

## **Pakistani Early Childhood Education Classroom Quality in Terms of Structural and Procedural Aspects**

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### **Abstract**

Classroom environment is a vital factor in early childhood education, serving as a key determinant of success. Organizational structure and the quality of processes together create conditions that lead to desired outcomes. This study aimed to examine classroom structural features in early childhood education within government and private schools in major cities of Punjab. Focus areas included classroom size, physical environment, academic quality, and teacher-child ratio. It also explored differences among population groups in fulfilling structural quality aspects, considering teacher self-efficacy and depressive behaviour. The research adopted a causal-comparative design. For quantitative data, 110 public and 110 private schools in Punjab were selected through ease of access. A survey method using a self-developed questionnaire was employed to collect data. The analysis was carried out with the Statistical Package for Social Sciences (SPSS) version 25.0, applying descriptive analysis. Statistical tools such as frequency analysis, independent samples t-test, and ANOVA were used to classify and interpret quantitative information. These methods allowed comparison of structural and process features of classroom quality across school types. The findings are expected to highlight differences between public and private settings, offering insights to improve classroom environments in early childhood education.

**Keywords:** *Classroom Quality, Structural Quality, Process Quality*

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## Introduction

Class quality is very important in achieving the intended learning outcomes at all levels of learning. It has been established that ECE is equally crucial for achieving positive results at the level of early childhood education. Other aspects of classroom quality include structural quality, process quality, learning environment, teachers' characteristics, teacher's self-perceived competence as well as the relationships that students have with their teachers (Khattak et al., 2023). Quality of classroom and learning also lies with the teachers. Educational system and successful learning can be regarded as depending greatly on the teachers. Teachers make students succeed through personalities themselves. 'Higher self-efficacy' as well as the quantitative scores on the positive features in the teachers showed optimistic results (Lopez et al., 2024). Classroom learning quality can also be defined as the extent to which the self-efficacy of the teacher, personal characteristics of the teacher and the students, classroom arrangements, teacher's student's interaction patterns and finally the structural and procedural quality of the classroom are effective determinants. Favorable and improved results can be achieved by a teacher with favorable attitude and beliefs towards teaching profession and self-efficacy. Self-efficacy is among the constructs of individual teachers, and the interaction between teachers and students is relevant to the institutions of education (Paling et al., 2024). It is based on two dimensions. 1. They are transferring efficiency. 2. Individual efficacy. The first one is the instructional efficacy which focuses on the understanding of instruction and promoting pupils' higher achievement. The second is unique point which makes a clear point with regard to strategies used in instruction that affect learning of students. Attributes of effective teachers play an important role in learning and achievement; truly effective teaching which requires high self-efficacy is essential for designing and administering the education system (Paling et al., 2024).

Schooling begins right from early childhood education. Now, let us consider ECE which actually has some influence on children's social, emotional and cognitive development. Neurological study also shows that growth of the brain is at the highest level in children at the age of three years. At this age, students' brain development can be enhanced to ensure a favorable, practicing learning environment through play (Khattak et al., 2023). There are two types of predictors: class environment and teacher self-efficacy, which is the primary characterizing factor of an effective teacher. In so doing, it indicates that the physical and academic

infrastructure (computer laboratories, learning material laboratories, and audio visual aids), and the overall classroom quality (structure and process environment) has a positive effect. It is during the childhood age that a child's social, emotional, intellectual, and physical development is mainly determined (Younas, 2022). Early Child Education is a developmental stage through which young children build their knowledge, thinking skills and emotional well-being. Scholars support that high-quality early childhood education becomes crucial in the child's academic achievements and peer relationships transition in the later years (Britto et al., 2017). In Pakistan, due to low socio-economic status, quality education especially in ECE is an issue and hence the need to investigate classroom quality of ECE. High-Quality ECE moreover the future success that children obtain in school and other significant aspects of early development, including mental health, behavior, and learning-readiness (UNESCO, 2021).

