INTERNATIONAL JOURNAL OF ADVANCED RESEARCH
International Peer-Reviewed Research Journal
ISSN (Online): 3106-7980 | ISSN (Print): 3106-7972
Volume 3 • Issue 7 • November 2026

A STUDY TO EXPLORING THE NEED AND IMPORTANCE OF EARLY CHILDHOOD EDUCATION IN BALUCHISTAN

Abida Kakar[*1], Dr. Muhammad Safdar[2], Dr. Muhammad Raheem[3]

*[*1]Ph.D. Scholar, AIU Quetta; Deputy Director Account and Audits, Directorate of Education (S), Baluchistan, Quetta, Pakistan*
[2] AP, AIU Quetta, Pakistan
[3] Registrar, AIU Quetta, Baluchistan, Pakistan

[*1]abik2411@gmail.com

DOI: https://doi.org/10.5281/zenodo.24031793

Keywords
Early Childhood Education, Baluchistan, School Readiness, Child Development, Educational Equity, Teacher Training, Pakistan.

Article History
Received: 05 August 2026
Accepted: 19 October 2026
Published: 04 November 2026

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Corresponding Author: *
Abida Kakar

Abstract
In the repaid evolving era the Early childhood education (ECE) provides the foundation for children's cognitive, linguistic, social, emotional, and physical development. Its importance extends beyond school readiness because early learning opportunities can influence educational participation, social inclusion, and long-term human development. In Baluchistan, the provision of quality early childhood education deserves particular attention because children experience unequal access to educational facilities, shortages of trained teachers, geographical barriers, resource limitations, and differences in educational opportunities between rural and urban communities. This paper explores the need and importance of early childhood education in Baluchistan through a conceptual review of recent research, education statistics, policy documents, and international literature published primarily between 2019 and 2026. The study adopts a qualitative, descriptive, and documentary research approach. It examines the educational, developmental, economic, and social significance of early learning, alongside the institutional and contextual barriers affecting its provision. Recent evidence indicates that early childhood education remains inadequately available in many Pakistani public schools and that Baluchistan faces substantial challenges in translating educational policy into effective classroom practice. The paper argues that expanding access alone is insufficient; quality improvement requires trained teachers, appropriate learning materials, child-centred pedagogy, family participation, dedicated funding, and reliable monitoring. It recommends a context-sensitive provincial strategy that integrates early childhood education with health, nutrition, child protection, and community development. The study concludes that investment in quality early childhood education should be considered an essential educational priority for reducing inequality and strengthening the future learning opportunities of children in Baluchistan.

1. INTRODUCTION

Early childhood is a significant period in human development during which children begin to acquire the language, knowledge, attitudes, relationships, and learning habits that influence their later experiences. During these years, children develop through interaction with caregivers, family members, teachers, peers, and their surrounding environment. Appropriate learning experiences can strengthen communication, problem-solving, emotional regulation, curiosity, and the ability to participate constructively in social settings. Consequently, early childhood education is increasingly understood as an essential component of an equitable and effective education system rather than merely a preparatory stage before formal schooling.

The Early childhood education generally refers to organized learning opportunities provided before or around the beginning of primary education, commonly for children between three and five years of age. Early childhood care and education (ECCE) adopts a broader perspective by integrating learning with children's physical, emotional, social, and developmental needs. These concepts are important because effective early learning requires more than teaching letters and numbers. It also involves play, communication, exploration, movement, creativity, emotional security, and responsive relationships (Samuel Hall, 2023; United Nations Educational, Scientific and Cultural Organization [UNESCO], 2024).

The international education agenda recognizes the importance of early learning through Sustainable Development Goal 4, particularly Target 4.2, which calls for access to quality early childhood development, care, and pre-primary education for all children by 2030. Nevertheless, global progress remains uneven, and disadvantaged children are less likely to benefit from consistent, high-quality learning opportunities (UNESCO, 2023, 2024). This situation demonstrates that the availability of early childhood education is not simply an administrative matter; it is closely connected with social justice, public investment, and children's rights.

In Pakistan, early childhood education has received increasing attention through national and provincial policies, curriculum development, and programs supported by development partners. However, implementation continues to be affected by limited resources, uneven institutional capacity, insufficient teacher preparation, and disparities in access. A national review of early childhood education models identified substantial gaps between policy commitments and classroom realities, including inadequate coordination, limited financing, and weak mechanisms for quality assurance (Samuel Hall, 2023).

The state of Baluchistan provides an important context for examining these challenges. Its widely dispersed settlements, mountainous and arid geography, differences in household income, and uneven distribution of public services create distinctive conditions for educational planning. In some communities, distance from schools, transport difficulties, shortages of female teachers, and concerns about safe and culturally appropriate educational environments may affect children's participation. Such barriers can be particularly consequential during the early years, when regular attendance and supportive relationships are important for learning.

The provincial challenge should not be understood exclusively in terms of school availability. Children also require environments that encourage meaningful participation and development. A school may report an early childhood class, but its educational value depends on teacher competence, classroom conditions, learning materials, appropriate pedagogy, and relationships with families. Therefore, examining the need for early childhood education in Baluchistan requires attention to both access and quality.

