



Strategies Used by Head Teachers to Cope with Teachers' Shortage Problem at the Primary School Level

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Abstract

Teacher scarcity in the global context and Pakistan, particularly at the primary level, is fixed on inadequate preparation, low pay, and difficult conditions of service. This is due to high population density and low levels of educational financing; hence, high student density, low academic integrity, and poor chances for kids. This descriptive survey research was carried out in Tehsil Murree, and 150 primary school head teachers were selected randomly for data collection. A questionnaire was used in data collection and administered through home visits, emails, and postal services. The analysis was conducted using the software SPSS, while data protection was ensured according to ethical standards throughout the research process. The teachers' shortage can thus be blamed on low wages, poor opportunities, poor preparation and training, and poor facilities. Remote areas also have problems like scarcity of shelters and transport problems. Some solutions to reduce this crisis include increasing remuneration and employment security, professional development, education, adequate accommodation, and a positive organizational culture. To enhance the quantity and quality of teachers, government expenditure must be enhanced to enhance demands for the education sector. Adopting these measures mitigates the teacher shortage crisis and its effects on quality education and socio-economic growth in Pakistan and other countries.

Keywords: Strategies, Teachers' Shortage, Head Teachers, Primary Level

1. Introduction

The lack of quality teachers is now considered one of the premier global challenges that have the largest effects on the availability and quality of education, with more emphasis on primary education. Quality education is a multi-dimensional concept (Jakkchira, 2020). Teachers are always regarded as the most important players in the educational system, and therefore, if the quality of education is to be improved, it is necessary to invest in the professional development of these educators (Ahmad et al., 2023). This problem is even more accentuated in developing countries such as Pakistan, where, apart from the existing problems of rapid population growth and lack of investment in education, the education sector faces even more woes. The teacher crisis is not only limited to education but expands to the overall development of society's economy.

A shortage of teachers also has many and rather profound implications. Among the short-term effects are, for instance, overcrowded classrooms, loss of learning quality, and limited opportunities for students. Such shortages, in the long run, mean a deterioration of the educational level, the further enlargement of the gap between the rural and the urban populations, and the slower development of the country. In Pakistan, let alone in other grades, the shortage of teachers is most acute in primary grades, where the basic framework of learning personality is set. Due to the following barriers, including inadequate teacher-training programs, low wages, difficult conditions of work, and limited promotion opportunities, there are few qualified educators. Such factors include high attrition rates, which make would-be teachers shy away from joining the teaching profession.

However, the teacher shortage can be solved through the cooperation of many stakeholders, including the government, schools, and teacher training colleges. Therefore, the paper focuses on head teachers and their role in managing and reducing the effects of teacher deficiency on the school. It shows that their strategies and leadership could affirm or offset the influence of resources, hence the quality of education. In 2001, due to the economy's growing collapse, schools received an arrival of teachers, and the teacher supply gap narrowed (Wiggan et al., 2021).

The present research is concerned with the behaviours used by head teachers to manage the shortage of teachers at the primary school level in Tehsil Murree, Pakistan. The cases presented here, those learned in Murree, a tehsil of Punjab province, can well be considered as the typical problem indicative of the overall micro-climate of the education system of Pakistan. From implementing strategies by these head teachers in this region, it becomes easier to compare the potential strategies that may be used in another similar region in the country.

The following reasons will support the significance of this research. First, Primary education is the first level of education that every child must undertake; therefore, quality teaching cannot be overemphasized at this level. Second, the behaviour that head teachers exhibit in implementing these strategies can influence the retention of teachers, outcomes of learners, and overall school productivity. Third, this research can help policymakers and local and national stakeholders where the specific channels or approaches that are working must be considered for the policy-making process and resource distribution processes.

