
INAUGURAL DISSERTATION 2018

Unequal Opportunities in Early Childhood Education in India

A Demand Side Perspective

Saikat Ghosh

University of Bamberg



BAMBERG
GRADUATE SCHOOL
OF SOCIAL SCIENCES



Unequal Opportunities in Early Childhood Education in India: A Demand Side Perspective

Inaugural-Dissertation

in der Fakultät Humanwissenschaften

der Otto-Friedrich-Universität Bamberg

vorgelegt von

Saikat Ghosh

aus Howrah, Indien

Bamberg, 2018

URN: urn:nbn:de:bvb:473-opus4-513931
DOI: <https://doi.org/10.20378/irbo-51393>

Tag der mündlichen Prüfung: 13/02/2018

Dekan:	Prof. Dr. Jörg Wolstein
Erstgutachter:	Prof. Dr. Hans-Günther Roßbach
Zweitgutachterin:	Prof. Dr. C. Katharina Spieß

Dedication:

To all children, worldwide.

This study is financially supported by:

Deutsche Forschungsgemeinschaft (DFG)

Acknowledgement:

My heartfelt gratitude to Professor Hans-Günther Roßbach, Professor Katharina Spieß, and Professor Steffen Schindler for having continuous faith in me. I am really indebted to them for their support and guidance for this research. Their critical and thoughtful comments and suggestions have helped me understanding issues from various perspectives, and widened my knowledge. Besides, I am grateful to Miriam Schneider, Marc Scheibner, and other BAGSS officials, and my colleagues in BAGSS for all their support at different times.

My sincere gratitude to the Government of West Bengal and its officials namely: Smt. Sudipta Chatterjee (State Project Director, Sava Siksha Abhiyan West Bengal), Smt. Debosmita Chattopadhyay (Administrative Officer, Paschim Banga Sarva Siksha Mission), Smt. Bulan Bhattacharya (District Project Officer, Sarva Siksha Mission, Howrah), and Smt. Taniya Parvin (District Project Officer, Sarva Siksha Mission, Murshidabad) for all their support during the field work. Moreover, I am indebted to Mr. Debasis Kayal (Director, Manju Kayal Foundation), all the Field Workers, and Principal Investigators, who had tirelessly performed during the field work. Without their dedication and support, it would not have been possible. In addition, I am thankful to all parents and school teachers for their participation in this research and allowing us to use their personal information for this research. I also extend my thanks to my brother Dr. Subhasis Dey who was always by my side whenever I needed. Also, special thanks to my sister Sharmini Selvarajah for giving me valuable feedback time by time. Last but not the least, my sincere gratitude to Mr. Jitendra Roy (Joint Secretary of Government of West Bengal, Department of Agriculture), who has been the key

person behind the networking with different departments and officials of the Government of West Bengal.

I am grateful to my wife Moumita Ghosh Chatterjee for all her support towards raising our two little children that allowed me to devote myself to this research. Last but not the least, I am beholden forever to all my family members and friends for all their moral, emotional, mental support and without them it would not have been possible for me to complete this journey.

Table of Contents

List of Acronyms	i
Definitions	ii
List of Tables	iv
List of Figures	vi
List of Appendices	vii
List of Annexures	vii
Summary	viii
Chapter 1: Introduction	1
1.1 Why Early Childhood is Important?	1
1.2 Concepts and Definitions	4
1.3 Significance for Developing Countries	7
1.4 India and Its Children	10
1.5 Objective of the Study	16
Chapter 2: System, Structure, and Problems of Early Childhood Education in India	21
2.1. Existing Early Childhood Education Provisions	22
2.1.1. Public provision	22
2.1.2. Private provisions	33
2.1.3. Other provisions	36
2.2. Demand for Early Childhood Education	37
Chapter 3: Theoretical Discussion and Literature Review	44
3.1. Two Key Questions	44
3.2. The Benefits and Costs	48

3.3. Benefits and Costs in Indian Context	53
3.4. Beyond Rationality	60
3.5. Mechanism behind ECE Choice	63
3.6. Plausible Determinants of Early Educational Choices	66
3.6.1 Family characteristics	66
3.6.2 Child characteristics	77
3.6.3 Provider Characteristics	78
3.7. Research Questions and Hypotheses of the Study	81
3.7.1. Decision of preschool or no-preschool	82
Main research questions	82
Hypotheses	83
3.7.2. Decision of public preschool or private preschool	84
Main research question	84
Hypotheses	85
Chapter 4: Research Methodology	88
4.1. Sampling Framework	88
4.2. Study Area	96
4.3. Questionnaires and Interviews	106
4.4. The Data	111
4.5. Regression Strategy	112
4.5.1 The decision of preschool or no-preschool	112
4.5.2 The decision of public preschool or private preschool	116
Chapter 5: Findings of the Study	122
5.1. Findings on Preschool or No-Preschool Debate	122
5.1.1 Descriptive data analysis	123

5.1.2 Regression analysis	139
5.2. Findings on Public vs. Private Preschool Debate	152
5.2.1 Descriptive data analysis	152
5.2.2 Regression analysis	164
5.3. Synopsis of Outcomes	173
Chapter 6: Discussion	179
6.1. Issues Relating to Preschool Attendance	179
6.2. Issues Relating to Type of Preschool Attended	195
6.3. Conclusion	206
6.4. Limitations	211
References	215
Appendices	229
Annexures	245

List of Acronyms

ASER	Annual Status of Education Report
AWCs	Anganwadi Centres
AWW	Anganwadi Worker
AWH	Anganwadi Helper
CECED	Centre for Early Childhood Education and Development
CRY	Child Rights and You
DISE	District Information System for Education
ECCD	Early Childhood Care and Development
ECCE	Early Childhood Care and Education
ECD	Early Childhood Development
ECE	Early Childhood Education
ECEC	Early Childhood Education and Care
EFA	Education for All
FOCUS	Focus on Children Under Six
ICDS	Integrated Child Development Scheme
MDG	Millennium Development Goals
MoSPI	Ministry of Statistics and Programme Implementation
MWCD	Ministry of Women and Child Development
NFHS	National Family Health Survey
NGOs	Non-Governmental Organisations
NIPCCD	National Institution of Public Cooperation and Child Development
OBC	Other Backward Caste
OECD	Organization for Economic Co-operation and Development
PSE	Pre School Education
S.C	Schedule Caste
S.T	Schedule Tribe
SNP	Supplementary Nutritional Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations Children's Fund
WEF	World Education Forum

Definitions

Preschool/Kindergarten		Setting out of home, where children of the age group 3-6 years spend several hours each day, and engage in formal or informal learning activities.
Anganwadi Centre		Anganwadi is a type of child care centre in India, a part of the Integrated Child Development Scheme (ICDS) program. Anganwadi means “courtyard shelter” in Indian languages. Children attending this centre are provided meals and other nutritional support, and preschool education.
Anganwadi (AWW)	Worker	One female personnel appointed in each Anganwadi centre as in-charge of the centre. They perform several duties including running the day-to-day activities of the Anganwadi centre, and other responsibilities that fall under ICDS.
Anganwadi (AWH)	Helper	One female personnel appointed in each Anganwadi centre to help Anganwadi worker with daily activities, cook meal, cleaning, and other duties.
Scheduled Caste (S.C.)		The official name given in India to the lowest caste, officially regarded as socially disadvantaged. Scheduled Caste means such cases, races or tribes or parts of or groups within such castes, races or tribes as are deemed under Article 341 to be Scheduled Castes for the purposes of Indian Constitution Article 366(24) in the Constitution of India 1949.
Scheduled Tribes (S.T.)		Indigenous people officially regarded as socially disadvantaged. The term 'Scheduled Tribes' first appeared in the Constitution of India. Article 366 (25) defined scheduled tribes as tribes or tribal communities or parts

of or groups within such tribes or tribal communities as are deemed under Article 342 to be Scheduled Tribes for the purposes of this constitution".

**Other Backward Class
(OBC)**

Other Backward Class is a collective term used by the Government of India to classify castes which are socially and educationally disadvantaged.

