

Determinants of Successful Inclusive Education in Rural Pakistan: An Ecological–Psychological Perspective

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HOW TO CITE:

Humera Amin, Syeda Zahra Ali, Shazia Fatima, Sumra Sajida Tufail (2026). Determinants of Successful Inclusive Education in Rural Pakistan: An Ecological–Psychological Perspective. International Journal of Special Education, 41(8s), 1410-1433

ABSTRACT:

Inclusive education has become a global priority; however, its implementation remains uneven in many low-resource settings, particularly in rural regions of low- and middle-income countries. While existing scholarships have extensively examined structural barriers, limited attention has been given to how institutional, psychological, and sociocultural factors interact in shaping successful inclusive education. This study explored the factors influencing inclusive education success in rural Khyber Pakhtunkhwa (KP), Pakistan, through an integrated ecological–psychological perspective. A qualitative multiple-case study design was employed, guided by Bronfenbrenner’s Bioecological Systems Theory, Bandura’s Self-Efficacy Theory, and Booth and Ainscow’s Index for Inclusion. Data were collected through semi-structured interviews with teachers, school leaders, district education officials, and special educators, alongside focus group discussions with parents and community representatives. Data were analyzed using reflexive thematic analysis. The findings demonstrate that inclusive education success is shaped by the interaction of five interconnected dimensions: ecological and institutional conditions, teacher self-efficacy and professional agency, family and community partnerships, sociocultural attitudes towards disability, and gendered experiences of inclusion. School leadership emerged as a key mechanism connecting policy intentions with classroom practices by mobilizing resources, supporting teacher collaboration, and strengthening community engagement. Teacher self-efficacy influenced how teachers responded to institutional opportunities and constraints, while disability-related stigma and gender norms continued to limit equitable participation, particularly among girls with disabilities. The study develops an ecological–psychological framework illustrating that inclusive education is produced through reciprocal interactions among educational systems, professional agency, and community contexts rather than through isolated policy

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interventions. These findings contribute contextually grounded evidence from rural Pakistan and offer theoretical insights for advancing inclusive education in resource-constrained settings.

Keywords: Inclusive education; disability inclusion; teacher self-efficacy; inclusive school leadership; ecological systems theory; rural Pakistan; community participation.

1. Introduction

Inclusive education has become a fundamental principle of contemporary education systems, emphasizing the right of all learners, including those with disabilities and other marginalized groups, to access meaningful participation and quality learning opportunities within mainstream educational environments. International commitments, including the United Nations Convention on the Rights of Persons with Disabilities (CRPD) and Sustainable Development Goal 4, have positioned inclusive education as a key pathway towards achieving equitable and transformative education systems (United Nations, 2006, 2015). However, despite substantial policy commitments and global advocacy, the implementation of inclusive education remains uneven, particularly in low- and middle-income countries (LMICs), where structural inequalities, limited institutional capacity, inadequate teacher preparation, and persistent sociocultural barriers continue to constrain the participation of learners with disabilities (Ainscow, 2020; UNESCO, 2020).

Contemporary inclusive education scholarship increasingly argues that inclusion should not be understood merely as the physical placement of students with disabilities in mainstream classrooms. Rather, it represents a systemic process involving transformations in school cultures, pedagogical practices, institutional arrangements, and community relationships (Booth & Ainscow, 2011; Slee, 2018). Successful inclusion requires educational systems to identify and remove barriers to participation while creating environments where learner diversity is recognized as an educational resource rather than a challenge (Ainscow, 2020). Evidence from diverse contexts indicates that inclusive education outcomes are shaped by multiple interacting factors, including supportive

leadership, teacher competence, collaborative professional cultures, accessible learning environments, and positive social attitudes towards disability (Kefallinou et al., 2020; Graham et al., 2021). Consequently, understanding inclusive education implementation requires moving beyond single-factor explanations and examining the relationships between individual agency, institutional structures, and wider social contexts.

Rural settings present particular challenges for inclusive education implementation. Schools in rural and marginalized communities frequently experience shortages of trained teachers, limited access to specialist services, inadequate infrastructure, and weaker institutional support systems compared with urban contexts (UNESCO, 2020; World Bank, 2022). However, research increasingly suggests that resource availability alone does not determine inclusion outcomes. Schools operating under similar structural constraints may demonstrate different levels of inclusion depending on leadership practices, teacher beliefs, community engagement, and the capacity to adapt policies to local realities (Ainscow, 2020; Magnússon, 2019). This highlights the need for analytical approaches that examine how different ecological levels interact to enable or constrain inclusive education.

Bronfenbrenner's Bioecological Systems Theory provides a useful framework for understanding inclusive education as a dynamic process emerging from reciprocal interactions between learners and their surrounding environments (Bronfenbrenner & Morris, 2006). From this perspective, educational participation is influenced by multiple interconnected systems, including family, school, community, and broader policy environments. Inclusion therefore cannot be achieved through isolated classroom-

level interventions; rather, it requires alignment among institutional structures, professional practices, and social relationships. Recent inclusive education research similarly emphasizes the importance of whole-school approaches in which teachers, leaders, families, and communities collectively contribute to reducing barriers to participation (Ainscow, 2020; Graham et al., 2021).

Within this ecological system, teachers represent key agents responsible for translating inclusive education policies into classroom practices. Teacher self-efficacy, defined as teachers' beliefs about their capability to organize and execute actions required to achieve desired educational outcomes, has been consistently identified as an important determinant of inclusive practice (Bandura, 1997). Teachers with stronger efficacy beliefs are more likely to adopt differentiated instruction, collaborate with colleagues, and demonstrate greater commitment towards supporting diverse learners (Sharma et al., 2012). Recent evidence further indicates that teacher self-efficacy is not simply an individual characteristic but develops through interactions with professional preparation, school leadership, collaborative cultures, and institutional support (Sharma et al., 2021; Alharbi & Iqtadar, 2024). In resource-constrained contexts, strengthening teacher agency requires attention to the organizational conditions that enable teachers to implement inclusive approaches effectively.

School leadership is therefore a critical mechanism connecting policy aspirations with everyday educational practice. Effective leadership contributes to the development of inclusive school cultures by promoting collaboration, supporting teacher learning, mobilizing resources, and challenging exclusionary practices (Ainscow & Sandill, 2010; Leithwood et al., 2020). Particularly in rural contexts where external support structures may be limited, school leaders often act as mediators between national policy frameworks and local implementation realities. Leadership practices that encourage collective responsibility and community engagement can enhance schools' capacity to respond to learner diversity.

Beyond institutional and professional factors, inclusive education is deeply embedded within sociocultural contexts. Disability-related stigma, misconceptions about disability, and traditional social norms continue to influence educational opportunities for children with disabilities in many societies (Waitoller & Artiles, 2018). These challenges are often intensified for girls with disabilities, who may experience intersecting forms of exclusion related to disability, gender expectations, mobility restrictions, and concerns regarding safety and social protection (Mitra et al., 2013). Therefore, understanding inclusive education requires examining disability not only as an educational issue but also as a social phenomenon shaped by broader systems of inequality.