Classroom quality in childcare and preschool age children can generally be categorized as structural and procedural class characteristics. Structural dimensions are the parameters such as class size, the proportion of teachers to students, qualities of teachers, and the materials and equipment available for carrying out the pedagogy (Phillips et al., 2021). On the other hand, procedural concerning the relationships of the students, the dynamics within the classroom, the approaches that is the teaching-learning process (Mashburn et al., 2021). Combined, all these dimensions have the crucial core responsibilities of creating a positive, stimulating, and constructive learning climate for young children. The quality of ECE in Pakistan is under the impact of cultural, socio- economic and political factors in the country. Based on UNICEF (2020) Pakistan overviews, there is still a huge inequity in terms of the availability of quality education in rural and urban areas of Pakistan, ECE centers in rural areas are generally poorly equipped. Furthermore, the Pakistani schools often have limited teaching aids, low quality of teachers, and overcrowded classes all of which affects the sort of education that young children receive (World Bank, 2021).

The structural quality in the Pakistani ECE classrooms is known to be compromised due to a lack of specific standard guidelines and resource deficiency. Literature shows that there is a discrepancy in teacher training, classroom facilities, and child-staff ratio in Pakistani preschools and the discrepancies are for private and public schools (Ahmad & Khan, 2021). This variation in structural quality impacts on the

extent to which learning environments promote early childhood development and learning (Jabeen & Mahmood, 2021). Teacher qualifications constitute one of the structural quality dimensions in Pakistan; many teachers of ECE are without formal training in ECE. The Pakistan Ministry of Education has also realized this problem and has reported that a small percentage of teachers in the early years are trained well enough (Ministry of Federal Education and Professional Training, 2021). The most worrisome of all elements, is the shortage of trained teachers; It has been proven that teachers who received their training would be in a better position to offer quality education and provide developmentally inappropriate methods of teaching (Rizvi, 2020).

Procedural quality is primarily about the interaction between teachers and children, which is pivotal to effective early childhood education. In Pakistani classrooms, procedural quality is often compromised by overcrowding and insufficient resources, which limit teachers' ability to engage meaningfully with each child (Saleem & Khalid, 2021). Studies have shown that high-quality teacher-child interactions, such as open-ended questioning, positive reinforcement, and collaborative learning, are essential for children's language and social skills development (Mashburn et al., 2021). Play-based learning is recognized internationally as an essential component of quality ECE, yet it remains limited in Pakistan due to cultural and educational constraints. Pakistani ECE classrooms often prioritize rote memorization over interactive or play-based learning, restricting children's creative and cognitive development (Ahmed, 2021). Research highlights the benefits of play-based learning in fostering critical thinking, social skills, and self-regulation in young children (Whitebread & Bingham, 2021).

Over the years the government of Pakistan has initiated certain policy change for enhancing quality of ECE. The NEP 2021 also bestows significant importance in early childhood education as a foundational stage and also to focus on both structure and process quality of classroom (Ministry of Federal Education and Professional Training, 2021). However, the provision of these policies has been partial across regions, and cities have more efficient access to utilization than the rural areas (World Bank, 2021).

Despite the ongoing attempts to enhance ECE in Pakistan, there is a dearth of empirical studies on the effects of structural and procedural quality on children's learning. The future research recommendations should aim at assessing the impact of current policy changes toward and

identifying new culturally sensitive and contextual solutions to enhance for quality of ECE in various Pakistani contexts. Research could give significant information on ways through which young children in Pakistan could be assisted to develop within the given context of early education in the country (UNICEF, 2020). This paper examines “Classroom quality in terms of structural and process dimensions at early childhood education level in Pakistan.” Research has established differences between public and private schools regarding both education organization standards and educational quality at the early childhood level. The main purpose of this research project contained a comparison between classroom quality's structural elements and process components. Find multiple aspects which define the standards of classroom quality. Pakistan stands among developing nations which show insufficient development of early childhood education despite its moderate progress within the developmental period. None of these years of at-home care for early childhood produces full ability development. Some factors have the potential to enhance early childhood learning quality at schools yet they receive minimal attention. The current research aims to evaluate how important the teachers' specifications and classroom conditions and teaching quality levels are at the ECE level. Body areas advance sequentially through time and daily vitamin and mineral amounts must be replaced while overall body dimensions grow. Proper teachers need to utilize their self-efficacy while creating a conducive classroom environment so the child can develop completely in all developmental areas which include physical, mental and intellectual, motor, cognitive and psychological aspects. Classroom quality significantly relies on teachers' effective self-efficacy together with students' interaction combined with teachers' physical and academic classroom environment. The paper evaluated different aspects that influence classroom quality starting with content materials followed by teaching environment and instructor qualities and continuing with teacher-student social dynamics and unsupportive learning environments and ending with family-school cooperation.

