IMPLEMENTATION OF FREE EARLY CHILDHOOD EDUCATION AND ECONOMIC DEVELOPMENT: A CASE STUDY OF GOVERNMENT SCHOOLS IN PAKISTAN

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ABSTRACT

This research paper aims to review and evaluate the implementation of arrangements made by the government of Sindh for free Early Childhood Education. Furthermore, this study undertakes a case study of the government schools of Hyderabad District. Since this topic is under-researched in the province, the authors of this paper have tried to see the efforts of government regarding the implementation of the law passed after the implementation of the 18th amendment, especially for early childhood education, which is one of the important phases of education. This study is based on descriptive data and analysis were conducted using the Force Field Analysis (FFA). Both primary and secondary sources were used for data collection. The study concludes that the government's initiative to pass the Sindh Right of Children to Free & Compulsory Education (SROCTF & CE) law is facing barriers in its implementation. In the end, the study suggests some recommendations, in light of the research findings.

Keywords: Early Childhood Education; Brain Development; Brain Shaping-Personality; Economic Development; Skills Development; Act Implementation.

INTRODUCTION

Education is the key factor in the development of a human being. It is the main driving factor for the development of an individual, society and a country as a whole. To get education and knowledge, one must pass distinct phases in life. Early education is one of the most important stages of life, which helps children in their physical, psychomotor, social, emotional, mental, and linguistic development (National Research Council, 2015).

Previous research studies have recognized the education acquiring phase of life as a time of rapid growth and development, including brain growth and foundational social-emotional development (Porter, 2014). Early schooling is recognized by different titles like pre-primary education, early childhood education and early education (Doherty & Hughes, 2009). The early childhood education is offered by home-based centres, daycare centres, early education centres, Kindergarten schools, and other similar institutions. Informally, early education starts from the lap of the mother but formally it begins at the age of two in formal institutional setting up to the age of five to seven years of primary schooling (Doherty & Hughes, 2009).

According to the medical and educational researchers, these early years are crucial for mental growth to rapidly develop intelligence, personality, and social behaviour (UNICEF, 2019). It is also estimated that half of the intellectual development potential is established by the age of four years (Bloom, 1964), thus, early education has been given immense importance.

Benefits of Early Childhood Education: Early Childhood Education and Human Capital for Socio-Economic Development

Early childhood education helps countries to acquire well behaved, knowledgeable, and skilled individuals. These individuals build a civilized society and provide skilled human resources to the country and that's why investment in early education yields more profit than investing in any other life stage. This notion is corroborated as an evidence of the research, conducted by Heckman (2008), on Human Capital Policy.



Figure 1. Returns to a Unit Dollar Invested Source: Heckman (2008).

According to figure 1, education investments at an early age yields the highest return than any other phase of life, i.e. schooling, post-schooling or professional training. More imperative fact may be realized that, the return declines step by step with high margin when a child grows older, despite excessive increment in investment. It is therefore presumed that, early phase of education starting from prenatal to five years not only have profound impact on the child's personality for the long-lasting academic brilliance, but also have premier return on a unit dollar invested.

Keeping in view the importance of early childhood education, the Government of Sindh (GoS) passed a bill titled "The Sindh Right of Children to Free & Compulsory Education" in March-2013 (ECCE, 2015). The chapter three (3) section nine (9) of the bill, states that GoS must make the necessary arrangements to provide free early childhood education and early childcare to the children before the age of three years until they join primary schools. Undoubtedly, this will help the nation to focus on brain development, personality development, enhancing attitude, refining leadership qualities, conferring enriched basic and cognitive skills (ECCE, 2015; 2017).

Conclusively, it is expected that this initiative taken by the Government of Sindh will bring a great deal of changes in early childhood education. Thus, a review of the updated status of arrangements made by GoS so far, and to assess its implementation with reference to relevant and important key areas i.e. planning, budgeting, schools' infrastructure, teachers' training, curriculum and books, teaching applets, teaching methodology are indispensable.