This paper explores the need and importance of early childhood education in Baluchistan by examining its developmental benefits, current policy context, institutional constraints, and potential contribution to educational equity. It uses recent documentary evidence to develop

recommendations for policymakers, school administrators, teachers, families, and future researchers.

2. Background of the Study

The recognition of early childhood education has expanded as research and policy discussions increasingly emphasize the relationship between early experiences and subsequent development. International evidence indicates that high-quality early learning can support school readiness, foundational literacy and numeracy, social-emotional development, and children's continued participation in education (UNESCO, 2024; UNICEF, 2019).

In Pakistan, early childhood education is delivered through different arrangements, including pre-primary classes, Katchi classes, government schools, private institutions, and community-based programs. These arrangements vary in their teaching practices, facilities, staffing, curriculum implementation, and access to resources. Samuel Hall's (2023) review found that Pakistan's early childhood education system faces challenges involving policy coordination, financing, professional development, infrastructure, and family engagement. Its provincial analysis also identified important implementation difficulties in Baluchistan.

The Recent national education statistics reinforce the need for closer attention to early learning provision. Pakistan Education Statistics 2023–24 reports that approximately 12% of primary schools in Baluchistan offered early childhood education, compared with 32% nationally (Pakistan Institute of Education [PIE], 2025). This indicator measures school-level provision, not the percentage of eligible children enrolled. It should therefore not be interpreted as an enrolment rate or as evidence that the remaining schools provide no informal early learning whatsoever.

The National Early Childhood Development Policy Framework, launched in February 2025, also reflects growing national recognition that children's development requires coordinated attention to education, health, nutrition, caregiving, and protection (Ministry of Planning, Development and Special Initiatives, 2025). For Baluchistan, the policy opportunity is to translate this broader commitment into accessible and sustainable services suited to the province's geographical and social circumstances.

The background to this study is therefore shaped by three related concerns: the importance of early learning for children's development, the limited and uneven provision of formal early childhood education, and the need for contextually appropriate implementation in Baluchistan.

3. Purpose of the Study

The purpose of this study is to explore the need and importance of early childhood education in Baluchistan by reviewing its developmental, educational, social, and economic significance and identifying the major barriers that may restrict access to quality early learning.

The study also aims to develop evidence-informed recommendations for strengthening early childhood education through improved public provision, teacher preparation, community participation, equitable financing, and appropriate monitoring.

4. Statement of the Problem

Despite increasing recognition of early childhood education as a foundation for lifelong learning, its provision remains uneven across Pakistan. Baluchistan faces particular challenges because educational opportunities are affected by geographical dispersion, infrastructure limitations, resource constraints, and differences in access between communities. Official statistics indicate that the proportion of primary schools reporting early childhood education provision in the province remains substantially below the national level (PIE, 2025).

The problem extends beyond the number of schools offering early learning. Effective ECE requires trained teachers, developmentally appropriate curricula, safe classrooms, play and learning materials, inclusive teaching practices, and constructive relationships between schools and families. Where these conditions are absent,

nominal provision may not translate into meaningful developmental benefits. Samuel Hall (2023) documented several of these system-level and classroom-level challenges across Pakistan, including Baluchistan.

Limited access to quality early learning may place children from disadvantaged households at a further disadvantage when they enter primary school. Children who have fewer opportunities for language development, guided play, social interaction, and foundational learning may require additional support during their initial school years. However, these outcomes should not be assumed to be identical for all children, because development is also influenced by household circumstances, health, nutrition, school quality, and wider social conditions.

The key problem addressed in this paper is the gap between the recognized importance of early childhood education and the practical conditions required to make quality early learning accessible to children throughout Baluchistan. A systematic understanding of this gap is needed to inform provincial planning, resource allocation, and future empirical research.

5. Research Objectives of the study

The study has three objectives:

1. To examine the educational, cognitive, social, emotional, and developmental importance of early childhood education for children in Baluchistan.
2. To identify the major institutional, socioeconomic, geographical, and pedagogical barriers affecting access to quality early childhood education in the province.
3. To propose evidence-informed strategies for improving the accessibility, quality, and sustainability of early childhood education in Baluchistan.

6. Research Questions of the study

1. What is the educational, cognitive, social, emotional, and developmental importance of early childhood education for children in Baluchistan?
2. What major barriers affect access to and the quality of early childhood education in Baluchistan?
3. What strategies could strengthen the provision, quality, and sustainability of early childhood education in the province?

7. Hypotheses of the Study

The following hypotheses are proposed for future empirical testing. Because this paper is based on documentary analysis rather than original survey data, they are not presented as statistically tested findings.

H1: Greater access to quality early childhood education is positively associated with children's school readiness and foundational learning outcomes in Baluchistan.

H2: Inadequate infrastructure, insufficient teacher preparation, and limited learning resources are negatively associated with the quality of early childhood education provision in Baluchistan.

H3: Greater family and community participation is positively associated with children's participation in and continuity of early childhood education.

These hypotheses identify relationships that can be investigated through quantitative or mixed-methods research. Testing them would require clearly defined variables, suitable sampling procedures, reliable instruments, and appropriate statistical analysis.

8. Justification of the Study

This study is justified on educational, social, economic, policy, and research grounds.

