Teachers' Perceived Efficacy of ECE Classrooms Learning Environment on Children Learning Experiences in Government Schools in District Sialkot

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Abstract

The study was to examine the Teachers' Perceived efficacy of ECE classrooms learning environment on children learning experiences in government schools in district Sialkot. The data was collected from the Government schools of each tehsil of district Sialkot having ECE classrooms. A stratified random sampling technique was used to select the schools from each tehsil of district Sialkot. An inventory to record the availability and usability of resources, and a questionnaire to record teacher reported learning experiences of children was used for quantitative data collection. Descriptive data analysis was done to report the current status of the physical, academic, and human resources (HR) of ECE classrooms. In this regard, ECE policy 2017 served as a documentary base to refer to policy statements and framework for action. The way forward suggested the improvement required in physical, academic, and HR facilities leading to improve learning experiences of children.

Keywords: Early Childhood Education Classroom, Learning Environment, Learning Experiences

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Introduction

A great deal of research in the field of early childhood education strongly suggests that classroom learning environment is a significant determinant of learning in students by stimulating teaching learning process through various components of classroom environment (Dhanapala, 2021).

The physical infrastructure, availability and usability of learning material, instructional design and peer interaction are effective stimulus to enhance students' learning experiences in classroom. The size of classroom, proper furnishings and spacing provide enough scope for young ones to move freely, work independently and perform group activities. This in turn promotes the habits of sharing, cooperation, discipline, self-regulation and executive functioning (Puteh et al., 2015). A flexible, child centered and play based curriculum effectively covers the cognitive, physical and social aspects of children development. On the other hand, continuous guidance, support and feedback of ECE teacher greatly help in acquisition of basic concepts, skills of numeracy and literacy in children (Ali et al., 2018).

Early Childhood Education is one of the six goals of EFA (1990). It is also an important goal of Dakar framework for action for Education for All (2000). Pakistan National policy (1998-2010) extended primary education to six-year program. In EFA National Plan of Action of 2001-2015, the three major targeted areas are early childhood education, universal primary education and adult literacy. Government of Pakistan is committed to provide quality of education to young ones to enhance the competency level of the children and to up lift the literacy level. One of the initiatives in this respect is to establish ECE classrooms, firstly in selected schools and gradually in all public schools (Punjab Early Childhood Education Policy, 2017).

In Pakistan there was no public policy or investment of any kind regarding early childhood education and care till 1990. Only private sector schools were continuously running kindergarten and Montessori systems on commercial level and providing services to selected urban population. This is after the commitment of EFA at the world education conference that the idea got significance as a serious issue. Dekar framework for Action at the world education forum in April reinforced the expansion and improvement of early childhood education to the most neglected ones. It was in 1998 that katchi/pre-primary was considered as formal class. Early childhood education became an important part of education sector reform program and separate funding was allocated for provincial and district government in National Plan of Action on Education for All (2001-2015).

Besides this, the need of raising quality, greater participation of all stakeholders and good governance was also proposed. Another important step in this regard was formation of ECE curriculum 2007 (Academy of Educational Planning and Management, 2017).

Early childhood education has now become a debate of policy level. The Punjab ECE policy 2017 has clearly formulated its objectives and strategies to institutionalize the whole ECE structure with allocation of adequate founding and set of quality standards. The major steps taken in this regard were establishment of ECE classrooms in selected primary schools with provision of ECE kit having diverse learning material, involvement of community and parents in the form of school council and hiring of caregivers and ECE teachers. The ECE classrooms were painted according to different themes. Learning corners were made to facilitate students to perform different activities and placing learning material. The training of ECE teacher, head teacher, care giver and school council members was conducted to make them familiar and trained according to the requisites of early childhood education.

The Punjab ECE policy 2017 provides a complete framework for action to establish standard ECE classrooms to have better learning experiences (Punjab Early Childhood Education Policy, 2017). Presently more than 11,000 ECE classrooms are established across Punjab and 28000 head teachers and ECE teachers are trained according to ECE curriculum to perform in these schools. PMIU is also continuously monitoring the functioning of these classrooms. The area of focus is to ensure the quality of teaching practices to have effective classroom learning experiences (Punjab Education Sector Reform program, 2020). Main objectives of the study were to assess the availability and functionality of Early Childhood Education (ECE) classrooms resources and to examine the perceived efficacy of ECE classroom learning environment in providing enriched classroom learning experiences to the children in Government schools. This being new initiative needs actual review of the situation to keep the directions correct with respect to establishment of early childhood education sector plan in the province.

Objective

The main objective of the study was to:

1. Examine the perceived efficacy of ECE classroom learning environment in providing enriched classroom learning experiences to the children in government schools in district Sialkot.