RESEARCH OBJECTIVES

This research attempts to review and assess the implementation made by the Government of Sindh to provide free early childhood education and early childcare for young children before the age of three years until they join the school for formal education. Moreover, a way forward with recommendations based on empirical research is provided for better implementation of the study. The following three objectives were designed for this study:

- 1. To review the present arrangements of Sindh Government for implementation of Early Childhood Education in Government Schools of Hyderabad district under SROCTF&CE Act-2013.
- 2. To assess the implementation status through Force Field Analysis (FFA) of Early Childhood Education in Government Schools of Hyderabad district under SROCTF&CE Act-2013.

3. To recommend the measures (based on Force Field Analysis (FFA) for better implementation of SROCTF&CE Act-2013.

RESEARCH RATIONALE

Early childhood education is one of the crucial phases of education where the personality of a child is built through the development of the brain, social, emotional, and cognitive skills (National Research Council, 2015). This has a long-lasting impact on further education of children and consequently on the socio-economic status of the country. At present, the world has recognized that early childhood education orchestrates the foundation to produce skilled human resource. The better the human capital, the better the economic development. Recently much focus has been given to free early childhood education/schooling which is a positive sign. The Government of Sindh (GoS), Pakistan has passed a bill to formalize it, however, its implementation has rarely been evaluated. Although informal assessments have been conducted to see the implementation of the bill, so far, no formal study has been made as shared by the GoS officials during this study interviews, hence, this study will review its implementation by GoS and come up with the empirical findings and solutions which may assist the government to implement it in true sense.

This study focuses on the implementation of Article 25A of the constitution. In fact, Article 25A was added to the constitution after the 18th Amendment, which was passed on 8th April 2010. Article 25 A is about the constitutional guarantee regarding children rights to free education, to girls and boys, up to the age of 16. The government of Sindh (GoS) responded to the amendment by proposing the Sindh Right of Children to Free & Compulsory Education Act (SROCTF & CE)- 2013 (ECCE, 2015, 2017). This study is a review and assessment of SROCTF&CE Act 2013, chapter III (9) point as shown in figure 2.

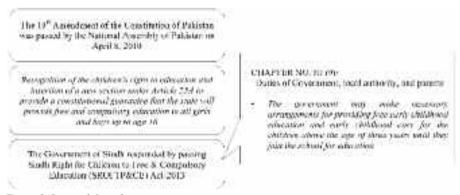


Figure 2. Research Introduction

LITERATURE REVIEW

The literature review part of this study portrays how the relevant literature was identified. Different search engines including Google Scholar and Web of Science were used to gather the secondary information on the topic. The authors have found various pieces of relevant literature and have presented the reflection in this part of the paper. Furthermore, the literature review part of the paper is based on the following themes supporting the central purpose of the paper.

It is clear from earlier studies that three fundamental areas develop in this age which become the main determinants of making a person a valuable human resource, beneficial to fabricate a civilized society and favourable for socio-economic development of a country. These three basic areas of early brain development are, i) early childhood education and brain development; ii) early childhood education and brain shaping-personality development; iii) early childhood education and skills development.

i. Early Childhood Education and Brain Development

The brain is an important organ of a human body which happens to be embryonic at the time of birth. It holds around 100 billion neurons, and each neuron makes connections with other neurons as maximum as 15000, and in this way, the brain develops its process (Elliot, 1999). This is called brain development process in scientific language. It starts from birth to the five years. Connections that are activated often stand retained whereas others will be pruned or discarded. Early education provides an external environment where the child uses his/her brain, develop its connections, maximizes the brain memory and power to acquire, store, and retrieve the information acquired through the external environment (Nelson, 2000), this illustration is shown in figure 3.