First, early childhood education supports children's preparation for formal schooling. Learning through play, conversation, storytelling, drawing, counting, and group activities can help children develop foundational abilities without reducing early education to rote memorization. These experiences can make the transition to primary school more supportive and meaningful.

Second, the study addresses educational inequality. Children do not enter school with identical opportunities to learn. Differences in access to books, stimulating play, adult interaction, nutrition, and educational services may influence school readiness. Quality early

childhood education can help reduce some of these differences, although it cannot independently eliminate the effects of poverty or broader social disadvantage (UNESCO, 2024; UNICEF, 2019).

Third, the study is relevant to gender equity. In communities where girls experience additional barriers to education, accessible early childhood programs may provide families with an opportunity to establish positive educational participation from an early age. Such programs must be safe, culturally responsive, and supported by adequate facilities and appropriately trained staff.

Fourth, the study has policy significance. The reported gap between national and provincial school-level ECE provision suggests that early learning requires more systematic planning and investment in Baluchistan (PIE, 2025). The paper may assist education officials, school leaders, teacher educators, development organizations, and community representatives in identifying priorities.

Finally, the study provides a foundation for further research. Local evidence is needed on parental attitudes, children's learning experiences, teacher preparedness, district-level inequalities, and the relationship between participation in ECE and later educational outcomes. By identifying these research priorities, the paper can support more context-sensitive planning and evaluation.

9. Contextual Ground of the Study

Baluchistan's educational context requires approaches that recognize differences in settlement patterns, language, family livelihoods, infrastructure, and community expectations. Provincial-level averages are useful for identifying broad patterns, but they cannot fully describe the circumstances of individual districts or schools.

9.1 Geographical and infrastructural context

The province's dispersed population creates practical difficulties in providing services consistently across remote communities. In some areas, long distances between settlements and schools may affect attendance and make the recruitment and retention of teachers more difficult. Establishing a separate ECE classroom in every small settlement may not always be feasible. Consequently, planning should consider community-based facilities, appropriately supervised satellite arrangements, and improvements to existing schools, subject to quality and safeguarding standards.

Samuel Hall (2023) identified infrastructure constraints and the use of multi-grade classrooms as significant issues in Baluchistan's early childhood education context. Where young children share crowded spaces with older pupils, teachers may struggle to provide age-appropriate activities and individual attention.

9.2 Socioeconomic context

Household income, parental education, access to transport, and the availability of learning materials can affect participation in early education. Families experiencing economic hardship may priorities immediate livelihood needs or may be unable to meet transport and related schooling costs. Publicly funded, accessible early childhood education can reduce some of these barriers, provided that services are genuinely affordable and located within reasonable reach.

9.3 Language and cultural context

Baluchistan is linguistically diverse. Children's home languages may include Balochi, Brahui, Pashto, Sindhi, and other languages, while school instruction may introduce Urdu, English, or other languages according to the curriculum and local arrangements. If early learning ignores children's linguistic backgrounds, they may experience unnecessary difficulty expressing ideas and understanding classroom instructions.

Early childhood classrooms should build on familiar language, stories, songs, objects, and community experiences while gradually supporting additional language learning. This approach can strengthen comprehension and participation without treating children's home languages as obstacles to education.

9.4 Gender and inclusion

Gender disparities, disability-related barriers, and differences between rural and urban settings should be considered in program design. Accessible toilets, safe classrooms, inclusive materials, trained staff, and engagement with parents can help make ECE more welcoming. The Programs should also avoid excluding children because of disability, language, poverty, displacement, or other circumstances.

9.5 Policy and institutional context

The 2025 National Early Childhood Development Policy Framework provides a national opportunity to strengthen coordination across sectors (Ministry of Planning, Development and Special Initiatives, 2025). In Baluchistan, this opportunity requires practical implementation plans, clearly assigned responsibilities, reliable funding, professional support for teachers, and monitoring systems that measure children's experiences as well as school-level provision.

10. Definitions of the Operational Terms

Early Childhood Education (ECE): Organized, developmentally appropriate learning provided before or around entry into primary education, generally for children aged three to five years in this study.

Early Childhood Care and Education (ECCE): An integrated approach that combines educational experiences with attention to children's physical, cognitive, social, and emotional development.

Quality ECE: Provision characterized by safe and inclusive environments, trained teachers, suitable learning materials, developmentally appropriate teaching, responsive relationships, and meaningful family engagement.

School readiness: The extent to which children have developed the foundational language, cognitive, social-emotional, physical, and behavioral capacities that support participation in formal schooling. School readiness also depends on whether schools are prepared to meet children's needs.

Access to ECE: The availability and practical usability of early learning opportunities, considering distance, affordability, admission practices, accessibility, safety, and attendance.

Teacher preparedness: The knowledge, skills, professional training, and practical competencies required to support young children's learning and development.

Family and community participation: The involvement of parents, caregivers, and community members in supporting children's learning, communicating with schools, and contributing to the improvement of early childhood services.

Educational equity: The provision of fair opportunities and appropriate support so that children's access to and benefits from early learning are not determined primarily by socioeconomic status, gender, disability, location, or language.

Baluchistan: The province of Pakistan that constitutes the geographical and institutional focus of this research paper.

