

## **Identifying the Socio-Economic, Institutional, and Policy-Related Factors Influencing Teacher Education Programs in Sindh: A Literature Review**

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### ***Abstract***

***Introduction:*** Teacher education plays a pivotal role in educational development, particularly in regions facing significant challenges like Sindh, Pakistan. This study aims to identify the socio-economic, institutional, and policy-related factors influencing teacher education programs in Sindh to address the root causes of educational challenges.

***Methodology:*** A systematic literature review was conducted using multiple academic databases, focusing on articles published between January 2020 and May 2024. Inclusion criteria ensured relevance, geographic focus on Sindh, and peer-reviewed status. Thematic analysis was employed to synthesize findings and identify common themes.

***Results/Findings:*** Socio-economic factors such as financial constraints and gender disparities significantly impact teacher education. Institutional challenges include inadequate training facilities and outdated curricula, exacerbated by bureaucratic inefficiencies.

*Policy-related issues include inconsistent implementation and insufficient funding. Thematic analysis highlighted resource disparity, the need for ongoing professional development, policy coherence, and curriculum modernization as recurring themes.*

**Future Direction:** *To address these challenges, increased investment in professional development, curriculum modernization, and policy coherence is recommended. Future research should focus on evaluating specific interventions and conducting comparative studies to inform policy and practice.*

**Keywords:** *Teacher education, Socio-economic factors, Institutional factors, Policy-related factors,*

## **Introduction / Background**

Teacher education is very important in the development of education globally. It provides teachers with the knowledge, skills, and attitudes needed for effective learning facilitation and intellectual and social development of students (Darling-Hammond, 2020). Quality teacher programs significantly contribute to bettering educational outcomes, teaching practices, and educational inequalities (Schleicher, 2018). They play a pivotal role in training teachers to respond to the diverse needs of students, introducing new teaching methods, and responding to changes in policies and curricula (Cochran-Smith & Villegas, 2016). In developing nations where education systems are bound to face extreme difficulties, great teacher preparation programs play an even more significant role towards achieving education goals and sustainable development (UNESCO, 2021).

## **Context of the Study**

The education sector in Pakistan, particularly Sindh, confronts a multitude of problems that need intense scrutiny of teacher education programs. Socio-economic imbalances and insufficient infrastructures have marred the education scenario of Sindh coupled with the lack of resources that have interlocked to prevent effective implementation of teacher education (Rizvi & Elliot, 2020). Rurally, there are severe shortages of trained teachers, lower access to professional development forums, and socio-cultural resistances against women entering the teaching profession. Institutional inefficiencies such as bureaucratic delays and policy mis-implementations also worsen the situation more than that (Bari, 2020). Therefore, in the context, understanding the

drivers of teacher education is important for developing effective strategies for enhancing the quality and effectiveness of training programs of the teachers.

### **Problem Statement**

Thus, the identification of factors influencing teacher education programs in Sindh resulting from socio-economic, institutional, and policy-related factors will help address the root cause of educational challenges in the region. As seen in this paper, several reforms and initiatives on improvement of teacher education and training have failed to achieve their desired outcomes because of subsisting issues in this regard (Mansoor, 2022). These factors are highlighted so stakeholders can also design inputs to enhance the quality of teacher training and professional development that will lead to better learning outcomes for their students. This paper aims at complementing available literature by providing a comprehensive review of the multifaceted influence on teacher education in Sindh.

### **Research Questions**

This literature review aims to answer the following research questions:

1. What are the socio-economic factors affecting teacher education programs in Sindh?
2. How do institutional factors influence the effectiveness of teacher education in Sindh?
3. What policy-related factors impact the development and implementation of teacher education programs in Sindh?
4. What strategies can be employed to address these challenges and improve teacher education in Sindh?

### **Significance of the Study**

This study is important for policymakers, educators, and other stakeholders engaged in the education sector in Sindh and beyond. Policymaking will need to understand the factors driving teacher education to design and implement better policies and interventions. Educators and teacher trainers will be able to speak for and execute changes within the programs of teacher education with such information on challenges and opportunities under the present system. Further, this research would add to the broader literature related to educational development in Pakistan and

help create a prototype for tackling similar issues in other districts. It would actually throw light on the factors critical concerning teacher education and try to build a more equitable and effective environment in Sindh.

