



Identification of Effective Strategies for the Enhancement of ECE Enrollment Ratio: A Study of the Schools of District Kamber Shahdadkot and Khairpur Mirs

Abul Ala Mukhtar Soomro¹, Shahid Hussain Wassan², & Dr Ghulam Muhiuddin Solangi³

¹ Head Master Govt. Boys Primary School Junani, Warah, Kamber Shahdadkot

²HST Govt. Boys High school Haji Nawab Khan Wassan, Kotdiji

³Department of Education, Shaheed Benazir Bhutto University, Shaheed Benazirabad

Corresponding author's email: abulalamukhtar@gmail.com

Abstract

Early Childhood Education (ECE) is a form of education which has been introduced in Pakistan from 3-8 years old children till the beginning of formal education. The study is aimed at to explore the effective strategies in order to intensify the enrollment of ECE. The descriptive survey study was conducted at both public and private sector schools. It is to enhance the enrollment of ECE children. Head masters, ECE teachers, and students of the locality formed population of the study. Random sampling technique was made to generalize the results of sample. After the collection of data from two Questionnaires first from 20 Head teachers and second from 40 ECE teachers' data were analyzed in quantitative methods through the SPSS 23 version. As the conclusion is to enhance enrollment of students, has been projected to address the real elements of enrollment in order to increase it at the rapid pace. The main concern of this research study deal the issues of lesser enrollment at ECE level shortage of well trained teachers, lack of material, malnutrition, poverty, and health pandemic COVID-19, to specify the strategies for enhancement of enrollment ratio of ECE students such as integral formation, didactic activities, professional performance of head teachers and teachers, immediate response to pandemic and manipulation of mass, digital media, reconstruction of connectivity between stakeholders, separation of ECE teachers with integration of innovative activities such as STEM and STEAM, ICT for holistic development of children.

Keywords: Early Childhood Education, issues and challenges Identification of strategies, Enhancement of enrollment

1. Introduction

ECE plays primal and reformative role in the very early period of the child's life. Through this education, child becomes proficient in language, prologs its attentive span, develops its communicative skills, and enables himself solve the problem by means of the interactive environ (Asghar, Munawar & Sittar, 2021). In the ECE children try to entail an acquisition of the ideas, attitudes, and constructs in order to lay foundation for the preparation or readiness of the school. In the presence of the daunting challenges such as such as lack of resources, untrained teachers, non-availability of the physical facilities. To counter act as such pressing problems the introduction of the proper system for the efficient and effective evaluation and monitoring will lead to prevail the conducive environ to get SLO's in the light of the ECE program (Nawaz, Ashraf & Siddique, 2021). Early childhood science education deals with the mental approach of the children from the

multi- dimensional perspectives for the sake of the students' learning. In this regard, the mental representation of the children is very vital for the process of the teaching and learning and for the involvement of the parents in the upbringing of their children at school (Ravanis, 2022). Dialogic reading ignites and encourages the parents to get their children involved into interactions such verbal and non-verbal. This can be done by shared readings between parents and their children (Chang et al., 2022). These are teaching qualities that offer the raising environment for the morality, intellect, spirit. These are just like pre conditions that the didactic processes in the pre schooling have positive influence upon the psyche of the younger children (Hamidovna, 2020). ECE school education can be developed by the development of the teacher leadership (Wang, & Ho, 2020). According to many research studies ECE provides the platform to foster educational care at this budding stage and prepares the child for the success in futurity. The languages such as mother tongue and second international language are blended together wherefrom child tries to interact through this mid-way process of internalization and culturalization before his entry into elementary school (Ghazi et al., 2018; Lee, Zhai, Brooks-Gunn, Han, & Waldfogel, 2014). According to Wawire (2006) and Ghazi et al. (2018) that well organized and planned ECE produces spectrum of experiences productive to the wellbeing and cognitive and educational development. The cultivation of the healthy, intentional and mindful educators supports the emotional stability and its regulation to lead towards the well-being of the teachers. It augments the knowledge acquisition and application of the practices to cope the stressful workplaces (Hatton-Bowers et al., 2022). All this is possible when the child gets well equipped with ECE classrooms, mechanical, technological devices, well trained faculty and conducive environment. There in ECE schools the distributed pedagogical leadership with its implementation as in the forms of it, are highly related with the ECE' teachers capability to make the learning process within the class and school as productive as possible (Heikka et al., 2021). The activity based curricula of ECE and education is highly essential for the too young children. This can be inducted by the teachers training institutes within the schools (Mubashar, Hashmi & Altaf, 2020). According to article 25-A of the constitution of Pakistan that every child has inborn right to have access to education between the age of 5 and 16. However, early childhood education in the public as well as private sector institutions has neglected the importance of ECE in children holistic development. Unfortunately as such access is denied due to unavailability of the resources and sorry condition of awareness among people. National education Policy (1998-2010) the provision was made for the re-entry of Katchi class as formal part of education (Aly, 2007). The ECE and its related activities within class and school: ECE attracts the children towards its fundamental cluster of activities that is mainly designed for enfolding the kids into natural setting where they feel familiarity and acquaintance just like their home. Here they are also provided with gadgets to utilize them as much as their capacity leaving no cumbersome effect but rather the place to learn with enjoyment. It is only possible when educational expert and teacher as the mentor and guider help them achieve the task as assigned to these curious kids. Children get their own experience and learn to take initiatives in order to make close proximity with environment. At this stage (2-5 years) is for to make concepts; get ability to

solve problems; grab attention and to develop communication skills. Psycho motor skills also grow stronger in terms of play way methodology of education.

