Exploring the idea of a school readiness assessment in Nizamuddin under Humayaun's Tomb- Sundar Nursery- Nizamuddin Basti Urban Renewal Programme

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1. INTRODUCTION

1.1 AKF Project

The "Nizamuddin Urban Renewal Initiative" is a not-for-profit public-private partnership project of the Archaeological Survey of India, the erstwhile Municipal Corporation of Delhi (the South Delhi Municipal Corporation now being the implementing authority), the Central Public Works Department, the Aga Khan Foundation and the Aga Khan Trust for Culture which is using regeneration of heritage and culture as a tool for sustainable development and modern living in a historical site. The Government of India (GOI) has under its urban conservation scheme through a public private partnership (PPP) approach, signed an agreement with (AKF) on 11th July, 2007. This agreement combined conservation of protected and unprotected monuments and urban environmental rehabilitation works with a series of community based socio-economic development initiatives designed to improve the environment and quality of life of the community. These initiatives cover every sphere of life to empower residents and connect heritage conservation with urban sustainability and living cultures to guarantee the lease of life.

Initiatives in education follow a life cycle approach. The education interventions cover preschool, school going, adolescents and adults. The major effort towards primary education improvement has included a refurbishment of the MCD Primary school, introducing arts education, greater parent interaction and improved school management. Significant learning support is being provided to senior students. Life Skills education is offered to all project beneficiaries.

To further this social development initiative and identify future areas of intervention, particularly in what it recognized to be the key areas for human development such as health, education and environmental sanitation, the

Centre for Early Childhood Education and Development (CECED), Ambedkar University, Delhi was approached by AKF to carry out a situational analysis of the *Basti* households between November, 2009 and June, 2010. This analysis focused on the status of Early Childhood Education and Development (ECED) for children from birth to 8 years, which are foundation years for a child's development. The study made significant recommendations to improve the care aspect for mother and child, strengthen the quality of preschool education and provide opportunities to all children for age-appropriate and holistic development.

1.2 Early Childhood Care and Education: It's Significance

The definition of Early Childhood Care and Education (ECCE) is universally located in an integrated and holistic paradigm, encompassing health, nutrition, care and early learning for children. It covers the entire early childhood continuum from prenatal stage to eight years of age, using a life cycle approach. ECCE is an area of high priority for children below the age of 8 across most of the counties in the world. Evidence from different international researches recognizes its immense importance and benefits from it, which include social and economic benefits, better child well-being and learning levels as a foundation for lifelong learning, more equitable outcomes and reduction of poverty, and increased intergenerational social mobility. These positive benefits were however directly and consistently related to the "quality" of ECCE available to children (Burger, 2010; Myers, 2005). The significance of these first six to eight years arises from the fact that brain development occurs at its fastest pace within this age range and this process is very responsive to the quality of early stimulation and early learning experiences the child gets.

An equally crucial reason for working with young children under six years is that they are entitled to quality services for care and development. It is their

right to be able to develop to their full potential. As they are largely dependent on adults to fulfil their needs in these vulnerable years, it is crucial that the needs of the children under six are addressed. The ICDS scheme is the flagship programme of the government in this context which is catering to this age group of children from the poorest communities. However, its ECCE component is generally reputed to be inadequate. Although ECCE has been left out from Right to Education, the government has now brought out a National ECCE Policy (2013), which makes it imperative for ICDS to take up this role more effectively, considering the possibility of the huge impact due to reach of the programme.

1.3 The AKF Project: Baseline and interventions

The Situational Analysis of the Nizammudin Basti carried out by CECED in 2010 served as a Baseline for the AKF interventions. The aim of the study was to look at key early childhood related segments and issues. Status of services for children, pregnant and lactating women, and adolescent girls within the *Basti* was reviewed and quality assessed. Perceptions of parents as well as other key stakeholders such as *Anganwadi* workers, school teachers etc. were compiled regarding early childhood. The issues addressed were malnutrition, preschool education, immunization, early stimulation as well as health of mother and child.

Based on the analysis and recommendations different interventions were planned by AKF in the area of Early Childhood Care and Education in Nizamuddin *Basti*. The initiatives being undertaken as part of the project which are discussed below, aim to facilitate the holistic development of children and prepare them for their transition to school.These interventions included capacity building of the *Anganwadi* Workers, direct interventions with the children and the community, infrastructural and resource support, curriculum development, support to *Anganwadi* Centres in pre-school education and

capacity building of teachers. All the interventions were carried out in different phases and at different levels.

1.4 Curriculum Development for the AWCs and Demo centre by AKF

Working towards improving the school readiness programme entailed developing a curriculum keeping in mind the urban context and the skills that need to be developed in children in order for them to be ready for school.

The focus areas for the curriculum were:

— **School readiness:** Since preschool age forms a basis of school learning, the curriculum included various activities which help children prepare for school especially focusing on the pre numeracy and pre literacy skills. The curriculum primarily tries to achieve this through activities focusing on cognitive development: For instance, to understand numbers, children are given concrete objects to count. Once they are able to count up to 3, they are given a matching worksheet where they are introduced to the numerals to form the visual association with the number. Once children are able to count and identify numerals up to 3, they count objects till 5 with the support of teacher and so on.

— **Curiosity:** This is an inherent quality of children which supports their understanding and learning of the environment. The aim of this curriculum is to expand this quality further so that children make sense of the world around them. For instance, children are taken to the neighbourhood park to explore various textures, colours and sounds. Once they are back, the teacher talks to them about their experiences and ask them to draw what they saw in the park.

— **Language development:** Preschool is an important stage for language development as this is the first set up outside the child's environment where the child learns to express herself. Most children are proficient in their

mother tongue by the time they enter into a preschool setup. The aim of preschool education thus becomes to build on this language and help child prepare for skills she would require later. For instance, to teach the written language, the children are first asked to identify their names to establish sight reading. They then move towards sight reading of other simple words of things in their environment.

— **Socio Interaction Skills:** The child forms relationships outside the family for the first time in the preschool set up. Research has indicated that positive relationships with adults other than family in this age are crucial for resilience later in life. Also, this is the time where children learn various social skills and practice them such as greeting, sharing and understanding needs of other individuals amongst others. This is achieved through the facilitation done by teacher and integrating these practices into everyday classroom rituals.

The curriculum is now being implemented in all the *Anganwadis* in the Basti by the AKF community teachers with the support of the *Anganwadi* workers and helpers. CECED was again approached to to conduct a repeat assessment of school readiness to track improvements, if any as a result of the initiatives taken.

1.5 Objective of the present study

The objectives of the study were to (a) assess the school readiness levels of children around the age of 5 years, prior to their entry into primary school and (b) relate the school readiness levels to the quality and duration of Early Childhood Education children were exposed to in terms of content, processes and teacher quality and (c) to identify quality factors in the centers which may contribute to school readiness in children.

1.6 Research Questions

The primary research questions for this study aim to address the above objectives of the study. The following set of questions guide the process of the study to better understand the school readiness level of the children attending various ECE centres in the Nizamuddin *Basti*.

a) What is the level of school readiness of the children around the age of 5 years?
b) What is the relationship between the school readiness levels of the children and the quality of the ECE centres?
c) What are the specific factors in the ECE centres that contribute to the school readiness levels of the children?

2. METHODOLOGY

2.1. Research Participants

The sample was be drawn from 5 *Anganwadi* Centres, the nursery class of the Municipal Corporation of Delhi (MCD) School and the Demostration Centre, i.e., 7 sites, all operating in the Nizamuddin *Basti* and supported by AKF. From each centre, all the available children between the age group of three and a half to five and a half years were selected as the sample for the study. Regularity of attendance of the children in the ECE centres was an eligibility criterion to enable an assessment of the influence of dosage of quality of ECCE. The initial estimate was to assess 80 children across 6 centres between the age group of 3½ - 5½. But due to the complexity of the field situation, only 48 children could be identified and assessed in the desired age group.

Further, 4 *Anganwadi* centres and the Demonstration Centre (MCH) were observed for a day each to review the quality of the programme that the children were attending in terms of the content and processes of the ECCE curriculum.

Participants also included some parents of the children who attended the different centres in the Nizamuddin *Basti*, the *Anganwadi* workers and the community teachers appointed by AKF.

The table below gives the distribution of participants in the study.

Age Group	Number of Children
3½ - 4½ Year olds	19
4½ - 5½ year olds	29

The table below lists the number of participants for the FGDs.

Participants	Number of Participants	Number of FGDs
Parents	15	2
Community Teachers	4	1
Anganwadi Workers	5	1

2.2. Method and Tools

A mixed method approach was considered for the study. Children's learning/school readiness levels were assessed using the School Readiness Instrument (SRI). This required individual administration of the instrument. The quality of the classroom was assessed on the basis of classroom observation with the use of Early Childhood Quality Assessment Scale (ECEQAS). Both these tools are described below.