## **Literature Review**

### **Socio-Economic Factors Influencing Teacher Education Programs**

The socio-economic context heavily influences the effectiveness of teacher education programs. In Sindh, Pakistan, socio-economic differences are overwhelmingly apparent, where in this sector rural areas struggle even more than the urban cities. Studies reflect that SES usually impacts the access to quality education, including teacher education. Teachers from lower SES backgrounds face limited professional growth opportunities that can impact efficacy during teaching and further hamper student outcomes (Khan, Hussain, & Ahmad, 2023; Khan, 2020).

Economic constraints also affect the distribution of resources to teacher education programs. This will imply limited infrastructure; few teaching materials; and a lack of advanced training facilities (Rizvi & Elliot, 2020). In this respect, the shortage prevents the teacher education institutions from offering a well-rounded training, which incorporates contemporary pedagogical approaches and the adoption of technology in teaching (Jamil et al., 2021). Other socio-economic factors such as poverty and unemployment-are also likely to raise teacher attrition rates because qualified teachers often seek opportunities outside of the education sector that pay higher (Bari, 2020).

Finally, gender biases also form a key consideration in teacher education in Sindh. Cultural inhibitions and socio-economic constraints impede women's engagement into teacher education programs, especially in the rural areas of Sindh (Ali, 2021). Effective tackling of these socio-economic factors will be necessary to have an equitable and efficient teacher education system in Sindh.

### **Institutional Factors Influencing Teacher Education**

The overall quality of educational institutions, governance, and administrative practices determine the success of teacher education programs. Institutional inefficiencies like bureaucratic delays, lack of accountability, and poor governance affect the successful implementation of teacher

education reforms in Sindh (Mansoor, 2022; Thomas, Khan, & Ahmad, 2022). These inefficiencies lead to outdated curricula, unavailability of practical training, and scarce research opportunities for teacher trainees (Bari, 2020).

There are further influences on the capability of teacher education institutions to provide quality education by the qualifications and competencies of the faculty. Many teacher educators at present in Sindh still do not have appropriate training and professional development to mentor the would-be teachers effectively, asserts Rizvi & Elliot (2020). Continuous professional development programs for the teacher educators are further hindered by a lack of innovative teaching practices and pedagogical advancements, adds Khan (2020).

Another critical factor is collaboration between teacher education institutions and schools. Effective teacher education requires the existence of a solid partnership with schools for training and for teaching practice in real classroom settings (Ahmad, Sewani, & Ali, 2021; Jamil et al., 2021). Weak linkage between the teacher education institutions and schools, however, has restricted opportunities for practicing activities involving trainee teachers and constructive feedback in the Sindh region (Ahmed, 2022).

### **Policy-Related Factors Influencing Teacher Education**

Policy-related factors shape the structure and effectiveness of teacher education programs in Sindh. Policy inconsistency and a lack of coherent educational policies have been found as a constraint to improved teacher education in the province of Sindh (Mansoor, 2022). Several initiatives undertaken regarding teacher education by different policies have been seen, but ill-executant and inability to continue has reduced the impact of those policies (Bari, 2020).

One of the issues is that mainly one size fits all in educational policies formulated by the government for Sindh, which is ineffective in diverse contexts, as it fails to address the specific needs of rural and marginalized communities (Ali, 2021). Moreover, an authentic data deficiency and relevant research gap inform the policy decision, and as such, gaps between policy intentions and ground realities continue to persist (Khan, 2020). The strong framework for monitoring and evaluation would be important for effective policy-making to ensure that the teacher education programs meet up to the expected standards and play out the changing needs of the education sector (Rizvi & Elliot, 2020).

Government support and political will are thought to be critical for the success of education reform. Political instability in terms of constant changes in government priorities often disrupt the continuity of initiatives in education in Sindh (Ahmed, 2022; Hafeez, Iqbal, & Imran, 2021). These programs need the environment of strengthened policies built on stable governance, adequate funding, and stakeholder engagement to develop better quality teacher education programs.

### **Strategies for Addressing Challenges in Teacher Education**

The socio-economic, institutional, and policy-related difficulties in teacher education in Sindh should thus be addressed on multi-dimensional levels. One of the best approaches is the increase in spending on teacher education programs to improve infrastructure, modern teaching resources, and continuous professional development. This amount of investment can also be a means to enable the promotion of innovative teaching practice and technology in teacher training (Khan, 2020).