Pakistan represents an important context for examining these complexities. Although the country has demonstrated policy commitments towards disability inclusion through national education policies, disability-related legislation, and alignment with international frameworks such as the Convention on the Rights of Persons with Disabilities, significant challenges remain in translating policy commitments into sustained educational practices (Government of Pakistan, 2017; Singal, 2016). Children with disabilities continue to encounter multiple barriers, including limited accessibility, inadequate teacher preparation, insufficient specialist support, and persistent social misconceptions regarding disability (Singal, 2016; UNICEF, 2021). These challenges are particularly pronounced in rural areas, where schools often operate with fewer resources, limited professional support, and weaker institutional networks.

Research from Pakistan indicates that teachers' perceptions, confidence, and preparedness significantly influence inclusive education implementation. Although teachers generally support the principle of inclusion, concerns related to training, classroom management, resource availability, and access to specialist assistance affect their capacity to implement inclusive pedagogies (Hashmi et al., 2020; Sharma et al., 2021). Evidence from Khyber Pakhtunkhwa further suggests that teachers'

understandings of inclusion vary according to professional background, institutional conditions, and exposure to inclusive education practices, highlighting the importance of strengthening teacher capacity and school-level support mechanisms (Ullah et al., 2025). Similarly, studies examining inclusive education initiatives in Pakistan demonstrate that teachers continue to experience challenges related to instructional adaptation, professional preparation, and institutional support, indicating that inclusion requires coordinated systemic efforts rather than simply integrating students with disabilities into mainstream classrooms (Bashir et al., 2022).

The sociocultural environment also plays a significant role in shaping inclusive education outcomes in Pakistan. In rural communities, disability may continue to be associated with stigma, dependency, or protection-oriented approaches rather than rights-based participation. Such perceptions can influence parental decisions, community acceptance, and children's opportunities for meaningful educational engagement. Research has shown that while families may recognize the value of education for children with disabilities, structural and social barriers often limit their ability to access and benefit from inclusive schooling opportunities (Naz, 2022). Furthermore, gender intersects with disability-related exclusion, creating additional vulnerabilities for girls with disabilities in contexts where social norms influence mobility, educational participation, and access to resources.

Despite growing research on inclusive education in Pakistan, much of the existing literature has focused primarily on identifying barriers, documenting teacher attitudes, or examining policy challenges. Less attention has been given to understanding how multiple determinants interact to produce successful inclusive education outcomes, particularly within rural contexts of Khyber Pakhtunkhwa. This represents an important theoretical and empirical gap because inclusive education success cannot be explained through a single dimension; rather, it emerges through interactions among ecological

conditions, professional agency, leadership practices, family participation, and sociocultural factors.

To address this gap, the present study explores the determinants of successful inclusive education in rural Khyber Pakhtunkhwa, Pakistan. Drawing upon Bronfenbrenner's Bioecological Systems Theory, Bandura's Self-Efficacy Theory, and Booth and Ainscow's Index for Inclusion, the study examines how institutional conditions, teacher agency, school leadership, family and community partnerships, and sociocultural factors collectively shape inclusive education implementation. By generating contextually grounded evidence from rural Pakistan, this study contributes to international inclusive education scholarship by advancing an integrated ecological-psychological understanding of how inclusive systems are developed and sustained in resource-constrained settings.

Conceptual Framework

Inclusive education is increasingly understood as a dynamic process shaped by interactions among institutional structures, social relationships, cultural contexts, and individual agency. Although previous research has extensively documented structural barriers to inclusion in low-resource settings, less attention has been given to how ecological and psychological conditions interact to enable sustainable inclusive practices. This study therefore adopts an integrated conceptual framework combining Bronfenbrenner's Bioecological Systems Theory (Bronfenbrenner, 1979; Bronfenbrenner & Morris, 2006), Bandura's Self-Efficacy Theory (Bandura, 1977, 1997), and Booth and Ainscow's Index for Inclusion (Booth & Ainscow, 2011) to examine the processes shaping inclusive education success in rural Pakistan.

Bronfenbrenner's Bioecological Systems Theory provides the ecological foundation for understanding how inclusion is influenced across multiple interconnected levels. At the microsystem level, inclusive practices are shaped by classroom interactions among teachers, students with disabilities, and peers. The

mesosystem highlights relationships between schools, families, and communities that influence participation and support. The exosystem includes institutional arrangements such as school leadership, teacher development opportunities, governance structures, and resource availability that indirectly affect classroom implementation. The macrosystem reflects broader cultural beliefs, disability attitudes, policy orientations, and social norms that shape understandings of inclusion. Together, these ecological levels explain how educational experiences are embedded within wider social and institutional environments.

While Bronfenbrenner's framework explains the contextual conditions surrounding inclusion, it provides less insight into how teachers interpret and respond to these conditions. To address this dimension, the study incorporates Bandura's Self-Efficacy Theory, which highlights individuals' beliefs in their capability to organize and execute actions required to achieve desired outcomes (Bandura, 1997). In inclusive education contexts, teacher self-efficacy influences instructional choices, classroom management, collaboration with families, and willingness to implement inclusive pedagogies. Through mastery experiences, modelling, social support,

and emotional regulation, teachers develop confidence to respond to diverse learner needs despite contextual challenges.

Booth and Ainscow's (2011) Index for Inclusion provides the interpretive lens for examining how ecological conditions and teacher agency are reflected in school cultures, policies, and practices. The Index conceptualizes inclusion as extending beyond placement of students with disabilities in mainstream classrooms, emphasizing participation, belonging, equity, and the removal of barriers to learning.

Integrating these perspectives, this study conceptualizes inclusive education success as an outcome of reciprocal interactions between ecological conditions and professional agency. Institutional support, leadership, professional learning, family engagement, community participation, disability attitudes, and cultural norms form the contextual conditions within which teachers operate. Teacher self-efficacy functions as a psychological mechanism through which these conditions are interpreted and translated into inclusive practices. This integrated framework enables examination of how inclusive education is negotiated and sustained within rural, resource-constrained settings.

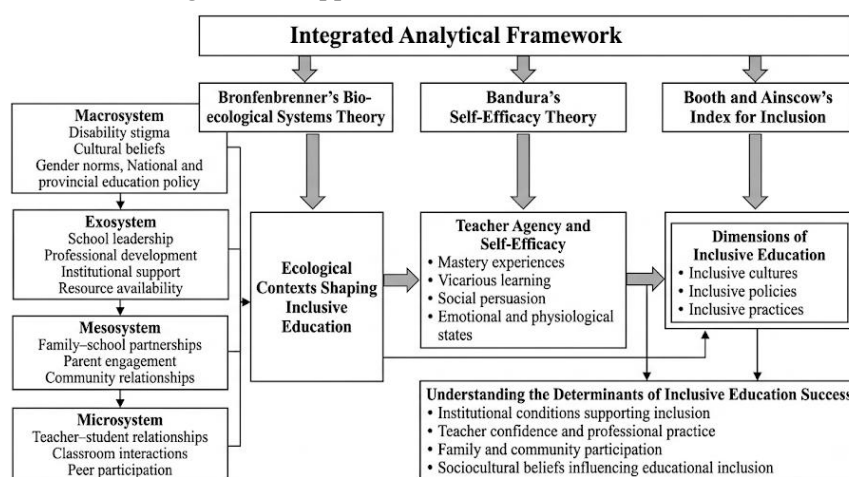


Figure 1. Integrated analytical framework illustrating how ecological contexts, teacher self-efficacy, and the dimensions of inclusive education collectively inform interpretation of the determinants of inclusive education success in rural Pakistan.