1.2 Problem Statement and the Significance of the Study

Early Childhood Education (ECE) has been given much importance in the development of children in initial years of Schooling. Pakistan is signatory of many international bodies including Sustainable development goals (SDGs), Millennium development goals (MDGs) and Education for all (EFA) to uplift the standard of education in Pakistan at pre-primary and primary level. ECE institutions can do strategic planning to develop the sustainability as their central value to it. This sort of the planning can be aimed at the ecological subject matter such as to sort out and then reduce the non-cyclic garbage; to ensure the care under taken for the friendly environment (Meland, 2022). On the other hand families have to employ the coping mechanism or strategies at every levels such as environmental, individualistic, and relational in order to take decisions and develop certain attitude towards them (Salin et al., 2020). However, the previous education policies were based on teaching of children from Katchi classes which were completely based on teacher-centered approach in which children's holistic development was ignored. The Government of Pakistan has realized this with the international developments and formally introduced ECE in National Education Policy of Pakistan in 2009. With the initiative of ECE in schools, both government and private sector schools did not get required number of children for ECE classes. The children who get admission in ECE dropout from schools due to one or other reason .The literature has identified many reasons of dropout of children at ECE level including less attention given by government for the promotion of ECE, lack of awareness among masses, missing facilities in schools, shortage of qualified teachers specially female teachers at ECE level, Non availability of instructional materials, health and nutrition issues among ECE age level students, Poverty and poor infrastructure in schools has caused the lesser enrollment of students at ECE level. In the under developed and developing countries Pakistan as inclusive in it, the research oriented ECE schooling is very limited. Whereas, it has been predominant in the other countries (Von Suchodoletz, 2022). Therefore, a study is required in the setting of rural Sindh to investigate the causes of lesser enrollment of children in ECE classes. This study will play major role in identification of effective strategies for the enhancement of ECE enrolment at two districts of Sindh Province.

There is a great significance of Early Childhood Education in educational system at the globe level. It has been recognized throughout the process of the schooling of kids and proved to be as the catalyst for the further cognitive development and educational achievement of Children (Ghazi, Ajmal, & Saeed, 2018; Magnuson, Ruhm, & Waldfogel, 2007). ECE casts deep and lasting impressions upon the mind of the young progeny to perform better in the context or setting (Barnett et al., 2008). ECE plays rudimentary and fundamental role laying down the strong foundation of the whole structure to be erected upon. The underground foundation is deep rooted into the familial, social, cultural institutions that counter act and interact with children because almost 85% of the brain development occurs at the age between birth and 8 years 1 (Ortiz-Laso & Diego-Mantecón, 2020). These formative years orient the children to internalize the multi-dimensional factors of

personality. Children try to relate to relevant phenomenon of the budding life with their co-existents such as family, community and other social strata (Yang & Li, 2022). The ECE yields the educational productivity in development in researched schools. It decreases the drop out ratio of students and ensures their retention in the school. Hence it maximizes the quality of education and promotes the moral and civic sense among the students. It also improves their enrollment to ensure their presence. At this early age of students in ECE classes make them well acquainted with physical environment where they are taught properly their hygiene and health issues. Moreover, they realize the ethnocentric concepts to be incorporated with tinge of socialization in their personalities. ECE teachers tries to mold their character in order to prepare them for good citizenship.

1.3. Research Objectives, Questions and Hypotheses

The objectives are (a). to analyze the potential challenges for the lessor enrollment ratio of students in district Kamber Shahdadkot and Khairpur Mirs; (b). to specify the effective strategies for the enhancement of student's enrollment in district Kamber Shahdadkot and Khairpur Mirs. The research questions are (a). What are the potential challenges for the lessor enrollment ratio of students in district Kamber Shahdadkot and Khairpur Mirs? (b). What are the effective strategies for the enhancement of student's enrollment in the district Kamber Shahdadkot and Khairpur Mirs'? The research hypotheses are (a). Ho. There is no significant relationship between ECE effective strategies and enrollment ratio of students; (b). H_A. There is significant relationship between ECE effective strategies and enrollment ratio of students.

2. Literature Review

Early Childhood Education (ECE) is a form of education which has been introduced in Pakistan from 3-8 years old children till the beginning of formal education. If the strategy to make the ECE children to play outdoors is viable to implementable, then the aversive perceptions of parents and those who are practitioners will be reduced to negligible level (Sandseter, 2020). Children's cognitive development starts from the activities carried out in home and ends in surrounding society. The complete internalization of thought process, socialization and learning process of the children takes place within the home and society. The long term strategy or the intervention such as STEM in ECE where, the teachers and learners learn with the provision of the space to orient their activities through the play way exploration (MacDonald et al., 2020). The First National Curriculum of ECE was prepared in 2002 but could not implemented because of lack of resources and finances. Then, it was modified in 2006 and finally introduced in National Education Policy (NEP) 2009 it was denoted in five policy actions on ECE (Ghazi et al., 2018). According to Pakistan Education statistics (2015-2016) Total enrollment of Pre Primary Education was 8.74 million and the gross enrollment ratio 74%. Pre-Primary Education ranking in between 3 to 4 years the net enrollment rate in Pakistan is supposed to be around 36%. It highlights that 1/3 of children are enrolled in ECE 2/3 of children are out of the schools (Rural 61% and Urban 39%). Why? To develop ECE policy and minimum standard of enrollment, establish ECE resource center in a