List of Tables

Table 1.1: Status of Indian Children	11
Table 2.1: Population Norms under ICDS Scheme.....	24
Table 2.2: Nutritional Norms in ICDS	26
Table 4.1: Sub-district wise Sampling Area.....	91
Table 4.2: Type of Primary Schools in Sampling Area	92
Table 4.3: Sampling Distribution Across Districts and Area	95
Table 4.4: Comparative Statistics between India and West Bengal.....	97
Table 4.5: Districts Overview.....	100
Table 4.6: Occupational Distribution of the population.....	102
Table 4.7: District wise coverage of Elementary Education.....	103
Table 4.8: District wise coverage of ICDS programme	105
Table 4.9: District wise distribution of Preschool Attendance	111
Table 4.10: Preschool wise distribution of the Sample.....	112
Table 5.1: Economic Status and Preschool Attendance.....	124
Table 5.2: Housing Pattern and Preschool Attendance	125
Table 5.3: Social Status and Preschool Attendance.....	128
Table 5.4: Family Demography and Preschool Attendance	130
Table 5.5: Supply-Side Variation and Preschool Attendance	131
Table 5.6: Parents motivation and their Socioeconomic Status.....	138

Table 5.7: Findings from the multivariate analysis on Preschool Attendance.....	142
Table 5.8: Relation between Parents' Attitude towards ECE and their SES.....	149
Table 5.9: Economic Status and Type of preschool attended.....	153
Table 5.10: Housing Pattern and Type of Preschool Attended.....	154
Table 5.11: Social Status and Type of Preschool Attended.....	156
Table 5.12: Family Demography and Type of Preschool Attended.....	159
Table 5.13: Supply Side Variation and Type of Preschool Attended.....	160
Table 5.14: Preschool to Primary School Transition Trend.....	163
Table 5.15: Estimation of Probit Regression (With and without Sample Selection).....	166

List of Figures

Figure 1.1: Under-Five Mortality Rate.....	12
Figure 1.2: Per-Capita Total Expenditure on Health.....	12
Figure 1.3: Gross Enrollment Ratio in Pre-Primary Education	15
Figure 2.1: Distribution of Time on Different Activities in Preschool Programme	41
Figure 3.1: The Multi-Level Structure of Rational Choice Explanation.....	46
Figure 5.1: Reasons for Preschool Attendance	132
Figure 5.2: Parental Education & Reasons for Preschool Attendance	133
Figure 5.3: Districts Wise Reasons of Preschool Attendance	133
Figure 5.4: Reasons for Preschool Non-Attendance	134
Figure 5.5: Parental Education and Reasons for Preschool Non-Attendance	135
Figure 5.6: District Wise reasons for Preschool Non-Attendance.....	136
Figure 5.7: Type of Preschool and Reasons for Preschool Non-Attendance	161
Figure 5.8: Type of Preschool and Components of Parental Satisfaction ..	162

List of Appendices

Appendix 1	229
Appendix 2	231
Appendix 2A	233
Appendix 3	235
Appendix 4	237
Appendix 5	239
Appendix 6	241
Appendix 7	243

List of Annexures

Annexure 1.....	245
Annexure 2.....	246
Annexure 3.....	248

Summary

Early childhood education is one of the most significant interventions in human life because it is the most critical period when the foundations are laid for life-long development. It is even more important in the context of developing countries where a considerable number of children cannot perform to their full potential due to poor learning environment and existence of different forms of child poverty.

India has one of the world's largest and universalized early education programme named Integrated Child Development Scheme (ICDS) in operation since 1975. Besides, there exist several private early educational provisions, which are relatively recent, in many parts of the country. Available information suggests that about fifty to sixty percent of eligible children have access to early education in India, which means a considerable number of children still denied the access to any early childhood educational experience. Besides, recent trend suggests an increasing preference towards private preschools, even though the public provision i.e. ICDS is there which is free of any financial cost. The demand for early childhood education is endogenous and comes from parents; therefore, a large source of variation in preschool attendance

may come from factors related to parents and extended families. Thus, the present study, footed on an empirical analysis, tries to investigate reasons behind the unequal opportunities in early childhood education in India from a demand-side perspective. The aim is to disentangle two interrelated forms of variations in early childhood education: First, to find out, which are the determinants of parental decision of sending (or not sending) children to preschool? Second, for those parents who send their children to preschool, which are the determinants behind the choice of a particular type of preschool?

It has been found that the main reason for sending children to preschool is early education and school readiness. Results reveal that preschool attendance depends mainly on parents' attitude towards early education, which varies across different socioeconomic groups. Whether parents consider the importance of early education plays a deterministic role in preschool attendance by children. Parents' educational level has been found to play a deterministic role in this regard, and higher the level of education achieved by parents greater is the probability of their children attended preschool. Besides, unequal opportunity in early childhood education can also be attributed to availability and accessibility of existing early educational provisions up to certain extent. Particularly, the

regional variation in supply may play an important role in widening the difference in access to early childhood education. Furthermore, the choice of a type of preschool was mainly grounded on stratification based the socioeconomic status of parents. In general, Anganwadi centers (public preschools) were attended by most of the children and were particularly popular among families from the lower socioeconomic strata. Private preschools, on the other hand, were considered of “better” quality and represented the “status” of socioeconomically better off families. It was also an attractive choice for socioeconomically upward mobile families.

The evidence is clear that the reason behind the unequal opportunity in ECE is multi-layered with several factors; both from demand side as well as supply side can be held responsible. Educational, occupational, and social factors all operate to create differences in preschool attendance, with educational factors appearing to carry the greatest share of the variance. Therefore, policies are clearly needed to increase demand for early childhood education on one hand and ensuring availability and ease in accessibility of it on the other.

Chapter 1: Introduction

1.1 Why Early Childhood is Important?

Childhood is the most precious period of human life and well-developed childhoods are the central to sustainable development. 'Life's early years have a profound impact on a child's future. When loved, nourished and cared for in safe and stimulating environments, children develop the skills they need to embrace opportunity and bounce back from adversity... Early years of childhood form the basis of intelligence, personality, social behavior, and capacity to learn and nurture oneself as an adult' (UNICEF 2017). 'Experiences for children from two through five years of age provide the child with the foundations for later learning and for formal education, as well as with baseline social skills' (Evans et al 2000: 2). Early childhood education¹ is one of the most significant interventions in human life because it is fundamental to provide the right start from the early childhood stage, which encompasses the most critical period when the foundations are laid for a life-long

¹ The terms 'early childhood education' and 'preschool education' have been used in this study interchangeably with the same meaning. Early childhood/preschool education is referred to the education for children of 3-6 years of age in non-home setting.

development and the realization of their full potential. This is especially important for children in poverty and those belonging to the marginalized section of the society. A good foundation in the early years is pivotal in making a difference through adulthood and even giving the next generation a better start. Educated and healthy people are an asset for their societies and a value added to the human capital of the nation. There is consistent and strong evidence which confirms that:

- Early childhood is the most rapid period of development in a human life cycle. Recent findings from developmental neuroscience tell us that the brain structures undergo its most dramatic development during the first years of life (Benton 2010, Johnson 2001). In addition, by the age of two, children's brains are as active as those of adults and by the age of three, the brains of children are twice as active as the brains of adults (Shore 1997: 21).
- The neuroscientific research on early brain development says that the young children need the greatest support in brain development and the concern needs to begin before birth (Shonkoff & Phillips 2000: 217).
- The effects of early disadvantage on children can be reduced and early interventions for disadvantaged children can lead to improvements in children's

survival, health, growth, and cognitive and social development. It was already mentioned by studies a long ago that ‘attendance at preschool programs is associated with cognitive gains and has improved performance in schools worldwide, it also appears that having some preschool experience matters more to children than exposure to any particular curriculum or program model as long as the program is not of very poor quality.’ (Boocock 1995: 109) The age of entry or years of experience in the preschool also influences the cognitive achievement of children, especially for the children from the poor family (Barnett 1995: 26). Findings from recent studies also support the role of ECE for children’s development (UNICEF 2017; UNICEF 2016).