2. Methods

2.1 Research Design

This study employed an interpretive qualitative research design to explore the determinants of inclusive education success in rural Khyber

Pakhtunkhwa, Pakistan. Qualitative inquiry was considered appropriate because the study sought to understand how educational stakeholders perceive, experience, and explain successful inclusive education within complex institutional and sociocultural contexts. Rather than

measuring predetermined relationships between variables, the study aimed to develop an in-depth understanding of the ecological and psychological processes through which inclusive education is enabled or constrained (Riaz et al., 2025; Riaz et al., 2025). The study was situated within a constructivist paradigm, which assumes that knowledge is socially constructed through individuals' interactions with their environments and shaped by cultural, institutional, and historical contexts. Consistent with interpretive epistemology, the research sought to understand the meanings participants attributed to inclusive education rather than to identify universal causal relationships. This philosophical orientation aligns with contemporary qualitative research in inclusive education, where understanding participants' lived experiences is essential for explaining how inclusion is enacted across diverse educational settings (Merriam & Tisdell, 2016).

The research was theoretically informed by the integrated conceptual framework presented in Figure 1. Bronfenbrenner's Bioecological Systems Theory guided exploration of the multiple environmental contexts influencing inclusive education, while Bandura's Self-Efficacy Theory informed the analysis of teachers' beliefs, confidence, and professional agency. Booth and Ainscow's *Index for Inclusion* provided the interpretive framework for understanding how these ecological and psychological influences were reflected in inclusive cultures, policies, and practices. Together, these frameworks enabled a holistic examination of the determinants of inclusive education success rather than focusing solely on institutional barriers or individual behaviours. This is a part two of the series Amin et al., (2026).

2.2 Study Setting

The study was conducted in selected rural districts of KP, Pakistan, where government schools have progressively adopted inclusive education through the enrolment of children with special educational needs (CWSEN) in mainstream classrooms. Khyber Pakhtunkhwa provides a particularly appropriate context for

examining inclusive education because, despite national and provincial policy commitments to educational inclusion, rural schools continue to face significant structural, institutional, and sociocultural challenges that influence the educational experiences of learners with disabilities.

The selected districts are characterized by predominantly rural populations, dispersed settlements, limited educational infrastructure, shortages of trained teachers, and inadequate specialist support services for children with disabilities. These contextual conditions present considerable challenges for schools attempting to implement inclusive education while simultaneously creating opportunities to explore how successful inclusion is achieved despite resource constraints. Understanding these contexts is essential because inclusive education is shaped not only by educational policy but also by the interaction of school environments, family engagement, community participation, and broader sociocultural norms.

Government schools enrolling children with special educational needs were purposively selected as the primary research sites because they represented settings where inclusive education was being implemented within everyday educational practice. These schools differed in terms of institutional capacity, leadership support, teacher experience, community involvement, and access to educational resources, thereby providing variation necessary for understanding the ecological and psychological determinants of successful inclusion. The diversity of educational contexts enabled comparison across schools while maintaining a common focus on rural government education.

Site selection was guided by four criteria: (i) location within predominantly rural districts of Khyber Pakhtunkhwa; (ii) active enrolment of children with special educational needs in mainstream classrooms; (iii) variation in school characteristics and institutional capacity to facilitate comparative analysis; and (iv) accessibility for sustained field engagement. These criteria ensured that participants possessed

direct experience of inclusive education within contexts reflecting the broader realities of rural schooling in Pakistan.

2.3 Participants and Sampling

The study employed purposive sampling to recruit participants with direct knowledge and experience of inclusive education. Purposive sampling is widely recommended in qualitative research because it enables the selection of information-rich participants who can provide detailed insights into the phenomenon under investigation (Patton, 2015). Consistent with the interpretive nature of the study, sampling focused on obtaining diverse perspectives rather than statistical representativeness. Participants comprised educational professionals, institutional leaders, families, and community stakeholders who were actively involved in the implementation or support of inclusive education. Specifically, the study included classroom teachers responsible for educating children with special educational needs, school principals overseeing inclusive educational practices, district education officials involved in educational administration and policy implementation, representatives of organizations working in disability inclusion, and parents of children with special educational needs enrolled in mainstream government schools. Collectively, these stakeholder groups provided complementary perspectives on the institutional, community, and psychosocial conditions influencing inclusive education.

A total of 18 semi-structured interviews were conducted with district education officials, school principals, experienced classroom teachers, and representatives of organizations supporting disability inclusion. These participants were selected because of their extensive involvement in educational leadership, policy implementation, teacher development, or community-based disability programmes. Their professional experiences provided insight into organizational processes, institutional decision-making, and the broader educational environment shaping inclusive practice.

In addition, six focus group discussions (FGDs) were conducted with classroom teachers, parents of children with special educational needs, and community stakeholders. The focus groups enabled participants to discuss shared experiences of inclusive education, community perceptions of disability, family-school relationships, and collective strategies for supporting children with disabilities. Conducting separate focus groups for different stakeholder categories encouraged open discussion and reduced potential power imbalances that might inhibit participant interaction (Krueger & Casey, 2015).

Participant recruitment continued until information power was achieved, whereby the collected data were considered sufficiently rich to address the research objectives comprehensively (Malterud et al., 2016). Throughout the recruitment process, attention was given to achieving diversity in participants' professional roles, years of experience, school characteristics, and geographical representation across the selected districts. This variation enhanced the breadth of perspectives while allowing common patterns to emerge across different educational contexts.

2.4 Data Collection

Data were collected through semi-structured interviews, focus group discussions, and reflective field observations. Employing multiple qualitative methods enabled triangulation of evidence and facilitated a comprehensive understanding of the ecological and psychological determinants of inclusive education success.

Semi-Structured Interviews

Semi-structured interviews constituted the primary method of data collection because they enabled participants to describe their experiences, perceptions, and interpretations of inclusive education in their own words while allowing the researcher flexibility to explore emerging issues through follow-up questions (Kvale & Brinkmann, 2015). An interview guide was developed from the study's conceptual framework and organized around four broad

areas: institutional conditions supporting inclusive education, teacher experiences and professional confidence, community and family engagement, and sociocultural beliefs surrounding disability. Interviews were conducted in Urdu or Pashto according to participants' language preferences and generally lasted between 45 and 75 minutes. With participants' permission, all interviews were audio-recorded to ensure accurate capture of responses. Detailed field notes were maintained throughout the interview process to document contextual observations, participant interactions, and preliminary analytical reflections.