phased manner focusing initially on the most vulnerable population across Sindh Province to transform 8000 Katchi on the theme of ECE. To support learners transition from home to school (SESP) 2014-2018. The experts of early childhood education highlight that children strongly develop cognitive, social, emotional, linguistic skills that predict their latter function in their domain (Trawick-Smith & Smith, 2014; Woolfolk & Perry, 2012). In terms of psycho analysis social development at early stage affect adulthood (Hindman & Morrison, 2012). Early Childhood Education casts selective behavior the children emitted with as such choices being affected by individual personalities, circumstances, primitive experiences and strong models (Thompson & Dahling, 2012). Games and playing with toys learning produces lasting impression (Gunindi, 2013; San-Bayhan & Artan, 2009). Through the introduction of the story telling condition, the children try to enhance the digital and literacy skills (Maureen, van der Meij & de Jong, 2020). Field trips also plays the important role to meet children's need through on spot observation, skills and attitudes (Bozdoğan, 2012; Krahenbuhl, 2014; Smith-Walters, Hargrove, & Ervin, 2014). Such trips allure the children towards the school and inspire other children to attend the school and this early childhood education effects on early intervention to prevent disease to promote health throughout life (Campbell et al., 2014; Conti, Heckman, & Pinto, 2016). In ECE the Norwegian have drawn their attention towards descriptive characteristics of qualities such as organization of groups, demographic and physical environment, ownership and other levels of education (Gulbrandsen & Eliassen, 2013). If income related gaps of parents are resolved that can have positive impact upon preschool enrollment trends (Reardon, 2011), low income families have negative effect to send their kids to school (Weiland & Yoshikawa, 2013). Spread of universal ECE has raised the chances to the options to help financially the effluent parents as a package of public provision to send their kids towards the school (Bassok, Fitzpatrick, Loeb, & Paglayan, 2013). Literature supports to the notion about policies that poor children are afforded than the attendance of preprimary school may contribute to higher primary completion ratio (Grantham-McGregor et al., 2007; Heckman, 2006; Olson, 2012). Related literature which incorporates the idea of Early Child Hood education, significance of ECE, productivity of ECE, policies framed at national level, regional information of ECE in the two proposed schools of two districts of Sindh Province. Prior to the admission of young children into the formal education, ECE works at the very crucial age of the children in order to develop their cognitive, intellectual and emotional upbringing not only in the terms of how much they are old. ECE makes them early masters not to get them informed of physical brain knots but they conceptualized knots of their mind (Syed, Asif, & Yousaf, 2011). Sustainable development goals (SDG 4.2) of united nations during September 2015 relates "By 2030, ensure that all girls and boys have excess to quality Early Child Hood development, care and pre-primary education so that they are ready for primary education" Production of healthy mid set that within very short time span children pickup himself/herself to be the social moral, intellectual and educational catalyst due to result of interaction in the society (Ghazi et al., 2018).

2.1. Policies Framed on National Level

The detailed information of the policies of ECE in Pakistan can be understand as follows in table.1.

Table. 1: Short history of policies propounded for ECE in schools in Pakistan

Time Line	Historical Progressive Cycle.
1947	Nursery as indigenous and integral part of main stream education at education conference 1947.
1950-1980	Mere familiarity of Katchi class
1992	Main streaming of Katchi class
1998	Recognition of importance and dire need of ECE.
2002	Curriculum developed so far
2001-2004	ECE as an innovative program federally funded
2009	Recommending ECE as part of main stream education
2001-2015	National plan of action for EFA $(2001-2015)$ recommended the complete main streaming of ECE in the formal educational system.
2017	Free and compulsory quality Pre-Primary or ECE for children of age four to
	five years and equal access to Early Child hood education and holistic
	development for the children of age group three to four years by 2030.

(Ghazi et al., 2018)

ECE places and showers productive and long lasting impression upon the children to develop their critical thinking and reasoning or cognitive development takes place at this educational juncture (Brooks-Gunn, 2011). Moreover, social, emotional, cultural and linguistic development become productive assets to the children, family, society as a whole. In this regard, the children's vocabulary development from pre-school to KG has been made easier with the facilitation of the teacher offered to students to communicate (Justice, Jiang & Strasser, 2018). The online learning can promote the children' learning and develop them intellectually by means of the online communication (Kim, 2020). Introduction of ECE in high priority schools: Separate ECT has been recruited and inducted in high priority schools where class room setup, audio video aids, accommodation of ECE furniture well decorated class with soft boards, models, charts and play toys will be provided.

3. Methodology

The mechanism and method adopted was very descriptive and survey type research. For the collection of data from local levels of twenty schools located at different districts of Sindh Province the study was conducted by both assigned research members. Each of the head teachers and ECE teachers were surveyed. The districts wise survey was administered to all Head teachers and ECE teachers in order to collect school level information that could inform effective strategies for the enhancement of ECE children ratio. They represented their schools and served as a random sample

of the population of both districts of Sindh province. The measures were taken to develop a survey instrument or tool to measure the structural features or strategies for the enhancement of enrollment ratio of ECE students within their respective twenty schools.

3.1. Population, Sample and Instrumentations of the Study

The advanced measures that can be numerically gathered, coded and administered on large scale of the population are mostly analyzed statistically through quantitative research. One of which is descriptive statistics that can identify the researched purpose of ECE enrollment. Because globally ECE enrollment rates have grown since 1960s in the considerable manner. As a consequence, there is dire need to measure and identify effective strategies that are deemed as quality indicators in ECE education. In this regard, Twenty Head masters, forty ECE teachers, of the locality formed the sample of the population of the study. The survey questionnaire has been used in this research that is intended for the Head teachers and Teachers to inform ECE practices for the enhancement of enrollment ratio through the effective strategies applied there. Two questionnaires were developed for the Head Masters of schools and Early Childhood Education teachers, of the areas for the collection of data. The pilot testing of research an instrument was carried out in the four schools; firstly, GBPS Junani secondly Muhammad jam Soomro public school, thirdly GBPS Rahim Bux Wassan and lastly Al Mehran Model school Chodaho of Kamber and Khairpur Mirs Districts respectively. Twenty (20) sample schools of two districts Kamber Shahdadkot and Khairpur Mirs were visited by research members to collect data and that data were analyzed in quantitative methods through the SPSS 23 version. Finally recommendations were made for the implementation of ECE policy of Education Department Government of Sindh in true spirit.

4. Results and Discussion

Data revealed in table.1 that ECE teachers and their training was 100% and additional budget and ECE rooms were lesser than the above three elements of provision of ECE.

Table. 2: Provision of ECE

Items	Option	Frequency	Percent
ECE Attached	YES	20	100.00
Provision of ECE Teacher	YES	20	100.00
Additional Budget	YES	15	75.00
ECE Teacher Training	NO	05	25.00
ECE Rooms	YES	20	100.00
Playing Facility	YES	15	75.00
Toys, etc.	NO	05	25

In table No.3 Motivation of parents for sending their children to school for ECE here the different methods of increasing ECE enrollment were analyzed by the data. Parent teacher meeting and school council members were 100% indicators for the incensement of ECE student's data. In door to door campaign and advertisement in newspaper were little bit short of percentage ratio and likelihood is 75%.