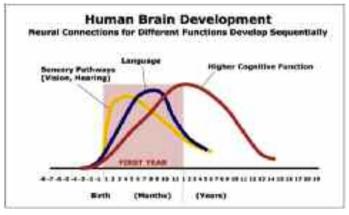


Figure 3. Human Brain Development

Source: Nelson, 2000

Early childhood education helps children in their physical, psychomotor, social, emotional, mental, and linguistic development and prepare them for primary schools and for their socio-economic life in the future (Gokalp, Barut, & Mentese, 2010). The initial years of a child's life are crucial, as necessary brain development happens during this period (Phillips & Shonkoff, 2000). Many studies concluded that early education contributes to the brain's developing architecture (Blakemore & Frith, 2005), and lay a solid foundation in the development of intellectual domain, hence well before entering school, the young child gets learning as well as main cognitive skills (Sylva & Pugh, 2005).

ii. Early Childhood Education and Brain Shaping-Personality Development

The neurons in early childhood education have a particularly significant role in shaping the brain. They have a profound impact on a child's behaviour. Consequently, the child will gain experience (positive/negative) from the environment and this will remain long-lasting. Therefore, this age requires care and attention in midst to provide a constructive environment to make him /her positive and a well-well-mannered human (Phillips & Shonkoff, 2000).

Eminent research studies conducted by Bell and Fox (1994); Burchinal, Roberts, Nabors, and Bryant (1996); Broberg, Wessels, Lamb, and Hwang (1997); and Emde (1998), summarize that the quality of Early-Learning can shape not only children's intellectual development but also their social and emotional development, that can build a foundation for their long-lasting learning and provide social and economic advantages.

Those children who were not provided opportunities for early education or whose minds were not inspired by proper interaction with adults and peers in their environment; pay for these early losses throughout their lives. In addition, their inefficiency affects labour productivity and national economic wellbeing (Young & Mundial, 1996).

iii. Early Childhood Education and Skills Development

There are many important and special skills developed in this age through early childhood education including adequate motor skills, gross motor skills, auditory skills, visionary skills and above all cognitive skills which enable a child to perform different assignments and activities successfully in the adult life (Barnett, 2008). In 1930, a notable research was conducted in the United States on the importance of the early childhood environment. The research results indicate that qualitative early

childhood education has a direct and constant impact on cognitive, social, and emotional development (Barnett, 2008; Currie & Blau, 2005; Camilli, Vargas, Ryan, & Barnett, 2010; Heckman & Masteroy, 2007).

For years research has been known of the extra development of a child's brain during the first phase that is the first five (5) years, current advances in neuroscience have assisted in the development of earlier findings and have brought latest understanding to the area of early brain development. Children are born ready to learn, they cultivate 85 percent of their intellect, personality, and skills by age first five (5) years to fix the phases for lifelong development.

Education Policy Implementation

Pakistan is suffering from numerous education related challenges (GoP, 2011), and almost 5.5 million children are out of school (Ailaan & SDPI, 2014). According to the UNESCO Education For All (EFA) Global Monitoring Report, indicates that Pakistan has the second highest 'out of school population' in the world and is facing qualitative learning crises encapsulating literacy, academic performance, enrolment, and attendance or dropout rates, despite the fact that Pakistan persist in spending 2 percent of its GDP on the education sector (UNESCO, 2010).

RESEARCH METHODOLOGY

The three objectives aimed to conduct this study, as stated earlier, are further divided into various research steps. All parameters are studied in relation to the implementation of free early childhood education and illustrated in figure 4 below.

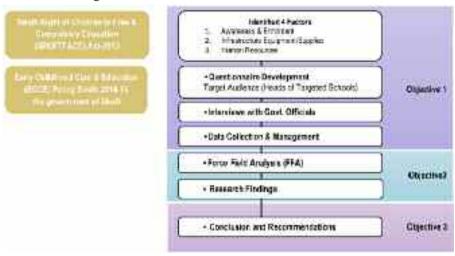


Figure 4. Research Flow

Data Collection

The primary data for this study was collected from 119 schools in the Hyderabad district. In addition, a semi-structured questionnaire of open and close-ended questions was used to assess the arrangements made by the government for implementation of free Early Childhood Education. The questionnaire was divided into three parts, the first part enquired about the questions related to the target audience, while, part two and three reflected the objectives of the study.