Focus Group Discussions

Focus group discussions complemented the individual interviews by facilitating exploration of collective experiences and socially shared understandings of disability inclusion. Six focus groups were organized with teachers, parents, and community representatives. Each discussion included participants with similar backgrounds to encourage open dialogue and minimize hierarchical influences. Discussion guides focused on perceptions of inclusive education, community attitudes towards disability, family participation in schooling, barriers to inclusion, and factors contributing to successful educational experiences for children with special educational needs. Group discussions lasted approximately 60 to 90 minutes and were conducted in community settings that ensured participant comfort and confidentiality.

Reflective Field Observations

During visits to participating schools, non-participating observations were undertaken to document the broader educational context within which inclusive education was implemented. Observations focused on classroom organization, teacher–student interactions, accessibility of school facilities, availability of learning resources, participation of children with disabilities in classroom activities, and interactions among teachers, parents, and school leaders. Rather than functioning as a separate source of data, these observations provided contextual information that informed

interpretation of interview and focus group findings. Reflective field notes also documented researchers' observations regarding school climate, community engagement, and institutional practices relevant to the ecological dimensions of the conceptual framework.

All interviews and focus group discussions were transcribed verbatim. Where data were collected in Urdu or Pashto, transcripts were translated into English for analysis. To preserve conceptual accuracy, translations were reviewed against the original recordings by bilingual members of the research team. Participants were assigned identification codes during transcription to ensure anonymity and confidentiality throughout the research process.

2.5 Data Analysis

Qualitative data were analyzed using reflexive thematic analysis (RTA) as outlined by Braun and Clarke (2021). RTA was selected because it provides a theoretically flexible yet rigorous approach for identifying, interpreting, and explaining patterns of meaning within qualitative data. This approach was appropriate for examining inclusive education as a complex phenomenon shaped by interacting with institutional, psychological, and sociocultural factors. Rather than simply describing participants' experiences, the analysis aimed to develop an interpretive understanding of how ecological conditions and teacher agency influence inclusive education practices in rural Pakistan. Data analysis commenced alongside data collection, allowing emerging insights to inform subsequent interviews and focus group discussions. Audio recordings were transcribed verbatim and translated from Urdu and Pashto into English where required by bilingual researchers familiar with the educational and cultural context. Transcripts were reviewed alongside field notes to support contextual understanding and preserve the meaning of participants' accounts. The analysis followed Braun and Clarke's (2021) six-phase process. Initially, the researchers familiarized themselves with the dataset through repeated reading of transcripts and the development of reflective

notes. The complete dataset was then coded inductively, with attention to participants' accounts of institutional support, leadership, teacher confidence, disability perceptions, family engagement, community participation, and classroom experiences. Codes were continuously reviewed and refined throughout the analytical process. Related codes were subsequently organized into candidate themes that represented shared patterns of meaning across participant groups. Themes were developed through comparison of interviews, focus group discussions, and field observations, with particular attention to how institutional, social, and psychological factors interacted to shape inclusive education outcomes. Candidate themes were reviewed, refined, and defined to ensure coherence, distinctiveness, and explanatory value. Although the initial coding process was inductive, interpretation was guided by the study's theoretical framework. Bronfenbrenner's Bioecological Systems Theory informed analysis of how inclusive education was shaped across interconnected ecological levels, including classrooms, schools, families, communities, and wider institutional structures. Bandura's Self-Efficacy Theory guided interpretation of teachers' confidence, professional agency, and perceived capacity to implement inclusive practices. Booth and Ainscow's Index for Inclusion further supported examination of inclusive cultures, policies, and practices within schools. This theoretically informed approach enabled the study to move beyond descriptive themes towards an explanation of the mechanisms through which inclusive education is developed and sustained in rural, resource-constrained contexts.

2.6 Trustworthiness

The trustworthiness of the study was established using the criteria of credibility, transferability, dependability, and confirmability proposed by Lincoln and Guba (1985). Credibility was enhanced through methodological triangulation using semi-structured interviews, focus group discussions, and field observations across multiple stakeholder groups, including teachers, school leaders, education officials, parents, and

disability inclusion representatives. Prolonged engagement with the research context and iterative comparison of emerging themes further strengthened interpretive depth.

Transferability was supported through rich descriptions of the study context, participants, and rural educational settings, enabling assessment of the applicability of findings to similar resource-constrained environments. Dependability was ensured through an audit trail documenting research procedures, participant recruitment, coding processes, and theme development. Confirmability was strengthened through reflexive practices, including maintaining analytical notes to acknowledge researcher positionality and ensure that interpretations remained grounded in participants' accounts. Together, these strategies enhanced the methodological rigour and credibility of the study findings.

2.7 Ethical Considerations

Ethical approval was obtained from the relevant institutional ethics committee before data collection. Permissions were also secured from education authorities and participating schools. Participation was voluntary, and all participants provided informed consent after receiving information about the study objectives, procedures, confidentiality, and their right to withdraw at any stage.

Confidentiality and anonymity were maintained through the removal of personal identifiers and the use of participant codes in transcripts and analysis. Research data were securely stored and accessed only by the research team. Given the sensitive nature of discussions concerning disability, exclusion, and social attitudes, interviews and focus groups were conducted in settings that ensured privacy and participant comfort. Participants were encouraged to share their experiences freely and could discontinue participation if they felt uncomfortable.

The study adhered to established ethical principles of respect, beneficence, justice, confidentiality, and non-maleficence (Akram et al., 2026). Particular attention was given to protecting the dignity and rights of children with

disabilities, their families, and education professionals involved in inclusive education contexts.

2.8 Limitations

This study has several limitations. As a qualitative multiple-case study conducted in selected rural districts of Khyber Pakhtunkhwa, the findings are context-specific and do not aim for statistical generalization. Instead, they provide analytical insights that may be relevant to comparable rural and resource-constrained contexts. The study primarily examined stakeholder perspectives and did not include extensive classroom observations or quantitative measures of learner outcomes. Future research using longitudinal, mixed-methods, and comparative designs could further examine the relationships among ecological conditions, teacher self-efficacy, school practices, and educational outcomes for learners with disabilities.

In conclusion, this study demonstrates that successful inclusive education in rural Pakistan is an ecological and relational process shaped by the interaction of institutional conditions, teacher agency, family engagement, and sociocultural contexts. By integrating ecological systems theory with teacher self-efficacy theory, the study provides a comprehensive framework for understanding how inclusive practices are developed and sustained in resource-constrained settings. The findings suggest that meaningful inclusion requires coordinated, context-responsive approaches that strengthen educational systems, empower teachers, engage communities, and address persistent social barriers to participation.

3. Results

3.1 Participants

Thirty participants representing diverse stakeholder groups involved in the implementation of inclusive education participated in this study. The sample comprised head teachers, general classroom teachers, special education teachers, district education administrators, parents of children with special educational needs (CWSN), and community

representatives from selected rural districts of Khyber Pakhtunkhwa. Data collection consisted of eighteen semi-structured interviews and six focus group discussions, with recruitment continuing until information power was achieved. Participants had between 3 and 22 years of professional experience and represented a range of institutional and community perspectives, enabling a comprehensive exploration of the determinants of inclusive education in rural contexts.