Table 3. Method of Increasing ECE Students

Items	Option	Frequency	Percent
Door to Door Campaign	YES	15	75.00
Advertisement in Newspaper	YES	15	75.00
Parent Teacher Meeting	YES	20	100.00
School Council Member	YES	20	100.00

In table.4. admission of ECE children in primary class one where less than 50% students were 100% admitted and round about 50% chances of admission into primary class one was least in percentage.

Table 4. ECE Children Admission

Bob cimientin i i		
Option	Frequency	Percent
NO	15	75.00
NO	15	75.00
YES	10	50.00
YES	20	100.00
	NO NO YES	NO 15 NO 15 YES 10

In table No.5 arrangement of activities for ECE children in the school revealed that playing with toys and drawing were 75% is the indicators of arrangement where 25% of both these indicators of this statement were non-happenings.

Table 5. Activities Arranged for ECE Children

Statement	•	Frequency	Percent
Playing with toys	Yes	15	75.00
Drawing	Yes	15	75.00

Holistic development of ECE children data as in the below table No.6 revealed that the development of children stimulating environment, interactive environment, activity based learning, psychology of child and meaningful learning were 100% in ratio was the possible outcomes of holistic development whereas modern achievement standards is the least percentage ratio of that phenomenon.

Table 6. Holistic Development of Children

Statement		Frequency	Percent
Stimulating Environment	Yes	20	100.00
Interactive Environment	Yes	20	100.00
Activity Based Learning	Yes	20	100.00
Psychology of Child	Yes	20	100.00
Best ECE Curriculum	Yes	15	75.00
Modern Achievement Standards	Yes	10	50.00
Meaningful Learning	Yes	20	100.00

ECE curriculum type as in table No.7 identified that activity based children centered and ECE curriculum with cultural diversity were 100% likely to become as for as content based type of curriculum is concerned it was categorized 50%.

Table 7. Type of ECE Curriculum

Statement	Frequency	Percent
Activity Based Children Yes Centered	20	100.00
Content Based Yes	10	50.00
ECE Curriculum Takes Yes Account of the Cultural Diversity of Your Area	20	100.00

Percentage of male teachers in researched schools is 58% and female teachers is 42%.

Table 8. Gender wise Teachers

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	35	58.0	58.0	58.00
	female	25	42.0	42.0	100.00
	Total	60	100.0	100.0	

ECE training duration design to teach ECE classes two weeks was categorically high in percentage and data revealed in table No.9 that 42% had come in this category and on the other hand one-year duration was the least percentage which was counted as 8%.

Table 9. ECE Training Duration

				Valid	
		Frequency	Percent	Percent	Cumulative Percent
Valid	Two Weeks	25	42.0	42.0	42.0
	One Month	15	25.0	25.0	67.0
	Six Month	15	25.0	25.0	92.0
	One year	5	8.0	8.0	100.0
	Total	60	100.0	100.0	

Where the ECE teachers had obtained the training most of the training was from Regional Institute of Teacher Education (RITE) and it led with 84% and other institutions are least counted training institutions.

Table 10. Name of Institution

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	PITE	5	8.0	8.0	8.0
	RITE	50	84.0	84.0	92.0
	Cluster Center	5	8.0	8.0	100.0
	Total	60	100.0	100.0	

Focused areas of training data revealed in table No.11 that holistic development of a child led with 50% and teaching pedagogy was lagging behind with 8%.

Table 11. Focus Areas

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	ECE Curriculum/Content based	15	25.0	25.0	25.0
	teaching Pedagogy	5	8.0	8.0	33.0
	Psychology of ECE Children	10	17	17	50.0
	Holistic development of child	30	50.0	50.0	100.0
	Total	60	100.0	100.0	

Classes to be taught daily in the school data in table No.12 revealed that ECE and one to three class were taught with 33% and a least percentage 17% is of ECE and class one to five.

Table 12. No of Classes

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Only ECE class	15	25.0	25.0	25.0
	ECE and 1-2 Class	15	25.0	25.0	50.0
	ECE and 1-3 class	20	33.0	33.0	83.0
	ECE and 1-5 class	10	17.0	17.0	100.0
	Total	60	100.0	100.0	

Table No.13 showed that students numbered from 21-30 are most frequent figure of the Size of ECE class and had 67%.

Table 13. Size of ECE Class

			Valid					
			Frequency	Percent	Percent	Cumulative Percent		
Valid	21-30 studer	nts	40	67.0	67.0	67.0		
	more than students		20	33.0	33.0	100.0		
	Total		60	100.0	100.0			

Data of table No.14 showed that how many students almost drop from ECE class during the academic session in the research was showing that 10% of students were numbered 58% in table.

Table 14. Students Dropout Percentage

				Valid		
		Frequency	Percent	Percent	Cumulative Percent	
Valid	10 %	35	58.0	58.0	58.0	
	20%	25	42.0	42.0	100.0	
	Total	60	100.0	100.0		

Table No.15 manifests that holistic development of children was the greatest in 67% and strong educational foundation was having 33%.

Table 15. Reasons of Sending Children to School

			Valid						
			Frequency	Percent	Percent	Cumulative Percent			
Valid	Holistic Development		40	67.0	67	67.0			
	strong foundation	education	20	33.0	33.0	100.0			
	Total		60	100.0	100.0				

Period of interaction with parent's data of table No.16 posited that quarterly and monthly period of interaction with parents had the same chance to occur and both were assigned 50-50%.

Table 16. Period of Interaction

				Valid	
		Frequency	Percent	Percent	Cumulative Percent
Valid	monthly	30	50.0	50.0	50.0
	quarterly	30	50.0	50.0	100.0
	Total	60	100.0	100.0	

Facilities availed by ECE students in the class drinking water had the highest 50% figure and ECE furniture has 8%.