### **Literature Review**

Most influential phase in the existence of a child is childhood as it shapes the whole life of the kid. Hear the voice of youngsters, they are major conceivers. They emulate their teachers and elders, as the case may be. They are simply just beginning in her life. Warm, firm, and positive classroom relationships involving students and teachers are an aspect of process quality. Based on the research, for the quality of ECE to be

retained and even elevated in an effort to produce better learning outcomes, it is requisite to incorporate services. Therefore, academic facilities, physical facilities, and instructional methodologies should be necessary for better performance. For instance, facilities in an organization may be available, but a leader is missing to effectively manage them. It is perhaps the most significant period in the entire life of students. Learning is more when one is young ES Early childhood is a period when learning takes place. While in the early years, the youngster develops a keen interest in the causes that make the other objects different from them. The learning point of view posits that the formative years of a child are especially important (Younas et al., 2022).

### **Structural Quality**

Structural quality is the focus on the arrangements of the program which can be viewed across the teacher-child ratio, number of children per group, teachers' education, physical condition of the surroundings, and key academic and physical characterizations. Learning-teaching process, personal characteristics of the learning-teaching personnel, relations between students and teachers, and depressed behavior are the primary spheres of process quality (Lyakso et al., 2022). Prior empirical research has concentrated on analyzing the connection between structure quality and process quality. Teacher education and structural standards as well as programme characteristics associated with physical learning space can enhance process elements of quality like environment and activities (Hartman et al., 2016). As Lanigan (2010) pointed out, structural relationships with process quality are already documented. It also shows that structure quality can be positively related to process quality; (Hartman et al., 2016). Quality assessment (QA) techniques in the context of protein structure prediction can be divided into two categories: Local QA predicts the structural quality of individual residues and global QA predicts the overall structural quality of a protein (Zhang et al., 2011; DeRonne & Karypis, 2009; Wallner & Elofsson, 2005). Out of a set of predicted structures, these QA techniques are vital to picking the best or near-native models (Zhang et al., 2011, DeRonne & Karypis, 2009, Wallner & Elofsson, 2005).

### **Classroom quality at the early childhood education level**

As is clearly understood, the quality of classroom is one of the most important factors that can facilitate or hinder students' achievement. Research findings have revealed that a foregoing success can be attributed to the mental and physical quality of the class (Lyakso et al.,

2022). Younas, Khan, et al. (2023) declares that quality of learning resource and quality of environment; play most important role in children in early childhood education level like; area inside, interior ,floor area, technology, furniture, routine care, play and learning indoors, furnishing for comfort, position of room, space for privacy, special needs of children ,children related display that can be changed, gross motor play, gross motor equipment, physical facilities, academic facilities such as audio visual aids depending. To attain better achievement, ECE or early childhood education facilities are more important. Several authors presented ECE in their work. According to Gorden and brown (2020), early education is the education students receive from 2 to 8 years”. As Sollars (2020) explains, Early Childhood Education is connected with Mental And Physical Development. Early childhood programs must therefore offer a good experience to 3-8 years, old students. According to Khan (2018), our present education is not aligned to our ideology. It should be as per our doctrine and equipped with all service and activity for improved productivity and efficiency. Younas et al. (2022) state that the initial eight years of any child defines the childhood as per the mental, social and physical as well as the intellectual progression. That is why, it is important to highlight the challenges that are faced by the government and private sector in ECE. In conclusion, ECE and care, according to the authors, create new possibilities and new direction for children, families and society in general(Aziz, 2020). Comparing the responsibilities of the public and the private sectors concerning ECE is a very instructive exercise. To our minds ECE and care create new trends and opportunities for children, families and, in general social context. The governments are under significant pressure to provide and improve social policy interventions which support the promotion and implementation of ECE (Younas, SairaTaj, et al., 2023).