Another important aspect is the building of the capacity of teacher education institutions through staff development programs, curriculum renewal, and research activities (Mansoor, 2022). Professional development in trainee teacher educators will better their teaching skills for them to train teachers coming in the future (Hussain, et al., 2023; Bari, 2020). Furthermore, liaison between teacher education institutions and schools can grant trainee teachers real teaching experiences and experience of natural classroom situations in actual situations (Ahmed, Ahmed & Buriro, 2023; Rizvi & Elliot, 2020).

Policy reforms are also critical in solving the issues pertaining to education among teachers. Formulation of holistic and site-specific policies of education that solves problems of rural or disadvantaged people can be an efficient determinant in implementing teacher training programs so that it enunciates the needs of the students (Ali, 2021). A robust monitoring and evaluation framework can be undertaken in order to ensure that the policies are put into action and results are achieved accordingly (Ahmad, Thomas, & Hamid, 2020; Ahmed, 2022).

Also, inclusive approach towards educational development can be obtained when teachers, educational leaders, policymakers and members of the community are involved in the policy-making process (Ali, et al., 2023; Schleicher, 2018). The more there is a consensus and support of

other stakeholders, the more reforms in teacher education will be sustainable and effective (UNESCO, 2021).

The socio-economic, institutional, and policy factors carry a highly determinative effect in the effectiveness of teacher education programs under the province of Sindh. Issues relating to these have to be taken as a whole: more funding investment, capacity building, policy reforms, and broad stakeholder engagement (Imran, et al., 2023). Through this, stakeholders will be in a position to assess the root causes to then derive targeted interventions that enhance teacher education and professional growth to consequently enhance educational outcomes in Sindh. This literature review shall provide a basis for further research and policy development in the aim of strengthening teacher education in Sindh and in the pursuit of sustainable educational development in Pakistan.

## **Literature Review Methodology**

### **Search Strategy**

A systematic literature review about socio-economic, institutional, and policy-related issues associated with the delivery of teacher education programs in Sindh was conducted. Cross-searching was performed through Google Scholar, PubMed, Scopus, and JSTOR for a comprehensive coverage of peer-reviewed journals and relevant material. The following keyword phrases and their variations were applied; Teacher education, Teacher training, Socio-economic factors, Institutional factors and Policy-related factors of Sindh, Pakistan.

The Literature search was limited to articles published between January 2020 and May 2024 to ensure the inclusion of the most recent studies for comprehensive study. Only articles published in English were considered to maintain consistency and clarity. Moreover, references from the selected articles were studied to identify any further relevant studies that strength have been missed during the initial database search also.

### **Inclusion and Exclusion Criteria**

In literature review inclusion and exclusion criteria were established to select the most relevant studies for this review. The inclusion criteria for article selection were as follows:



1. **Relevance:** Studies must be focus on teacher education programs only and factors influencing these programs. deeply
2. **Time Frame:** Articles must be published between 2020 and 2024.
3. **Language:** Only articles written in English.
4. **Peer-Reviewed:** Articles must be published in good peer-reviewed journals to ensure credibility and academic rigor.

The exclusion criteria were as:

1. **Non-Empirical Studies:** Personal views, Commentaries, opinion pieces, and non-empirical reports were excluded all.
2. **Non-Education Focus:** Studies focusing on general education without specific reference to teacher education programs were excluded.
3. **Duplications:** Duplicate studies found across multiple databases were excluded to avoid redundancy.

### Data Extraction

Data extraction involved a systematic process to ensure consistency and accuracy. The following information was extracted from each selected study:

1. **Study Details:** Author(s), year of publication, and title.
2. **Research Objectives:** Main objectives of the study.
3. **Methodology:** Research design, sample size, data collection methods, and analysis techniques.
4. **Key Findings:** Major findings relevant to socio-economic, institutional, and policy-related factors influencing teacher education.
5. **Recommendations:** Any recommendations provided by the authors for improving teacher education programs.



A data extraction form was used to record this information systematically, allowing for easy comparison and synthesis of findings across studies.