Table 17: Facilities

		Tuble 17.1 definites						
		Frequency	Percent	Valid Percent	Cumulative Percent			
Valid	Toys	15	25.0	25.0	25.0			
	Drinking water	30	50.0	50.0	75.0			
	activity books	10	17.0	17.0	92.0			
	ECE furniture	5	8.0	8.0	100.0			
	Total	60	100.0	100.0				

Table 18. Evaluation

	- 110-11 - 101 - 1 11-1111-11-1							
			Valid					
			Frequency	Percent	Percent	Cumulative Percent		
This Valid	Watching activities	their	45	75.0	75.0	75.0		
	verbal test		10	17.0	17.0	92.0		
	written test		5	8.0	8.0	100.0		
	Total		60	100.0	100.0			

Table No.18 revealed that watching their activities had the highest 75% which was the factor that shows the important evaluation based on observation. As this very initial stage written test was much more difficult to become evaluating factor and is 8% in number.

4.2. Findings

4.2.1. Potential issues and challenges encountered to enhance the enrollment.

- 1. In addition to ECE children challenges, the educators themselves are suffering from the numerous issues, stresses meanwhile imparting the education. Thus educator's well-being is supposed to be catalyst to child qualitative relationship with regard to its learning and development (Eadie et al., 2021).
- 2. The health pandemic and other crises such as environmental reshuffling, political turmoil, socio- economic degradation, jeopardize children' development in terms of the quality education (Spiteri, 2021).
- 3. As the reaction to this pandemic COVID-19, it apparently leads to risks and problems such as obesity, cardio vascular and diabetes among the educators, teachers and children. The restrictions proscribed by the pandemic COVID-19 disturbed and disrupted the behavior ranging from the physical activities to the sedentary and sleep modes. These social restrictions decreased the quality of the schedule to the children (Bates et al., 2020).
- 4. To cope as such fatal challenges, the programmatic and policy strategies should be expedited to promote the physical activity and reduce the sedentary behavior (Dunton, Do & Wang, 2020).
- 5. Besides the shortage of well trained teachers had made this enhancement of ECE ineffective. In addition to instructional regarding ECE has not been provided.
- 6. Malnutrition and bad health have also effected badly to put check upon the children to go to the school regularly and punctually.
- 7. Consequently, the poverty of their parents has been witnessed as big blow to the enhancement of Early Childhood Education.

4.2.2. Effective strategies for the enhancement of students' enrollment.

- 1 There is cluster of strategies to identify and enhance enrollment ratio. Government sector should pay attention towards neglected section of population to ensure and convince people to send their kids to schools.
- For the integral formation of the regular and punctual students, the didactic activities such as orientation, innovation in ideas, constructs, and professional performance of the teachers are predetermined conditions for the active participation and presence of the children within the multi fold activities that resultantly will lead to accelerate the enrollment of the younger students (Herrera et al., 2022).

- 3 Strategy to avert unfair and unnecessary dominance of the school and its static professional attitude of the teachers, should be enforced as policy development (Cohen et al., 2021).
- 4 Especially in the wake of the COVID-19, the immediate response to promote the child care in the ECE classes and school, the policy would be implemented as staunch strategy (Blum & Dobrotić, 2021).
- By means of mass media awareness drive regarding the enhancement of effective enrollment schools will be enabled to tend the bulk of children who are permanently away from the schools The teachers pedagogical and communicative skills involves him to establish the groups in children that will further work like inviting agents to get outside students allured to attend the schools properly (Undheim & Jernes, 2020).
- There needs reconstruction of the connectivity among parent- teacher- child triangle will be just like golden triangle that takes on the board these three stakeholders to create the conducive environment for the quality education as social stimulus and capacity for the enhancement of the enrollment (Lutfatulatifah, 2022).
- 7 The separate allocation of ECE teachers in high priority primary schools is to be done as written in education policy 2017.
- 8 Through the integration of concepts of the STEAM as an intervention or scientific activity, the activity plan or strategy should be to get ECE children solve the problems embedded within the situation offered to them. This will accelerate the higher order literacy (Zhou, 2022).
- 9 The provision of basic material required for the ECE class should be done.
- 10 The holistic development of the children led by head teachers and teachers to foster the healthy teaching and learning by applying the pragmatic and practical activities such as conventional and digital story telling. This enhanced the entertainment, capture of the theatrical and communicative insights. In this regard manipulation of the simulation and ICT method implemented within the schools would be catchy for the enhancement of the enrollment for it serves and entice the children to be actively present within the schools (Rahiem, 2021).
- 11 The schools have to arrange ECE attractive programs that persuade the reluctant children to be the part of learning process formally.
- 12 The early childhood development programs are deemed as the workable strategies to improve the service with regard to the education and to increase the access or approach to seek (Blimpo et al., 2022).

5. Conclusion, Implications, Recommendations

5.1. Conclusion

The subject matter of this quantitative research manifests almost similar situations of these schools located at the different physical plane Kamber Shahdadkot and Khairpur Mirs' districts respectively. In this regard, it is very crucial for the practitioners to provide the synchronous versus, asynchronous teaching and learning environment to the ECE teachers and students respectively. This will lead towards the better academic impact upon the parents and children as well (Timmons et al., 2021). To enhance enrollment of students has been subject matter of this research that is

projected to address the real elements of enrollment in order to increase it at the rapid pace. Hence, it is drawn that H_A there is significant relationship between ECE effective strategies and enrollment ratio of students. The main objectives which deal with the matter in focus are to identify the issues of lesser enrollment at ECE level and to specify the strategies for enhancement of enrollment ratio of ECE students. The above schools have been running the ECE classes since then taking into confidence the stakeholders instead of the Government. The main concern of this research study deal the issues of lesser enrollment at ECE level shortage of well trained teachers, lack of material, malnutrition, poverty, and health pandemic COVID-19, to specify the strategies for enhancement of enrollment ratio of ECE students such as integral formation, didactic activities, professional performance of head teachers and teachers, immediate response to pandemic and manipulation of mass, digital media, reconstruction of connectivity between stakeholders, separation of ECE teachers with integration of innovative activities such as STEM and STEAM, ICT for holistic development of children.