ECE policies accomplishments. When analyzed the past history of ECE in Pakistan, it reveal that ECE has not given importance in public sector of Pakistan. In the Pakistan education system, there was an ECE context all through preparatory class only in few public schools, not any class of ECE. ECE was originally initiated in 1970s in Pakistan, and organized between ages 3 to 6 organized in public sector school of Pakistan. This program was not complied with by schools for a long time and was discontinued in the 1980s. Again in 1992 early classes were initiated in Pakistan’s public sector schools but were not given facilities and students services. Children aged three to five years (4,426,589 boys and 4,228,480 girls) were out of school. Closely tied to policy changes were new reasons to state that further action is needed in order to enhance

the quality of ECE programs in schools in Pakistan. New education policies for improving ECE quality of learning environment stimulation, for better understanding services for play activities emphasizing on activities-based education for additional budgets for the teachers' training in ECE regarding material for ECE curriculum. Even in Pakistan there is no particular emphasis on ECE, training center for teachers hardly offered, no ECE is provided due to poor economic status. Lack of poverty is the main reason not to provide basic facilities and services to students at the early childhood education level in Pakistan and untrained teachers are not provided to students at the early childhood education level in Pakistan. In other words, providing all facilities and trained teachers to students will help us realize our required aims and objectives (Younas, SairaTaj, et al., 2023). Dickinson (2002) also observed that classroom quality, physical facilities, facilities for academics, healthy environment and learning with play greatly influenced better achievement at ECE Level. Classroom academic quality in early childhood education is the most important factor in better achievement because early childhood education is our basis. Academic learning outcome provides information about a school classroom learning environment. The classroom assessment scoring system (CLASS) makes sure the practice of the teacher and interactions of the student (La Paro et al., 2024).

### **Teachers' Self-efficacy**

Teachers self-efficacy is concerned with teacher improving better learning (Bandura, 2023). A fragment of evidence that would give them confidence in their competence to properly accomplish a particular task. Teachers' efficacy is the notion that enhances factual knowledge regarding the learning of what teachers wish to impart to the students. Teachers' management, teacher's skills of learning, confidence, planning, and ability to control the situation all involve aspects of self-efficacy that teachers in the field have. Teachers' self-efficiency is in the ability and the awareness they possess in their field of specialty. Its premise that teachers possess proper and authentic knowledge of how best to teach. High self-efficacy has positive impact on students while low self-efficacy among the standard teachers lead to poor performance. So for effective outcomes and improved performances, there should be a high self-efficacy. Using Bandura's social cognitive theory self-efficacy is the extent to which an individual believed in his/her capability to perform tasks and accomplish certain goals. It is very important in interpreting the level of motivation, tenacity and hard work in spite of odds. Many studies make it obvious that those who possess high self-efficacy beliefs are likely to set realistic



challenging goals and likely to solve problems, to show more flexibility in their working . While in academic settings, self-efficacy affects the students' performance learning rates and overall satisfaction. For instance, students with higher self-efficacies depicted positive and more approach behaviors in tasks related to learning, sought assistance when necessary and self-propelled even if facing chunk. Those aspects of knowledge which influence self-efficacy including accomplishments, encouragement and helpful feedback may prove beneficial for designing improved interventions for altering personal career as well as other achievement lifecycle necessities in numerous vocations. As such, self-efficacy assumes a strategic role in both psychological theory and practice in education, workplace and other spheres(Bandura, 2023).