- Children who receive assistance in their early years achieve more success at school. As adults, they have the greater accumulation of human capital, which results in higher employment and earnings (Becker 1964; Heckman 2000; UNICEF 2016, 2017).
- Early childhood education and care is also an effective tool to narrow the gap between children from different socio-economic classes. As argued by Heckman (2011), the inequality in the development of human capabilities can and should

be prevented with investments in early childhood education, particularly targeted toward disadvantaged children and their families.

The current progress in child development in the form of decreased child mortality, relatively improved nutrition and school enrollment gives a picture that the world is on track on its promises for children. However, many of the children are not achieving their full developmental potential (UNICEF 2017). At least 200 million children under the age of five failed to reach their potential for cognitive and socioemotional development (Jolly 2007). Moreover, millions of children around the world are out of school and thus at risk. If one goes deeper, beyond national averages, there are widening disparities among regions, within countries and among countries, based on wealth, gender, and geographic location (UNICEF 2017).

1.2 Concepts and Definitions

In general, early childhood is defined as the period after birth till the age of eight. The modern definition of early childhood includes the prenatal period till giving birth because the society, culture, and economy in which the child is born may have an impact on the future of the child. Moreover, according to medical science, child's brain starts growing and learning at the age of six months, when the child is in the mother's womb (Shonkoff & Phillips 2000). Moreover, since parent's education,

health, economic status etc. has an effect also on child's development, it is therefore necessary to expand the definition of early childhood to the maternal health and care, economic status, social and cultural aspects, and academic achievements of parents because all of these factors exhibits some impression on child's future.

There are different terminologies used by different institutions addressing early childhood. For example, OECD uses Early Childhood Education and Care (ECEC), UNICEF and World Bank use Early Childhood Development (ECD) and the Consultative Group on Early Childhood Care and Development uses Early Childhood Care for Development (ECCD). All of them recognized the importance of integrated and holistic interventions in the early age of a child. By tossing the concept of Early Childhood Care and Education (ECCE) it comprehended that the combination of 'care' and 'education' is needed for good quality provisions for the children. As defined and quoted by UNESCO (2006), 'early childhood care and education supports children's survival growth, development and learning – including health, nutrition and hygiene, and cognitive, social, physical and emotional development – from birth to entry into primary school in formal, informal and non-formal settings...ECCE represents a continuum of interconnected arrangements involving diverse actors: family, friends, neighbours; family day care for a group of children in a provider's home;

centre-based programmes; classes/programmes in schools; and programmes for parents'. Evans et al. (2000: 2) also defined that, the 'Early Childhood Care for Development includes all the support necessary for every child to realize his/her right to survival, to protection, and to care that will ensure optimal development from birth to age eight'.

Early Childhood Education (ECE) is defined as the learning of children from birth up to age of six, before going into the formal education system. It is a common belief that learning begins at home with the help of parents and family members. However, early childhood learning may also be formalized by a government or private initiatives. ECE mostly refers to 'learning by playing' kind of arrangements in which children learn the basics in a homely atmosphere. As mentioned by Smith (2003: 1), '[e]arly childhood education (ECE) consists of organized supervised programs with social and educational goals for children (of up to school entry age) in the temporary absence of their parents'. These days, it is well understood that education can help to build a strong foundation for the children and thus emphasis has been given to ECE. The Dakar Framework for Action (2000) by WEF proposed strategies for ensuring the basic learning needs of every child, and set the goal of 'expanding and improving comprehensive early childhood care and education, especially for the most vulnerable and disadvantaged

children' has been unambiguously acknowledged worldwide' (WEF 2000: 75).

1.3 Significance for Developing Countries

It is the right of every single child in this world to survive, develop, and relish their childhood. However, many children worldwide do not reach their full human potential because of their families' income status, geographic location, ethnicity, disability, religion or sexual orientation. They do not receive adequate nutrition, care, and opportunities to learn. According to the statistics by UNICEF (2017), about 7.6 million children under the age of 5 worldwide die each year. More than 25 times that number – over 200 million children – survive, but do not reach their full potential. As a result, their countries have an estimated 20 per cent loss in adult productivity. There is also a very high correlation between low enrollment, poor retention, and unsatisfactory learning and incidence of child poverty. This is even severe in developing countries as a child born in the developing world has a four out of ten chance of living in extreme poverty, defined as living on less than US\$1 a day (UNESCO 2006a). Because of poor health, under nutrition and poor learning environments that fail to provide adequate responsive stimulation and nurturance, too many children around the world are suffering from poor cognitive and non-cognitive

development, a late entry and dropouts from school, poor performance at school and not achieving their full potential. In 2012, over 200 million children under five years of age worldwide did not receive the appropriate care and support to become physically healthy, mentally alert and emotionally secure. The effects reach far beyond the individual lives of children and affect families, communities and the development of entire nations (UNICEF 2017).

Early childhood education may prove to be effective to reduce the incidence of child poverty by encouraging school enrollment and retention and can act as a preventive strategy against vulnerabilities. Millions of children are still at risk due to trafficking, child labour, and child abuse, and nearly 43% of children under 5 in low- and middle-income countries are not getting the nutrition, protection, and stimulation they need. This diminishes both the child's potential and sustainable growth for society at large (UNICEF 2017). 'To break [the] cycle of poverty, violence and disease, interventions must come early in life, the earlier the better. ECD is the key to a full and productive life for a child and therefore important for the progress for a nation' (UNICEF 2001: 43). In countries with socio economic inequalities, ECE initiatives may act as 'leveling the playing field' and bringing equality (UNICEF 2016: 41). Furthermore, millions of girls have no access to primary schooling and early childhood education may act in support

of gender equity in developing countries. Giving a 'fair chance' at the beginning of the life may improve gender equity. Besides, another important aspect is the role of early childhood education in helping to universalize primary education which is one of the main goals of the developing countries. Strong foundation made by the ECE programme helps children to perform better in their further studies and that, in turn, increase their motivation. Conversely this may help to improve the primary school enrollment and retention rate, and reduce school dropouts (WEF 2000, UNICEF 2003).

Another benefit of ECD provision is providing working parents with access to quality child care for their young children. This is becoming increasingly pertinent in the context of sustainable development beyond 2015 and reaching the most marginalized families. Given the growing female employment in developing countries, oftentimes one or both parents may be engaged in the informal sectors of the economy without the benefit of paternal or maternal leave. For the vast majority of poor parents working in the informal sector, access to quality child care services is critical. In the absence of quality child care, a poor family is faced with difficult choices. For example, either one parent decides not to work which ends the possibility of having much-needed income, or both parents continuing to work while leaving the young child home alone or with inadequate care, such as with an older

sibling under the age of 10. This has been associated not only with the sub-optimal development of the children themselves, but also causing the older siblings dropping out of school and also not to dismiss the safety concerns of accidents and fatalities (UNICEF 2017). Therefore, having easily available ECED provisions in developing countries not only help children having proper nutritional, cognitive, and emotional development, but also allow parents, especially those from socio-economically disadvantaged section of the society, to work and earn some more for the family and older siblings to have the opportunity to go to school.

1.4 India and Its Children

As per the census of India 2011, the child population in the age group of 0-6 years stands at 164.5 million which is about 13.5 percent of total population of the country. Compared to the Census 2001, there is an increase in child population by 0.7 million in 2011. In recent years, there has been considerable progress in the status of the children in the country.

Table: 1.1: Status of Indian Children

Key Indicators	National Family Health Survey-3 (2005-06)	National Family Health Survey-4 (2015-16)
Institutional Birth (%)	38.7	78.9
Infant Mortality Rate (IMR)	57	41
Child Mortality Rate (CMR)	74	50
Children fully immunized (%)	43.5	62.0
Children age 6-23 months receiving an adequate diet (%)	na	9.6
Children under 5 years who are stunted (%)	48.0	38.4
Children under 5 years who are wasted (%)	19.8	21.0
Children under 5 years who are underweight (%)	42.5	35.7

Source: National Family Health Survey (NFHS), Govt. of India.
Available at < <http://rchiips.org/NFHS/about.shtml>> accessed January 2017.