11. Review of the Literature

11.1 Early childhood education and child development

Recent literature treats early childhood education as a multidimensional process that supports children's learning, well-being, and participation in society. UNICEF (2019) emphasized that quality pre-primary education can provide foundational skills and improve children's preparation for primary schooling, particularly when programs reach disadvantaged groups. The significance of this argument is that early learning should not be evaluated solely by whether children can recognize letters or numbers. It should also be assessed through language development, curiosity, emotional security, social interaction, and the capacity to learn through exploration.

UNESCO (2024) similarly argues that early childhood care and education is essential to

building a strong foundation for lifelong learning. Its global report highlights continuing inequalities in access and the need for stronger public investment, adequate educator provision, and more inclusive policy arrangements. These findings support the view that early childhood education is both a developmental priority and a matter of educational justice.

11.2 School readiness and foundational learning

School readiness is one of the most frequently discussed benefits of ECE. Children who participate in supportive early learning environments have opportunities to develop listening skills, vocabulary, early mathematical understanding, fine-motor coordination, cooperation, and problem-solving. These abilities may help them participate more confidently in primary classrooms. "the education promotion contextual elements (infrastructure and policy environment of institutions) also impact the attitude of educators towards the use of AI" (Syed Muhammad Ishaq et al.., Volume 3, Number 3, 2025,).

UNESCO (2024) identifies supportive home environments and developmentally appropriate early learning experiences as important contributors to school readiness. However, the relationship should not be interpreted as automatic: attendance alone does not guarantee improved outcomes. Program quality, teacher-child interaction, continuity of attendance, and children's wider living conditions influence what children gain from participation.

Samuel Hall (2023), in its review of ECE models in Pakistan, reported that quality early learning can support foundational skills, appropriate primary-school entry, attendance, retention, and academic performance. The report also noted that policy intentions do not consistently translate into classroom practice. This distinction is especially relevant to Baluchistan, where increasing the number of schools offering ECE must be accompanied by attention to teaching quality.

11.3 Early childhood education in Pakistan

Pakistan's early childhood education system includes different models of pre-primary provision, and the quality of these models varies across institutions and provinces. Samuel Hall (2023) examined ECE policy, financing, teachers, curriculum, classroom implementation, and family engagement across four provinces, including Baluchistan. Its findings highlighted insufficient coordination, limited budget transparency, uneven professional development, infrastructure constraints, and the need for stronger parental participation.

The report is particularly useful because it moves beyond policy statements to examine implementation. A provincial framework may establish the purpose of early learning, but its impact depends on whether teachers receive guidance, materials are available, classrooms are suitable, and administrators monitor educational quality. The study also indicates that responsibility for ECE needs to be sufficiently clear within the wider education system.

Official statistics provide a further perspective. PIE (2025) reported that 32% of primary schools nationally offered ECE in 2023–24, compared with approximately 12% in Baluchistan. This difference suggests that children in the province may have fewer opportunities to access formal school-based early learning. However, the statistic does not measure the quality of provision or establish the proportion of children who attend ECE. It therefore needs to be interpreted alongside enrolment, attendance, staffing, and learning-outcome data.

11.4 The Baluchistan context

Baluchistan's geographical and institutional conditions make the provision of ECE a distinctive policy challenge. Samuel Hall (2023) identified infrastructure limitations, multi-grade teaching arrangements, workforce development needs, and implementation gaps in the province. These conditions can restrict teachers' capacity to deliver activities suited to young children.

Inadequate learning spaces may encourage a formal, teacher-directed approach when young

children need opportunities to play, move, ask questions, communicate, and explore. Limited access to appropriate materials can further restrict learning. Teachers may need specialized training to organize meaningful activities using low-cost, locally available resources.

The provincial context also calls for sensitivity to language and culture. Children learn more effectively when teaching connects with their prior experiences and enables them to communicate. Local stories, songs, familiar objects, community practices, and children's home languages can provide useful starting points for developing early literacy and comprehension. These practices should be incorporated within a coherent curriculum rather than treated as substitutes for planned learning.

11.5 Teachers, pedagogy, and curriculum quality

Teachers are central to the effectiveness of ECE. Young children benefit from adults who can observe developmental needs, respond patiently, encourage curiosity, and design activities appropriate to children's ages and abilities. Early childhood teaching therefore requires competencies that differ from those associated with lecture-based instruction or the memorization of textbook content.

Samuel Hall (2023) identified teacher development, curriculum implementation, and quality assurance as important areas for strengthening Pakistan's ECE systems. Professional support should include pre-service preparation, practical classroom training, mentoring, peer learning, and continuing professional development. Training should also cover inclusion, child safeguarding, formative assessment, classroom organization, and communication with caregivers.

The Curriculum implementation matters equally. A developmentally appropriate curriculum integrates language, early mathematics, physical movement, creative expression, social interaction, and exploration. Formal literacy and numeracy activities may be introduced gradually, but they should not displace play and social-emotional development. Effective curriculum design should provide teachers with clear learning goals while allowing adaptation to local languages, materials, and children's needs.

11.6 Family participation and community engagement

Parents and caregivers are children's first and continuing educators. Everyday activities such as talking, storytelling, singing, counting household objects, and responding to children's questions can strengthen learning. Schools can build on these experiences by maintaining communication with families and explaining the purpose of play-based learning.