Research Questions of the Study

Following were the proposed research question:

- 1. Which physical resources are available and functional in ECE classrooms in government schools of district Sialkot?
- 2. Which academic resources are available and functional in ECE classrooms in government schools of district Sialkot?
- 3. Which human resources are available and functional in ECE classrooms in government schools of district Sialkot?
- 4. How the ECE teacher does perceives the efficacy of physical arrangement and access to learning material in ECE classroom on learning experiences of children in government schools of district Sialkot?
- 5. How the ECE teacher does perceives the efficacy of teachers' behavior and interaction in ECE classroom on learning experiences of children in government schools of district Sialkot?
- 6. How the ECE teacher does perceives the efficacy of daily schedule of learning activities in ECE classroom on learning experiences of children in government schools of district Sialkot?

Review of Literature

The behaviorist theory argues that learning is the product of stimulus conditions and the responses (Uribe et al., 2019). So, there is need to change the stimulus conditions in the environment to modify the responses of the learners (Bastable et al., 2019).

The physical environment of ECE classrooms depends upon the physical setting and proper space and furnishing of classroom so the students could move freely and have access to learning materials of their choice to learn and play. It also includes wall chalking, availability of ECE kit and formation of learning corners to optimize children's learning experiences. A trained ECE teacher can effectively utilize classroom resources to enhance learning experiences of students. Teacher's behavior, tone of language and positive feedback help children to actively participate and effectively perform during different tasks. ECE teacher with caregiver and parents develop cooperative behaviors and healthy habits among children through peer interaction and working together. ECE teacher guides and facilitates children during different activities. The daily educational program and activities define the daily plan of work and schedule of activities to be performed according to time table so it may

secure classroom discipline and promote self-regulation. Different activities in the form of free play, individual work and group work optimizes effective learning of certain skills and values (Curriculum Early Childhood Care and Education Grade Pre 1, 2020).

The establishment of ECE classrooms in Pakistan is to facilitate the process of learning and to help smooth transition to primary school education. The ECE classrooms must be theme based with variety of learning material displayed on walls and shelves easily accessible to children. The formation of learning corners is to stimulate and provide real life like situation to learn and experience. These learning corners optimize learning experiences. Children do experiment with concepts and skills introduced by teacher. Formation of learning corners in ECE classrooms is an effective and efficient way to store relevant learning material and to enhance learning experiences. In learning corners children work with their own pace having wide range of material of interest. Following are the learning corners equipped with material for children to acquire certain competencies.

- 1. Language Corner: to enhance the vocabulary and language acquisition skills
- 2. Library Corner: developing interest in book reading and carefully placing them
- 3. Art Corner: motivating the creative skills
- 4. Math Corner: to learn numeracy, classification, counting and sorting
- 5. Science Corner: observing, experiencing and manipulating
- 6. Home Corner: to inculcate cultural and traditional values

This physical setting helps children in maintaining discipline and self-regulation. Moreover, the daily work routine follows the pattern of planning, working, cleaning and reviewing (National Curriculum for Early Childhood Education, 2017).

The quality of early childhood education programs largely depends on relationship between children and their teachers. The positive interaction between both reflects the effectiveness of learning experiences and developmental benefits in early childhood education classroom (Lipscomb et al., 2021). In the perspective of early childhood education, the professional training of ECE teacher predicts their performance by developing self-efficacy and competencies while conducting multiple tasks specific to early childhood education and care in an ECE classroom (Khandaker, 2021).

Positive peer relationship and social support enhance motivation, attention, academic achievement and learning outcomes in children. It also

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accelerates supportive behavior, emotional stability and resilience to adversities (Chen et al., 2020). Social interaction helps children to adapt and adjust in their surroundings. It is a predictor of successful relationships in future. Experiences with friends give social awareness to develop psycho social competencies among children. Children develop their interpersonal skills and understand the feelings and opinion of others while interacting through communication or play (Shehu, 2019).

An extensive body of research provides an insight that quality preschool programs enhance scope of success and achievement in early learning years coupled with lasting impact on later life for children who belong to poor background. A multi domain curriculum caters the academic and psychological needs of children at risk (Odom et al., 2019). Activity based instructional strategies being more durable and developmentally appropriate to facilitate cognitive growth as children develop their memories and language skills through hands on activities and interaction with concrete objects. For young children 'play' is a medium to know and explore the world around them but the researchers also acknowledge the significance of teacher guided structured activities to enhance cognitive, language, social and emotional competencies (World Health Organization, 2018).

