teacher ratios:** The government should recruit more teachers to achieve a pupil-teacher ratio closer to the recommended standard of 1:30, enabling better individualized attention for students.

3. Addressing Socioeconomic Barriers

- **Financial support for students:** Providing scholarships, free uniforms, and school supplies can help alleviate the financial burden on families, encouraging school attendance and reducing dropout rates, particularly for girls.
- **School feeding programs:** Implementing nutrition programs in schools would address malnutrition, helping improve students' health, attendance, and academic performance.

Suggestions for Future Studies

The study can be replicated with larger population to enhance the authenticity of results. Moreover, qualitative study may provide in-depth insights.

REFERENCES

- Ahmad, I., & Javed, S. (2021). Teacher turnover in rural Pakistan: The impact on educational outcomes. *Journal of Educational Policy Studies*, 35(2), 134-149.
- Ahmad, R., & Latif, H. (2020). The impact of extracurricular activities on student learning: Evidence from rural schools. *Journal of Rural Education and Development*, 25(1), 66-78.
- Ahmed, S., & Baloch, M. A. (2022). Socio-economic and Institutional factors effecting "Quality Education" in Government primary schools in the Naseerabad division, Balochistan. *Journal of Development and Social Sciences*, 3(2), 447-458.
- Ahmed, S., Baloch, M. A., & Karim, H. (2023). Influence of Teacher Factors on "Quality Education" in Government Primary Schools in the Naseerabad Division, Balochistan, Pakistan. *Annals of Human and Social Sciences*, 4(2), 626-637.
- Farooq, M. S., Chaudhry, A. H., Shafiq, M., & Berhanu, G. (2011). Factors affecting students' quality of academic performance: A case of secondary school level. *Journal of quality and technology management*, 7(2), 1-14.
- Malik, N. (2019). Community engagement in rural education: A case study of Punjab, Pakistan. *Journal of Educational Development*, 45(2), 215-230.

- Mursiani, M. (2023). The Influence of Principal's Academic Supervision, Teacher's Professionalism on the Quality of Education. *PPSDP International Journal of Education*, 2(1), 142-150.
- Save the Children. (2021). Education in rural Pakistan: Challenges and opportunities. Save the Children Report.
- Save the Children. (2021). State of education in Pakistan. Retrieved from <https://www.savethechildren.org>
- Shahzad, S., Ghazi, S. R., Ali, R., & Shah, S. F. (2013). Quality of primary education in Khyber Pakhtunkhwa Pakistan. *International Journal of Physical and Social Sciences*, 3(9), 261-274.
- Siddiqui, M. N. (2019). Quality education in rural areas: Challenges and opportunities. *Journal of Educational Studies*, 12(2), 78-93.
- Suhag, A., & Khan, N. (2020). National educational policies of Pakistan with reference to social justice: A critical analysis. *Global Educational Studies Review*, 3(1), 166-174.
- UNESCO. (2020). The integration of technology in rural education: A global perspective. United Nations Educational, Scientific and Cultural Organization.
- UNESCO. (2021). The importance of early childhood education in achieving educational goals. United Nations Educational, Scientific and Cultural Organization.
- UNESCO. (2020). *Education for rural people*. Retrieved from <http://www.unesco.org>
- UNESCO. (2020). Global Education Monitoring Report 2020. Paris: UNESCO.
- UNICEF. (2019). Access to education in rural Pakistan: Challenges and solutions. United Nations Children's Fund.