Samuel Hall (2023) found that stronger family and community engagement was needed across Pakistan's ECE systems. This suggests that improving provision requires more than establishing classrooms. Parents need opportunities to understand the benefits of ECE, participate in school discussions, and communicate concerns about accessibility, safety, teaching, and attendance.

In Baluchistan, community engagement may be particularly valuable where schools serve dispersed populations. Local representatives, parents, teachers, and school committees can help identify practical barriers and support locally appropriate arrangements. However, participation should complement rather than replace the government's responsibility to provide qualified teachers, safe facilities, and sustainable funding.

11.7 Financing, equity, and public policy

A persistent theme in the literature is that ECE requires predictable financing. Samuel Hall (2023) identified limited budget transparency and insufficiently defined ECE funding as barriers to effective implementation. Without a clear budget, policymakers may find it difficult to plan recruitment, classroom improvement, teacher development, learning materials, and quality assurance.

UNESCO (2024) also stresses the need for greater investment and an adequate early childhood education workforce. For Baluchistan, equitable

financing should take account of the additional costs associated with remote communities, infrastructure deficits, teacher deployment, and inclusive services. Funding based exclusively on existing enrolment may disadvantage communities where low enrolment is itself a consequence of inadequate provision.

The National Early Childhood Development Policy Framework launched in 2025 provides a broader policy basis for coordinated early childhood development in Pakistan (Ministry of Planning, Development and Special Initiatives, 2025). Its practical value will depend on the development of implementable plans, clear institutional responsibilities, appropriate provincial adaptation, and measurable outcomes.

11.8 Research gap and synthesis

The literature establishes the importance of quality ECE and identifies significant system-level barriers in Pakistan. Nevertheless, broad national findings cannot fully explain differences among Baluchistan's districts, schools, languages, and communities. The national school-provision indicator also cannot reveal whether ECE classrooms have trained teachers, provide suitable learning experiences, or improve children's readiness for primary education.

There is consequently a need for more district-level empirical research examining parents' perceptions, teacher preparedness, classroom practice, children's participation, and learning outcomes. Longitudinal research would be particularly useful for assessing whether access to quality ECE is associated with later attendance, retention, and achievement.

Taken together, the literature supports three central propositions. First, ECE can strengthen the foundations of children's development when provision is of adequate quality. Second, Baluchistan's challenge involves both limited access and the conditions needed for meaningful implementation. Third, sustainable improvement requires coordinated investment in teachers, infrastructure, curriculum, family engagement, and monitoring. These propositions inform the theoretical framework and documentary analysis presented in the following sections.

12. Theoretical Framework of the Study

This study draws on three complementary perspectives: ecological systems theory, sociocultural learning theory, and a systems-oriented approach to early childhood education.

12.1 Ecological systems theory

Bronfenbrenner's (1979) ecological systems theory provides a foundational explanation of how children's development is shaped by interconnected environments. Although this foundational source predates the study's main 2019–2026 literature period, it remains relevant for explaining the relationship between children, families, schools, communities, and public institutions.

At the immediate level, children's development is influenced by interactions with caregivers, teachers, and peers. Relationships between families and schools also matter because children's learning experiences are strengthened when adults communicate and provide consistent support. At broader levels, educational policies, public expenditure, cultural expectations, employment conditions, and geographical circumstances can influence whether families are able to access quality early learning.

Applied to Baluchistan, the theory suggests that limited ECE participation should not be explained only by parental attitudes or school availability. Instead, analysis should consider the interaction of household resources, distance, teacher availability, infrastructure, community expectations, and government planning.

12.2 Sociocultural learning theory

Vygotsky's sociocultural perspective emphasizes the role of social interaction, language, and guided participation in learning. From this perspective, children develop understanding through communication and shared activities with more knowledgeable people.

For ECE in Baluchistan, this perspective supports teaching practices that incorporate storytelling,

guided play, collaborative tasks, familiar objects, local languages, and responsive teacher-child interaction. Teachers can extend children's existing knowledge by asking questions, modelling new skills, and gradually reducing support as children become more independent.

12.3 Systems-oriented early childhood education

A systems-oriented perspective emphasizes that sustainable ECE requires connected functions, including policy, financing, teacher development, curriculum, family engagement, and quality monitoring. Samuel Hall (2023) applied a systems approach to examine the implementation of ECE across Pakistani provinces.

This perspective is particularly relevant because weaknesses in one part of the system can undermine the others. For example, an approved curriculum may have little effect if teachers have not received training or lack appropriate materials. Similarly, teacher training may not produce lasting improvements if classrooms remain overcrowded and supervision is weak.

12.4 Proposed conceptual model

The conceptual relationship guiding the study is presented below.

Enabling conditions: equitable funding, suitable infrastructure, trained teachers, appropriate curriculum, family engagement, and supportive policy.

Implementation processes: play-based teaching, responsive interactions, inclusive participation, formative assessment, and regular attendance.

Expected developmental outcomes: improved school readiness, foundational learning, social-emotional development, educational participation, and a smoother transition to primary school.

Contextual influences: geographical distance, household socioeconomic conditions, language, gender, disability, and local community circumstances.