Therefore, the study is based on the general principles of education in Islam, of which education and knowledge acquisition are highly emphasized. The Prophet Muhammad, may peace and blessings be upon him, spoke highly of education, saying, "Every Muslim must acquire knowledge" (Ibn Majah). This outlook on education from the Islamic point of view also gives a cultural and religious concern to the existing shortages of teachers in Pakistan, a Muslim-majority country.

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In turn, the research is based on other investigations that have been carried out concerning teacher shortages and their consequences for learning achievements. For example, García and Weiss (2019) pointed to the escalation of the problem of teacher scarcity and the fact that it affects the generally deprived population to an even greater extent. Similarly, there is still the requirement to identify the approaches that may contribute to combating it, as Carver-Thomas et al. (2022) pointed out.

The importance of this research goes well beyond the regions of Tehsil Murree. The implications are that the results can provide useful input to the discourse on the theories and practice of educational management in developing contexts, especially in areas of similar challenges. Consequently, this research can influence policymakers' decisions and the direction of funding in a way that may lead to novel methods of dealing with teacher shortages.

Further, this research is relevant to Sustainable Development Goal 4, devoted to Quality Education for all, since it investigates the critical and creative thinking of students and teachers to promote the effectiveness of education. Addressing teacher shortages is one of the biggest challenges to quality education. This serves the broader interest of enhancing the quality of education globally.

1.1. Objective of the study:

- To identify the strategies head teachers use to cope with teacher shortage problems.

2. Literature Review

Teacher shortages are across the globe and can be noted from several previous empirical literature reviews. Numerous articles provide an elaborate analysis of the severity and increasing tendency of this problem; one of the most recent works is (García & Weiss, 2019). They established that the problem of scarcity of qualified teachers is even worse than they had earlier thought, with ramifications for both teachers and their learners. It was revealed that there are potential factors to the staff working in a school, such as low teachers' pay, high turnover, and decreased numbers of students entering teacher education programs. As crucial, García and Weiss underlined the categorical effect on less privileged communities, which deepened the educational inequalities.

In the case of developing countries, the demographic changes fuelling teacher scarcity in India have been elaborated by (Viano et al., 2021). The authors emphasized how population growth, urbanization, and migration have stretched education facilities, especially in rural regions. Instructional leadership practices of the primary school head teachers have a significant impact on teacher effectiveness (Ahmad et al., 2020).

It is undeniably evident that teacher shortages affect education significantly, but the impacts vary widely. Carver-Thomas et al. (2022), the author discusses this in detail, describing how it harms student learning and academic achievement. The study also revealed that staff shortcomings are worse for low-income schools and compound income disparity.

Possible solutions to the shortage of teachers and the intervention of technology have also been discussed. McKnight et al. (2016) looked at the possibility of using technology to improve students' learning and cognitive abilities. In cognition, there has been a focus on the development of higher-order thinking skills. Naseer et al. (2022) analyzed the Pakistan Studies textbook regarding the integration of critical thinking skills. In the same way, Jamil, Aslam, et al. (2024) analyzed the Single National Curriculum (SNC) 2020 for Social Studies and the integration of critical thinking skills development in the textbook. Moreover, critical thinking has been focused in different studies with respect to secondary school teachers' perspectives (Jamil, Anwar, et al., 2024; Jamil et al., 2023; Jamil et al., 2021a); teachers' practices (Jamil & Muhammad, 2019; Jamil et al., 2021b), education policy documents focus (Jamil, Aslam, et al., 2024; Jamil, Bokhari et al., 2024; Jamil et al., 2024), secondary level arts and science subjects textbooks (Jamil, Bibi, et al., 2024; Jamil, Bokhari et al., 2024; Jamil, Mehmood, et al., 2024; Jamil et al., 2024) incorporation of critical thinking skills. Specifically, Baird-Thompson (2023) investigated the professional development of American male students' literacy experiences. It was a mixed-method study regarding the impact of interest, motivation, and the use of comprehensive reading science.