2.2.1. Description of the tools

School Readiness Instrument

The School Readiness Inventory (SRI) which had been developed and standardized by World Bank in 2009 on an Indian population, is an activity based tool, conceptualized as a dip stick measure for assessment of children's levels of school readiness at a system level. It is administered on a one to one basis on the children to specifically assess certain cognitive and language skills and concepts that have proven to be good indicators of school readiness. It is not a comprehensive tool for formative and comprehensive assessment of an individual child. The instrument has ten work sheets and assesses the child on cognitive and language readiness in terms of pre number and number concepts,

reading readiness, sequential thinking, classification, phonemic awareness and picture description. It includes a total of 10 activities yielding a maximum score of 40. All activities have been given weighted scores depending on the complexity of the skills and concepts tested in the activity. The maximum score for each activity varies from 1 to 6.

Early Childhood Education Quality Assessment Scale (ECEQAS)

A comprehensive assessment of the quality of the programmes that the children were attending in terms of the content and processes of the classrooms and centres was done through the ECEQAS. This tool, which is inspired by the internationally known and widely used tool called Early Childhood Environment Rating Scale (ECERS) has been substantially modified from the original and adapted to suit the Indian context. It yields both quantitative and qualitative information and information on time on task. It is comprised of three parts, of which Part 1 records direct observations of activities being conducted in narrative form along with information on kinds of activities, materials used, classroom organization, level of participation of children etc. It follows a snapshot technique, requiring the observer to describe/record the activity in the classroom every ten minutes for the full duration of a day's programme. Initially, it was proposed that each centre be observed for two days. This was done during the pilot phase but when the scores on observations for the two days was found to be significantly correlated (0.93), it was decided to carry out the observation only for one day. Parts 2 and 3 of the ECEQAS constitute a three-point rating scale on the following parameters, in addition to the basic identification data, which is largely pre-coded:

- ✓ Physical infrastructure and materials
- ✓ Class management and organization
- ✓ Content and process of the programme.

- ✓ Language and Reasoning experiences, including pre literacy and numeracy
- ✓ Creative Activities
- ✓ Self-help skills
- ✓ Fine and gross motor activities
- ✓ Social Development
- ✓ Teacher Disposition

The tool also includes within the above domains, aspects specific to the Indian context and related to social inclusion, particularly of children from marginalized communities and children with special needs, and issues related to transition from home language to the school language.

Focus Group discussions (FGDs):

Feedback on the ECE quality and the various factors with regards to selection of different type of ECE centres was taken from parents through FGDs. FGD were also conducted with the community teachers appointed by AKF and the *Anganwadi* workers to understand as to how well versed they were with the curriculum, the challenges faced while teaching the children and their views on further improvement. Also, the focus of the FGDs was the information on work distribution between the *Anganwadi* workers and the community teachers, with a view to assess sustainability.

3. ARE CHILDREN READY FOR SCHOOL.

School readiness levels of 48 children attending various AKF supported centres in Nizamuddin *Basti* were assessed in the cognitive and language domains which are important pre requisites for formal schooling. The obtained results on SRI both in terms of an overview and a disaggregation of skills or concepts included under each domain are discussed below. Further, all the results obtained were compared with the results of the IECEI study, a flagship longitudinal study done by CECED in three different states across India namely Assam, Rajasthan and Telengana on a cohort of 2323 children during the pre-test at 3 ½ to 4 ½ years and at post-test when children were 4 ½ to 5 ½ years across the three states. This was done using this data as a point of reference in the absence of any national norms or standards. The children attended different types of ECE centres which included *Anganwadis*, private pre-schools and some known practices in the three states. Further, the data was also compared to known practice centres, namely *Bodhshalas,* who were managed by Bodh Shiksha Samiti in Alwar, Rajasthan which was a part of the larger IECEI study. They were deemed as a good practice as their scores in School Readiness was better than the scores of overall IECEI study. The number of children in the *Bodhshalas* was 76.

Overview of School readiness levels: Figure 3.1 presents the comparative performance of children on school readiness across cognitive and language in terms of the average scores obtained by them from a maximum score of 40, for the children between the age group of 3½-4½ and 4½-5½, attending AKF supported centres in the Nizamuddin *Basti* and from the pre-test (children between the age group of 3½-4½) and the post-test (children between the age group of 4½-5½) of the IECEI study.

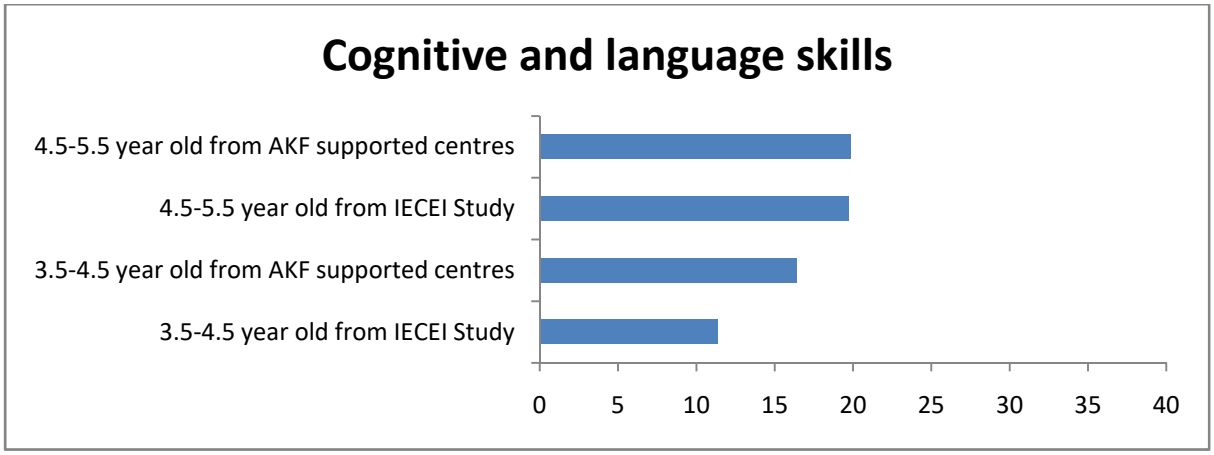

Figure 3.1: Average scores of the cohort on school readiness skills on a scale of 40 (Cognitive and language skills)

Comparatively, the children from AKF supported centres in Nizamuddin *Basti* were performing better than the children in both the phases of the IECEI study, although their average scores were also very low. From figure 3.1, one could clearly see that even though the average scores were low, the average score of the children between 3½-4½ years of age vary significantly, with children from the AKF supported centres performing better than the children from the same age group of the IECEI study. Further, it could also be seen that the children between 4½-5½ from AKF supported centres was slightly higher than the children from the IECEI study, with average scores for both the groups being 19.85 and 19.73 respectively. There might be many reasons for the same. The cognitive and language skills assessed were to a considerable extent dependent on the curriculum to which the children were exposed to and this deficiency might be due to the some weaknesses of the ECE curriculum or the method of teaching.

The disaggregated data on all indicators for cognitive and language components of school readiness was subjected to further analysis. The findings from this analysis are discussed in the coming sections.

3.1.1. Comparison on specific cognitive skills and concepts of School Readiness for the children attending AKF supported centres and the children from the IECEI study.

Given below is the performance by the sampled children from the AKF supported centres on different cognitive competencies and the comparison with both the pre and the post test scores of the IECEI study.

Pre mathematical concepts: The tasks related to these competencies assessed pre number and space concepts. The space concept of '*in front of*' and '*at the back*' was identified by 88 and 96 per cent of the children between the age group of 3½-4½ and 4½-5½ from the AKF supported centres respectively as shown in figure 3.1. This is higher in comparison to the pre-test and the post-test scores of the IECEI study which was 73 per cent and 86 per cent respectively. For pre number concept of quantity i.e., *more and less*, 36 per cent and 70 per cent children between the age group of 3½-4½ and 4½-5½ from the AKF supported centres gave correct responses as shown in figure 3.2. This was lower than the pre-test scores where 39 per cent of the children gave correct responses but marginally higher than the post-test scores where 68 per cent of the children gave correct responses. But the percentage of partially correct responses wherein the children responds to either one of the concepts of more or less, is far higher at 47 and 22 per cent for both the groups, than the pre-test and post-test of the IECEI study at 24 per cent and 17 per cent respectively. A few children counted the number of apples in the picture to decide which tree had most and which had least number of apples. This was done by a few children in the government school where they were at times exposed to the concept of counting.