Individual interview participants are identified using the prefix "P", while focus group participants are identified according to stakeholder group (FGD-T = teachers, FGD-P = parents, and FGD-C = community representatives).

3.2 School Leadership, Institutional Capacity, and Resource Availability

Participants consistently described inclusive education as being influenced by institutional conditions operating beyond individual classrooms. Across all districts, school leaders, teachers, and district administrators emphasized that successful inclusion depended not only on teacher commitment but also on administrative support, resource availability, and effective coordination between educational authorities. Although provincial policies encouraged inclusive education, participants perceived a substantial gap between policy intentions and the resources available for implementation. Head teachers described assuming responsibilities beyond their formal administrative duties to compensate for institutional shortcomings. They reported coordinating minor infrastructure modifications, mobilizing school council resources, and negotiating local solutions to improve access for children with disabilities. These initiatives were viewed as essential because dedicated financial and technical support for inclusive education was often unavailable.

One head teacher explained:

"We operate under a clear division between special and general education directorates at the provincial level. Without direct institutional coordination, general schools do not receive specialized budget lines for ramps or Braille

books, leaving individual schools to manage infrastructure adaptations independently." (P-01)

Teachers similarly described the practical consequences of inadequate infrastructure for classroom participation. During one focus group discussion, a teacher explained how environmental barriers directly affected students with physical disabilities:

"The directorate issues directives to enrol all children, but our physical infrastructure remains unchanged. During winter, when classes move into the courtyard because classrooms cannot be heated, students with physical disabilities struggle to move across uneven ground. Teachers often have to assist them manually because accessibility has never been considered in school construction." (FGD-T3)

District administrators acknowledged these implementation challenges and attributed them largely to fragmented governance arrangements. Participants noted that responsibilities for infrastructure, specialized learning materials, and

disability-related services were distributed across different administrative departments, limiting coordinated planning and delaying resource allocation.

As one district administrator stated:

"Funding responsibilities remain separated across departments. School buildings are financed through one system, while specialized educational resources fall under another. As a result, schools are expected to implement inclusion without having the institutional mechanisms necessary to support it." (P-06)

Despite these structural constraints, participants consistently identified proactive school leadership as an important enabling factor. Schools where head teachers actively sought community support, collaborated with local authorities, and encouraged teacher participation were perceived as better able to sustain inclusive practices than schools relying solely on external government support.

Table 1: School Leadership and Institutional Capacity as Determinants of Inclusive Education

Main theme	Subtheme	Representative evidence	Summary of findings
School leadership and institutional capacity	Leadership commitment	Head teachers coordinated local solutions to improve accessibility despite limited institutional support.	Leadership played a central role in compensating for structural limitations.
	Resource availability	Schools reported shortages of assistive devices, adapted learning materials, and accessible infrastructure.	Resource limitations reduced schools' capacity to implement inclusive practices effectively.
	Administrative coordination	Participants described limited collaboration between education departments responsible for inclusive education.	Fragmented governance delayed implementation and resource allocation.
	Infrastructure	Physical accessibility remained inadequate in most participating schools.	Environmental barriers restrict participation for learners with disabilities.

3.3 Teacher Self-Efficacy and Professional Agency

Participants consistently identified teacher confidence as one of the most influential

determinants of successful inclusive education. Across interviews and focus group discussions, teachers described that their willingness to include children with special educational needs

was shaped less by formal qualifications or years of teaching experience than by practical classroom experience, peer learning, and supportive leadership. Many general education teachers acknowledged that they initially lacked confidence in adapting lessons for learners with disabilities. Feelings of uncertainty were particularly evident among teachers working in overcrowded classrooms, where balancing the needs of children with disabilities alongside large class sizes was perceived as highly demanding. Participants described these challenges as contributing to anxiety, instructional uncertainty, and a tendency to rely on traditional teacher-centered approaches.

One teacher reflected on this experience:

"In a classroom with over sixty students, managing specialized learning needs without prior training creates considerable stress. My confidence only improved after observing how another teacher organized peer-group activities to involve a student with a mild cognitive impairment." (P-02)

Several participants explained that observing experienced colleagues provided practical strategies that were rarely addressed during pre-service teacher education. Informal peer mentoring, collaborative lesson planning, and opportunities to observe inclusive classrooms were viewed as more influential than formal professional development workshops.

As one early-career teacher explained:

"During my first year of teaching, I had no idea how to modify reading activities for children who learned differently. Watching experienced teachers simplify lessons and use pictures helped me understand that inclusion was possible without creating an entirely separate curriculum." (P-04)

Teachers also highlighted the importance of encouragement from school leadership. Constructive feedback from head teachers and opportunities to discuss classroom challenges increased their confidence to experiment with inclusive teaching strategies. Conversely, participants working in schools with limited professional support described feeling isolated and overwhelmed.

One participant explained:

"When a child cannot hear properly and there are seventy other students in the classroom, you naturally struggle to divide your attention. Without guidance from experienced colleagues or school leadership, many teachers lose confidence and begin to avoid involving that child in classroom activities." (FGD-T2)

Overall, participants viewed teacher self-confidence as a dynamic process that developed through practical experience, collaboration, and continuous support rather than through formal qualifications alone.

Table 2: Teacher Self-Efficacy and Professional Agency

Main Theme	Subthemes	Representative Evidence	Summary of Findings
Teacher self-efficacy	Practical classroom experience	Confidence increased through direct experience with inclusive teaching.	Practical experience strengthened teachers' willingness to implement inclusive practices.
	Peer learning	Observation of experienced colleagues supported professional learning.	Informal collaboration emerged as an important source of professional development.
	Leadership support	Feedback and mentoring encouraged experimentation with inclusive strategies.	Supportive leadership enhanced teachers' professional confidence.

Main Theme	Subthemes	Representative Evidence	Summary of Findings
	Classroom pressures	Large class sizes and limited training reduced confidence.	Structural constraints undermined teacher agency and instructional flexibility.

5.4 Family and Community Partnerships

Participants consistently described family engagement as an essential component of successful inclusive education. Although schools were responsible for providing educational opportunities, participants emphasized that sustained inclusion depended upon active collaboration between teachers, parents, and the wider community. Teachers explained that regular communication with parents improved school attendance, encouraged continuity of learning, and strengthened parental confidence in the school's ability to support children with disabilities. Several participants noted that families were often hesitant to enroll their children because they anticipated discrimination or social isolation within the school environment.

One head teacher explained:

"Involving the school council and village elders changes how families view our work. When the community accepts responsibility for inclusion, parents become more confident that their children will be treated with dignity." (P-05)

Parents confirmed that supportive relationships with schools influenced their willingness to maintain their children's enrolment.

One mother commented:

"We were worried that our son would be ignored or laughed at in school. After meeting the teachers several times and seeing how they welcomed him, we became much more confident about keeping him enrolled." (FGD-P1)

Community representatives similarly described inclusion as a collective responsibility rather than solely a government obligation. In several districts, local leaders reported mobilizing community resources to improve school accessibility, organize transport arrangements, and encourage families to enroll children with disabilities.