In the Pakistani context, different studies have been conducted regarding different aspects of the topic of novice public school teachers' experiences regarding classroom management challenges and administrative support in elementary schools (Saleem et al., 2020), negative emotions and self-created challenges (Saleem & Muhammad, 2020); strategies and challenges of novice public school teachers' classroom management at the elementary level (Saleem, Muhammad, & Qureshi, 2021); novice teachers' perceptions of students' behavioural challenges (Saleem, Muhammad, et al., 2021b); behavioural challenges of students regarding classroom management (Saleem, Muhammad, et al., 2021a); instructional leadership practices of primary school head teachers for teachers' effectiveness (Ahmad & Hamid, 2021); head teachers' instructional approaches impact on teachers' competencies (Ahmad et al., 2021); challenges of instructional supervision faced by primary school head teachers (Arif et al., 2023).

3. Research Methodology

This study employed a descriptive, quantitative approach using a survey questionnaire to examine techniques for coping with teacher shortages in primary schools of Tehsil Murree, Pakistan. The population comprised 150 head teachers from all 150 government primary schools in Tehsil Murree (70 boys' and 80 girls' schools). Due to the small population size, the entire population was sampled for the main study, with 10% (15 head teachers) used for the pilot study. A random sampling technique was used to select participants. A five-point likert scale questionnaire was developed based on the study objective. Each item addressed a specific research question related to coping with

teachers' shortages. Content validity was established through expert review. Three field experts evaluated the questionnaire and provided feedback, which was incorporated to enhance validity. A pilot study was conducted with 15 head teachers (10% of the population) excluded from the main study to ensure reliability. Responses were analyzed using Cronbach's alpha coefficient in SPSS version 23 to assess internal consistency. Mean scores and standard deviations were computed regarding each statement.

4. Findings of the Study

Table 1: Mean and SD for Strategies used by head teachers for tackling teachers shortages

S. No.	Items	Mean	Standard Deviation
1	Innovation recruitment strategies	1.18	1.05
2	Collaboration with Local Education Authorities	2.49	1.21
3	Prioritizing Professional Development	2.39	1.22
4	Implementing Flexible Scheduling and Utilizing Part-time Teachers	2.57	1.21
5	Establishing Partnerships with Teacher Training Institutions	2.57	1.27
6	Community Engagement Initiatives to Promote Education and Teaching Careers	3.34	1.33
7	Leveraging Technology for Online Courses and Virtual Teaching	3.03	1.32
8	Mentoring Programs for New Educators	3.33	1.30
9	Collaboration with Neighboring Schools	3.15	1.28
10	Creative Teaching Methods with Classroom Assistants and Volunteers	3.14	1.32
11	Engaging Retired Teachers and Professionals as Guest Educators	3.12	1.36
12	Comprehensive Workforce Planning	2.96	1.31
13	Encouraging Teachers to Take on Leadership Roles	3.05	1.34
14	Offering Attractive Incentives for Qualified Teachers	3.00	1.38
15	Collaborative Networks with NGOs and Community Organizations	2.86	1.36
16	Targeted Advertising and Recruitment Campaigns	2.77	1.38
17	Prioritizing Teacher Wellbeing	3.00	0.38
18	Implementing Teacher-Sharing Programs	3.17	0.94
19	Partnerships with Local Universities and Colleges	3.67	0.94
20	Proactive Succession Planning	3.47	0.84
21	Policy Advocacy for Teacher Shortage	3.63	0.94
22	Head teachers adjust school calendar or class schedules	3.47	0.84
23	Head teachers implement mentorship programs	2.77	1.38
24	Adjust class size or student-teacher ratio to manage teacher shortage	3.17	0.94

The survey results regarding the strategies for tackling teacher shortages in primary schools present responses with a divergence. Mean scores are as follows: From 1. 18 to 3. 67, which suggests a relatively broad distribution of perceived effectiveness or implementation of these strategies. Strategic collaborations with local universities and colleges were the most positively rated tactic, with a mean score of 3. Again, 67, with a corresponding standard deviation equalling 0. 94, were aware of this, and the respondents had a positive perception of the product at 94%. High support was also evident in policy advocacy for teacher shortage, with a mean of 3. 63.