5.2. Implications

- 1. The valuable implication on part of the professional head teachers and teachers to integrate the cultural and social diversity into curriculum to owe the problems as opportunity by the process of the lateral thinking will lead hybrid enrollment of the children.
- 2. It is expected that this study will be helpful for authorities, head teachers and teachers to seek better understanding of ECE enrollment factors which will serve as guiding stars to get awareness and solution to the relevant problems.
- 3. This research implies local community, family and teachers as the indicators of the mobilization ECE enrollment will be enhanced more functional.
- 4. The main motive of this research is to access and analyze issues or factors responsible for the static development of ECE at the primary level and then to chalk out strategies to pave the way for those children to be educated at this vital phase of their lives.
- 5. Government of Sindh is determined to render service to the communities for the promotion of ECE in Urban as well as Rural areas in the futurity.

5.3. Recommendations

- 1. Low concentration drawn by the government has been remained the main grave concern. It does not pay attention to investigate and inquire with the rationality.
- 2. Policy makers or the heads of organization then it is the duty to be discharged by them to enforce the policies at this primary level of education on the priority basis.
- 3. On the other hand the rest of stake holders are oblivious of the awareness they do not know pros and cons of the institution to get rid of this low enrollment dilemma.
- 4. Within the educational institution the basic facilities in order to provide just like a token of incentive to grab their attention towards the school premises.
- 5. The private schools are informally recommended to run ECE classes through their governing boards and whereas public sector schools run this program with help of stake

- holders other than Government and looking forward to executing its implementation and support from Governmental sector.
- 6. In order to implement the data given by these researches oriented schools the much more initiatives are to be taken by the Government of Sindh.

6. References

- Aly, J. H. (2007). Education in Pakistan: A white paper (revised). *Documentation to Debate and Finalize the National Education Policy. Islamabad: Government of Pakistan, National Education Policy Review Team.* https://www.voced.edu.au/content/ngv:5218
- Asghar, M., Munawar, S., & Sittar, K. (2021). EARLY CHILDHOOD EDUCATION AND ITS INFLUENCE ON FUTURE EDUCATION. *Jahan-e-Tahqeeq*, 4(4), 141-153 http://jahan-e-tahqeeq/article/view/453
- Barnett, W. S., Jung, K., Yarosz, D. J., Thomas, J., Hornbeck, A., Stechuk, R., & Burns, S. (2008). Educational effects of the Tools of the Mind curriculum: A randomized trial. *Early childhood research quarterly*, 23(3), 299-313. https://web.dpscitt.ac.uk/wp-content/uploads/2020/08/Educational_Effects_of_Tools_of_the_Mind_Curriculum_Barnett_2008.pdf
- Bassok, D., Fitzpatrick, M., Loeb, S., & Paglayan, A. S. (2013). The early childhood care and education workforce in the United States: Understanding changes from 1990 through 2010. *Education Finance and Policy*, 8(4), 581-601. https://cepa.stanford.edu/sites/default/files/AEFP_ECCE%20Workforce.pdf
- Bates, L. C., Zieff, G., Stanford, K., Moore, J. B., Kerr, Z. Y., Hanson, E. D., ... & Stoner, L. (2020). COVID-19 impact on behaviors across the 24-hour day in children and adolescents: physical activity, sedentary behavior, and sleep. *Children*, 7(9), 1-9 https://doi.org/10.3390/children7090138
- Blimpo, M. P., Carneiro, P., Jervis, P., & Pugatch, T. (2022). Improving access and quality in early childhood development programs: Experimental evidence from the Gambia. *Economic Development and Cultural Change*, 70(4), 1479-1529 DOI: https://doi.org/10.1086/714013
- Blum, S., & Dobrotić, I. (2021). Childcare-policy responses in the COVID-19 pandemic: unpacking cross-country variation. *European Societies* 23 (S1), S545-S563 https://doi.org/10.1080/14616696.2020.1831572
- Bozdogan, A. E. (2012). The Practice of Prospective Science Teachers regarding the Planning of Education Based Trips: Evaluation of Six Different Field Trips. *Educational Sciences: Theory and Practice*, 12(2), 1062-1069. https://eric.ed.gov/?id=EJ981830
- Brooks-Gunn, J. (2011). Early childhood education: The likelihood of sustained effects. https://psycnet.apa.org/record/2011-20779-038
- Campbell, F., Conti, G., Heckman, J. J., Moon, S. H., Pinto, R., Pungello, E., & Pan, Y. (2014). Early childhood investments substantially boost adult health. *Science*, *343*(6178), 1478-1485. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4028126/

- Chang, C. S., Hsieh, F. J., Chen, T. Y., Wu, S. C., Tzeng, O. J., & Wang, S. (2022). Revisiting dialogic reading strategies with 12-month-old infants. *Early Childhood Education Journal*, 1-14. https://link.springer.com/article/10.1007/s10643-022-01385-4
- Cohen, B., Moss, P., Petrie, P., & Wallace, J. (2021). 'A New Deal for Children?'—what happened next: a cross-national study of transferring early childhood services into education. *Early Years*, 41(2-3), 110-127 https://doi.org/10.1080/09575146.2018.1504753
- Conti, G., Heckman, J. J., & Pinto, R. (2016). The effects of two influential early childhood interventions on health and healthy behaviour. *The Economic Journal*, *126*(596), F28-F65. https://onlinelibrary.wiley.com/doi/pdf/10.1111/ecoj.12420
- Dunton, G. F., Do, B., & Wang, S. D. (2020). Early effects of the COVID-19 pandemic on physical activity and sedentary behavior in children living in the US. *BMC public health*, 20(1), 1-13 https://bmcpublichealth.biomedcentral.com/articles/10.1186/s12889-020-09429-3
- Eadie, P., Levickis, P., Murray, L., Page, J., Elek, C., & Church, A. (2021). Early childhood educators' wellbeing during the COVID-19 pandemic. *Early Childhood Education Journal*, 49(5), 903-913 https://doi.org/10.1007/s10643-021-01203-3
- Ghazi, S. R., Ajmal, M., & Saeed, A. (2018). Effectiveness of early childhood education: A case study from remote district of central Punjab. *Journal of Early Childhood Care and Education*, 2(1), 75-86. http://jecce.aiou.edu.pk/wp-content/uploads/2019/01/06-Effectiveness-of-Early-Childhood-Education.pdf
- Grantham-McGregor, S., Cheung, Y. B., Cueto, S., Glewwe, P., Richter, L., Strupp, B., & International Child Development Steering Group. (2007). Developmental potential in the first 5 years for children in developing countries. *The lancet*, *369*(9555), 60-70. https://www.sciencedirect.com/science/article/pii/S0140673607600324
- Gulbrandsen, L., & Eliassen, E. (2013). Kvalitet i barnehager-rapport av strukturell kvalitet høsten 2012.
- Gunindi, Y. (2013). An Evaluation of Social Adaptation Skills of Children with and without Preschool Education Background Based on Their Mothers' Views. *Online Submission*, 3(2), 80-90. https://eric.ed.gov/?id=ED540916
- Hamidovna, N. R. (2020). Preparation of children in schools by making technological techniques in pre-school education. *European Journal of Research and Reflection in Educational Sciences*, 8(2), 120-124. https://www.idpublications.org/wp-content/uploads/2020/02/Full-Paper-PREPARATION-OF-CHILDREN-IN-SCHOOLS-BY-MAKING-TECHNOLOGICAL-TECHNIQUES.pdf
- Hatton-Bowers, H., Clark, C., Parra, G., Calvi, J., Bird, M. Y., Avari, P., ... & Smith, J. (2022). Promising findings that the cultivating healthy intentional mindful educators' program (CHIME) strengthens early childhood teachers' emotional resources: An iterative study. *Early Childhood Education Journal*, 1-14. https://link.springer.com/article/10.1007/s10643-022-01386-3