According to table 1.1, the basic indicators show that there has been a significant improvement in infant and child health status in recent years. With respect to infant and child mortality, immunization coverage etc. current status of the children has improved considerably compared to the last decade.

Figure 1.1

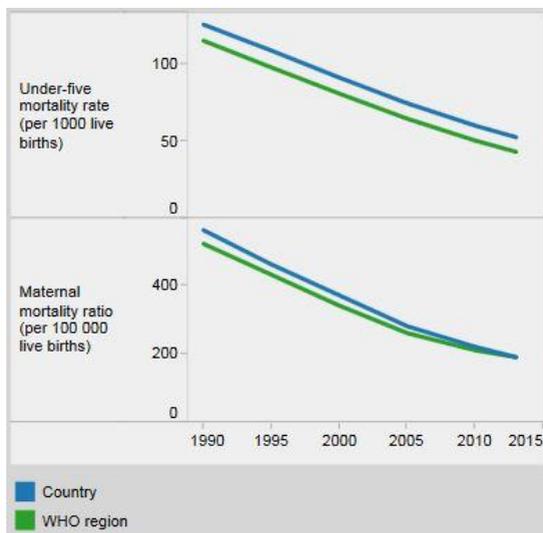
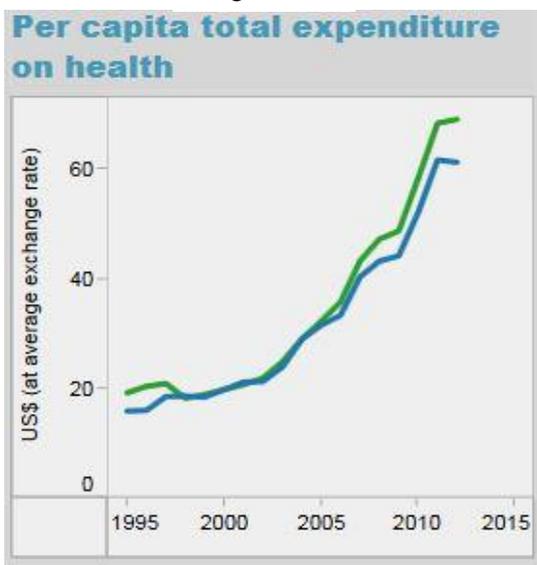


Figure 1.2



Figures extracted from WHO (2015: 1-2)

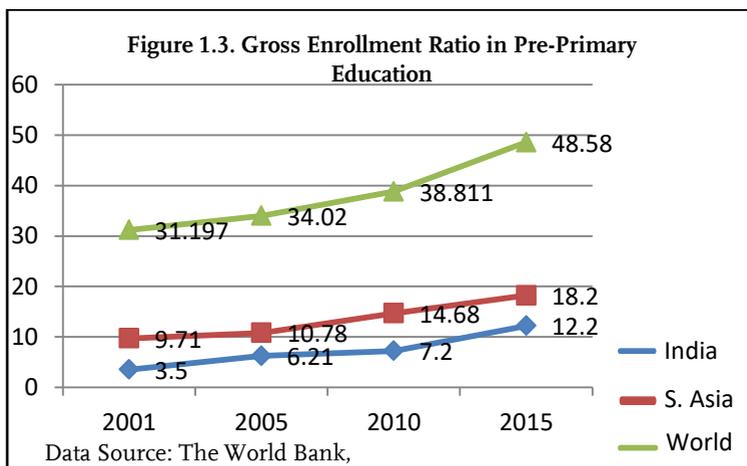
Figure 1.1 and Figure 1.2 indicate that, there is a steady decrease in child mortality rate and maternal mortality rate, as well as increase in per-capita total expenditure on health over years. However, it is below the average (the green line in figures) of other countries of the South-East region.

Nevertheless, there are considerable number of children suffering from poor health and nutritional deficiencies, and what has been achieved is far from what is needed. For instance, according to the latest Human Development Report, India has the highest proportion of undernourished children in the world, along with Bangladesh, Ethiopia, and Nepal. This humanitarian catastrophe is not just a loss for the children concerned and their families, and a violation of their fundamental rights, but also a tragedy for the nation as a whole. A wholesome society cannot be built on the ruins of hunger, malnutrition and ill health (FOCUS 2006). The study by Arnold et al. (2009: 1) showed that '[y]oung children in India suffer from some of the highest levels of stunting, underweight, and wasting as observed in any country in the world. And 7 out of every 10 young children are anemic. The percentage of children under the age of five years who are underweight is almost 20 times higher in India as would be expected in a healthy, well-nourished population and is almost twice as high as the average percentage of underweight children in sub-Saharan African countries'. This has improved considerably during recent years, and according to the

National Health mission (NHM 2017) under ministry of health and family welfare of the govt. of India, under five mortality rate is 49 per 1000 live births in 2013 (MDG-4 target is 42 per 1000 live birth by 2015). Infant Mortality Rate currently stands at 40 per 1000 live births (SRS 2013), against the target of 29 per 1000 live births by 2015 set in the Millennium Development Goals. Children (12-23 months) immunized against measles has reached a coverage of 74% in 2009 (CES 2009) against a target of universal immunization against measles. However, it is still far from what should have been achieved in child health and nutrition (Usmani & Ahmad 2017).

India has also made substantial progress in education in terms of increased enrollment, retention rates, and reduced dropouts (the World Bank, ASER 2017). Available statistic shows that, there has also been a considerable increase in enrollment in pre-primary education compared to past few decades. Figure 1.3 below shows that, whereas in 2001 the gross enrollment ratio in pre-primary education was 3.5% of eligible children, the same has increased to 12.2% in 2015. It has been found that, despite some unevenness in the quality of services, the major ECE provision named Integrated Child Development Scheme (ICDS) in India has had a positive impact on the survival, growth, and development of young children (NIPCCD 2006; UNESCO 2006b; Kaul 1993). There has been significant progress in recent years and data (Govt. of India 2011) shows that the

coverage of ICDS in 2011-12 has increased to about 39 percent for SNP (supplementary nutrition programme) and 19 percent for PSE (pre-school education) as compared to 2007-08, which indicates that more and more children have been receiving early education and care.



In spite of being committed to universalizing the service, a large number of children are still left behind (Govt. of India 2011: 41) and ICDS² failed to provide a universal coverage. According to the Govt. of India (2011) report, only about 31 percent of the eligible children in the country receive food from Anganwadi centres. Also, large variation has been found among the states in terms of coverage, and whereas it is about one-fifth in Bihar, Haryana, Punjab, Rajasthan,

² Integrated Child development Scheme (ICDS) is a publicly sponsored child development programme in India. Detail about ICDS can be found in chapter 2.

Uttar Pradesh and Kerala; it is rather high (little more or less than half) in Assam, Orissa, Karnataka and West Bengal. A shortfall of 19.3 percent in the number of Anganwadi centres has been recorded at the national level. These facts indicate that ICDS still requires considerable efforts to achieve its objectives of attacking malnutrition – especially among children.

1.5 Objective of the Study

Even though the effort taken to improve the status of the children in India has paid off up to a certain extent; yet, a substantial number of children still suffer from different forms of poverty and destitution. According to the estimates, about 19.8 million children below the age of six in India are undernourished (ICDS 2015, NFHS-4), and only 9.6 percent of the children between 6-23 months in the country receive an adequate diet (NFHS-4, 2015-16). One in four children of school-going age is out of school in our country, about 99 million children in total have dropped out of school (the Census of India 2011) and there are 10.13 million child labours between 5-14 years in India (the Census of India 2011). In many parts of the country, the birth of a girl child is not welcomed and girls are discriminated and neglected because of her gender, especially when it comes to healthcare, education and growth opportunities. School dropout rate amongst adolescent girls in India is as high as 63.5 percent (MoSPI

2012) and about 45 percent of girls in India get married before the age of eighteen years (NFHS-3, 2005-06). The impact of poverty is even worse among children from marginalized groups. According to estimates (NFHS-3, 2005-06), 55 percent of Scheduled Castes and Scheduled Tribes children below three years of age are underweight; and the under-five mortality rate in India is 88.1 percent for Schedule Caste and 95.7 percent for Scheduled Tribe children, compared to the national average of 59.2 percent. Over 30 percent of the 385 million children living in extreme poverty in the world are living in India alone (UNICEF and World Bank Group 2016, 3) and that constitute about 26 percent of the total child population of the country. Poverty in India has been cited as one of the main reasons why millions of children do not get access to the rights they are entitled to (Ministry of Statistics and Programme Implementation- MoSPI, 2012). India has not been able to ensure the Right to Survival, Right to Development, Right to Protection and Right to Participation to its children' (CRY 2017).