### Framework

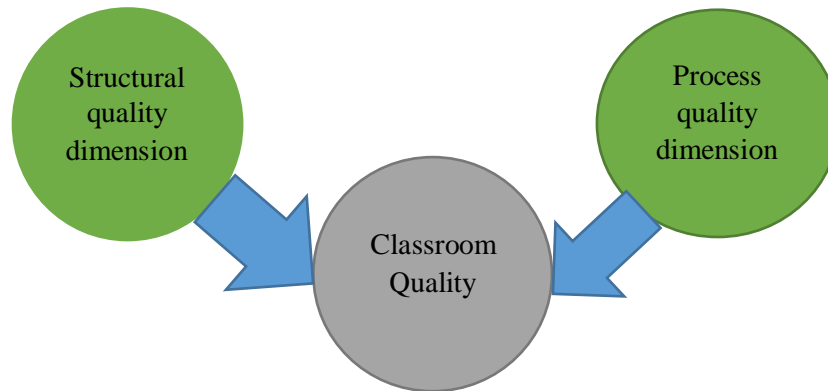


Figure 01. *Class quality dimension*

### Objectives

1. To examine the physical and organizational classroom context features (class size, facilities, instruction, and teacher-pupil ratio) in the early childhood education in public and private institutions of Punjab.
2. To measure the process dimensions of classroom quality (Teachers' self-efficacy, depressive behavior, teacher parents, co-ordination and teachers' attitude toward children) in early childhood education at public and private schools of Punjab.

3. The purpose of this study is to analyze comparative analysis between different demographic variables in terms of structural and process aspect of classroom quality in early childhood education in public and private school of Punjab Province of Pakistan.

This study will have a significant influence on assessing the teachers' perception of the classroom quality in an effort to enhancing learning the at ECE level. This study will yield a comprehensive understanding of the key elements comprising the environment, practices and structures of early childhood education. To conclude, we can state that growth of the fundamental societal, emotional, cognitive skills that should help instructors to facilitate the progress of their learners is defined by the quality of the classroom. That will establish the fact that approaches utilized for encouraging the qualities of instructors as well as students will apply permanent impact to kids' achievements.

### **Research Question**

1. How many structural quality dimensions are there at the level of early childhood education?
2. At what level is the process quality in early childhood education, and what are the dimensions of this level?
3. To what extent are public and private schools in major cities of Punjab structurally or procedurally different?
4. This framework is geared towards determining the structural and process quality dimensions of early childhood education classroom quality factors.

### **Methodology**

It was causal comparative study. It involved positivism as research paradigm. To carry out this study, the population included all the public and the private institutes of the metropolitan cities in Punjab and the teachers and students of the private and the public institutes of the metropolitan cities that provide ECE. The majority of the researchers used numerous forms of sampling based on the needs of their methodology. The research design used was positivist causal-comparative research design. The target population was all the public and private schools and institutions to which Early Childhood Education is offered in the major cities of Punjab like Lahore, Gujranwala and Faisalabad. Using convenience sampling, the researcher selected the sample of 200 schools with balanced distributions of 100 public and 100 private schools in these cities. Invitation to participate in the study was sent to one school ECE classroom teacher in each of the selected schools. The survey was filled in

by 200 teachers who answered with fifty percent of both categories of educational sectors. School administrators provided contextual information regarding facilities and resources as well as class size information. This sampling method was effective in attaining an urban breadth yet convenience-based selection poses the possibility of unrepresentative gaps in total coverage of ECE settings. Population was covering the total of the private and the public schools of Lahore, Gujranwala Faisalabad. In the research, the researcher would measure the teacher self-efficacy, structural, classroom quality of teachers in school. In the quantitative section, the researcher would be quantitatively measuring all the contextual factors by use of a self-developed questionnaire on aspects of classroom quality, structural and process, which have been applied in similar studies such as the program, teacher-student communication, physical environment, academic environment self-confidence, depressive behavior and other related aspects. The instrument would be validated by psychologists and experts in educational measurement.