- Heckman, J. J. (2006). Skill formation and the economics of investing in disadvantaged children. *Science*, *312*(5782), 1900-1902. https://jenni.uchicago.edu/papers/Heckman Science v312 2006.pdf
- Heikka, J., Pitkäniemi, H., Kettukangas, T., & Hyttinen, T. (2021). Distributed pedagogical leadership and teacher leadership in early childhood education contexts. *International Journal of Leadership in Education*, 24(3), 333-348 https://doi.org/10.1080/13603124.2019.1623923
- Herrera, X. P. C., Guevara, P. M. B., Córdova, B. M. V., Maldonado, M. A. B., & Tapia, M. M. P. (2022). Systematization as A Methodology In Teaching Practice And Its Link Within The Teaching-Learning Process In Early Childhood Educators. Journal of Positive School Psychology 6(6), 9892-9898 https://journalppw.com/index.php/jpsp/article/view/9503
- Hindman, A. H., & Morrison, F. J. (2012). Differential contributions of three parenting dimensions to preschool literacy and social skills in a middle-income sample. *Merrill-Palmer Quarterly* (1982-), 191-223. https://web.archive.org/web/20200320184551id_/http://mnprek-3.wdfiles.com/local--files/research-studies/Parenting%20Dimensions%20to%20Preschool%20Literacy.pdf
- Lutfatulatifah, L. (2022). The Development of Golden Triangle Program Using Head Start Approach as an Early Childhood Education Service. SEA-CECCEP, 3(01), 42-48 http://seameo-ceccep.org/journal/index.php/eccep/article/view/35
- Justice, L. M., Jiang, H., & Strasser, K. (2018). Linguistic environment of preschool classrooms: What dimensions support children's language growth? *Early Childhood Research Quarterly*, 42(1), 79-92 https://doi.org/10.1016/j.ecresq.2017.09.003
- Kim, J. (2020). Learning and teaching online during Covid-19: Experiences of student teachers in an early childhood education practicum. *International Journal of Early Childhood*, *52*(2), 145-158. https://link.springer.com/article/10.1007/s13158-020-00272-6?fbclid=IwAR3x-u9vdpJctNnoVQ
- Krahenbuhl, K. (2014). Collaborative field trips: An opportunity to connect practice with pedagogy. *The Geography Teacher*, *11*(1), 17-24. https://www.tandfonline.com/doi/abs/10.1080/19338341.2013.854264?journalCode=rget-20
- Lee, R., Zhai, F., Brooks-Gunn, J., Han, W. J., & Waldfogel, J. (2014). Head start participation and school readiness: Evidence from the early childhood longitudinal study—birth cohort. *Developmental psychology*, 50(1), 202. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4050643/
- MacDonald, A., Huser, C., Sikder, S., & Danaia, L. (2020). Effective early childhood STEM education: Findings from the Little Scientists evaluation. *Early Childhood Education Journal*, 48(3), 353-363 https://doi.org/10.1007/s10643-019-01004-9
- Magnuson, K. A., Ruhm, C., & Waldfogel, J. (2007). Does prekindergarten improve school preparation and performance? *Economics of Education review*, 26(1), 33-51. https://www.nber.org/system/files/working_papers/w10452/w10452.pdf