On the other hand, differential and creative recruitment processes were equally given the least response mean of 1. It was 18 with a standard deviation of 1. 05, showing that this strategy is perceived as least effective or least implemented. Mean scores less than three were obtained in strategies like working closely, enhancing staff professional development, and adopting promotive work schedules. To some extent, these values are lower than 0, which means perhaps these interventions are not frequently used or are considered less helpful.

Notably, community engagement and mentoring new teachers' strategies received relatively higher mean scores of 3. 34 and 3. 33, respectively, showing that the strategies are somewhat preferred. However, the higher limitations for many items from 0. 84 to 1. 38 indicate the presence of variations in the responses given, in the sense that the head teachers do not concur in the functionality or application of these strategies.

5. Conclusion

This research explored the management of teacher shortages in primary schools of Tehsil Murree Pakistan from a head teachers' point of view. The study shows a broad spectrum of actions with higher or lower perceived efficacy and utilization. Affiliate relationships with local learning institutions were the most appreciated strategy, and policy lobbying for teacher deficiency was also appreciated. This implies that collective partnerships with higher education organizations and systematic policy changes are perceived as potential solutions to the scarcity of teachers' problems. Similarly, somewhat higher support was expressed for community engagement activities and support of and mentoring new teachers. However, as it was also discovered, some gaps must be considered. Certain areas of concern came out of this study. The use of creative and strategic recruitment methods was viewed as least effective or least practiced, which could suggest a lack of innovation in the search for new teachers. Likewise, developing partnerships

with local education authorities and committing to professional development were rated relatively low, suggesting that weaknesses in these domains need to be redressed to enhance teacher retention and recruitment. The large standard deviations suggest significant variation in the extent to which head teachers endorse each of the interventions, implying that even with many strategies, there is little agreement. These different points of view explain that the teacher shortage problem is not mono-causal and that they need concepts that address the challenges, considering their unique context.

6. Discussion

The results of this research can be useful in understanding various strategies that can be implemented to overcome the problem of scarcity of teachers in primary schools in Tehsil Murree, Pakistan, especially from the head teachers' point of view. Particularly noteworthy is the mean score of 3.67 for partnerships with local universities and colleges, indicating that head teachers consider this strategy rather effective. This aligns with the (Darling-Hammond, 2017) argument that strong university-school partnerships are effective in solving teacher shortages. It could also cultivate feeders for new teachers and generate an endless source of professional learning. The favourable view of this strategy suggests that there may be an opportunity to develop and improve investing in managing teacher-scarce resources. Indeed, the mean score of 3.63 on policy advocacy shows that head teachers understand that the challenges of teacher shortages can be tackled only through policy changes. This is in the cycle with Sutcher et al. (2019) assertion that 'whole system' approaches are needed to address teacher shortages. This latter average implies that head teachers are cognisant of the systemic forces that underpin the realities of teacher deficit and recognize that the essence requires policy change. Luckily, there are above-average perceived relevancies associated with community involvement activities (3.34) and training opportunities for new teachers (3.33) that point to the importance of social networks and professional development for educators. These findings follow the study by Sutcher et al. (2016), who concluded that induction and mentoring programs may enhance teacher retention. Since the presented strategies are viewed positively, they could be expanded and utilized to counteract teacher deficits. A rather worrying average is the low response for question 8 on innovative recruitment, 1.18, and this appears not to tally with literature where innovative recruitment approaches are described as important (Guarino et al., 2006). This gap could mean that practical implications and scholarly studies are different or that current best practices are not regarded as such in this context. It will be advisable to conduct further research to understand why this result is so low. Somewhat lower values should be attributed to professional development (2.39) and cooperation (2.49), although both of these strategies have been described as critical in the literature (Darling-Hammond, 2017). These findings imply that there could be differences in what scientific studies propose and what practice sees or feels is pertinent or viable. This may be the right time to reconsider how these strategies are being addressed and promulgated to head teachers.