### **Data collection**

The questionnaire was developed with a clear conceptualization of the quality of the ECE classroom both structurally and procedurally. Our constructs were structured dimensions (e.g. class size, teacher qualifications, materials, safety) and process dimensions (teacher-child interactions, instructional practice, contact) guided by accepted theory and research (e.g. ecological view and quality frameworks by Bronfenbrenner). Previous research indicates that despite the importance of structural factors (like teacher training or child to staff ratios), process quality (day to day interactions, learning experiences) can often be the driving factor in child outcomes. Specifically, the creators of research and scales observe that a good program should address the primary needs of children in the areas of health/safety, nurturing relationships, and challenging learning experiences. We base our item domains on this tripartite model (protection, relationships, stimulation). The items that captured our special attention in the Pakistani situation, where overcrowded classrooms and fluctuating resources are standard, related to both the local situation (e.g. crowded classrooms, resource availability) and to the global quality constructs.

The survey tool that was applied in this study was designed by the author of this paper and was composed of questions set. Public and private sector data was used to supplement a broad and sample survey. The

questionnaires were administered personally to the public and the private sectors by the researcher. The administration was to submit these questionnaires after filling the questionnaire.

### Data Analysis

Data that were collected were analyzed using the statistics including descriptive and inferential statistics. The frequencies and percentage were calculated under the cross tabulation and the mean standard deviation was calculated under the descriptive analysis. T.TEST of independent sample and ANOVA were employed in the case of inferential statistics. As a result, data were described in tabular and phrase forms using the SPSS versions 25.

### Findings

Table 01

#### *Reliability test*

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	No of Items
0.827	0.849	70

The table explains that considerable differences ECE services, public school shows (M=23.933, SD=2.474) and private schools show (M=24.400, SD=3.259),  $t=1.397$ . The P-value (.001) shows that the results are insignificant. It is crystal clear that private school had much ECE services towards ECE public school.

Table 02

#### *Summary of One way Analysis of variance (ANOVA) national efforts towards ECE*

National Effort	Sum of square	Df	Mean square	F	P
Between groups	300.25	199	100.08		
Within groups	2508.06	199	54.52	1.84	.15
Total	2808.32	398			

The table reveals that ANOVA test results are significant. It means that there is significant difference of opinion among teacher and parent's regarding national efforts towards ECE.

Table 03

*Independent sample t-test*

Variablres	M	SD	DF	T	P
Public (n=100)	20.720	2.732	198	2.934	.004
Private (n=100)	21.833	3.758			

The result depicted in the table is that means of (Public and Private) teacher use useful teaching strategies in learning achievement at ECE level show (M=20.720, SD=2.732) and distance education programs show (M=21.833, SD=3.758). The T-value is 2.934. The P-value is .004 which indicates the result is not significant. From the aforementioned comparative analysis, it is quite emergent that private school teachers provided much useful teaching strategies to public school teachers.

Table 04

*Comparative analysis of structural dimensions between public and private institute for ECE students.*

Public			Private		
Opinion	Frequency	Percent	Opinion	Frequency	Percent
			Strongly Agree	85	85.0
			Agree	8	8.0
Strongly Agree	78	78.0	Neutral	2	2.0
Agree	07	07.0	Disagree	4	4.0
Neutral	00	00.0	Strongly Disagree	1	1.0
Disagree	10	10.0			
Strongly Disagree	05	05.0			

Table indicates that regarding Physical/structural facilities for ECE students' The perception of the public school teacher is evidenced by

i.e. 78.0 percent of the respondent strongly agreed, 7.0 percent agreed The private school teacher's perception was i.e. 85.0 percent strongly agreed, 8.0 percent agreed our school percent of them were agreed that our school has all physical facilities play grounds, wash rooms ,medical facilities, care giver There is no doubt that private schools have better physical facility or structural facility than the ECE students of the government schools.