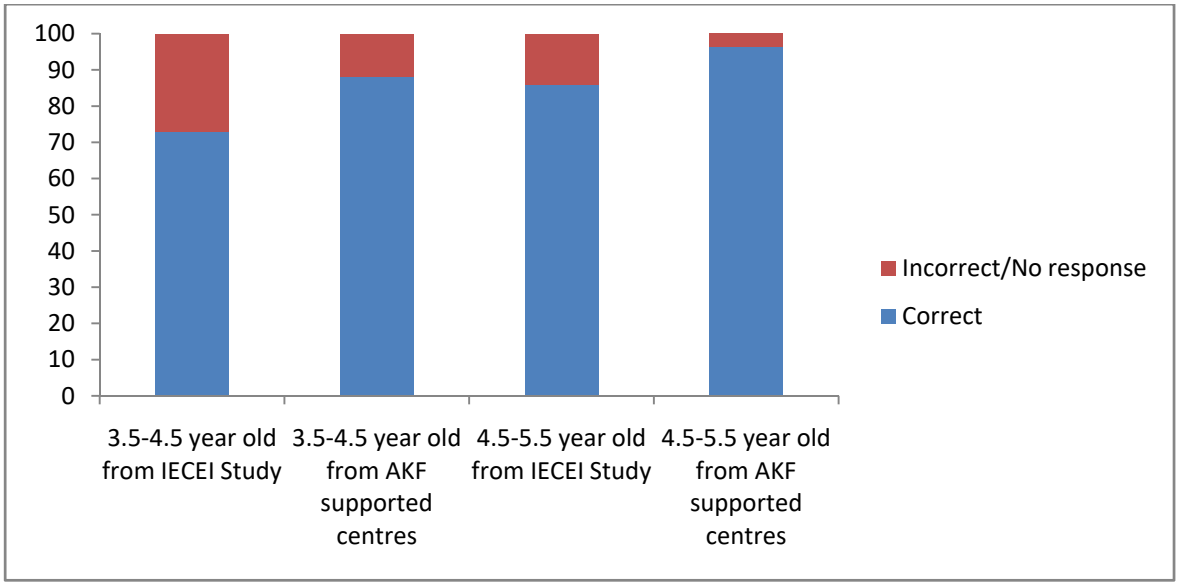

Figure 3.1: Average percentage responses of the cohort on spatial concept.

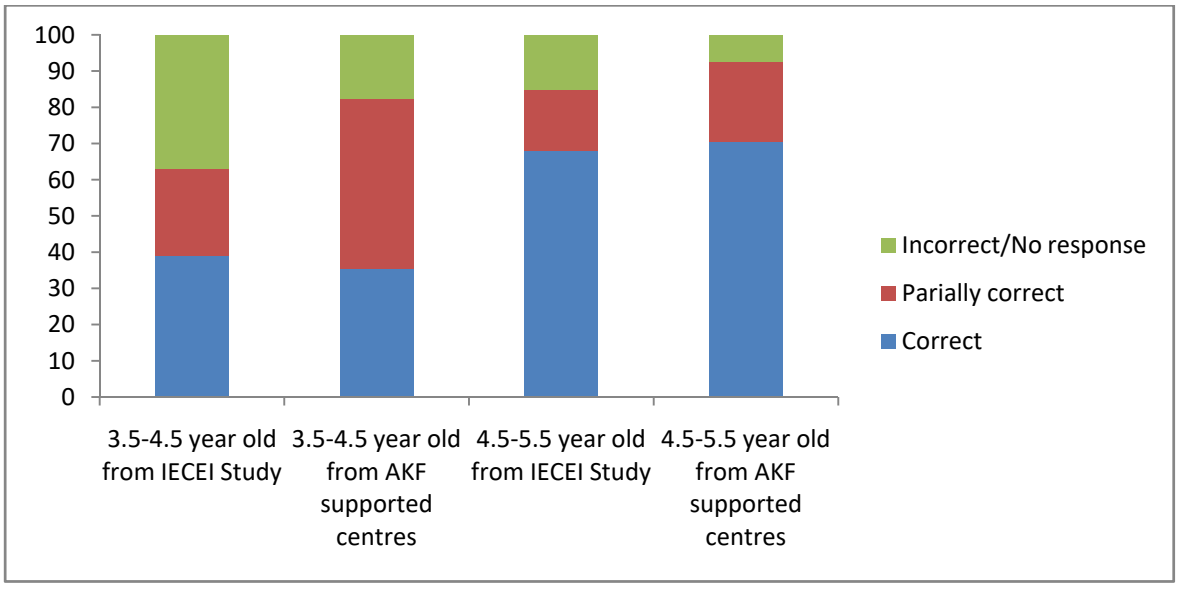

Figure 3.2: Average percentage responses of the cohort on pre-number concept.

Number Concept—Recognition and Comparison: Assessment of number concept was done through two tasks — recognition of numbers in terms of number object matching and comparison of relative value of numbers below 9. For recognition of numbers in terms of number object matching, 24 per cent and 37 per cent of the children between the age group of 3½-4½ and 4½-5½ respectively from the AKF supported centres could give correct responses and 6 per cent children and 12 per cent children from both the groups could give

partially correct responses i.e., they could identify and match at least two numbers (Figure 3.3). In comparison, of the children from the pre-test and the post-test phase of the IECEI study, only 3 per cent and 43 per cent children respectively could give correct responses. In many cases, it was seen that the children could count the objects but could not identify the numbers.

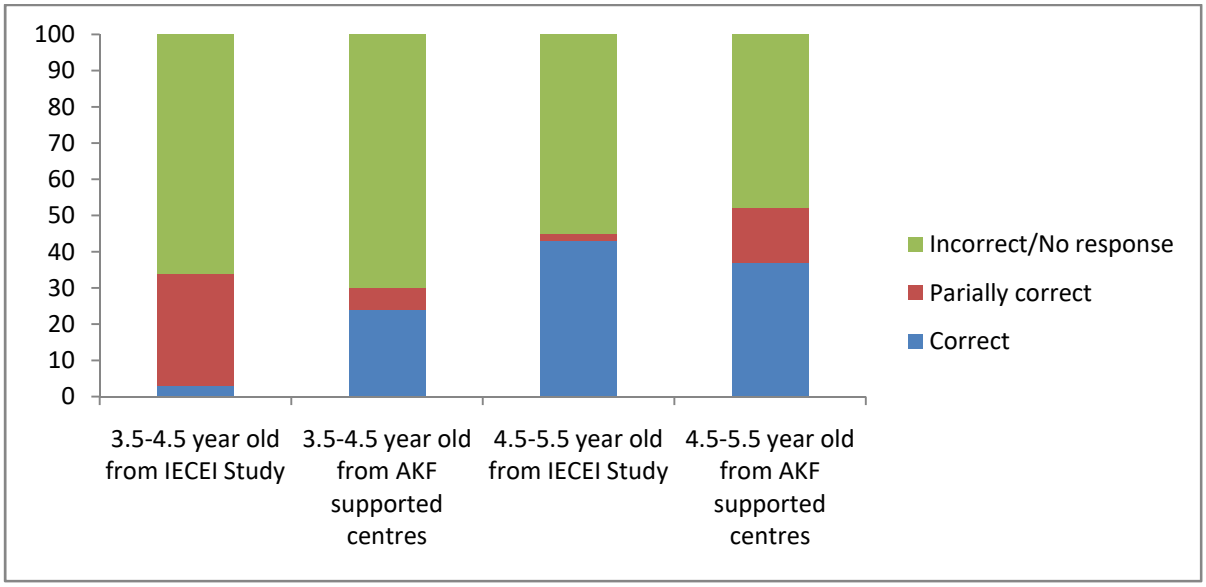

Figure 3.3: Average percentage responses of the cohort on recognition of numbers in terms of number object matching.

In this activity, the child is shown five numbers ranging from 3 to 9, and the child has to identify the number which is smaller than 5. As seen in figure 3.4, for number comparison, 23.5 per cent of the children between the age group of 3½-4½ years from AKF supported centres were able to give correct responses which were higher in comparison to pre-test (10 per cent) of the IECEI study. Similarly, 52 per cent of the children between the age group of 4½-5½ years from AKF supported centres were able to give correct responses which were higher that the post test of the IECEI study which stood at 28 per cent.

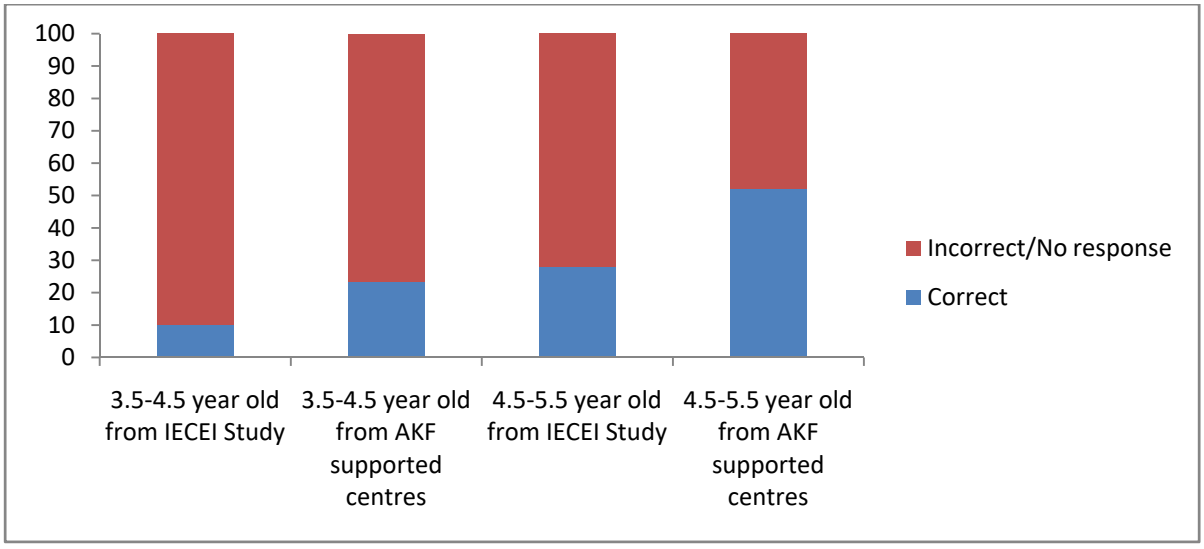

Figure 3.1.4: Average percentage responses of the cohort on number comparison wherein the smaller number from a set of numbers is to be identified.