The model assumes that enabling conditions influence the quality of implementation, which in turn may contribute to children's developmental and educational outcomes. Contextual factors may strengthen or weaken these relationships. Because the present study does not collect primary data, the model is a conceptual proposition rather than a statistically verified causal pathway.

13. Research Methodology

13.1 Research method

The study uses a qualitative documentary research method supported by descriptive analysis of official education statistics and relevant policy literature. This method is suitable for examining the conceptual importance of ECE, identifying documented implementation challenges, and developing policy recommendations.

The study draws on secondary sources, including international education reports, government publications, policy documents, and research commissioned by development organizations. It does not claim to have conducted original interviews, focus group discussions, classroom observations, or a questionnaire survey.

13.2 Research design

A descriptive and interpretive documentary design was adopted. The review concentrates primarily on literature published between 2019 and 2026, with earlier foundational theoretical work included where necessary.

The documentary analysis was organized around five themes:

1. Child development and school readiness.
2. Access, equity, and participation.
3. Teachers, curriculum, and classroom quality.
4. Institutional capacity, infrastructure, and financing.
5. Family engagement, policy implementation, and future research.

The purpose was to identify recurring patterns across the available sources and interpret their relevance to Baluchistan.

13.3 Sources of information selection of the study

In this paper a documentary study consists of potentially relevant published materials concerning ECE, child development, education policy, and school provision in Pakistan, with particular attention to Baluchistan.

The conceptual population of interest for future field research would be children of pre-primary age, their parents or caregivers, ECE teachers, primary-school heads, education officials, and representatives of relevant community organizations in Baluchistan.

The documentary sample consists of a purposively selected set of relevant sources, including the UNICEF-commissioned review of ECE models in Pakistan, official Pakistan Education Statistics 2023–24, UNESCO publications on early childhood education, UNICEF material on early learning, and Pakistan's National Early.

13.4 Childhood Development Policy Framework.

A numerical count of every document screened was not recorded as part of a formal systematic review protocol. Accordingly, this paper does not claim a comprehensive systematic search or a statistically representative sample of published studies.

The Purposive source selection of information was based on relevance to the research objectives, institutional credibility, geographical applicability, and publication date. Earlier foundational theory was included selectively where it contributed directly to the conceptual framework.

13.5 Data collection tools

The principal data collection instrument for this paper was a documentary review matrix. It was used to organized information by source, publication year, geographical relevance, methodological approach, key findings, and implications for ECE in Baluchistan.

The review considered:

- Government education statistics and policy documents.
- Reports from UNESCO and UNICEF.
- Research on ECE implementation in Pakistan.
- Literature concerning school readiness, teaching quality, family engagement, and educational equity.

No new human-participant data were collected.

13.6 Data analysis tools

The study employed qualitative thematic synthesis and descriptive interpretation of published statistics.

Thematic synthesis involved identifying recurring issues across the documents, comparing findings, and organizing them under the main research themes. Descriptive interpretation was used to explain the significance and limitations of official school-level provision indicators.

No inferential statistical analysis was conducted because the study did not generate a primary dataset. No statistical software or qualitative coding software is claimed to have been used.

13.7 Validity and reliability

The credibility of the documentary analysis was supported by prioritizing identifiable government and international organization publications, checking whether indicators referred to schools or children, and distinguishing reported evidence from interpretation.

The study also considered the geographical relevance of sources and the limits of national-level findings when applied to Baluchistan. Official statistics were not treated as direct evidence of classroom quality or individual children's developmental outcomes.

However, formal inter-rater coding, independent replication, and quantitative reliability testing were not undertaken. These limitations should be recognized when interpreting the findings.

13.8 Ethical considerations

The study uses publicly available secondary information and does not report identifiable information about individual children or families. Because no primary human-participant data were collected, participant consent procedures were not applicable to the present paper.

Any subsequent field study involving children should obtain appropriate institutional approval, informed consent from parents or legal guardians, age-appropriate assent where applicable, and robust safeguarding arrangements.

13.9 Methodological limitations

The findings depend on the availability, quality, and scope of published documents. National reports may not represent all districts equally, and differences in definitions or reporting practices can complicate comparisons. The documentary design cannot establish causal relationships between ECE participation and child outcomes in Baluchistan.

The study should therefore be understood as a conceptual and policy-oriented analysis that identifies evidence-supported priorities and questions for future field research.

14. Results and Discussion

14.1 Results of the documentary analysis

The documentary analysis identified five principal themes.

Theme 1: Limited formal provision. Pakistan Education Statistics 2023–24 reports that approximately 12% of primary schools in Baluchistan offered ECE, compared with 32% nationally (PIE, 2025). This indicates a substantial gap in reported school-level provision. It does not establish the percentage of children enrolled, the quality of individual classrooms, or the extent of informal learning outside school.

Theme 2: Implementation and institutional capacity. Samuel Hall (2023) identified challenges involving policy coordination, financing, curriculum implementation, teacher development, infrastructure, and quality assurance. These findings suggest that effective ECE requires a functioning support system rather than isolated classroom initiatives.

Theme 3: Teacher preparation and learning environments. The literature indicates that young children's learning depends on appropriate interactions, developmentally suitable teaching, safe facilities, and accessible learning materials. Where classrooms are crowded or teachers lack specialized preparation, opportunities for individual attention and play-based learning may be restricted (Samuel Hall, 2023; UNESCO, 2024).