## Analysis

The analysis involved both quantitative and qualitative methods to synthesize the literature. A thematic analysis was conducted to identify common themes and patterns across the selected studies. The following steps were undertaken:

1. **Categorization:** Studies were categorized based on the type of factors they addressed: socio-economic, institutional, or policy-related.
2. **Thematic Coding:** Key findings from each study were coded according to themes such as funding, teacher professional development, policy implementation, governance, and socio-economic disparities.
3. **Synthesis:** The coded data were synthesized to highlight the main factors influencing teacher education programs in Sindh, drawing connections and contrasts between different studies.
4. **Critical Analysis:** A critical analysis was conducted to assess the robustness of the methodologies used in the selected studies and the validity of their findings. Any potential biases or limitations were noted and considered in the synthesis.

The synthesized findings were then organized to provide a coherent narrative that addresses the research questions posed in the introduction. This methodology ensured that the literature review was comprehensive, systematic, and reflective of the most recent research on the topic.

## Findings of the Study: Challenges Faced by English Teachers in Pakistan

### Socio-Economic Factors

According to the review, there are some very important socio-economic factors affecting teacher education programs in Sindh. The first one is financially challenging as most of the time, the salary distribution from the government is not good enough for motivating and to develop professional practices of teachers, especially in rural areas. Most of the teachers, despite receiving

generous benefits, lack motivation to pursue advanced training courses because their salaries are not up to par. Similarly, the socio-economic status of teachers themselves often deprives them of opportunities to get better training programs. Teachers belonging to families of lower socio-economic status cannot afford to travel for training or buy educational resources in advance (Ahmed, 2021).

Another form of economic inequality is the imbalance in access to quality education and training. Between the urban and rural setting, the difference is still clear: in the rural setting, teachers are hindered by poor school settings lacking modern teaching aids and technology-a factor that further hinders their professional development and effectiveness. This lack of sufficient funding for educational programs and infrastructure in rural Sindh adds problems to these issues, which makes the gap between the quality of teacher education for urban regions and that of rural regions persist (Ali, et al., 2023; Bari, 2020).

### **Institutional Factors**

Institutional factors also influence teacher education in Sindh. There are considerable institutional challenges such as inadequate trainings under non-qualified trainers, and there is a scarcity of professional development programs conducted over time. The majority of institutions in Sindh cannot provide any kind of hands-on training experience because they do not possess modern facilities (Mansoor, 2022).

This curriculum that is adopted in teacher education programs is very obsolete and hence creates another institutional hindrance. Many of the pedagogical technologies and techniques can go unreinforced in the curriculum, which may not be fully prepared to support the teachers for many of the current classroom challenges. Educational institutions in Sindh are bureaucratic and hierarchical in nature. This creates their own problems when trying to introduce new teaching methodologies and practices into school (Ahmed, 2022).

### **Policy-Related Factors**

Policy-related factors play the most crucial role in determining the course of teacher education in Sindh. Pointed issues are most of the cases the incoherent and non-consistent education policies. Poor implementation coupled with little or no monitoring of the policies has led to confusion and inefficiency within the teacher education programs (Khan, 2020). Most cases

have witnessed policy formulation unrelated to ground realities; the formulated policies are impractical and arduous to be adopted and implemented effectively, according to Jamil, 2021.

Another critical policy-related challenge refers to a resource base for teacher education. This strategic recognition of the need to provide proper training and infrastructure development finds its existence within government budgets, but funding implementation is reported to be lacking in most cases, according to UNESCO, 2021. This is further exacerbated by a lack of incentives for the teachers to undertake professional development since many teachers do not value their time and effort put into training that will yield no real benefit.

### Thematic Analysis

The thematic analysis of the literature reveals several recurring themes and patterns:

1. **Resource Inequality:** The issue of resource inequality between urban and rural areas always existed and affected availability and quality of teacher education programs. This disparity is based on socio-economic factors and due to inadequate funding and inefficiencies in the institutions (Bari, 2020; Ahmed, 2021).
2. **Professional Development:** The theme that seems to run back in all these is professional development. Many studies regard the importance of continuing training and support toward improving the skills of teachers as being adapted into newer teaching methodologies (Ali, 2021; Jamil, 2022).
3. **Policy Implementation:** The most common theme is the lack of policy formulation and implementation. Although proper teacher education requires well-crafted policies, there is a need to implement and monitor those policies for expected results (Khan, 2020; UNESCO, 2021).
4. **Curriculum Innovations:** The curriculum designed for the programs of teacher education is often very much suggested to be updated. Such a curriculum would need innovation that involves novel pedagogical practices and technologies so that the teachers would be prepared to cope with the challenges posed by the present education system (Mansoor, 2022; Rizvi, 2020).