Overall, in both number recognition and number comparison, which involve understanding of the concept of numbers, the performance of the children from different AKF supported centres were better than the children from the IECEI study but was not satisfactory.

Sequential Thinking: Analysis of the sequential thinking scores and responses indicates that 17.6 per cent and 29.4 per cent of the children between the age group of 3½-4½ years from AKF supported centres were able to give correct and partially correct responses respectively as seen in figure 3.5. Similarly, 26 per cent and 37 per cent of the children between the age group of 4½-5½ years from AKF supported centres were able to give correct and partially correct responses respectively. This was higher than the pre-test and the post-test of the IECEI study which was 10 and 15 per cent respectively. The trend is similar for the partially correct responses. The skill requiring temporal understanding of events does emerge as an area in which children need more support and experience.

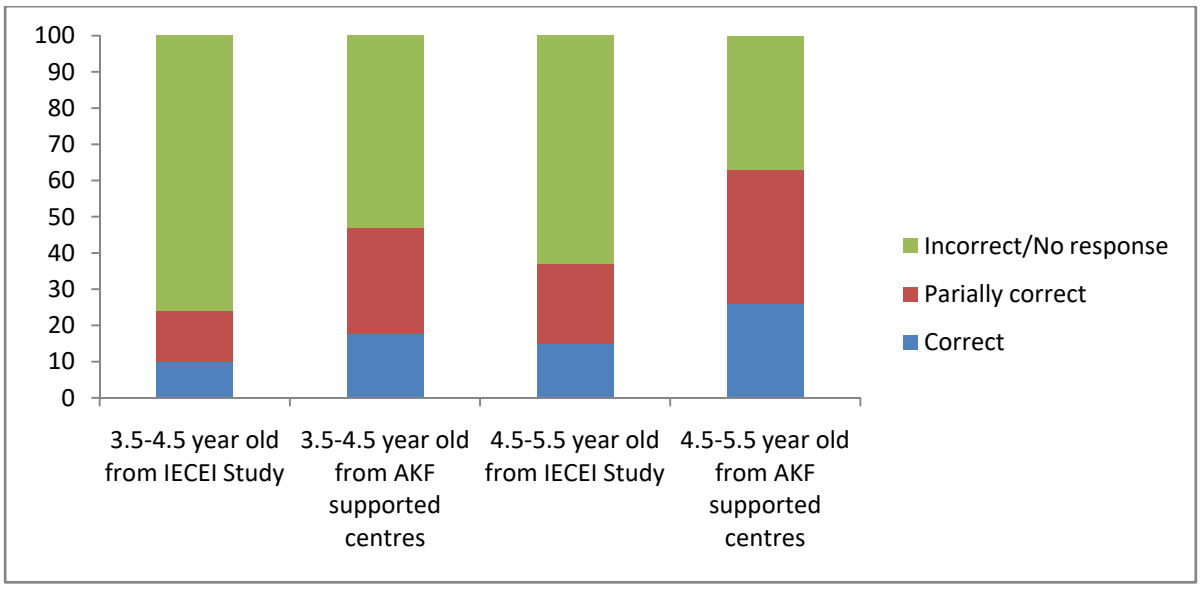

Figure 3.5: Average percentage responses of the cohort on sequential thinking.

Pattern Completion: The response to the task for *pattern completion*, which required cut outs of shapes and colours to be first copied and then placed in a sequence spatially, also indicated a similar trend as sequential thinking. As seen in figure 3.6, only 18 per cent of the children between the age group of 3½-4½ years from AKF supported centres could give correct responses but was still higher than the pre-test of the IECEI study which stood at 13 per cent. Partially correct respondents who could copy the pattern but not sequence them were 47 per cent which was higher than pre-test (42 per cent) of the IECEI study. Similarly, 30 per cent of the children between the age group of 4½-5½ years from AKF supported centres could give correct responses which was higher than the post-test (20 per cent) of the IECEI study. With greater percentage of correct responses, partially correct responses for children between the age group of 4½-5½ years from AKF supported centres were lower than that of the children from the same age group of the IECEI study which stood at 56 per cent and 64 per cent respectively.

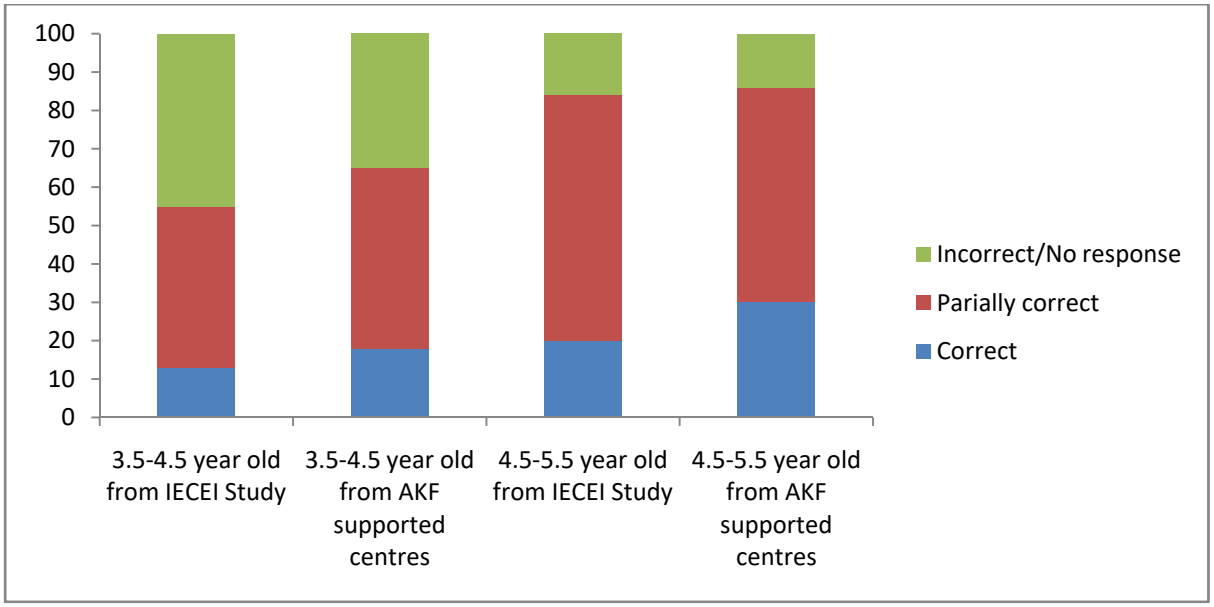

Figure 3.6: Average percentage responses of the cohort on pattern completion

Classification: The classification task required categorization of pictures into birds and animals. 23.5 per cent and 44.5 per cent children between the age group of 3½-4½ and 4½-5½ respectively from the AKF supported centres (Figure 3.7) were able to categorize birds and animals correctly while in the pre-test and the post-test of the IECEI study, 14 and 32 per cent of the children could categorize birds and animals correctly. At least, 53 per cent and 37 per cent children from AKF supported centres between the age group of 3½-4½ and 4½-5½ respectively could identify all the birds and animals. In comparison, only 18 per cent and 20 per cent of the children from pre-test and post-test of the IECEI study respectively could identify all the birds and animals. It seemed that many children did not have exposure to this concept of classification of birds and animals.