Table 05

*Comparative analysis of academic facilities for ECE students*

Public			Private		
Opinion	Frequency	Percent	Opinion	Frequency	Percent
Strongly Agree	65	65.0	Strongly Agree	85	0.85
Agree	10	10.0	Agree	8	0.80
Neutral	10	10.0	Neutral	2	0.20
Disagree	10	10.0	Disagree	4	0.40
Strongly Disagree	05	0.50	Strongly Disagree	1	0.10
Total	100	100.0	Total	100	100.0

Table shows that as per the perception of the teachers of Public school 65.0% of the total respondents strongly agreed that Our school has availability of worksheet, daily diary, multimedia, audio visual aids, refresher courses, and study visits for ECE students and 10.0% agreed the same statement while 10.0% were undecided and 10.0% were disagreed whereas only 5.0% were strongly disagreed On the availability for work sheet, daily diary, multimedia, audio visual aids, refresher course, study visits form ECE students, 85.0% of the teacher from private school strongly agreed, 8.0% of them agreed, 2.0% were undecided and 4.0% disagreed while 1.0% of them strongly disagreed. Without doubts one can say that private school teacher had better provision of academic resources compared to that of a public school.

Table-6

*Comparative analysis of teachers' attitude towards ECE students*

Public			Private		
Opinion	Frequency	Percent	Opinion	Frequency	Percent

Strongly Agree	60	60.0	Strongly Agree	85	85.0
Agree	15	15.0	Agree	8	8.0
Neutral	10	10.0	Neutral	4	4.0
Disagree	10	10.0	Disagree	2	2.0
Strongly Disagree	05	05.0	Strongly Disagree	1	1.0
Total	100	100.0	Total	100	100.0

Private school teachers have a more favorable attitude than public school teachers, as found in a comparative study of the attitude of teachers from the two types of schools towards students of ECE. Only 4% of teachers from private schools were neutral and 3% disagreed, while 85% strongly agreed and 8% agreed that they have a favorable attitude toward ECE children. Conversely, a high proportion of public-school teachers reported neutrality (10%) or disagreement (15% total), which indicated more mixed attitudes, although 60% strongly agreed and 15% agreed. Overall, the results indicate some institutional culture difference and teacher attitudes between the two groups, with private school teachers more consistent in support and encouragement of ECE students and public-school teachers more inconsistent and negative attitudes.

## Conclusion

The quality of early childhood classrooms' structure and procedure in Punjab is much higher in private schools compared to state schools, as per empirical evidence from this study. Specifically, it was found that while public schools typically did not have sufficient materials and had lower teacher efficacy, private ECE environments had much greater access to academic resources (e.g., worksheets, audio-visual aids, and technology) and more positive instructor attitudes. These differences were registered alongside differences in organizational provision and classroom infrastructures. The results indicate a concern with equality: children through public early childhood education may begin primary school having fewer advantages. They also support previous research documenting public-private inequalities in Pakistani early education (Hafeez et al., 2023). This research points to the areas where the most concern is needed through the identification of some quality needs, including lack of instructional material and teacher preparation in the public sector. The findings lend support to Pakistan's ECE policy agenda that the improvement in physical environment and instruction in all preschools is important for developing young children. The key finding is that to bring public ECE to private sector standards, structural and

procedural investments are necessary. Ultimately, enhancing these areas will result in more equitable outcomes in Pakistan's education system, more effective early learning experiences, and better school preparation.

**Recommendation**

Allocate dedicated funds for the materials and facilities required for early childhood education. These finance options must be accessible across Pakistan. Key initial steps towards quality involve offering age-suitable learning materials and basic amenities (toilets, clean water, electricity, and playgrounds). Preschool teachers must be made to acquire formal ECE certification, and they must be provided with continuous professional development that focuses on child-centered pedagogy. Teachers with strong self-efficacy create more supportive and effective learning environments, thus training should enhance their self-efficacy and classroom management skills. Young children are known to respond positively to interactive teaching approaches (Zachariou & Whitebread, 2022). Set measurable, clear ECE standards that can be applied to public and private providers alike, and monitor closely for compliance. The government should facilitate standard definitions and requirements for ECE (curriculum, class size limits, and resource requirements), as recommended by UNICEF.