Theme 4: Family and community engagement. Families influence children's learning through everyday interactions, attendance decisions, and communication with schools. The literature identifies parental and community participation as an area requiring further support in Pakistan's ECE system (Samuel Hall, 2023).

Theme 5: Policy opportunity and coordination. The launch of the National Early Childhood Development Policy Framework in 2025 demonstrates growing recognition of the need for coordinated early childhood services (Ministry of Planning, Development and Special Initiatives, 2025). The principal challenge is converting policy commitments into adequately financed, accessible, and measurable provincial services.

These themes are findings of the documentary synthesis. They are not the results of a newly conducted survey or an independent statistical test.

14.2 Discussion

The findings reinforce the importance of viewing ECE in Baluchistan as both an access issue and a quality issue. The reported 12% school-level provision figure indicates that early learning opportunities need substantial expansion. Nevertheless, increasing the number of schools reporting ECE provision will not necessarily produce better developmental outcomes unless teaching practices, facilities, and curriculum implementation are also strengthened.

This distinction is important because educational programs may exist administratively without consistently providing the experiences young children need. A classroom that lacks suitable materials, sufficient space, or a teacher prepared to support early development may offer limited

opportunities for meaningful learning. Consequently, access indicators should be complemented by measures of classroom quality, children's attendance, and developmental progress.

The relationship between ECE and school readiness provides a second important insight. Early learning can help children become familiar with classroom routines, communicate their needs, cooperate with others, and develop foundational literacy and numeracy. These capacities may make the transition to primary school more manageable. However, the expected benefits depend on the quality and continuity of the program, and they should not be interpreted as guaranteed outcomes for every child (UNESCO, 2024; UNICEF, 2019).

The findings also indicate that Baluchistan needs implementation arrangements suited to its geographical and social conditions. A uniform model may be difficult to apply equally across large urban centers and remote communities. Planning should therefore consider local population distribution, language, transport, staffing, and existing school infrastructure. Community-based approaches may be useful in underserved locations, but they require trained personnel, appropriate supervision, safe facilities, and stable funding.

Teacher preparation is another central concern. Early childhood education should not simply reproduce the teaching methods used in higher grades. Young children learn through purposeful play, guided exploration, interaction, and repetition within meaningful contexts. Teachers require support to plan these experiences, assess development sensitively, and respond to different learning needs. Continuing professional development should therefore be accompanied by classroom mentoring and practical resources.

Family participation is equally important. Parents may differ in their understanding of formal ECE, particularly where early learning has traditionally taken place within the household or where school attendance involves considerable practical costs. Rather than treating these differences as parental indifference, schools should engage families respectfully, explain the benefits of age-appropriate early learning, and identify barriers to participation.

Finally, the national policy framework provides an opportunity to coordinate education with health, nutrition, caregiving, and child protection. A child's learning is influenced by more than the classroom. Better coordination may help identify developmental concerns, support caregivers, and create safer and more responsive environments. However, coordination must be accompanied by clear responsibilities, dedicated funding, and measurable indicators to avoid remaining a general policy aspiration.

15. Findings and Conclusions

15.1 Findings

The documentary analysis supports the following findings:

1. ECE is developmentally important. Quality early learning can support language development, foundational learning, social-emotional growth, and school readiness.

2. Formal provision is limited. Official data report ECE provision in approximately 12% of primary schools in Baluchistan in 2023–24, compared with 32% nationally (PIE, 2025).

3. Access and quality are interconnected. Expanding provision without adequate teachers, materials, safe facilities, and appropriate pedagogy may limit the benefits children receive.

4. Implementation capacity requires strengthening. Policy coordination, financing, teacher development, curriculum delivery, and quality assurance remain important areas for improvement (Samuel Hall, 2023).

5. Contextual adaptation is necessary. Geographical distance, linguistic diversity, gender-related barriers, and differences in household circumstances should inform provincial and district-level planning.

6. Families and communities have an important role. Constructive school-family relationships can support attendance, continuity, and learning at home.

7. Further empirical evidence is needed. The available documentary sources do not establish the causal effect of ECE participation on children's later academic outcomes in Baluchistan.

15.2 Applications of the study

The findings may be useful in several areas.

Educational planning: Provincial authorities can use the identified priorities to inform district-level ECE expansion plans and budget allocations.

Teacher education: Teacher-training institutions can strengthen preparation in play-based pedagogy, early literacy, numeracy, inclusive education, child safeguarding, and formative assessment.

School management: School leaders can improve classroom organization, communication with families, and monitoring of children's attendance and participation.

Community engagement: Parent groups and community organizations can support awareness, identify barriers to attendance, and encourage home-based learning activities.

Policy development: Policymakers can integrate early learning with wider early childhood development initiatives and establish clearer standards for access, quality, and accountability.

Research and evaluation: Researchers can use the conceptual framework and proposed hypotheses to design empirical studies that examine the relationship between provision, classroom quality, family participation, and children's developmental outcomes.

15.3 Conclusion

Early childhood education is a foundational component of an inclusive and effective education system. It creates opportunities for children to develop the language, social relationships, cognitive abilities, emotional capacities, and learning habits that support later educational participation. For Baluchistan, the importance of ECE is heightened by reported limitations in formal provision and by the geographical, institutional, and socioeconomic circumstances affecting access to education.