The following tools are used for the data collection of the study:

- i. Meetings with Provincial Government Officials, District Education Officers, and School Management were conducted for assessment of the research.
- ii. Questionnaires as a survey tool for a structured interview.

Sampling

Table 1. Sampling Data

S/No	Taluka	Total Schools	Sample Selection
01	Hyderabad (City)	85	23
02	Latifabad	82	21
03	Qasimabad	31	11
04	Hyderabad (Rural)	290	64
		488	119

As shown in Table 1, a total of 119 schools were surveyed out of 488 schools in the district. 23 schools were surveyed out of 85 in Hyderabad city; 21 schools out of 82 from Latifabad area, 11 of 31 from Qasimabad area; and 64 out of 290 schools in Hyderabad rural area were surveyed. For analysing the data Kurt Lewin's, Force Field Analysis (FFA) technique is utilized. FFA draws a framework for identifying the forces (factors) that effects a situation. FFA, in fact, identifies the forces that either influence moment towards a goal or block movement towards a goal (hindering forces). Following are the research findings as analogous to the study objectives:

Objective 1: To review the existing arrangements of the Sindh Government, for implementation of Early Childhood Education in Government Schools of Hyderabad district.

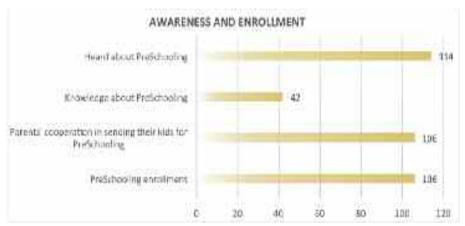


Figure 5. Awareness and Enrolment

According to the findings, figure 5 above shows that, out of the 119 surveyed government schools in Hyderabad district, 114 school respondents affirm that they had heard about the Early Childhood Education concept and 42 of the respondents had knowledge about the concept. Further, in 106 schools' parents cooperate in sending their kids for Early Childhood, therefore in the same number of schools', pre-school enrolment is found on self-awareness basis.



Figure 6. Total Students Enrolled in Early Childhood Education

Similarly, figure 6 shows the frequency of the enrolments of Early Childhood Education students. On X-axis number of schools are demonstrated and the Y-axis shows the number of enrolled students. It is concluded from the findings that there are overall 8,110 students enrolled in 106 schools ranging from 13 students to 205 students, while the remaining 13 schools have zero enrolments.

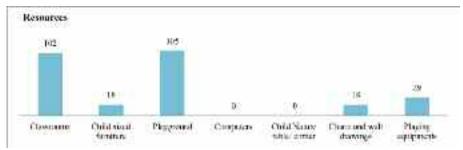


Figure 7. Infrastructure and Equipment/Supplies

Figure 7 depicts the status of most important basic resources required for the quality of Early Childhood Education. It is found that out of 119 schools, 102 schools have classrooms and 105 schools have playground in varied sizes. More than 18 schools which offer Early Childhood Education, have child-sized furniture and playing equipment. It is worth to mention here that these playing equipment and child-sized furniture have not been provided by the Government but the donations and contributions from the heads and teachers of the schools have made these available to the students. In addition, out of 119, none of the schools have computers or academic corners for exploration and experiments for the Early Childhood Education.



Figure 8. Infrastructure and Supplies

Moreover, the findings depicted in figure 8 reveal that out of 119 schools none of the schools have a separate building for Early Childhood Education. Similarly, no separate course/curriculum required for the Early Childhood Education (through the power of play that focuses knowledge, skills, and attitude) has been prepared or adopted. The same course/curriculum of Grade 1 is being taught to the children enrolled in beginners' grade. In this regard, the textbooks of grade 1 have been followed to teach the Early Childhood Education children. The status of free books provided to children from Early Childhood Education children to Grade 1 was found in 87 schools; which is otherwise be given to every student of the 109 schools under reference.