Therefore, stronger efforts are clearly needed to improve the status of the children and provide them with a better future. In this regard, it has already been established that early childhood care and education initiatives in India can have a positive impact on the development of children. Hence, providing children with a strong nutritional and educational foundation can surely be an effective

instrument to reduce child poverty. India is already on track with these and integrated approaches have been taken to improve the health and nutritional status of children on one hand, and developing their cognitive and non-cognitive abilities on the other. However, existing evidences clearly show that almost one-third of the children are not getting any forms of institutionalized early childhood care and education; and this could be one of the reasons of the existing child poverty in the country. Moreover, the hinge is primarily on issues of equity because unequal opportunity at the very early years of life can actually aggravate and influence different forms of socioeconomic inequalities at later stage in life. Therefore, it is immensely important to explore different forms of inequality that children face even at the very early years.

This study focuses predominantly on the issue of unequal opportunity in early childhood education in India. Because education is considered one of the effective agents of change in the society and when children are able to go to school today, they set off a cycle of positive change (CRY 2017). Despite having one of the world's largest and universalized ECE programme for years, India still failed to provide universal coverage in early childhood education and as a result, a significant number of children are left behind. Therefore, it is fundamental to investigate the reason behind the gap in early childhood education for not only reducing child poverty and improving the status of the

children but also in terms of policy perspectives. If publicly sponsored programme like ICDS fails to address its audience and to help them, then the effectiveness of increasing investment on this programme is not justified and should be investigated. This is crucial for reallocation and redistribution of the budget since it has already been witnessed that, the states with the greatest need often having the lowest programme coverage and the lowest budgetary allocations from the central government (Govt. of India 2011).

Several limitations arising from the supply side of the existing ECE provisions, especially ICDS have already been identified by evaluation studies so far (Govt. of India 2011). Hence, this study focuses on the demand-side perspective of early childhood education and tries to understand whether the lack of demand is also responsible for unequal opportunity in ECE. Since existing ECE provisions in India are self-targeted in nature, it needs effort from parents and families to send their children to the ECE centres. Therefore, preschool attendance by children depends very much on their parents' demanding for it, and variation in this demand can increase or decrease the gap between demand and supply of ECE. However, there are very limited studies and empirical evidences in India that explicitly look at and explain variation in parental choices of preschools and inequalities arising from it. This study, perhaps the first of its kind in India, tries to explore the

unequal opportunity in ECE from a more demand side perspective. The main objective is to find the plausible explanations behind the low participation in the ECE by children (or low demand for ECE by parents and families) and to identify the factors responsible for this.

The chapters are compiled as follows: chapter 2 gives a detailed picture of the existing ECE practices in India and issues faced by it. Chapter 3 focuses on theoretical discussion on the unequal opportunity in education in general and ECE in particular. Chapters 4 addresses details on the research methodology and chapter 5 delivers the results of the study. Chapter 6 provides a detailed discussion on the findings and possible limitations of the study.

Chapter 2: System, Structure, and Problems of Early Childhood Education in India

In India, ECE³ is acknowledged as an important intervention in human life and several significant policies and initiatives have been taken to support child development in the country. For example, it has been recognized in the National Policy for Children adopted on 22nd August 1974 that ‘the nation’s children are a supremely important asset’. The policy advocated for the nurture and attentiveness of children and proposed that ‘children’s programme should find prominent part in our national plans for the development of human resources, so that our children grow up to become robust citizen, physically fit, mentally alert and morally healthy, endowed with the skills and motivations provided by society. Equal opportunities for development to all children during the period of growth should be our aim, for this would serve our larger purpose of reducing inequality and bring social justice’ (Govt. of India 1974: 1). Also, the National Policy on

³ The terms ECE and Preschool education used alternatively in this study with same meaning i.e. education for children from three up to six years of age.

Education (1992) has viewed ECE as a crucial input for the development of human resource.

2.1. Existing Early Childhood Education Provisions

2.1.1. Public provision

Provisions of ECE in India are available through three different channels: public, private and non-governmental. The largest provision of ECE is in the public sector which is named as Integrated Child Development Scheme (ICDS), is the most significant child development program for children up to the age of six. The programme is especially aimed at the children of the disadvantaged communities and particularly those in rural areas. ICDS was launched by the Govt. of India on the 2nd of October 1975, based on four main pillars namely: Pre School Education, Joy of Learning, Linkages to Nutrition and Health, and All Matters relating to Early Childhood Education. **The objectives** of the scheme (as mentioned on the Official website of the Ministry of Women and Child Development, Govt. of India⁴) are:

4 Ministry of Women & Child Development, Government of India <
<http://icds-wcd.nic.in/icds.aspx> > accessed 10 May 2012.

- To improve the nutritional and health status of children in the age-group 0-6 years;
- To lay the foundation for proper psychological, physical and social development of the child;
- To reduce the incidence of mortality, morbidity, malnutrition and school dropout;
- To achieve effective co-ordination of policy and implementation amongst the various departments to promote child development; and
- To enhance the capability of the mother to look after the normal health and nutritional needs of the child through proper nutrition and health education.

Registration of Beneficiaries: All children below 6 years of age, pregnant women and lactating mothers are eligible for availing of services under the ICDS Scheme. BPL is not a criterion for registration of beneficiaries under ICDS. The Scheme is universal for all categories of beneficiaries and in coverage. The ICDS programme offers health, nutrition and hygiene education to mothers, non-formal preschool education to children aged three to six, supplementary feeding for all children and pregnant and nursing mothers, growth monitoring and promotion, and links to primary health care services such as immunization and vitamin A supplements.

Nowadays ICDS represents one of the world’s largest and most unique universalized programmes for early childhood development. The objective is to simultaneously tackle early childhood challenge by providing pre-school education on one hand and breaking the vicious cycle of malnutrition, morbidity, reduced learning capacity, and mortality, on the other. The lowest tier of the ICDS program is popularly known as ‘**Anganwadi**’ (village courtyard) and is the main platform where all the services converge. Establishment of Anganwadi centres are based on population and follow the guideline below:

Table 2.1: Population Norms Under ICDS Scheme

	For Rural/Urban Projects	
	Population	Number of Anganwadi Centre
Anganwadi Centres (AWCs)	400-800	1 AWC
	800-1600	2 AWCs
	1600-2400	3 AWCs
	Thereafter in multiples of 800	one AWC
Mini AWC	150-400	1 Mini-AWC
For Tribal/Riverine/Desert, Hilly and other difficult areas/Projects	300-800	1 AWC
	150-300	1 Mini AWC

Source: Official website of the Ministry of Women and Child Development, Govt. of India <<http://icds-wcd.nic.in/icds.aspx>>.

As defined in NIPCCD (n.d.: 12):

- *‘An Anganwadi Centre - a courtyard play centre - located within the village or a slum is the focal point for delivery of all the services under ICDS programme in an integrated manner to children and women.*
- *An Anganwadi is a centre for convergence of services for children and women.*
- *An Anganwadi is a meeting ground, where women / mother’s groups can come together/with other frontline workers to share views and promote action for development of children and women.*
- *An Anganwadi is run by an Anganwadi Worker who is supported by a Helper in service delivery.’*

Anganwadi Workers (AWWs) & Anganwadi Helpers (AWHs), being honorary workers, are paid a monthly honoraria as decided by the Government from time to time. In addition to the honoraria paid by the Government of India, many States/UTs are also giving monetary incentives to these workers out of their own resources for additional functions assigned under other Schemes (Official website of the Ministry of Women and Child Development, Govt. of India)

To strengthen the health, nutrition, and development of children, two major services provided on a daily basis through these Anganwadi centers are: Supplementary Nutrition (SNP) for Children below six years, Pregnant & Lactating Mothers, and Pre-School Education (PSE) for

Children 3-6 years. Under the SNP, initiatives are taken by the respective department to supply daily cooked foods to each of the beneficiaries (children of 0-6 years of age) following the below mentioned norms:

Table 2.2: Nutritional Norms in ICDS (since February 2009)

Beneficiaries	Calories	Protein (g)
Children (6 months to 72 months)	500	12-15
Severely malnourished Children (SAM) (6 months- 72 months)	800	20-25
Pregnant women and lactating mothers	600	18-20

Source: Ministry of Women and Child Development, Govt. of India.