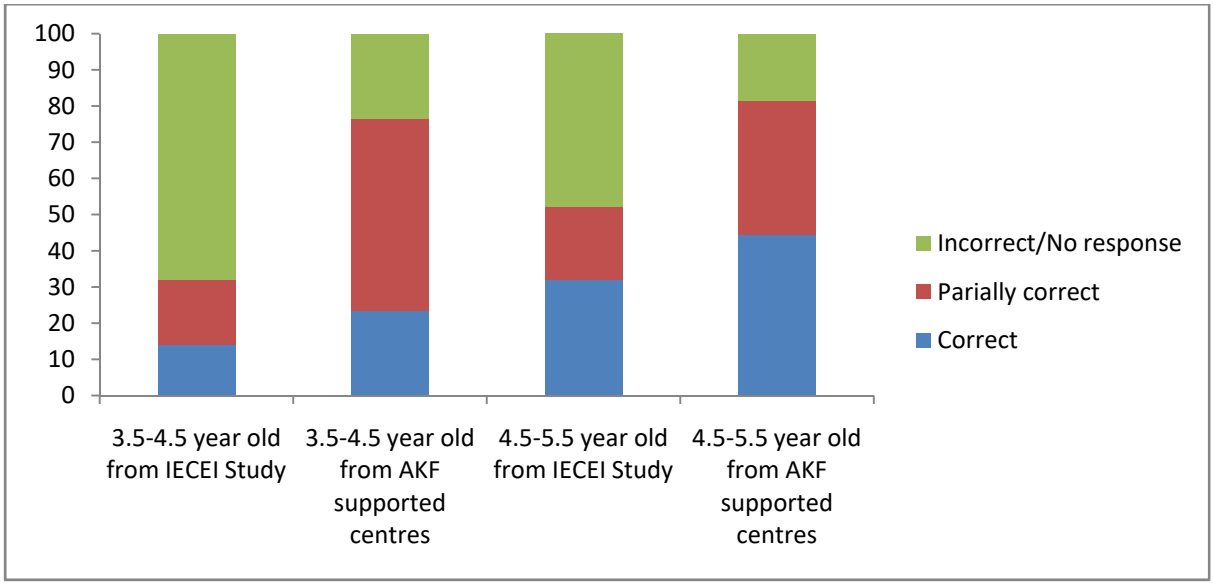

Figure 3.7: Average percentage responses of the cohort on classification of birds and animals

3.1.2. Comparison on language concepts of School Readiness for the children attending AKF supported centres and the children from the IECEI study.

Children were assessed on three language skills, viz. sentence formation, phonemic awareness and following instructions related to reading and writing readiness. The findings on the same were as follows.

Following instructions: Children were given a single instruction verbally followed by a complex instruction which involved four consecutive steps. As seen in figure 3.8, 88 per cent and 100 per cent children between the age group of 3½-4½ and 4½-5½ respectively from the AKF supported centres were able to follow both the simple and the complex instruction. This was far higher than the pre-test and the post-test of the IECEI study which stands at 62 per cent and 76 per cent respectively. Only 6 per cent children between the age group of 3½-4½ could follow the simple instruction but struggled with the complex one. This indicates that the children could comprehend the language easily and follow the instructions with ease.

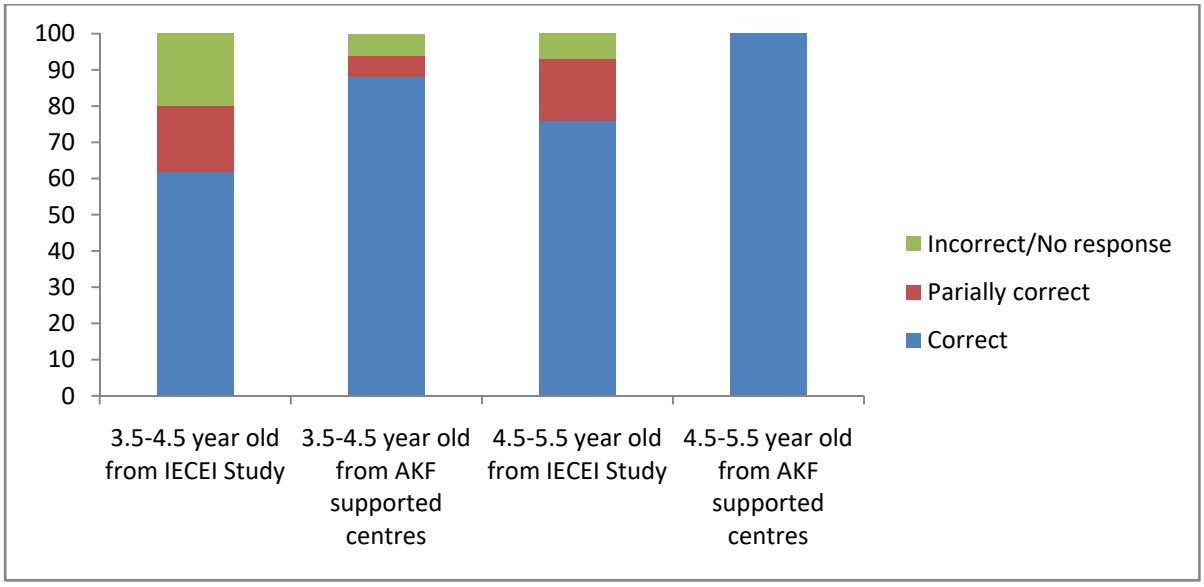

Figure 3.8: Average percentage responses of the cohort on following of instructions.

Phonemic Awareness: Phonemic awareness is considered a pre requisite for learning to read, particularly in the context of the Indian languages which were very phonetic in nature. However, the responses to children on the related task yielded a very poor response. The percentage of children from AKF supported centres who could provide a correct response were merely 6 per cent and 15 per cent (Figure 3.9) between the age group of 3½-4½ and 4½-5½ respectively. The pre-test and the post- test of the IECEI study follows the same trend, i.e., only 3 and 7 per cent children could provide the correct response to the item on phonemic awareness. Only 6 per cent children between the age group of 3½-4½ years from the AKF supported centres could give partially correct responses i.e., they could identify the starting sound. Similarly, 26 per cent children between the age group of 4½-5½ years from the AKF supported centres could give partially correct responses. It is a matter of concern that more than 55 per cent children were unable to identify beginning sounds of words.

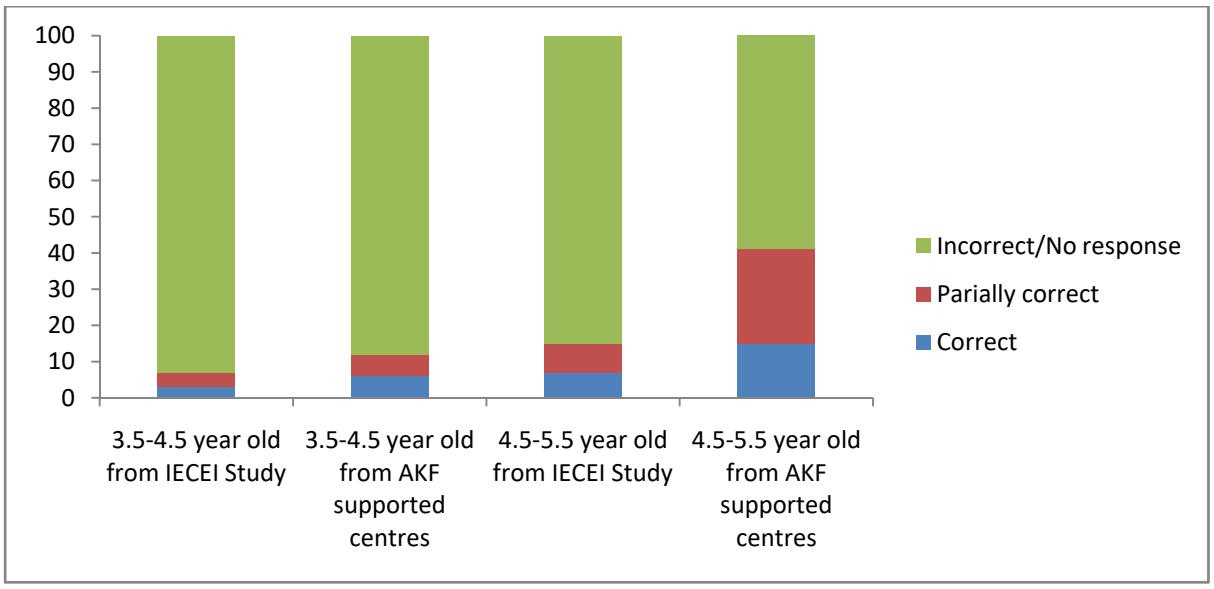

Figure 3.9: Average percentage responses of the cohort on phonemic awareness.

Sentence formation: The related activity for assessment was 'picture reading' of two pictures of children involved in different activities. The children were assessed on whether they describe the picture correctly and in complete sentences. As evident in Figure 3.10, 12 per cent of the children between the age group of 3½-4½ of age from the AKF supported centres were able to explain both the pictures in correct sentences whereas 82 per cent children from the same group were able to correctly describe the picture, although in incomplete sentences. For the age group of 4½-5½, 26 per cent children could describe the pictures in complete sentences whereas 70 per cent children could describe the picture, but not in complete sentences. As for IECEI study, there was an unexpected reversal, with 17 per cent children at age 4 years describing the picture in full sentences and the percentage reducing by 3 per cent i.e., 14 per cent at age 5. It also shows that there had been an increase in the percentage of children correctly describing the picture, although in incomplete sentences for the pre-test and post-test of the IECEI study which stood at 60 per cent and 79 per cent respectively.