As one community elder explained:

"We could not wait for government funding. The village decided that every child deserved access to education, so families contributed small donations to build a ramp and arrange transport for children who could not walk to school." (FGD-C2)

These findings suggest that community participation extended beyond moral support and frequently involved practical contributions that compensated for limited institutional resources.

Table 3: Family and Community Partnerships

Main Theme	Subthemes	Representative Evidence	Summary of Findings
Family and community partnerships	Parent-teacher collaboration	Regular communication increased parental confidence.	Trust between families and schools supported continued participation.
	Community leadership	Village elders encouraged enrolment and inclusion.	Local leadership strengthened community ownership.
	Resource mobilisation	Communities contributed transport and accessibility improvements.	Community initiatives supplemented limited government support.

Main Theme	Subthemes	Representative Evidence	Summary of Findings
	Shared responsibility	Inclusion viewed as a collective community obligation.	Collaborative partnerships strengthened inclusive education.

3.5 Disability Stigma and Sociocultural Barriers

Participants identified disability-related stigma as one of the most persistent barriers to inclusive education across all districts. Teachers, parents, administrators, and community representatives consistently reported that negative societal attitudes towards disability influenced school enrolment, attendance, and participation. Many participants explained that disability continued to be viewed as a source of shame or social disadvantage, leading some families to conceal children with disabilities from the wider community.

A district administrator observed:

"The institutional barriers are significant, but cultural beliefs remain even more difficult to overcome. If families believe that disability prevents a child from participating in society, they often decide not to enroll them in school at all." (P-06)

Special education teachers described similar experiences during community outreach activities.

One participant explained:

"Some families worry that acknowledging disability will affect the reputation of the entire household. During home visits, we occasionally discover children whose disabilities have never been reported because families fear community judgement." (P-03)

Teachers also described how low expectations influenced children's classroom participation.

One participant stated:

"Parents sometimes tell us that their child is only attending school to pass the time because they do not believe education will change the child's future. These expectations affect children's confidence and willingness to participate." (FGD-T1)

Across participant groups, stigma was therefore described not only as a barrier to school enrolment but also as a continuing influence on educational participation and aspirations.

Table 4: Disability Stigma and Sociocultural Barriers

Main Theme	Subthemes	Representative Evidence	Summary of Findings
Disability stigma	Negative community attitudes	Disability perceived as a source of shame.	Social attitudes limit educational participation.
	Family concealment	Families concealed children with disabilities.	Fear of discrimination reduced enrolment.
	Low educational expectations	Parents questioned the value of education.	Expectations influenced children's participation and motivation.
	Social exclusion	Community perceptions shaped educational decisions.	Stigma operated across family and community contexts.

3.6 Gendered Dimensions of Inclusive education

Participants consistently describe gender as an important factor shaping educational access and participation for children with disabilities. Through interviews and focus group discussions, teachers, parents, and special educators reported that girls with disabilities experienced multiple intersecting barriers that extended beyond those encountered by boys with disabilities. These barriers reflected the interaction of disability, gender norms, family expectations, and rural sociocultural practices. Participants explained that concerns regarding safety, mobility, and social reputation frequently influenced parental decisions about girls' education. While families often sought alternative strategies to facilitate boys' school attendance despite physical impairments, girls with disabilities were more likely to remain at home, particularly after reaching puberty.

One special educator explained:

"Socio-cultural safety demands mean that when a girl has a physical impairment, the family often prefers keeping her at home. The interaction between disability and traditional gender expectations creates a cycle of exclusion that prevents many girls from continuing their education." (P-03)

Parents participating in the focus group discussions similarly described the practical realities that influenced these decisions. Long walking distances, inaccessible school environments, and concerns regarding personal

safety were frequently cited as reasons for withdrawing girls from school.

One mother commented:

"A boy may travel with neighbours or relatives, but sending a daughter with a disability along isolated village roads is much more difficult. Once she becomes older, if the school has no boundary wall, no accessible toilets, or no safe transport, continuing her education becomes almost impossible." (FGD-P3)

Teachers also observed noticeable differences in school participation between boys and girls with disabilities. Female teachers reported that enrolment of girls with disabilities declined substantially in the upper primary grades, reflecting the cumulative effects of mobility restrictions, household responsibilities, and limited institutional support.

One teacher stated:

"We see far fewer girls with disabilities after Grade Three. Families become increasingly concerned about safety and social expectations, while schools often lack the facilities that would reassure parents." (P-02)

Although participants recognized growing public awareness regarding inclusive education, they emphasized that improvements in school infrastructure alone would be insufficient unless accompanied by broader changes in community attitudes toward gender and disability. Many argued that targeted awareness programmes involving parents, community leaders, and religious scholars would be essential to increase educational participation among girls with disabilities.

Table 5: Gendered Dimensions of Inclusive Education

Main Theme	Subthemes	Representative Evidence	Summary of Findings
Gendered dimensions of inclusion	Mobility restrictions	Long travel distances and inaccessible routes limited girls' attendance.	Safety concerns reduced educational participation.
	Cultural expectations	Traditional gender norms influenced schooling decisions.	Disability compounded existing gender inequalities.

Main Theme	Subthemes	Representative Evidence	Summary of Findings
	School environment	Lack of accessible sanitation and secure facilities discouraged continued enrolment.	Institutional limitations reinforced parental concerns.
	Educational participation	Declining enrolment beyond primary grades.	Girls with disabilities experienced disproportionate educational exclusion.

3.7 Characteristics of Successful Inclusive Schools

Despite numerous structural and sociocultural challenges, participants identified several schools that had developed effective approaches to inclusive education. Across interviews and focus group discussions, participants consistently emphasized that successful inclusive schools were distinguished less by the availability of extensive financial resources than by strong leadership, collaborative school cultures, flexible management practices, and committed teaching staff. Participants described inclusive school cultures as environments in which diversity was openly acknowledged and respected. Head teachers reported that promoting acceptance among students, teachers, and parents reduced stigma and encouraged greater participation by children with disabilities.

One head teacher explained:

"Inclusion is not simply about admitting children into school; it is about ensuring that every child feels respected. We regularly remind students that everyone learns differently, and this has reduced teasing and increased acceptance within classrooms." (P-05)

Participants also highlighted the importance of flexible school management. Rather than waiting for external funding or administrative approval, school leaders frequently used available school council resources to address immediate accessibility needs. Small but locally initiated improvements, including the construction of ramps, classroom modifications, and the purchase of adapted learning materials, were considered important examples of practical leadership.

One participant stated:

"If we waited for official approval every time a problem appeared, very little would change. Instead, we work with the school council to solve small problems immediately so that children can continue learning." (P-01)

Teachers consistently reported that successful inclusion depended on adaptable classroom practices rather than separate instructional programmes. Participants described using differentiated activities, peer-assisted learning, flexible assessment approaches, and cooperative group work to enable students with diverse learning needs to participate within the same classroom.