The evidence reviewed in this paper suggests that the province's challenge is not merely to introduce more early childhood classes, but to ensure that those classes provide meaningful and developmentally appropriate learning. This requires investment in trained teachers, safe and accessible classrooms, suitable learning materials, inclusive teaching, family engagement, and reliable monitoring. It also requires a recognition that children's educational experiences are shaped by their homes, communities, health, nutrition, and broader social environments.

The 2025 National Early Childhood Development Policy Framework provides an opportunity to strengthen the coordination of services for young children. For this opportunity to translate into improvements in Baluchistan, national commitments must be supported by provincial implementation plans, predictable budgets, district-level evidence, and clear institutional responsibilities.

Ultimately, quality early childhood education should be understood as a long-term investment in children's development and in the province's educational and social future. A sustained, equitable, and locally responsive approach can help create stronger foundations for learning while reducing the disadvantages that begin before children enter primary school.

16. Recommendations

1. Expand access to ECE. Develop a phased provincial plan to extend early childhood education to underserved districts and communities, using reliable school-level and population data to priorities areas with the greatest need.

2. Allocate dedicated funding. Establish transparent budget lines for ECE classrooms, teacher recruitment, professional development, learning materials, maintenance, and monitoring.

3. Strengthen teacher preparation. Provide specialized pre-service and in-service training in early childhood development, play-based pedagogy, language development, early mathematics, inclusive teaching, and safeguarding.

4. Improve classroom environments. Ensure safe spaces, age-appropriate furniture, accessible sanitation, clean drinking water, adequate ventilation, and locally relevant learning materials.

5. Promote play-based learning. Encourage teaching through storytelling, games, music, drawing, exploration, conversation, and structured play rather than relying mainly on rote memorization and written exercises.

6. Use linguistically responsive approaches. Build on children's familiar languages and cultural experiences while supporting gradual development of the additional languages required by the curriculum.

7. Engage parents and communities. Organize parent meetings, caregiver guidance sessions, and community consultations to explain ECE's purpose and identify barriers to regular attendance.

8. Improve gender equity and inclusion. Strengthen safe facilities, disability accessibility, inclusive teaching, and recruitment and support of appropriately qualified female teachers where needed.

9. Integrate early childhood services. Improve coordination between education, health, nutrition, sanitation, and child-protection services so that children receive more comprehensive support.

10. Strengthen monitoring and evaluation. Track not only the number of schools offering ECE but also enrolment, attendance, teacher qualifications, classroom quality, inclusion, family participation, and children's developmental progress.

11. Support district-level implementation. Allow districts to adapt delivery arrangements to local geography and community needs while maintaining provincial quality standards.

12. Evaluate programs before scaling up. Pilot contextually appropriate approaches, assess their educational and financial performance, and expand those that demonstrate credible benefits and sustainability.

REFERENCE

Syed Muhammad Ishaq et al.. (Volume 3, Number 3, 2025,). Artificial Intelligence as a Co-Teacher: Enhancing Educator Efficiency through Intelligent Systems. The Critical Review of Social Sciences Studies, Pages 1324–1342.

Bronfenbrenner, U. (1979). The ecology of human development: Experiments by nature and design. Harvard University Press.

Ministry of Planning, Development and Special Initiatives. (2025, February 20). Federal Minister for Planning, Development, and Special Initiatives Ahsan Iqbal launches National Early Childhood Development (ECD) Policy Framework & Pakistan SUN Youth Network (SYN). Government of Pakistan. https://pc.gov.pk/web/press/get_press/1499

Pakistan Institute of Education. (2025). Pakistan education statistics 2023–24. Government of Pakistan. https://pie.gov.pk/SiteImage/Publication/PES%202024.pdf

Samuel Hall. (2023). Review of early childhood education (ECE) models in Pakistan. UNICEF Pakistan. https://www.unicef.org/pakistan/media/5316/file/Review%20of%20Early%20Childhood%20Education%20(ECE)%20Models%20in%20Pakistan.pdf

United Nations Educational, Scientific and Cultural Organization. (2023). Global education monitoring report 2023: Technology in education—A tool on whose terms? https://www.unesco.org/gem-report/en/technology

United Nations Educational, Scientific and Cultural Organization. (2024). Global report on early childhood care and education: The right to a strong foundation. UNESCO. https://www.unesco.org/en/articles/right-strong-foundation-global-report-early-childhood-care-and-education

United Nations Children's Fund. (2019). A world ready to learn: Prioritizing quality early childhood education. https://www.unicef.org/media/57926/file/A-world-ready-to-learn-advocacy-brief-2019.pdf

United Nations Children's Fund. (2020). Build to last: A framework in support of universal quality pre-primary education. https://www.unicef.org/media/67191/file/Build-to-last-framework-universal-quality-pre-primary-education.pdf

United Nations Children's Fund. (n.d.). Early childhood development (ECD). Retrieved October 20, 2026, from https://www.unicef.org/pakistan/early-childhood-development-ecd-0

Vygotsky, L. S. (1978). Mind in society: The development of higher psychological processes. Harvard University Press.

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