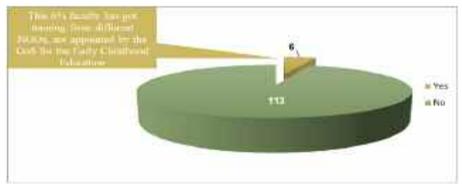


Figure 9. Human Resources for Early Childhood Education

For any institution, the trained and qualified human resources are the most essential means for organizational success and progress. Figure 9 above illustrates that there is a severe dearth of human resource in the target area, none of the 119 schools covered in the survey, have any relevant Early Childhood Education qualified human resources or teaching staff or those provided trainings by the Government. The lack of proper training or qualification, consequently, results in poor tutoring which should be alternatively imparted with care and concentration. A few teachers were reported in only six (6) schools who obtained training through personal resources from different NGOs due to their personal interest.

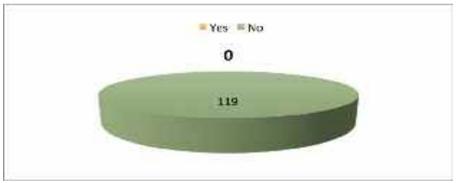


Figure 10. Budget allocated by Government of Sindh (GoS) for free Early Childhood Education

Figure 10 shows that the Government of Sindh has not earmarked any budget provision for Early Childhood Education in 119 targeted schools specifically, and other schools throughout the province in general.

Objective II: To assess the Implementation status of Early Childhood Education in Government Schools of Hyderabad district under SROCTF&CE Act-2013 through FFA.

During the study it was revealed that 96 percent of the respondents have heard about Early Childhood, 35 percent have the knowledge, 83 percent of the respondents co-operates in sending their kids to school, while 83 percent of schools have an enrolment of preschool children as shown in figure 11. So, for, the forces as barriers to implementation are concerned, a few percentages need to be worked out. However, the second point of knowledge about Early Childhood Education has a very negligible response and stand in an alarming position.

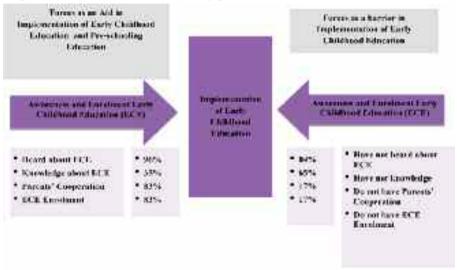


Figure 11. Force Field Analysis - Awareness and Enrolment Early Childhood Education



Figure 12. Force Field Analysis – Infrastructure and Equipment/Supplies

Figure 12 shows either zero or a negligible response from most of the areas, related to provision of infrastructure and other equipment like, computers, nature tables/corners, allocated building, separate curriculum, child-size furniture, charts, playing equipment, however, only the provision of free books received an adequate response.

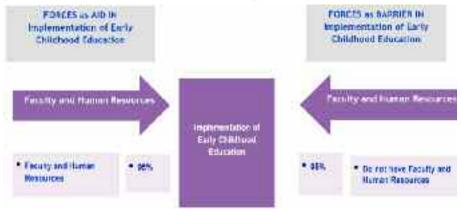


Figure 13. Force Field Analysis – Human Resources

Figure 13 shows that about 95 percent of human resources, especially faculty is available in the schools. However, the faculty was not trained for early childhood education, moreover, other assisting staff specialized in pre-school education was also found to be unavailable in the surveyed schools.

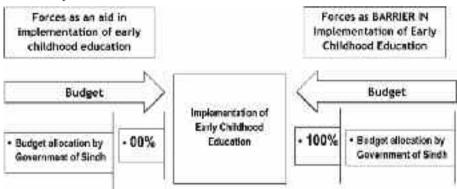


Figure 14. Force Field Analysis - Budget

During the study, it was revealed that no budget was allocated by the government of Sindh, even after the Sindh Right of Children to Free & Compulsory Education (SROCTF&CE) Act -2013 has been passed, illustrated in figure 14. This is hindering the main implementation of the SROCTF&CE Act-2103.