7. Recommendations

Based on the findings of this study, the following are key recommendations:

1. Strengthen and diversify the analytic partnerships between primary and secondary schools to produce long-lasting lines of teacher supply and upgrade professional learning.
2. Enhance the capacity of head teachers to organize and undertake polity advocacy at district and national levels.
3. Design a full-spectrum new teacher induction and support within the professional learning community that pays attention to teachers' retention.
4. Evaluate the existing practices in recruitment and search for effective solutions, some of which might be appropriate in the local environment.
5. Replace the existing ineffective professional development strategies and practices with higher quality and proceed from the weaknesses of teachers in the region.

References

Ahmad, N., & Hamid, S. (2021). An Analysis of Instructional Leadership Practices of Primary School Head-Teachers on Teacher Effectiveness: A Qualitative Study of Teachers' Perceptions. *Pakistan Languages and Humanities Review*, 5(2), 193-209.

Ahmad, N., Rashid, S., & Ali, Z. (2023). Investigating primary school teachers' perceptions about professional development and its impact on students achievement. *Journal of Social Sciences Review*, 3(1), 809-823.

Ahmad, N., Sewani, R., & Ali, Z. (2021). Impact of head-teachers' instructional approaches on teachers competencies at campus schools in Karachi. *Pakistan Social Sciences Review*, 5(4), 131-146.

Ahmad, N., Thomas, M., & Hamid, S. (2020). Teachers perception regarding the effect of instructional leadership practices of primary school head teachers on teacher effectiveness. *Journal of Research and Reflections in Education*, 14(2), 231-248.

Arif, R., Jamil, M., & Naseer, B. (2023). Challenges of instructional supervision faced by primary school heads. *Pakistan JL Analysis & Wisdom*, 2, 189.

Baird-Thompson, T. E. (2023). *Professional development: A mixed methods study on the impact interest, motivation, and the use of comprehension reading science has on African American male students' literacy experiences*. American University.

Carver-Thomas, D., Burns, D., Leung, M., & Ondrasek, N. (2022). Teacher Shortages during the Pandemic: How California Districts Are Responding. *Learning Policy Institute*.

Darling-Hammond, L. (2017). Teacher education around the world: What can we learn from international practice? *European Journal of Teacher Education*, 40(3), 291-309.

García, E., & Weiss, E. (2019). The Teacher Shortage Is Real, Large and Growing, and Worse than We Thought. The First Report in "The Perfect Storm in the Teacher Labor Market" Series. *Economic policy institute*.

Guarino, C. M., Santibanez, L., & Daley, G. A. (2006). Teacher recruitment and retention: A review of the recent empirical literature. *Review of Educational Research*, 76(2), 173-208.

Jakachira, G. (2020). The prospects and complexities of quality education in satellite primary schools of Makonde District, Zimbabwe. *Unpublished DED Thesis*. Pretoria: University of South Africa. <https://uir.unisa.ac.za>.

Jamil, M., Anwar, M., & Ali, M. J. (2024). Developing critical thinking skills in English classrooms at the secondary level: Teachers' perspective. *Journal of Social Sciences Development*, 3(1), 76-85.

Jamil, M., Aslam, M., & Ali, S. (2024). Single National Curriculum (SNC) for social studies (2020): Document analysis for development of critical thinking skills at the primary level. *Pakistan Journal of Law, Analysis and Wisdom*, 3(2), 67-74.

Jamil, M., Bibi, T., & Shahzadi, U. (2024). Critical thinking skills development among secondary school students: An analysis of Chemistry textbook grade X (2020). *Research Journal for Societal Issues*, 6(2), 1-11.