In the perspective of early childhood education and care Fredrich Frobel (1762-1852) laid down the foundation of kindergarten in Germany in 1937. He supports the theory of learning with playing for physical, intellectual, spiritual and social development of children. He introduced certain material objects in the name of "gifts". In the same way Maria Montessori (1870-1950) established "children house" in Rome in 1907. In Montessori classrooms children move freely in the classroom to select activities of their choice and learn by experience with variety of materials. In Reggio Emilia (1920-1994) approach the classroom has been introduced as "third teacher" by making classroom visibly attractive and stimulating to draw the attention of young learners. High-Scope was formulated by David Weikart in 1970. High-Scope involves the method of active learning and participation of students in varying projects. The children plan before doing a task and review after accomplishing it. In all these approaches a play based curriculum is preferred to encounter the needs, interests and abilities of young children (Aleksov, 2018).

The idea of preschool programs got momentum in the middle of 20th century mainly due to the importance of quality early childhood education and work force of mothers desiring safety and care of young ones in duty hours. The research about development of human brain, and pre-school programs for the children from unprivileged family establishes the need of

establishing early childhood learning and caring centers. The formulation of developmental theories of Piaget (cognitive), Vygotsky (sociocultural), Bronfenbrenner (ecological systems), Erik Erikson (social emotional) and Howard Gardner's learning theory of multiple intelligences revolutionized the whole process of a child's learning and development (Curriculum for Early Childhood Care and Education, 2017).

As the young children learn by interacting with their surrounding and with people that delve in their catchment area. An ECE classroom environment is formed by physical, psychological and social elements. In such a stimulating environment with the provision of a wide range of experiences and activities children can develop knowledge, skills and attitudes in a meaningful way. The formation of learning corners, availability of ECE kit and daily routine of ECE classroom optimize enriched learning experiences (Curriculum for Early Childhood Care and Education, 2017).

Ensuring holistic and inclusive early childhood care and education, all stakeholders must have to play their positive and action based role to influence the systems and structures that provide nurturing care and education to children. Teachers, caregivers, parents and policy makers will have to work together to create a healthy, secure and playful classroom learning environment to fulfill the needs of children. Playful and age appropriate learning experiences will maximize the opportunity to develop physically, socially, emotionally and cognitively (Bhamani, 2021)

Methodology

The research was descriptive in nature. Cross sectional survey design was used because the study intended to know the current status of facilities versus learning experiences in an ECE classroom at a particular point of time. An inventory to record availability and usability of resources and a survey questionnaire to examine perceived efficacy of ECE classroom resources was used as tools to collect the data. The question items in the questionnaire were scaled on the five-point Likert scale. The validity of the items was checked through expert opinions. Cronbach's Alpha test in SPSS software was also used to check the reliability of the items. In this respect 40 respondents were selected for pilot study to test the reliability of instrument. These 40 teachers were not included in final sample selection for the study to maintain the accuracy and fairness of data collection. Reliability statistics showed that coefficient of reliability for the aspect of teachers' perception about inventory regarding availability and functionality of resources is .901. The reliability coefficient for the aspect of effectiveness of learning experiences was .925 and overall complete tool's reliability coefficient was .937. The values were acceptable for the finalization of the instrument for this research study.

Stratified Random sampling technique was used to select the sample. There were 308 schools (138 primaries, 90 elementary and 80 high schools) having ECE classrooms in four tehsils (Daska, Pasrur, Sialkot, Sambrial) of district Sialkot. Each tehsil served as stratum. Fifty percent teachers were randomly selected from each tehsil of district Sialkot. The details of tehsil-wise distribution of population and sample are given in the table below:

No of No of No of Total high Total primary elementary Name teachers Tehsil wise school teachers school school of selected distribution teachers selected teachers teachers District for the of sample selected as selected selected as study as sample in sample sample sample Daska 17 10 9 36 Pasrur 24 16 13 53 Sialkot 154 21 13 14 48 Sialkot Sambrial 8 5 4 17 70 44 40 Total 154

Table 1 Tehsil wise Teachers' Selection as Sample of the Study from District Sialkot

An instrument comprised of an inventory and questionnaire in the form of five-point rating scale was developed as tools to conduct the survey in this research. The inventory communicated the availability and functionality of physical, academic and HR resources of ECE classrooms. The questionnaire addressed the perceived efficacy of factors of ECE classroom environment that results into enriched learning experiences. Cronbach's Alpha test in SPSS software was used to check the reliability of the items. The researcher visited the selected schools for data collection and also collected data electronically. Informed consent, confidentiality and respect for privacy of the respondents were observed during data collection. The response rate remained 96%. Descriptive statistics was used to find mean and standard deviation to address the designed research questions.