Meeting with the Government Officials- Findings

A meeting regarding the implementation of SROCTF&CE Act-2103 Chapter-III (9) for providing free early childhood education, was conducted by Deputy Secretary, Childhood Education, and Deputy Secretary Schools. The following are the main findings of the interviews:

- i. Government officials confirmed the non-availability of funds/budget for early childhood education.
- ii. The curriculum for early education and care policy has been prepared by the government of Sindh under the Reform Support Unit
- iii. The government of Sindh has a lack of interest and awareness not only at the school level management, but also at the secretariat level about early childhood education and care in Sindh.

Objective III: To recommend the measures (based on FFA) for better implementation SROCTF&CE Act-2013.

The objective of the study was to recommend the measures for better implementation of the Sindh Right of Children to Free & Compulsory Education Act 2013. It was concluded that the government should take the following necessary steps to implement the law for early childhood education:

- Awareness programs at the community, school, management, and secretariat level should be organized.
- Necessary arrangements should be made in terms of infrastructure, i.e. separate buildings having enough classrooms, furniture, and equipment.
- Separate curriculum should be designed for Early Childhood Education.
- The government should supply proper school dresses, course books, and stationery.
- Trained staff should be appointed to conduct activity-based learning programs through the power of play.
- The budget should be earmarked to conduct Early Childhood Education.

DISCUSSION AND CONCLUSIONS

This study focuses on the implementation of Article 25A of the constitution. In fact, the article was added in the constitution after the 18th Amendment, which was passed on 8th April 2010. Article 25A is about constitutional guarantee of children rights to free education, to girls and boys, up to the age of 16. The Government of Sindh (GoS) responded to the amendment by passing the Sindh Right of Children to Free & Compulsory Education Act -2013. This study is the review and assessment of the Sindh Right of Children to Free & Compulsory Education (SROCTF&CE) Act 2013, chapter III (9).

During the study, it was found that:

- The government initiated to pass the Sindh Right of Children to Free & Compulsory Education (SROFTF&CE) law.
- There are poor implementation arrangements for free Early Childhood Education.
- Traditional methods of Kachi Pehren prevails in the sampled schools.
- There is a lack of understanding of the importance of early education at the school, management, and secretariat level.
- A number of students of early education age were found in schools that shows the parents' interest in Early Childhood Education.
- No budget earmarked for Early Childhood Education despite the law has been passed.
- Insufficient infrastructure and equipment were found to be another hindering impediment against the Early Childhood Education.
- Insufficient appointments of faculty and staff for Early Childhood Education were also identified during the study.

RECOMMENDATIONS

The following recommendations are made from the study for the implementation of the Sindh Right of Children to Free & Compulsory Education (SROCTF&CE) Act 2013, chapter III (9) passed by the government of Sindh in response to the 18th amendment. It is recommended that the government should take the following necessary

steps to implement the law for Early Childhood Education:

- Awareness programs at the community, school, management, and secretariat level should be organized.
- Necessary arrangements should be made in terms of infrastructure, i.e. separate buildings having sufficient classrooms, furniture, equipment.
- Separate curriculum may be designed for Early Childhood Education.
- The government should supply proper school dresses, course books and stationery.
- Trained staff should be appointed to conduct activity-based learning programs through the power of play and other activities.
- Adequate budget may be earmarked to conduct Early Childhood Education

LIMITATIONS OF THE STUDY

In view of the Sindh Right of Children to Free & Compulsory Education, it covers vast educational arrangements about all segments that has a wide range of scope and requires a meticulous work to be done. It is therefore quite challenging to conduct study on the whole document, thus, keeping in view the time limitation, only the implementation of necessary arrangements for free early childhood education under chapter III section 9 has been selected for the government schools of Hyderabad District, in this study. Future studies may include other segments to extend the study scope.

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