Jamil, M., Bokhari, T. B., & Ahmad, D. (2024). Evaluation of critical thinking elements: A qualitative content analysis of physics textbook grade IX. *Qlantic Journal of Social Sciences*, 5(1), 344-350.

Jamil, M., Bokhari, T. B., & Zia, Q. (2024). Qualitative content analysis for critical thinking and skill development: A case of Chemistry curriculum. *Journal of Asian Development Studies*, 13(1), 147-155.

Jamil, M., Mahmood, A., & Masood, S. (2023). Fostering critical thinking in Pakistani secondary school science: A teacher's viewpoint. *Global Educational Studies Review*, 8(2), 645-659.

Jamil, M., Mehmood, W., & Saleem, A. (2024). Biology textbook grade X (2020): Analysis for the development of higher order thinking skills among secondary school science students. *Global Regional Review (GRR)*, 9(1), 29-35.

Jamil, M., Muhammad, N., & Aslam, M. (2024). Critical thinking skills development: An analysis of mathematics curriculum 2006 (Grade-wise). *Global Social Sciences Review*, 9(1), 22-29.

Jamil, M., & Muhammad, Y. (2019). Teaching science students to think critically: Understanding secondary school teachers' practices. *Journal of Research & Reflections in Education (JRRE)*, 13(2), 256-272.

Jamil, M., Muhammad, Y., & Qureshi, N. (2021a). Critical thinking skills development: Secondary school science teachers' perceptions and practices. *Sir Syed Journal of Education & Social Research (SJESR)*, 4(2), 21-30.

Jamil, M., Muhammad, Y., & Qureshi, N. (2021b). Secondary School Science Teachers' Practices for the Development of Critical Thinking Skills: An Observational Study. *Journal of Development and Social Sciences*, 2(4), 259-265.

McKnight, K., O'Malley, K., Ruzic, R., Horsley, M. K., Franey, J. J., & Bassett, K. (2016). Teaching in a digital age: How educators use technology to improve student learning. *Journal of Research on Technology in Education*, 48(3), 194-211.

Saleem, A., & Muhammad, D. Y. (2020). Negative emotions and self-created challenges of novice public-school teachers in managing classroom. *Journal of elementary education*, 29(2), 178-195.

Saleem, A., Muhammad, Y., & Masood, S. (2020). Classroom management challenges and administrative support in elementary schools: Experiences of novice public-school teachers. *UMT Education Review*, 3(2), 29-46.

Saleem, A., Muhammad, Y., & Masood, S. (2021a). Managing elementary classrooms: Experiences of novice public-schools teachers regarding behavioral challenges of students. *Asian Social Studies and Applied Research*, 2(3), 354-366.

Saleem, A., Muhammad, Y., & Masood, S. (2021b). Novice teachers' perceptions of students' behavioral challenges instigating emotional self-regulation challenges in classroom management. *International Review of Basic and Applied Sciences*, 9(3), 300-314.

Saleem, A., Muhammad, Y., & Qureshi, N. (2021). Strategies and challenges of novice public-school teachers related to classroom management at the elementary level in Lahore. *Pakistan Social Sciences Review*, 5(4), 258-271.

Sutcher, L., Darling-Hammond, L., & Carver-Thomas, D. (2016). A coming crisis in teaching? Teacher supply, demand, and shortages in the US. *Learning Policy Institute*.

Sutcher, L., Darling-Hammond, L., & Carver-Thomas, D. (2019). Understanding teacher shortages: An analysis of teacher supply and demand in the United States. *Education policy analysis archives*, 27(35).

Viano, S., Pham, L. D., Henry, G. T., Kho, A., & Zimmer, R. (2021). What teachers want: School factors predicting teachers' decisions to work in low-performing schools. *American Educational Research Journal*, 58(1), 201-233.

Wiggan, G., Smith, D., & Watson-Vandiver, M. J. (2021). The national teacher shortage, urban education and the cognitive sociology of labor. *The Urban Review*, 53, 43-75.