The non-formal Pre-school Education (PSE) component of the ICDS is mentioned as the backbone of the ICDS programme and it is considered as a significant innervation in children’s life as ‘it brings and keeps young children at the Anganwadi centre - an activity that motivates parents and communities. PSE, as envisaged in the ICDS, focuses on the total development of the child, in the age up to six years, mainly from the underprivileged groups. (as mentioned on the official website of the Ministry). ‘The purpose of Early Childhood Care and Education (ECCE) in ICDS is to ensure responsive care,

early learning and development which includes physical and motor; language; cognitive; socio-personal; emotional and creative and aesthetic appreciation. It encompasses the inseparable elements of care, health, nutrition, play and early learning within a protective and enabling environment.....an Anganwadi Centre(AWC) is to be repositioned as a “vibrant ECD centre” to become the first village output for health, nutrition and early learning with adequate infrastructure and human resources for ensuring care to early childhood care and development.’ (The official website of the Govt. of India⁵).

The programme is aimed at providing and ensuring a natural, joyful and stimulating environment with an emphasis on necessary inputs for optimal growth and development for children. The preschool education component is the most significant part in a sense that it provides a sound foundation for cumulative lifelong learning and development (ibid). The Anganwadi centre brings, cares and stimulates young children through various activities and provides an environment that motivates parents and communities to send their children to these centres. Currently, there are about 1.3 million Anganwadi centres across the country. About 95 million children are enrolled for SNP and about 36 million

⁵ <http://icds-wcd.nic.in/schemes/ECCE/EarlyChildhoodCareandEducation01092015.pdf>

children are enrolled for PSE (Ministry of Women and Child Development, Govt. of India, 2014-15).

The national evaluation study of ICDS done by the National Institution of Public Cooperation and Child Development in 1992 covering 98 districts across 25 states and union territories shows that 89 percent of children with ECE experience was found to be continuing their education in primary school as compared to about 60 percent without ECE experience. Another study by NIPCCD in 1994 in nine states including West Bengal revealed similar findings. The positive impact of ECE has also been noticed in promoting enrollment in primary schooling (NIPCCD 1992). Also, children with ECE exposure performed better with respect to school readiness parameters (NIPCCD 2006). A mid-term evaluation of ICDS in two states, Andhra Pradesh and Orissa, however, presented a mixed impact of ICDS. It showed a positive effect of ICDS in reducing infant mortality rate (IMR), but on the other hand the nutrition and health status of children under six years of age continue to be a matter of concern (NIPCCD 1992). Another longitudinal study also indicated significant and continuous benefits from a quality ECE programme on mathematics learning in primary grades (Kaul 1993 in UNESCO 2006b).

However, it has been stated that the delivery of child related services was limited by the resources of the Anganwadi centres, the skills and training of the Anganwadi workers,

and difference in viewpoint between those in charge of curriculum and training and parents and community members. Parents sometimes favored a formal school-like approach to literacy and numeracy education in the early years (Prochner 2002: 443). The initiative taken to develop the strong foundation of nutrition, health, and education of children through the ICDS programme is well applauded; nevertheless, ICDS is often criticized for its quality and availability of its services. A common picture of the Anganwadi centres in the past can be drawn from the study by Sharma (1987) which said,

'[a]ll Anganwadi's by and large looked alike in their setup. Faded charts of birds, animals, fruits, alphabets and numbers adorned the walls. In most cases, these were stuck far above the eye level of children. Anganwadi workers rarely permitted children freedom of movement to explore surroundings. The children were found seated in rows, one behind the others, unable to look at each other. The Anganwadi workers were usually seated on a chair with a table in front of them, far away and far too high for establishing eye contact with the children. Discipline was enforced strictly, making children epitomes of conformist behaviour' (Sharma 1987: 57-59).

Sharma also argued that, '...the preschool scenario in ICDS has been quite disappointing and devoid of the real

emphasis on child-centred Playway activities, nurturing the joy and creativity of young child'. The present picture of most of the Anganwadi centres is not dramatically different from what had been derived in the past, and many of the Anganwadi centres still suffers from insufficient availability of basic infrastructure (Pratichi 2009; FOCUS 2006). As mentioned by UNESCO, 'the focus is more on the feeding aspects than on promoting behavioral change in child care practices in the community'; and one possible reason for this is that, communication and behaviour change are much complex and intangible, and Anganwadi workers often not very well educated and do not have the required skills to take on these complex challenges (UNESCO 2006b: 30). Another criticism against ICDS is that the budget allocation was far too inadequate to provide the children a healthy and reasonably quality meal every day. In many Anganwadi centres, the supply of meal was interrupted and they failed to provide a meal of some variety (FOCUS 2006). A study evaluation performance of ICDS in West Bengal has found that many of the parents sending their children to Anganwadi centres had resentments with the quality of food served at the ICDS centres (Rana & Sen 2008).

Furthermore, the availability and functioning of ICDS are highly heterogeneous across states. While some states like Tamil Nadu and West Bengal, are successful in encouraging parents to send their children to the

Anganwadi centres, other states, for example Bihar, are not. The regional variation in the functioning of the public provision is there since its inception till date. For example, the study by Kaul in 90's has mentioned that '[i]n the government sponsored programmes, particularly the ICDS while in many southern states like Tamil Nadu and Kerala children stay for longer hours, in most northern states the children come in only for 1-2 hours. In Rajasthan, for example, 46 percent of Anganwadi centres in the tribal areas were observed to be running for only one hour' (Kaul 1998b: 56). The regional variation is still there in recent years, and the information available from the Ministry of women and child development of the Government of India shows that, whilst in Tamil Nadu 68% of the total children from the age group of 0-6 years were enrolled for SNP and 34% of the total children were enrolled for PSE in 2011-12, the same in West Bengal is 40% and 33%, contrastingly, for Bihar is only 19% and 10% respectively. On average, nearly 66% of eligible children and 75% of eligible women were registered at the Anganwadi centres all over India (Ministry of Women and Child Development, Govt. of India, 2011-12). As mentioned in the FOCUS (2006) report, there exists huge variation in performance in ICDS across states in India. Where some states actively make efforts in providing the best they can under ICDS, whilst some states are relatively passive and settle on the bare minimum (FOCUS 2006). The reach of the ICDS programme is constrained by some particular regional phenomenon: both

inter-district variation and intra-district variation (Rana & Sen 2008). Other than this, discrimination based on ethnicities such as caste and religion has been witnessed in different parts of the country (FOCUS 2006). Another point that was addressed by the FOCUS (2006) study was the varying infrastructure of the Anganwadi centres across different states. The main difficulty, that many Anganwadi centres faced, was not having their own place/building. The centres varied from an independent all-weather building with adequate space for play-way learning and separate spaces for storage and cooking in Tamil Nadu to a one-room dingy and cramped structure in Uttar Pradesh (FOCUS 2006).