One teacher explained:

"We do not prepare completely separate lessons. Instead, we adjust activities according to each child's ability. Some students complete the full task, while others work with simplified materials, but everyone participates in the same lesson." (FGD-T4)

Participants further emphasized that successful schools cultivated strong relationships with parents and local communities. Regular communication, collaborative decision-making, and community participation strengthened trust in schools and encouraged continued enrolment of children with disabilities. These partnerships also enabled schools to mobilize additional resources and reinforce positive community attitudes towards inclusion. Overall, participants described successful inclusive schools as organizations characterized by collaborative leadership, flexible decision-making, supportive teaching practices, active family engagement, and school cultures that valued diversity and participation. Rather than relying exclusively on

external resources, these schools demonstrated an ability to adapt existing capacities creatively to

meet the educational needs of children with disabilities.

Table 6: Characteristics of Successful Inclusive Schools

Dimension	Observed Characteristics	Contribution to Inclusive Education
Inclusive school culture	Shared vision, respect for diversity, peer acceptance	Promoted belonging and reduced stigma within the school community.
Leadership and management	Proactive leadership, flexible decision-making, effective use of school council resources	Enabled schools to respond creatively to institutional constraints.
Inclusive teaching practices	Differentiated instruction, peer-assisted learning, flexible assessment	Increased participation of learners with diverse educational needs.
Family and community engagement	Regular communication, collaborative partnerships, community resource mobilization	Strengthened trust, sustained enrolment, and reinforced inclusive values.

4. Discussion

The present study sought to identify the determinants of successful inclusive education in rural Khyber Pakhtunkhwa by examining the experiences of teachers, school leaders, district administrators, parents, and community representatives. The findings indicate that inclusive education in rural Pakistan is not determined by a single factor but emerges through the interaction of institutional, psychological, and sociocultural processes operating across multiple levels of the educational system. This challenges explanations that attribute implementation difficulties solely to resource shortages and instead suggests that inclusion is shaped by the alignment between governance structures, school leadership, teacher self-efficacy, family engagement, community attitudes, and broader cultural understandings of disability. Such an interpretation is consistent with contemporary scholarship that conceptualizes inclusion as a systemic process concerned with identifying and reducing barriers to participation rather than merely placing children with disabilities in mainstream classrooms (Ainscow, 2020).

The findings strongly support an ecological understanding of inclusive education. Participants consistently described how classroom inclusion was influenced by factors extending beyond the immediate teaching environment, including administrative coordination, infrastructure, resource allocation, community participation, and disability-related social norms. These interconnected influences reflect Bronfenbrenner and Morris's (2006) proposition that human development is shaped through reciprocal interactions between individuals and the multiple environmental systems in which they are embedded. In the present study, the microsystem of the classroom could not be understood independently from the ecosystem of educational administration or the macrosystem of cultural beliefs regarding disability. Teachers repeatedly reported that decisions made at provincial and district levels affected their capacity to implement inclusive practices, while family and community attitudes influenced whether children entered and remained in school. The study therefore reinforces the argument that inclusive education should be analyzed as a multi-layered ecological process rather than as an isolated classroom intervention.

A particularly significant finding concerns the role of school leadership in mediating structural constraints. Head teachers were frequently described as compensating for fragmented governance arrangements by mobilizing school council resources, negotiating local solutions, and coordinating community support. This finding aligns with international evidence that school leadership is a critical determinant of inclusive education because leaders shape school culture, allocate resources, support teacher learning, and establish expectations regarding participation and diversity (Ainscow, 2020). However, the present study extends this literature by showing that in low-resource rural contexts leadership often functions as an adaptive mechanism through which schools negotiate institutional fragmentation. Rather than implementing inclusion through formally resourced systems, many schools relied on localized problem-solving and community partnerships to sustain participation for learners with disabilities. This suggests that leadership agency becomes particularly important where formal governance structures remain weak or poorly coordinated.

The findings also highlight the central role of teacher self-efficacy in translating policy intentions into classroom practice. Although participants acknowledged the importance of infrastructure and resources, they consistently emphasized that successful inclusion depended upon teachers' confidence in their ability to teach learners with diverse educational needs. Teachers who reported greater confidence described using differentiated activities, peer-assisted learning, flexible assessment approaches, and collaborative problem-solving, whereas those with lower confidence often relied on traditional teacher-centered instruction. This pattern closely reflects Bandura's (1997) theory of self-efficacy, which proposes that beliefs about personal capability influence behavioural choices, persistence, resilience, and professional performance.

Importantly, the study indicates that teacher self-efficacy develops primarily through authentic professional experiences rather than through formal qualifications alone. Participants repeatedly identified successful classroom

experiences, observation of experienced colleagues, mentoring, and collaborative learning as the principal sources of confidence for inclusive teaching. These findings correspond closely to Bandura's (1997) four sources of efficacy information: mastery experiences, vicarious experiences, social persuasion, and emotional states and are consistent with recent research demonstrating that teachers' efficacy for inclusive practice is strengthened through sustained professional learning, mentoring, and opportunities to implement inclusive pedagogy within real classrooms rather than through isolated workshop-based training (Wray et al., 2022; Woodcock et al., 2022). The findings therefore suggest that professional development for inclusive education should be understood as a situated and relational process embedded within school practice.

At the same time, the study demonstrates that teacher self-efficacy is shaped by ecological conditions. Overcrowded classrooms, limited teaching materials, inadequate administrative support, and insufficient opportunities for professional collaboration were frequently described as undermining teachers' confidence to include learners with disabilities. This finding extends existing self-efficacy research by showing that efficacy beliefs are not merely individual psychological attributes but are continuously influenced by organizational and environmental conditions. Similar conclusions have been reached in recent studies showing that teachers' efficacy for inclusive education is strongly associated with school climate, leadership support, collaborative culture, and access to relevant resources (Woodcock et al., 2023). The present findings therefore support an ecological-psychological interpretation in which institutional conditions influence teachers' opportunities to develop and sustain professional confidence, while teacher self-efficacy determines how available resources are translated into inclusive classroom practices.

Family and community engagement emerged as another important determinant of successful inclusion. Participants consistently described inclusive education as extending beyond the

boundaries of the school and requiring active collaboration among teachers, parents, community leaders, and local institutions. Schools that engaged parents, school councils, village elders, and religious leaders reported stronger community support for the education of children with disabilities and greater willingness among families to maintain enrolment. These findings resonate with Booth and Ainscow's (2011) conception of inclusion as the development of inclusive cultures alongside inclusive policies and practices. Community participation in the present study was not limited to consultation; it frequently involved practical contributions such as transport arrangements, accessibility improvements, and advocacy for enrolment. This suggests that community social capital can partially compensate for limited institutional resources by mobilizing locally available capacities.

The findings also reveal the continuing influence of disability stigma on educational participation. Participants described disability as carrying social meanings associated with shame, dependency, and limited future potential, leading some families to conceal children with disabilities or to hold very low expectations regarding their education. These findings are consistent with contemporary disability studies, which argue that exclusion is produced through social structures, cultural beliefs, and institutional practices rather than through impairment alone (Goodley, 2023). The study contributes to this literature by demonstrating how stigma operates simultaneously at family, community, and school levels, influencing enrolment, participation, motivation, and educational aspirations.