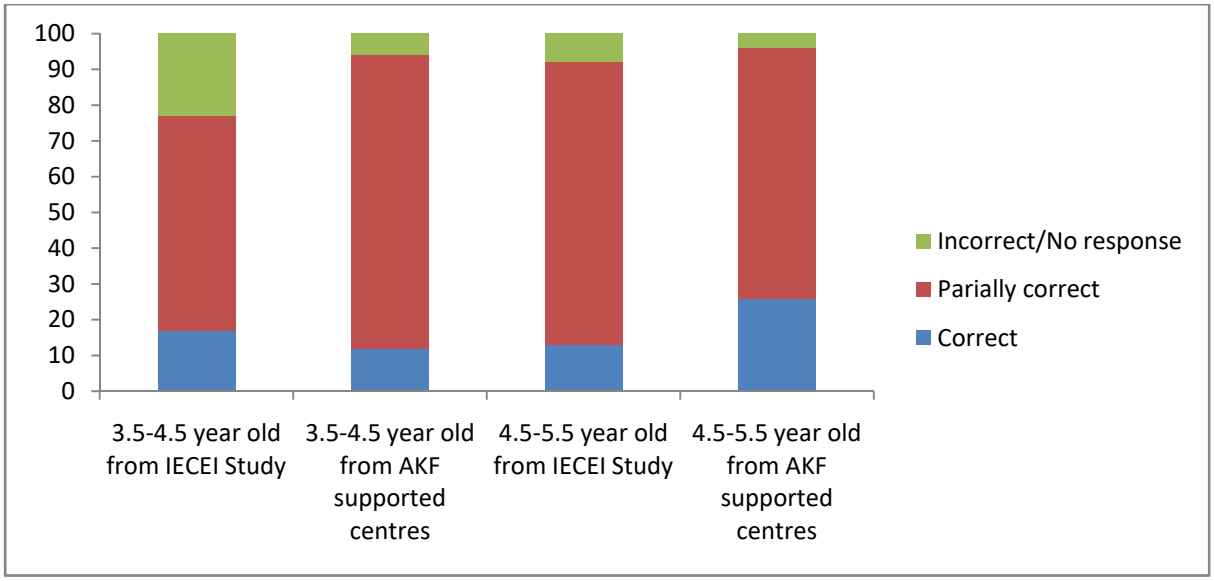

Figure 3.10: Average percentage responses of the cohort on sentence formation.

Further, the mean scores of the children from AKF supported centres were compared with the children from the IECEI study and children from the *Bodhshalas*, which was a sub-sample of the IECEI study and deemed a good practice as given in **Annexure I**. From the tables one could clearly see that in most of the domains, the average scores for the children from AKF supported centres for both the age groups i.e., for 3½- 4½ year olds and 4½ - 5½ years were higher for the AKF supported centres in comparison to the children from the IECEI study and the *Bodhshalas*. This might be because of the fact that many children from the AKF supported centres start coming to the centre by the age of 3 and are already exposed to the classroom environment. Also, the children from Nizamuddin *Basti* were exposed to an urban setting and so had idea of many things/situations from the setting and were able to comprehend many domains of school readiness with ease. However, the gains in the mean scores of the children from the *Bodhshalas* in most of the cases were higher than the gains in the mean score of the children from the IECEI study and the AKF centres. One could see that the mean scores for 3½- 4½ year olds were significantly higher in comparison to the children from the IECEI study and the *Bodhshalas*. However, the same could not be said about children between 4½- 5½ years of age. The difference between

both the groups on the said age group is marginal. This suggests that there is a need for more guided and age appropriate curriculum as 4-5 year of age is a critical phase for the development of the child.

3.2. Conclusion

From the above discussion one can clearly state that the children in AKF supported centres were mostly performing better in most of the domains in comparison to the children from the IECEI study and the children from the *Bodhshalas* which comprised mostly of the rural sample for both the age groups i.e., 3½-4½ years and 4½-5½ years. The higher scores might be because of higher exposure for the children in the urban areas in comparison to ones in the rural areas. However, the gains in most of the domains of school readiness were higher for the *Bodhshalas* in comparison to that of the children from the IECEI study and the children from the AKF supported centres. There were certain areas of concern which need more focus. There were problems with language skills of the children. Though majority of the children could follow complex instructions with ease, they were having problems in the area of phonemic awareness and sentence formation and there is a need immense improvement as the scores for all the groups were very low which signifies that the children were not aware of the basic premise of word formation. With lack of phonemic awareness, the children would focus on rote memorization rather than on their understanding. For sentence formation, one could see that the percentage of responses in complete sentences were higher for the older children in comparison to the younger ones in AKF supported centres but still needs further improvement with majority of the children responding in incomplete sentences. There might be a need to dedicate more time to the concepts pertaining to language. Further, with regards to cognitive concepts, the children had problems with items pertaining to sequential thinking which comprised of items such as identifying a process of filling water in a bucket and completion of a pattern. The children seemed quite competent on pre-number concepts but not on number concept as the children could not recognize the

numbers. The children had problems with classification wherein they could identify the birds and animals with ease but were not able to classify them. Though the older children were performing better than the younger children, there was a lot of scope for improvement. The curriculum in the centres need to be further modified so as to develop children's concept on cognitive and language development which is important for the success of the child in the primary grades. In other words, better school readiness is associated with better learning levels in the primary grades. Provision must be made to develop children's knowledge, understanding and skills in the areas of personal and social development, language development and communication skills, concepts pertaining to mathematics, understanding of their environment etc. which could help them to improve their life skills.

4. QUALITY OF THE ECCE PROGRAMME

The early childhood years lay the foundation for lifelong development of the child. Research from different disciplines has unequivocally established the critical importance of these years and of the experiences and environment the child gets in this period, which determines to a significant extent the development of the child's potential. Early Childhood Education (ECE) assumes a great deal of importance, particularly for children with disadvantaged home backgrounds, since it tend to compensate for their experiential deficits. Research around the globe has provided evidence of not only immediate impact of ECE in terms of improved school readiness, but also latent impact on children's capabilities, even into adulthood. The impact is however contingent on the quality of the ECE programme that the children have experienced.

In this section, the focus is on the quality of the ECE programmes supported by AKF where the sampled children for the study in Nizamuddin *Basti* were attending. The programme where the sampled children were participating was assessed on quality indicators using an observation rating scale. The sampled cohort of participating children was attending 6 centres in Nizamuddin *Basti*, of which 5 were assessed but the MCD government school could not be assessed because of permission issues. The centres attended by each of the sampled children were observed for a full day on the basis of a rating scale developed for the study named Early Childhood Education Quality Assessment Scale (ECEQAS), which makes a very comprehensive assessment of quality with regard to all ECE domains. Since the overall scores of each of the domains varied, the score for each domain was normalised on a scale of 10. The result for the same is being presented in figure 4.1.