Despite the challenges addressed above, the performance of ICDS with regards to reducing mal-nutrition and undernutrition among children is well applauded, albeit ECE's dubious and much criticized for quality and methods. Despite the fact that the ICDS programme has been widely appreciated, it still remains highly contested as there still are a number of children denied the right to education and the programme failed to provide universal coverage. As mentioned by Amartya Sen '[t]he reports coming in from various parts of India show wide disparities in performance, and while a few states (such as Tamil Nadu) have achieved a lot, others have failed fairly comprehensively. It is very important to make the working of ICDS more efficient, more equitable and more

humane’ (Amartya Sen in ‘The Pratichi Child Report’ 2009: 11-12). Nevertheless, ‘despite its poor quality, empirical evidence has indicated its positive impact on young children.’ (Sharma 1998: 292)

2.1.2. Private provisions

Besides ICDS as the largest provider of ECE in India, the private provisions of ECE are also available which refer to a **profit making initiative**. These private preschools are steadily expanding across the country, in not only urban but also in rural and tribal areas in many states (Kaul et al. 2015). Where ICDS is targeted to cater the disadvantaged group of the community, private ECE provisions are mainly targeted towards children of socioeconomically well-off families. These private institutions are directed solely in preparing children for formal schooling. The major focus of these private ECEs is the three R’s (read, write, and arithmetic), tests, examinations, home-works are the norm rather than exception...the medium of communication is English and not the mother tongue or the regional language... and most preschools becoming ‘coaching centres’ (Kaul 1998b: 57). Children are enrolled from the age of two years and six months. The programme is completely oriented towards their future school success. Almost 95 percent of the preschools are functioning as a downward extension of the primary school (Kaul 1998b: 57). Though the exact number

is not available, the number of private sector preschools in India lies approximately between 50000 to 100000 and it is estimated that about 10 million children receive ECE from private providers. While some of these private preschools are operated by entrepreneurs as separate enterprises, some others are attached to private primary schools. In absence of any regulation and control by the Government, the curriculum and education offered by them are of wider range and it is hard to evaluate performance of these private preschools and their impact on children. Although, the targeted subscribers are usually the economically well-off families of the society, recent studies have also found that economically upward mobile families and sometimes low-income families are often choosing private preschools (which is beyond their economic ability) in an illusion that their children will get better treatment in these private preschools.

Although, there is no recent information⁶ available on private preschools in India, some of the studies in the past exclusively looked at private preschools and most of them oppose the growth of an unregulated preschool education sector in India. As Swaminathan (1998) wrote, in private preschools, ‘...untrained teachers in ill-equipped classrooms, [cram] the three Rs forcibly down the throats of unwilling children, while ignorant managements enforce

⁶ In best of author’s knowledge there is no recent and authentic study available on private ECE in India.

inappropriate curriculum and methods of teaching, at the cost of parents who, ironically, often pay a fee they can ill afford for this dubious 'service' resembling torture' (Swaminathan 1998: 22). Some of these preschools are more of a 'teaching shop' and they do not respect the developmental norms of children. The quality of education offered by these preschools is often being countered and described as 'mis-education' (Kaul & Sankar 2009, Kaul 1998a, Kaul 1992). 'Preschool in India is serious business. The extent to which this is true is evident in the growth of a sub-preschool level. Pre-nursery schools prepare children for nursery school admission tests. The overheated competition for places in the most sought-after schools feeds the need for pre-primary classes. Because of the special role of pre-primary classes in the school hierarchy (it is often the only point of entry into the most popular schools), the preschool or pre-nursery school can have a higher fee than the primary levels.' (Prochner 2002: 446)

However, there is very little empirical evidence to justify the claims made against private preschools, or alternatively, to appreciate its performance. Even though the methods practiced by most of the private preschools are highly criticized, still private preschools are perceived as of 'good quality' by most of the parents compared to the ICDS.

2.1.3. Other provisions

In addition, voluntary, non-governmental and non-profit organizations also play an important role in providing ECE in India. They mainly operate in backward areas targeting socially and economically disadvantaged children of the society. The purpose is to provide ECE to those children who are not participating in the formal education system due to several reasons; so that inequality can be reduced to a certain extent. Though the effectiveness of these programmes is not evaluated, parental experiences indicate towards positive outcomes of these ECE services on children. As a result, many of the children who attended these services are more likely to move on to primary schools (Swaminathan 1998) and continue study. The ECE models developed by many non-governmental organizations (NGOs) are well applauded for their content and methodologies that meet basic child care needs. However, most of these initiatives are taking place at the local levels; therefore, little information is available or accessible about them.

2.2. Demand for Early Childhood Education

Universal early childhood education in India is relatively recent phenomenon which started during 90's (Pattnaik 1996). In the past, children were mostly being cared for within the extended family, not only by parents but also by other members of the family. In a patriarchal society, it was mainly the women who had the responsibility of child care, and men were the primary bread earner for the family. With industrialization, urbanization and rapid expansion of women labour force in the economy across all socioeconomic groups, there were drastic changes within the family structure and more nuclear families emerged, especially in urban areas. Parents in nuclear families are in more need of some alternative to take care of children. Because if both the parents are working, then, essentially, they need to have places where children could be kept and looked after for the duration parents are at work.

As there are several ECE provisions available, parents must decide carefully which preschool to choose for their children. This decision varies considerably across regions based on factors like socioeconomic status, culture, tradition, and most importantly what parents expect from the preschool. The choice of a type of preschool depends on whether parents value early education or other material

components of a preschool. Given two major provisions available in most of the regions: Anganwadi centres (public provisions) and private preschools, parents ultimately need to decide which of the option they want and can afford. Preschool choices in India may mainly refer to two main reasons: (i) for early education and school readiness, and (ii) as a child care centre. Therefore, choice of different types of preschool depends on what parents are looking for and also their socioeconomic conditions. Major reason for choosing preschool is to prepare children for primary education so that they perform well in the formal school and be disciplined. As mentioned by Rana & Sen (2008: 5) 'many of the mothers pointed out that the pre-school activities, singing, dancing, recognizing colours etc. would help their children following the lessons to be given in the primary schools in the imminent future'. Besides, ECE can also help children, especially those with relatively lower cognitive and non-cognitive abilities, to be more accustomed to the formal education system and perform better in later years. In fact, this situation has induced a strong sense among parents that preschool education can help children to overcome initial difficulties they face (Rana & Sen 2008, Pattnaik 1996). On the contrary, parents may not consider ECE as important for their children but in some cases, they still send their children to a preschool for the free meals and other benefits. Parents may even use preschool as a child care centre that enabling parents to engage themselves in economic activities. This has been

frequent across all income groups including low-income parents. For low-income families, it is crucial for both the parents to work in order to secure their basic needs. Hence preschools are the most favored alternative for them. Contrary to the belief that the poor families only send their children to ECE centres for food and material benefit, the CECED (2015a) study found that nearly half of the parents send their children to ECE centres to prepare them for primary classes and only five percent send their children to ECE centres for food. The reason for choosing ECE centres may also vary across states. Whereas parents from one state may choose Anganwadi for school readiness, the other may choose it only for food (CECED 2015a).

Given the income variation among different groups, there is an increasing demand for ECE, especially in areas where parents are relatively more educated (FOCUS 2006). Although, Anganwadi centres are hugely popular across the country, private initiatives are also getting very popular among parents and are expanding to the rural and tribal areas as well, and across many states. Together with this, there exist variations in attending different types of preschools among states. For example, the CECED (2015a) study has found that in Assam about 91 percent of the sampled children were found to be attending Anganwadi centres as compared to only 35 percent in Andhra Pradesh and only 11 percent in Rajasthan in the sampled districts. This indicates towards a preference for private preschools

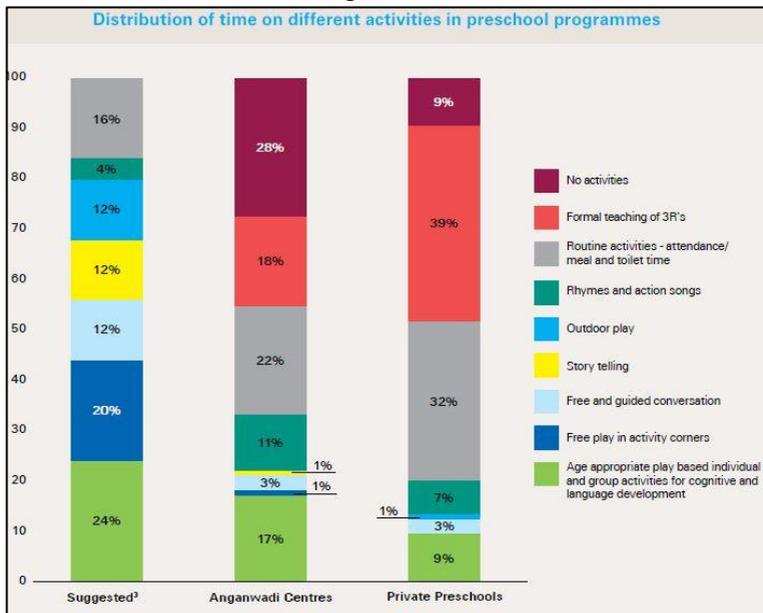
in Rajasthan and Andhra Pradesh. Alternatively, in Assam, private preschools were not seen as the preferred choice of parents and furthermore, catered only to a small number of the children (CECED 2015a: 14-15). However, this could also be due to less availability of private provisions in Assam and may not necessarily always reflection on parental choices.