Results

Table 2

Availability and functionality of physical, academic and human resources in ECE classrooms of district Sialkot

Resources	Ν	Minimum	Maximum	Mean	Std. Deviation
Availability of physical resources	148	1.33	2.00	1.921	.166
Functionality of physical resources	148	1.00	5.00	3.984	.660
Availability of academic resources	148	1.00	2.00	1.910	.182
Functionality of academic resources	148	1.00	5.00	3.841	.737
Availability of human resources	148	1.00	2.00	1.756	.347
Functionality of human resources	148	1.00	5.00	3.746	.930

Table 2 shows the availability and functionality of physical, academic and human resources of ECE classrooms. The values (M=1.921, SD=0.166), (M=1.910, SD=0.182), (M=1.756, SD=0.347) respectively indicate that there were enough physical, academic and human resources available in ECE classrooms in public schools of district Sialkot. The values (M=3.984, SD=0.660), (M=3.841, SD=0.737), (M=3.746, SD=0.930) respectively show that teachers frequently used available physical, academic and human resources.

Table 3

Physical Arrangement and Access to Learning Material as Perceived by Teachers

Teachers	N	Minimum	Maximum	Mean	Std. Deviation
Physical arrangement and access to material	148	2.50	5.00	4.032	.472
Teachers' behavior and interaction	148	2.64	5.00	4.230	.481
Daily schedule of learning activities	148	2.64	5.00	4.152	.460

Table 3 data analysis shows that there was high values of physical arrangement and access to learning material, teacher's behavior and interaction, and daily schedule of learning activities as perceived by the teachers in ECE classrooms in public schools of district Sialkot.

Discussion

This discussion following the six major research questions and utilizing the evidences from quantitative details of the analysis highlighted the fact that in majority of schools having ECE classrooms in district Sialkot the availability and functionality of physical, academic and HR resources were satisfactory (Table 2). The research results and the field survey provided evidence that government established ECE classrooms in selected schools in district Sialkot with the provision of physical, academic and HR resources. Most of the ECE classrooms were decorated as per criteria with provision of ECE kits including diverse learning material to have diverse and productive learning experiences. To provide effective learning experiences the nominated ECE teacher, head teachers, privately hired caregivers and community members were trained as per directions. At the same time there was found variations in values of standard deviation regarding the usability of ECE classroom resources that showed the diverse opinion of teachers related to the functionality of ECE classroom resources.

The analysis also revealed the fact that majority of teachers were satisfied with the efficacy of learning experiences provided in ECE classrooms within the scope of available resources (Table 3). There was no denying the fact that the initiative of ECE classrooms produced a healthy impact on the most neglected children and local community. It also enhanced the learning experiences of children but the quality standards were not met completely and effectively due to certain limitations. The disparity aroused in those schools where infrastructure and funds were limited and teachers were less than STR ratio that raised difficulty for nominated ECE teacher to effectively carry out ECE activity plan. ECE teachers were also unaware about the uses of some of the articles of ECE kits. At the same time the transfer of trained ECE teacher created another hurdle in smooth functioning of ECE classrooms. With the passage of time the low pay of caregivers made them reluctant to perform their jobs effectively. On the other hand, the local community was unable to comprehend the significance of early childhood education. They were just attracted by the physical environment of ECE classrooms and least bothered about the practices essential for holistic development of children.

They insisted on regular homework like most of the katchi classes. Most of the ECE teachers had the opinion that the learning experiences and learning outcomes of ECE children were better than the students who directly admitted to katchi class. They were more confident and got better communication abilities despite of the fact that existing ECE classrooms in Pakistan lack the practices that were hallmark of quality teaching learning process in ECE classrooms in developed countries.

A study regarding the provisions of ECE classroom reveal that almost all basic facilities requisite to ECE classrooms are present in schools having ECE classrooms. There is a need of proper implementation and administrative system. At the same time continuous teacher training and financial assistance is imperative to maintain the quality of program (Iqbal et al., 2021). At the same time another research explore that the quality practices regarding early childhood care and education are not satisfying due to certain challenges and issues. These include lack of awareness, access and equity, teacher training, funds, assessment plan, monitoring system and gap in policy and practice (Tahira et al., 2021).

Due to the immense significance and broad scope of early childhood education there is dire need of awareness and expansion of this specialized field of study. The knowledge generated through this research brought to notice the difference in planned and on ground situation of ECE in schools. The identification of gaps helped in bringing policy measures closer to the practice.

Recommendations

- Government should recruit professionally qualified ECE teachers in all those schools having ECE classrooms to ensure effective learning experiences.
- 2. ECE teachers should be trained with time according to trends to effectively utilize ECE classroom resource.
- 3. There is need of public awareness especially at local level about the significance of early childhood education including community as active participants.
- 4. Government should allocate separate funds, proper implementation and regular monitoring system to ensure the quality of learning experiences in ECE classrooms.

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