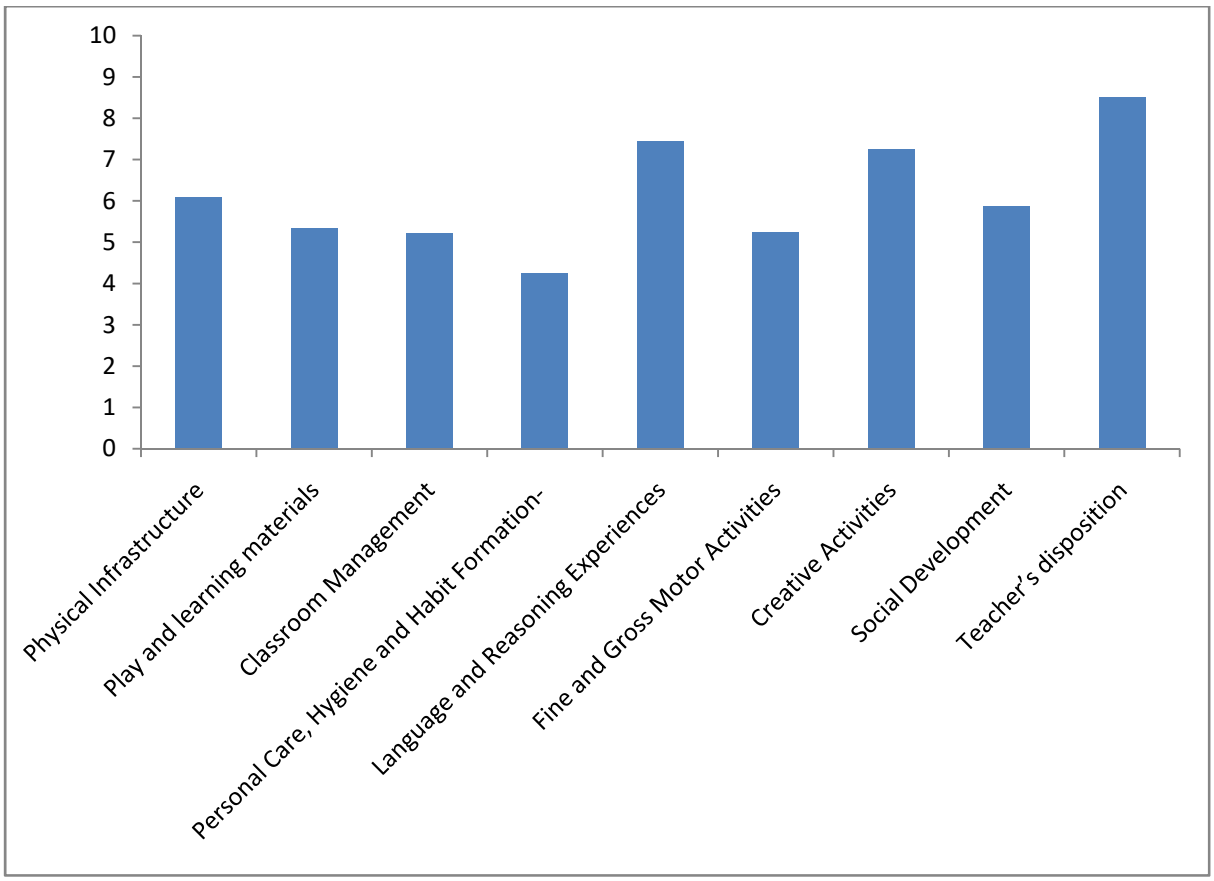

Figure 4.1: Average scores of the centres on different domains of quality of the centre on a scale of 10..

Physical Infrastructure: The AKF supported centres in Nizamuddin *Basti* scored a mean score of 6.09 on a scale of 10 on physical infrastructure. Most of the centres lacked toilets for children to use. There was lack of space in the centres as there was lack of availability of rented accommodation of adequate size in the area and being an urban slum the cost of larger spaces was too high to be incurred as per the government norms. According to the *Anganwadi* workers, it was only after the support of AKF that they were able to afford proper place for running the *Anganwadi* Centres. Mats for sitting were also provided by AKF as the government was not providing for the same. The parents also were of the view that the infrastructure of the *Anganwadi* centres have improved considerably with the support of AKF. However, there was one concern among the *Anganwadi* workers and the parents, which was the sustainability of the programme after AKF would stop supporting the initiatives. They were eager to know as to how they were supposed to manage the rent and maintain the space after AKF pulls out from the

Basti after completion of their project, as the government would financially not support the higher rent costs against their approved costs. Also, the area being cramped; there was lack of space for children for outdoor play.

Play and Learning material: The AKF supported centres in Nizamuddin *Basti* scored a mean score of 5.33 on a scale of 10 on the domain for play and learning material. The problem was non-availability of the out-door play space. Since there was no out-door space, in most cases the play materials for the same were not available. Indoor materials were available at all the centres, though the usage of the materials varied. The parents, the community teachers and the *Anganwadi* workers were of the belief that in the *Basti* which is already over populated, it was impossible to get such a centre with outdoor space and the condition of the private pre-schools in the area is also the same. The parents and the teachers acknowledged that there have been ample play materials in *Anganwadi* centres since the time AKF started supporting the *Anganwadi* Centres.

Classroom management: Classroom management was an issue in the AKF supported centres where the mean score was 5.22 on a scale of 10. One of the primary problems in the centres was the distribution of work between the *Anganwadi* Worker and the community teacher appointed by AKF. It could be clearly seen in most of the centres that the community teachers were teaching in the class whereas the *Anganwadi* workers were busy with their routine activities such as entry in registers, providing supplementary nutrition etc. Hence, the supervision of the class in generally up to the community teacher. The teacher child ratio in all the centres was less than 1:25. As far as the composition of the class, it could be seen that at the beginning of the class the children were sitting according to their age, but by the end of the day all the children sat together. This reflects on their activities also. Though mostly the centres had display materials, they were generally not the ones made by the children.

Personal Care, Hygiene and Habit Formation: The AKF supported centres in Nizamuddin *Basti* scored a mean score of 4.25 on a scale of 10 on this particular domain. In majority of the centres, it could be clearly seen that the children were either carrying their utensils from home to take their food or if the children were washing hands they did so after having food, not before that. Further, it was seen that though the teachers at times looked into the grooming of the child, it was not a regular activity. Most of the children in the different centres could eat independently without the help of the teacher or helper. One of the problems was that most centres did not have a toilet for the children. The *Anganwadi* workers were of the view that a room with independent toilets is not affordable in the area. Further, the teachers and parents were equivocal in saying that the children in the *Basti* wake up late and the *Anganwadi* helper has to wake up each and every child and many children tend to come to the *Anganwadi* centre just after waking up and their grooming is not looked into.

Language and Reasoning Experiences: It is an area where the AKF supported centres were performing relatively well as the mean score was 7.44 on a scale of 10. The community teachers as well as the *Anganwadi* Workers were regularly trained by various resource persons from AKF and a high score in this area reveals the success. The children were provided listening opportunities through rhymes and stories which were told by the teachers and the children got opportunities to speak when the teacher asked them a question with regards to the story. Further, the children also had opportunities to speak as and when the teachers showed them various cards and asked them to make stories through the same. There were materials with regards to language development, concepts formation etc. such as picture cards, shapes, blocks etc. Many centres also had abacus for preparing the children on number readiness. One could see in all the centres that the focus was on developing fine motor skills such as holding the pencil rather than teaching them to read and write. The parents were of the view that the centres follow a

developmentally appropriate curriculum which is generally not the case in the private school, where many children from the *Basti* go as the cost of education in the schools were free under the RTE quota for economically weaker sections. The parents in their discussions focussed that going to private schools under the RTE quota is the current trend. They were of the view that the children would have a better quality education in comparison to the government schools, where the children were taught to read and write. Further, when they join a private school, they can be at the same school from the pre-primary classes to the 12th grade with perceived quality education. The problem faced was the expenditure on things such as fees, uniform etc. which was very high and unmanageable and at times, the children from the affluent classes were reluctant to be with children who had come under the RTE quota for economically weaker sections. This leads to discrimination because of which many children tend to shift back from the private schools to the government schools because of their inability to adjust with the environment of the affluent private schools. Many parents were aware that the curriculum in the private schools are not developmentally appropriate, yet they send their children to such schools with a thought that reading and writing is good for the child and it would have a positive effect on their social status with their children studying for free in a so called good private school.

Fine and Gross Motor Activities: The mean score for AKF supported centres is 5.25 on fine and gross motor activities on the scale of 10. There are many reasons for the mediocre score on fine and gross motor activities. First would be the complete lack of outdoor space and lack of necessary space for indoor activities for gross motor development. Further the time that the *Anganwadi* centre functions for is a maximum of 2 hours which is too little to engage in all the types of activities, though the few activities that take place in the centre ensure participation of all the children. Both the community teachers and the *Anganwadi* workers acknowledged that the duration of the centre is an issue and to

accommodate everything in such a short duration is difficult. The most preferred activity for fine motor skills was to ask the child to draw something and in the process teach them how to hold a pencil.

Creative activities: Relatively there were opportunities for creative activities in the centres as the mean score for the same was 7.25 on a scale of 10. One could see children taking part in activities pertaining to rhymes, songs, drawings etc. One could also see the teachers asking the children what their drawing was all about. The children were provided time for free play and were free to interact with the teachers as well as other children. In most of the cases, it was also seen that the children were involved in both the individual as well as group activities. The parents were of the view that the centres have improved with support on infrastructure and extensive training of the *Anganwadi* workers and the community teachers by AKF. The centres in the *Basti* at present times were also conducive for different activities with proper resources such as beads, blocks, colours, charts etc. Proper corners could not be set up in the *Anganwadi* centres for the lack of space.

Social Development: The mean score for AKF supported centres is 5.86 on the domain of social development on the scale of 10. It was observed that most of the children were comfortable around the strangers. This might also be because the centres in the *Basti* and the *Basti* itself were frequented by many people and the children were used to seeing people around. In all the centres it was observed that the teacher greeted the children at least on arrival but it was rarely observed that a child greeted the teacher on arrival and departure. Further, it was also observed that children from both the genders were seen playing together and were comfortably interacting with one another. It was also seen that the children had the opportunity to interact with the *Anganwadi* worker and the community teacher with ease. Further, during the discussion with the parents, they emphasized that the children were far more confident in interacting with others. According to the parents, before AKF started supporting the *Anganwadi* centres, the *Anganwadi*

workers were overworked with a lot of paper work. But after AKF's involvement, the responsibility in most cases is shared wherein the community teachers looked in the activities with the children and the *Anganwadi* workers focussed on the official work. One phenomenon that could be observed across all the *Anganwadi* centres is that, though the community teacher is supposed to support the *Anganwadi* worker, it is generally the community teacher who is in charge of the interaction with the children rather than the *Anganwadi* worker. So, the children seemed to be more in ease with the community teacher than the *Anganwadi* worker.