Particularly noteworthy is the interaction between disability and gender. Participants consistently reported that girls with disabilities faced greater educational disadvantage than boys because disability intersected with existing gender norms concerning mobility, safety, and family honour. Long travel distances, inaccessible school environments, concerns regarding puberty, and the absence of secure sanitation facilities were repeatedly identified as reasons for withdrawing girls from school. International

evidence similarly indicates that girls with disabilities experience multiple and intersecting forms of disadvantage resulting from the interaction of disability discrimination and gender inequality (UNESCO, 2020). The present study adds context-specific insight by showing how these intersecting barriers are experienced within rural Khyber Pakhtunkhwa, where sociocultural expectations surrounding female mobility remain highly influential.

Taken together, the findings suggest that structural and psychological explanations of inclusive education should not be treated as competing perspectives. Institutional arrangements shape teachers' opportunities to develop confidence, teacher self-efficacy influences whether available resources are transformed into inclusive pedagogy, and family and community attitudes determine whether children are supported to participate in schooling. Booth and Ainscow's (2011) framework helps explain how these interacting processes ultimately contribute to the development of inclusive cultures, policies, and practices within schools. The principal contribution of this study is therefore the development of an integrated ecological-psychological understanding of inclusive education in low-resource rural contexts. By demonstrating how governance structures, teacher self-efficacy, community participation, disability stigma, and gender norms operate together rather than independently, the study advances a more comprehensive explanation of inclusive education success that is particularly relevant for rural settings where formal institutional support remains limited.

5. Implications

This study has important implications for strengthening inclusive education in rural Pakistan and other low-resource contexts. The findings demonstrate that successful inclusion is not achieved through isolated interventions but through the interaction of institutional conditions, teacher agency, family engagement, and community support. Therefore, inclusive education policies should adopt a system-

oriented approach that recognizes the interconnected nature of ecological, professional, and sociocultural factors.

At the policy level, the findings highlight the need for stronger institutional coordination between mainstream education and special education departments. Fragmented governance structures can create implementation gaps through unclear responsibilities, inconsistent resource allocation, and weak policy translation at the school level. Integrating inclusive education within broader educational planning and establishing mechanisms for interdepartmental collaboration may improve implementation effectiveness.

School leadership emerged as a critical driver of inclusive practice. School leaders played an important role in translating policy intentions into local action by supporting teachers, mobilizing resources, and strengthening community relationships. Accordingly, leadership development programmes should incorporate inclusive education competencies alongside teacher training, focusing on collaborative decision-making, resource management, and inclusive school cultures.

The findings also indicate that teacher professional learning should move beyond short-term training models towards continuous, school-based approaches. Mentoring, peer collaboration, reflective practice, and professional learning communities can enhance teacher self-efficacy and strengthen teachers' ability to implement differentiated and responsive pedagogies.

Furthermore, inclusive education requires active engagement of families and communities. In rural contexts, social attitudes and community expectations strongly influence educational participation. Schools should therefore develop structured partnerships with parents, School Management Committees, and community stakeholders to promote disability awareness, reduce stigma, and encourage sustained participation of children with disabilities.

The study also highlights the importance of gender-responsive inclusion. Girls with disabilities often experience intersecting

disadvantages associated with disability, gender norms, mobility restrictions, and safety concerns. Inclusive education initiatives should therefore incorporate accessible infrastructure, supportive retention strategies, and gender-sensitive planning.

Theoretically, this study contributes by demonstrating the value of integrating Bronfenbrenner's Bioecological Systems Theory and Bandura's Self-Efficacy Theory to explain inclusive education processes. The findings suggest that inclusion is produced through reciprocal interactions between educational environments and professional agency rather than through structural or individual factors alone.

Future research should examine inclusive education across diverse geographical and institutional contexts using longitudinal and mixed methods approaches. Greater attention should also be given to learner experiences, particularly among children with different disabilities and those facing multiple forms of disadvantage.

Overall, the ecological-psychological perspective developed in this study provides a useful framework for understanding and strengthening inclusive education in resource-constrained settings, contributing to broader efforts towards equitable and quality education.

6. Conclusion

This study investigated the determinants of successful inclusive education in rural Khyber Pakhtunkhwa, Pakistan, through a qualitative exploration of the experiences and perspectives of teachers, school leaders, district education officials, parents, and community representatives. By adopting an integrated ecological-psychological perspective, the study moves beyond traditional explanations that attribute implementation challenges primarily to resource shortages or policy deficiencies. Instead, the findings demonstrate that inclusive education is produced through dynamic interactions among institutional structures, professional agency, family engagement, community participation, and sociocultural beliefs about disability. These

interdependent determinants collectively shape the extent to which inclusive education policies are translated into meaningful educational opportunities for children with disabilities in rural settings.

The findings underscore that the success of inclusive education cannot be understood through isolated educational interventions. Institutional coordination, school leadership, teacher self-efficacy, supportive family–school relationships, and positive community attitudes emerged as mutually reinforcing conditions that facilitate inclusive practice. Conversely, fragmented governance, limited institutional capacity, disability-related stigma, and gendered sociocultural norms constrain educational participation despite the existence of supportive policy frameworks. These findings reinforce the view that inclusion is fundamentally a systemic process requiring alignment across multiple ecological levels rather than a technical exercise confined to classroom instruction.

A major contribution of this study lies in its theoretical integration of Bronfenbrenner's Bioecological Systems Theory and Bandura's Self-Efficacy Theory within the context of inclusive education. While ecological systems theory provides a framework for understanding how multiple contextual environments shape educational participation, self-efficacy theory explains the psychological mechanisms through which teachers respond to these contextual opportunities and constraints. The findings demonstrate that teachers' confidence to implement inclusive pedagogies is not solely an individual characteristic but is developed and

sustained through supportive institutional environments, collaborative leadership, professional learning opportunities, and positive community relationships. This integrated perspective advances current understandings of inclusive education by illustrating how ecological conditions and professional agency operate simultaneously to influence successful implementation. Furthermore, the study extends Booth and Ainscow's conceptualization of inclusive cultures, policies, and practices by showing how these dimensions emerge through continuous interactions between schools and their broader social environments.

The study also contributes to the limited body of empirical evidence on inclusive education in rural Pakistan. While much of the international literature has been generated within high-income educational systems, relatively little research has examined how inclusive education is experienced within resource-constrained rural contexts characterized by fragmented governance, limited infrastructure, and deeply embedded sociocultural beliefs regarding disability. By foregrounding the voices of multiple stakeholder groups, this study provides a contextually grounded understanding of the complex realities surrounding inclusive education implementation in Khyber Pakhtunkhwa. The findings therefore contribute to broader international discussions regarding inclusive education in low- and middle-income countries by demonstrating that successful implementation depends not only on policy commitment but also on strengthening relationships among institutions, educators, families, and communities.

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