- Maureen, I. Y., van der Meij, H., & de Jong, T. (2020). Enhancing storytelling activities to support early (digital) literacy development in early childhood education. *International Journal of Early Childhood*, 52(1), 55-76 https://doi.org/10.1007/s13158-020-00263-7
- Mavilidi, M. F., Bennett, S., Paas, F., Okely, A. D., & Vazou, S. (2021). Parents' and early childhood educators' perceptions on movement and learning program implementation. *International Journal of Environmental Research and Public Health*, 18(22), 1-22 https://doi.org/10.3390/ijerph182211913
- Meland, A. T. (2022). Tracking education for sustainable development in ECEC institutions' annual plans. *European Early Childhood Education Research Journal*, *30*(5), 791-805 https://doi.org/10.1080/1350293X.2021.2008464
- Mubashar, R., Hashmi, A., & Altaf, F. (2020). Factors Affecting Teachers' Practices in Implementation of Early Childhood Care and Education Curriculum in Public Schools. *Global Social Sciences Review* 5 (1), 623-632 http://dx.doi.org/10.31703/gssr.2020(V-I).62
- Nawaz, A., Ashraf, I., & Siddique, A. (2021). Impact of Effectiveness of Early Childhood Education on Students Learning Outcomes in Pakistan. *Interdisciplinary Journal of Education Research*, 3(2), 32-39 <a href="https://scholar.googleusercontent.com/scholar?q=cache:lrw_jw0FCP8J:scholar.google.com/+Impact+of+Effectiveness+of+Early+Childhood+Education+on+Students+Learning+Outcomes+in+Pakistan+++&hl=en&as_sdt=0,5
- Olson, S. (2012). From Neurons to Neighborhoods: An Update--Workshop Summary. *National Academies Press*. 500 Fifth Street NW, Washington, DC 20001. https://eric.ed.gov/?id=ED555239
- Ortiz-Laso, Z., & Diego-Mantecón, J. M. (2020). Strategies of Pre-Service Early Childhood Teachers for Solving Multi-Digit Division Problems. *Sustainability*, *12*(23), 1-20 https://doi.org/10.3390/su122310217
- Undheim, M., & Jernes, M. (2020). Teachers' pedagogical strategies when creating digital stories with young children. *European Early Childhood Education Research Journal*, 28(2), 256-271 https://doi.org/10.1080/1350293X.2020.1735743
- Rahiem, M. D. (2021). Storytelling in early childhood education: Time to go digital. *International Journal of Child Care and Education Policy*, *15*(1), 1-20 https://ijccep.springeropen.com/articles/10.1186/s40723-021-00081-x
- Ravanis, K. (2022). Research trends and development perspectives in Early Childhood Science Education: an overview. *Education Sciences*, 12(7), 456 https://doi.org/10.3390/educsci12070456
- Reardon, S. F. (2011). The widening academic achievement gap between the rich and the poor: New evidence and possible explanations. *Whither opportunity*, *I*(1), 91-116. <a href="https://books.google.com.pk/books?hl=en&lr=&id=mF_me7HYyHcC&oi=fnd&pg=PA91&dq=Reardon,+S.+F.+(2011).+The+widening+academic+achievement+gap+between+the+rich+and+the+poor:+New+evidence+and+possible+explanations.+Whither+opportuni

- ty,+91-
- $\underline{116.+ \& ots = wuga1UH8pf\&sig = id7QPwLRfEyFzZZB1Juj_QUNi4\&redir_esc = y\#v = onepage\&q\&f = false}$
- Salin, M., Kaittila, A., Hakovirta, M., & Anttila, M. (2020). Family coping strategies during Finland's COVID-19 lockdown. *Sustainability*, *12*(21), 9133 https://doi.org/10.3390/su12219133
- San-Bayhan, P., & Artan, İ. (2009). Çocuk gelişimi ve eğitimi [Child development and education]. *Ankara: Morpa Yayınları*.
- Sandseter, E. B. H., Cordovil, R., Hagen, T. L., & Lopes, F. (2020). Barriers for outdoor play in early childhood education and care (ECEC) institutions: Perception of risk in children's play among European parents and ECEC practitioners. *Child Care in Practice*, 26(2), 111-129 https://doi.org/10.1080/13575279.2019.1685461
- Smith-Walters, C., Hargrove, K., & Ervin, B. (2014). Methods and Strategies: Extending the Classroom. *Science and Children*, *51*(9), 74-78. https://eric.ed.gov/?id=EJ1037366
- Spiteri, J. (2021). Quality early childhood education for all and the Covid-19 crisis: A viewpoint. *Prospects*, 51(1), 143-148 https://doi.org/10.1007/s11125-020-09528-4
- Syed, S. Z., Asif, M., & Yousaf, A. (2011). Rethinking ECE in Pakistan. *Journal of Elementary Education*, 21(2), 65-76. http://pu.edu.pk/images/journal/JEE/PDF-Files/6_Salma%20Zaidi%20Syed_%20Mehwash%20Asif%20_%20Amna%20Yousaf%2_0_1_2011%20JEE%20Vol%2021%20no.%202.pdf
- Thompson, M. N., & Dahling, J. J. (2012). Perceived social status and learning experiences in social cognitive career theory. *Journal of Vocational Behavior*, 80(2), 351-361. https://www.sciencedirect.com/science/article/pii/S0001879111001266
- Timmons, K., Cooper, A., Bozek, E., & Braund, H. (2021). The impacts of COVID-19 on early childhood education: Capturing the unique challenges associated with remote teaching and learning in K-2. *Early Childhood Education Journal*, 49(5), 887-901 https://doi.org/10.1007/s10643-021-01207-z
- Von Suchodoletz, A., Larsen, R., Uka, F., Nadyukova, I., Pakarinen, E., & Lerkkanen, M. K. (2022). Investigating quality indicators of early childhood education programs in Kosovo, Ukraine and Finland. *International Journal of Early Years Education*, *30*(2), 290-306 https://doi.org/10.1080/09669760.2020.1848527
- Wang, M., & Ho, D. (2020). Making sense of teacher leadership in early childhood education in China. *International Journal of Leadership in Education*, 23(3), 300-314. https://www.tandfonline.com/doi/abs/10.1080/13603124.2018.1529821?journalCode=tedl20
- Wawire, V. K. (2006). Factors that influence the quality and relevance of Early Childhood Education in Kenya: Multiple case studies of Nairobi and Machakos Districts (Doctoral dissertation, Kenyatta University). http://kerd.ku.ac.ke/handle/123456789/1332
- Weiland, C., & Yoshikawa, H. (2013). Impacts of a prekindergarten program on children's mathematics, language, literacy, executive function, and emotional skills. *Child*

development, 84(6), 2112-2130. https://srcd.onlinelibrary.wiley.com/doi/pdf/10.1111/cdev.12099

- Woolfolk, A., & Perry, N. (2012). Social and emotional development in early childhood. *Child and adolescent development*, *18*, 262-309.
- Yang, W., & Li, H. (2022). The role of culture in early childhood curriculum development: A case study of curriculum innovations in Hong Kong kindergartens. *Contemporary Issues in Early Childhood*, 23(1), 48-67 https://doi.org/10.1177/1463949119900359
- Zhou, J. (2022). Research on the Design and Practice of Early Childhood Science Education Activities Based on the Concept of STEAM. *International Journal of New Developments in Education*, *4*(4), 12-21 https://francis-press.com/papers/6208