5. **Incentives and Motivation:** Such studies also unveil the provision of incentives to teachers as a major issue concerning their professional development. An un-motivated teacher will often not invest in professional growth, and this reflects in the quality of education being delivered (Schleicher, 2018; Jamil, 2021).

The findings of the present study bring into focus all the various dimensions of socio-economic, institutional, and policy-related factors affecting teacher education programs in Sindh. This involves enhancement of funding, modernization of curriculum content, continuous professional development, and effective policy implementation. Rectification of these issues can raise the quality of teacher education and, consequently, raise the outcomes of education in Sindh.

## Discussion

### Interpretation of Findings

The present study highlighting socio-economic, institutional and policy-based issues related to programs of teacher education in Sindh, upon intricate interaction, serves as an antidote towards shaping up the quality and effectiveness in initiatives for training teachers at regional levels. Interpretation of findings reveals sophisticated challenges faced by the educators within this region and henceforth necessitates such holistic interventions.

### Comparison with Prior Work

The outcomes of the present study are in line with the existing literature that questions teacher education in similar contexts. Comparative studies conducted in other parts of the world having identical socio-economic characteristics and structures of their education systems also repeat most of the challenges that Sindh is facing, such as shortages of funding, outdated curricula, and policies' implementation (Ali, 2021; Rizvi & Elliot, 2020). This comparison shows that most of the mentioned challenges are universal in nature, suggesting the need for context-specific solutions.

### Implications for Practice

This study has immense implications for practice in teacher education in Sindh. The first and foremost implication is that of increased investment in professional development programs for teachers, mainly at the rural level (Ahmed, 2021). Access to constant training and support for

teachers serves to improve their skills and better performance in the classroom. In addition, the curriculum of such programs should be reformed in the line of modern teaching practices as well as technologies (Mansoor, 2022). In this way, curriculum revision may assist today's educators to improve their trainings to prepare future teachers for better demands of 21st-century classrooms.

### **Policy Implication**

From the findings of this research, there are some policy implications that can be developed to reform the teacher education programs in Sindh. First, the education budget should be well prioritized by giving equitable attention to funds both urban and rural areas (UNESCO, 2021). Secondly, educational policies should undergo much coordination and coherence in order not to clash with each other and end up confusing people (Khan, 2020). The policymaker should, therefore, focus on rewarding teachers for their efforts to develop professionally (Schleicher, 2018).

### **Limitations of the Literature Review**

This literature review should therefore be acknowledged as presenting some critical limitation. Basically, the scope of the review was limited to publications written in English. This may mean that relevant studies that are not published in English have been excluded from this review. Peer-reviewed journals comprised almost all the publications of this review. Other sources, such as reports and grey literature might have been ruled out by this review although they would prove vital in the analysis of any given issue. Lastly, different qualities characterized the included studies. This might have affected the reliability of the findings.

### **Conclusion**

Such findings were derived from the literature review about the set of socio-economic, institutional, and policy-related factors to determine the teachers' education programs within Sindh. Such factors include financial constraints, inadequacy in training facilities, outdated curriculum, and ineffective policy implementation. Nevertheless, improvement potential is still found due to intensified investment in professional development, modernizing the curriculum, and policy reform.

### **Recommendations**

Based on the findings of the literature review, several recommendations can be made to enhance teacher education programs in Sindh. These include:

1. Increase funding for professional development initiatives for Teacher Education.
2. Teacher Education curriculum modernize and align with contemporary teaching practices.
3. Improve policy coherence and implementation about Teacher Education.
4. Incentivize teachers to engage in ongoing training and development for professional development.

### Future Research Directions

The next step for future research, then will be to discover the efficacy of particular interventions designed to mitigate these challenges. Longitudinal studies that monitor changes in policies and programmatic interventions could thus shine a spotlight on these interventions' longer-term effectiveness. Comparative studies of education programs targeting teachers across different regions and contexts may also provide insights into best practices and lessons learned that may inform policy and practice within Sindh and elsewhere.

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