Teachers Disposition: The AKF supported centres scored relatively high on the domain of teacher disposition where the mean score was 8.5 on the scale of 10. Both the *Anganwadi* workers and the community workers were regularly trained by AKF. Further, many of the community teachers were educated to certain extent on Child Development and Education. Therefore, one could clearly see that there is ample interaction going on between the teachers and the children and the children were encouraged to talk among themselves and their teachers during play and other activities. It could be seen that the both the community teachers and the *Anganwadi* worker were not authoritative with the children, rather were democratic in their approach. The teachers were also seen to be looking into the problems and needs of each and every child. There were no children with special needs in all the centres on the day of the visit.

From the preceding discussion on different domains of quality, it is evident that there is a focus on language, social and cognitive development. Further, there is regular training and orientation of the community teachers which helps them in conducting the activities appropriately at the centres. Though the *Anganwadi* workers were also trained, they were busier with official work such as filling of registers, providing supplementary nutrition, etc. and did not interact much with the children in the classroom environment. With numerous constraints, the AKF

supported centres were trying to adhere to a common set of principles of developmentally appropriate curriculum and quality of the ECE programme. Table 4.1 where the time on task analysis of each model indicates the emphasis on different activities takes place in the centre.

Activity	AKF supported Centres	Centres from the IECEI study		
		Anganwadi Centres	*Private Preschools*	*Innovative Known Practice*
Developmentally appropriate activities like language, cognitive, social, creative activities	Medium	Low	Low	Medium
Rhymes and songs	High	High	Medium	High
Conversation	High	Medium	Low	Medium
Formal teaching	Low	High	High	High
Routine activity	Low	High	High	High
No activity	Low	High	Medium	Medium

Table 4.1: Proportionate time on task in AKF supported centres and the centres from the IECEI study.

4.1 Conclusion

It was clearly seen that there was high emphasis on the language and reasoning experiences and creative activities. The teachers being well disposed proved to be a key element in being an effective teacher. Further, the focus also seemed to be on the social development of the child. The physical infrastructure of the *Anganwadi* centres was improved as they were supported by AKF by providing them with additional rent for the building, display materials, stationaries, play materials and teaching learning materials. The parents and community members were of the view that the quality of the *Anganwadi* centres in the area had been improving with passing time. Yet, there is a concern. Even with emphasis on domains of language, reasoning, creativity, etc. the children were facing problems in these areas. The children were lagging in phonemic awareness, sentence formation, sequential thinking, etc. It clearly signifies that though there is a focus

on language and cognitive competencies but it needs to be further emphasized for more significant influence on later learning of the children as the scores obtained in the activities pertaining school readiness competencies were low. The parents in their view were also unsure about the future of the *Anganwadi* centres in the area as they on each and every occasion said that the quality of the *Anganwadi* centres would deteriorate once the project duration for AKF is over in the area. This is an area which needs to be addressed as the parents need some assurances for they believe that there has been a huge improvement in the Nizamuddin *Basti* and its *Anganwadi* centres and they want their children to learn from the *Anganwadi* centres supported by AKF. But if this support does not continue, they do not have any option other than to continue in a private school.

5. RECOMMENDATION

The children had problems with respect to certain domains of school readiness which were assessed. The curriculum for the 4-5 year olds needs to be focus more on guided and age appropriate cognitive and language activities which are important for development of school readiness among children and lead to better learning outcomes in the primary grades according to the IECEI study.

6. REFERENCES

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Annexure I

Table 1: Comparison of the mean scores of the children from the IECEI study, Bodhshalas and AKF supported centres and subsequent gains in mean score made by the 5 year olds on Spatial Concept.

		Mean Scores	Gains in mean score made by 5 year olds
IECEI study	3.5 - 4.5 years	7.2	1.4
	4.5 - 5.5 years	8.6	
Bodhshalas	3.5 - 4.5 years	6.8	2.5
	4.5 - 5.5 years	9.3	
AKF supported centres	3.5 - 4.5 years	8.8	0.8
	4.5 - 5.5 years	9.6	

Table 2: Comparison of the mean scores of the children from the IECEI study, Bodhshalas and AKF supported centres and subsequent gains in mean score made by the 5 year olds on Pre- Number Concept.

		Mean Scores	Gains in mean score made by 5 year olds
IECEI study	3.5 - 4.5 years	5.15	2.5
	4.5 - 5.5 years	7.65	
Bodhshalas	3.5 - 4.5 years	5	2.85
	4.5 - 5.5 years	7.85	
AKF supported centres	3.5 - 4.5 years	5.85	2.25
	4.5 - 5.5 years	8.1	

Table 3: Comparison of the mean scores of the children from the IECEI study, Bodhshalas and AKF supported centres and subsequent gains in mean score made by the 5 year olds on Sequential Thinking.

		Mean Scores	Gains in mean score made by 5 year olds
IECEI study	3.5 - 4.5 years	1.84	1
	4.5 - 5.5 years	2.84	
Bodhshalas	3.5 - 4.5 years	1.96	2.22
	4.5 - 5.5 years	4.18	
AKF supported centres	3.5 - 4.5 years	3.52	1.28
	4.5 - 5.5 years	4.8	

Table 4: Comparison of the mean scores of the children from the IECEI study, Bodhshalas and AKF supported centres and subsequent gains in mean score made by the 5 year olds on Completing Pattern.

		Mean Scores	Gains in mean score made by 5 year olds
IECEI study	3.5 - 4.5 years	2.3	0.98
	4.5 - 5.5 years	3.28	
Bodhshalas	3.5 - 4.5 years	2.6	2.28
	4.5 - 5.5 years	4.88	
AKF supported centres	3.5 - 4.5 years	2.92	1.43
	4.5 - 5.5 years	4.35	

Table 5: Comparison of the mean scores of the children from the IECEI study, Bodhshalas and AKF supported centres and subsequent gains in mean score made by the 5 year olds on Classification concept.

		Mean Scores	Gains in mean score made by 5 year olds
IECEI study	3.5 - 4.5 years	2.3	2.05
	4.5 - 5.5 years	4.35	
Bodhshalas	3.5 - 4.5 years	2.5	1.75
	4.5 - 5.5 years	4.25	
AKF supported centres	3.5 - 4.5 years	4.9	1.52
	4.5 - 5.5 years	6.42	

Table 6: Comparison of the mean scores of the children from the IECEI study, Bodhshalas and AKF supported centres and subsequent gains in mean score made by the 5 year olds on Object Number Matching.

		Mean Scores	Gains in mean score made by 5 year olds
IECEI study	3.5 - 4.5 years	2.3	2.1
	4.5 - 5.5 years	4.4	
Bodhshalas	3.5 - 4.5 years	5.3	2
	4.5 - 5.5 years	7.3	
AKF supported centres	3.5 - 4.5 years	2.73	1.94
	4.5 - 5.5 years	4.67	

Table 7: Comparison of the mean scores of the children from the IECEI study, Bodhshalas and AKF supported centres and subsequent gains in mean score made by the 5 year olds on Number Comparison.

		Mean Scores	Gains in mean score made by 5 year olds
IECEI study	3.5 - 4.5 years	0.95	1.9
	4.5 - 5.5 years	2.85	
Bodhshalas	3.5 - 4.5 years	0.4	2.65
	4.5 - 5.5 years	3.05	
AKF supported centres	3.5 - 4.5 years	2.35	2.8
	4.5 - 5.5 years	5.15	

Table 8: Comparison of the mean scores of the children from the IECEI study, Bodhshalas and AKF supported centres and subsequent gains in mean score made by the 5 year olds on Following Instruction.

		Mean Scores	Gains in mean score made by 5 year olds
IECEI study	3.5 - 4.5 years	7.15	1.3
	4.5 - 5.5 years	8.45	
Bodhshalas	3.5 - 4.5 years	6.95	2.25
	4.5 - 5.5 years	9.2	
AKF supported centres	3.5 - 4.5 years	9.1	0.9
	4.5 - 5.5 years	10	

Table 9: Comparison of the mean scores of the children from the IECEI study, Bodhshalas and AKF supported centres and subsequent gains in mean score made by the 5 year olds on Phonemic Awareness.

		Mean Scores	Gains in mean score made by 5 year olds
IECEI study	3.5 - 4.5 years	1	1.1
	4.5 - 5.5 years	2.1	
Bodhshalas	3.5 - 4.5 years	0.7	1.6
	4.5 - 5.5 years	2.3	
AKF supported centres	3.5 - 4.5 years	0.88	1.77
	4.5 - 5.5 years	2.65	

Table 10: Comparison of the mean scores of the children from the IECEI study, Bodhshalas and AKF supported centres and subsequent gains in mean score made by the 5 year olds on Sentence Formation.

		Mean Scores	Gains in mean score made by 5 year olds
IECEI study	3.5 - 4.5 years	3.46	0.47
	4.5 - 5.5 years	3.93	
Bodhshalas	3.5 - 4.5 years	3.5	0.55
	4.5 - 5.5 years	4.05	
AKF supported centres	3.5 - 4.5 years	4.11	1.87
	4.5 - 5.5 years	5.98	