## References

- Ahmed, M. (2021). The role of play-based learning in Pakistani early childhood classrooms. *Pakistan Journal of Educational Research*, 9(2), 34-46.
- Britto, P. R., Engle, P. L., & Super, C. M. (2017). *Handbook of early childhood development research and its impact on global policy*. Oxford University Press.
- Jabeen, F., & Mahmood, N. (2021). Teacher qualifications and quality of early childhood education in Pakistan. *International Journal of Early Childhood Education*, 19(1), 23-35.
- Aziz, S. (2020). Nongovernment Organizations' Role in Providing Quality School Education in Pakistan: The Experiences of CARE Foundation. *Anticipating and Preparing for Emerging Skills and Jobs: Key Issues, Concerns, and Prospects*, 83-88.
- Bandura, A. (2023). Cultivate self-efficacy for personal and organizational effectiveness. *Principles of Organizational Behavior: The Handbook of Evidence-Based Management 3rd Edition*, 113-135.
- Dickinson, D. K. (2002). Shifting images of developmentally appropriate practice as seen through different lenses. *Educational Researcher*, 31(1), 26-32.
- Hafeez, A., Dangel, W. J., Ostroff, S. M., Kiani, A. G., Glenn, S. D., Abbas, J., Afzal, M. S., Afzal, S., Ahmad, S., & Ahmed, A. (2023). The state of health in Pakistan and its provinces and territories, 1990–2019: a systematic analysis for the Global Burden of Disease Study 2019. *The Lancet Global Health*, 11(2), e229-e243.
- Khattak, A. N., Khan, W. A., Bhatti, G. A., Ullah, S., Irfan, K. U., Waqas, A., & Khan, M. I. (2023). Designing A Super Lecture Model For Academic Excellence: Integrating The Theories Of Human Resource Management: An Exploratory Study. *Journal of Positive School Psychology*, 427-442.
- La Paro, K. M., McKoy, M. C., & Scott-Little, C. (2024). Teacher educators as interpreters: the role of faculty in guiding student learning of DAP within sociocultural, institutional, and individual contexts. *International Journal of Early Years Education*, 1-10.
- Lopez, L. D., Castillo, A., Frechette, E., Jeon, S., Castle, S., Horm, D., & Kwon, K. A. (2024). High-quality early care and education for low-income families: Toddlers' cognitive and emotional functioning during the COVID-19 pandemic. *Infancy*.

- Lyakso, E., Frolova, O., Kleshnev, E., Ruban, N., Mekala, A. M., & Arulalan, K. (2022). Approbation of the child's emotional development method (CEDM). Companion Publication of the 2022 International Conference on Multimodal Interaction,
- Paling, S., Sari, R., Bakar, R. M., Yhani, P. C. C., Mukadar, S., Lidiawati, L., & Indah, N. (2024). Belajar dan pembelajaran. *Penerbit Mifandi Mandiri Digital*, 1(01).
- Sollars, V. (2020). Defining quality in early childhood education: parents' perspectives. *European Early Childhood Education Research Journal*, 28(3), 319-331.
- Younas, A., Khan, B. S., & Taj, S. (2023). Structural Dimensions of Classroom Quality at the Early Childhood Education. *Archives of Educational Studies (ARES)*, 3(1), 130-145.
- Younas, A., Khan, S., & Makhdum, F. N. (2022). A Comparative Study of Early Childhood Education Services Provided By Public and Private Institute in Pakistan. *International Journal of Early Childhood Special Education*, 14(5).
- Younas, A., SairaTaj, S. K., Hussain, S., Makhdum, F. N., & Khan, B. S. (2023). Classroom Quality In Terms Of Structural And Process Dimensions At Early Childhood Education Level In Pakistan. *Journal of Positive School Psychology*, 79-94.
- Zachariou, A., & Whitebread, D. (2022). The relation between early self-regulation and classroom context: The role of adult presence, the task's source of initiation, and social context. *British Journal of Educational Psychology*, 92(3), 861-880.

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