The observation by the author during the field work is that, private preschools are particularly popular among parents for its 'quality' education and better infrastructure in comparison to Anganwadi centres. And if there is private preschool nearby and parents can afford the cost then it is their first choice. As the main purpose of sending children to preschool is school readiness and in some cases to make sure that children get admission to a desired primary school later on, private preschools are relatively more preferred by parents. This is so because most of the parents prefer education centered curriculum of private preschools which may better help children to get acquainted with the formal schooling at later years (Rana & Sen 2008: 9). This has been triggered by the increasing competition in all tiers of education including primary education. Also, due to limited space and high demand for private primary schools, there exist entrance restrictions in the form of entrance tests. Private preschools are particularly popular among parents for preparing children for primary schools so that they can get admission in good schools at a later stage.

Besides, choice of an Anganwadi centre may have two different dimensions. On one hand, some parents may willingly choose Anganwadi centres because they simply like it. On the other hand, some parents would have preferred to send their children to private preschools (which they considered of better quality) but eventually had to choose Anganwadi due to economic and social constraints.

Although, there are several ECE provisions available in India with distinct features; however, the quality of preschool education is not appropriate for children’s development. None of the existing ECE provisions offers

Figure: 2.1



Extracted from CECED (2017)

the environment that children need for their optimal development. In fact, most important components of the successful early childhood development such as opportunities for planned play are absent and the focus is on formal teaching (CECED 2017: 5-6). The figure 2.1 shows that, neither Anganwadi nor private ECE centers has followed the suggested percentage of time spent on different activities in preschools.

While, there is no activity at all for a major part of time in Anganwadi centres, private preschools on the other hand, spend most of their time for formal education giving very little scope for the children to play and explore their surroundings.

The range of ECE provision in India is huge but the availability and accessibility of 'quality' ECE is still under question. There might be several excellent and innovative ECE programmes largely unknown outside their region or communities. Several NGOs and developmental organizations are taking a leading role in introducing child-friendly ECE programmes in India but it is extremely challenging to have a full description of the entire ECE system in India without having enough information. Clearly, there is a gap in quality ECE provision in India. While the quality and quantity of the public provisions need to be significantly improved and made more efficient, the private provisions need to be regulated and frequently monitored. Considering the fact that, a significant number

of children still do not have any ECE experience, it is pivotal to identify whether the reasons of non-attendance of children in ECE centres are due either to lack of demand or limited and poor supply, or even both. Because, if the reasons are associated to low demand then there should have a set of policies which differ from the policies needed if the problem is a limited supply.

Chapter 3: Theoretical Discussion and Literature Review

In this chapter, an attempt has been made to discuss plausible theoretical explanation behind differential educational choices with special emphasis on ECE. The chapter is organized as follows: first, an attempt has been made to unfold the theoretical discussion on educational choices in general and then bringing in the ECE context in India. Second, effort has been given to explain the process through which parents make their ECE decisions and how different factors interact in this decision making. Third, bringing forward plausible factors may affect ECE decisions in the Indian context, and thereafter, forth, research questions of this study and plausible hypothesis in the Indian context. Different sections will thus explain variation in educational choices and key determinants behind the educational choice that has been found so far by existing studies on ECE.

3.1. Two Key Questions

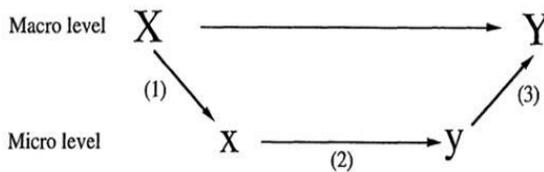
The difference in ECE choices can be explained by two interrelated questions that have been debated in this context. Firstly, why parents demand ECE

for their children? And secondly, given different alternatives available, how they choose an ECE option for their children? An attempt has been made in this section to unfold these questions using the existing theoretical arguments on educational decisions in general and ECE in particular.

To understand how the differences in demand for education are actually generated, it is important to consider how parents make an educational choice for their children and which factors influence those choices? While, in principle, all individuals should demand ECE, in reality, the picture is rather different. Two factors contribute to the variation in educational attainment in the population: one is talent (be it 'pure intelligence' or 'better family background') which boosts the human capital accumulation and the other is resource endowment which may constrain poor families when financial market is imperfect or absent (Checchi 2006: 27). More importantly, educational decisions are not only the reflection of parents' rationality to think but also their resource endowment, societal status, and their values and sentiments. It is assumed that parents behave rationally in the economic sense but they also behave within decision fields whose parameters are a function of their position in the stratification system. Even with other factors being equal, people will make different choices according to their position in the stratification system (Boudon 1974: 36).

Rational choice theory can be an effective tool for explaining the variation in educational choices using the assumption that parents' decisions are based on the cost-benefit analysis that they make for each decision. The rational choice theory is inherently a multilevel enterprise. At the micro level, its models contain assumptions about individual cognitive capacities and values, among other things.

Figure 3.1:



The multilevel structure of rational choice explanations (after Coleman 1990, p. 8).

At the macro level, rational choice models also contain specifications of social structures. In figure 3.1., relations denoted as (1), (2), and (3) are micro level relations which describe how a person, who is subject to a given social structure at a particular time point, will behave on the basis of the individual characteristics. For example, relation (2) can be preschool decision by a parent based on their socioeconomic characteristics at point of time, thus, explains individual behaviours and the factors affecting those behaviours at a particular point of time. Whereas, relation (2) is necessary, it is far from the whole story. But, there might have a distinct set of factors responsible for the behaviour of each of the families and explaining relation

(2), at the same point of time. Therefore, each parent, given their socioeconomic position at that time (x), behaves in a particular fashion to take the decision about their children's preschool and the argument used by each of the parents may differ considerably from others. If we consider the micro level analysis to explain individual behaviours then for each of the parents' movement from point 'x' to point 'y' may have a different explanation based on their resource endowment, social position etc. These individual actions then serve both as the social and material context for (X) for individual action and as new structures (Y) resulting from the actions of individuals whose behavior is described by the lower level assumptions (Coleman 1990: 1-23). Furthermore, since norms and other kinds of institutions enter the models both as contexts for and as outcomes of action, rational choice theories do not rest on premises pertaining exclusively to individual.

As the focus of this study is on early childhood education, the potential benefits and costs assessed by parents at this level may differ considerably compared to other levels of education. As already mentioned, one of the key questions behind differential educational choices is associated with this benefits and costs that help answering why parents send their children to a preschool. Therefore, in the next section an attempt has been made to identify plausible benefits and costs that may associate with early childhood education.

3.2. The Benefits and Costs

The demand for ECE is very much endogenous and comes from parents and extended family members. While trying to understand the underlying mechanism behind educational decisions, it is utmost important to explore the argument parents may use to choose an educational option. If the parental decision of choosing an educational option is based on their rationality of taking decisions, then the costs (both financial and opportunity costs), the benefits, and the probability of success are the typical components which are considered in this decision making. However, given different stages of education, all these components may not have equal importance in explaining educational differences. While considering ECE, the cost-benefit analysis seems to be more important in explaining parental decisions, whereas the subjective probability of success seems to have a limited role in this regard. This is because of the fact that, it might be too early to assess the probability of success at ECE level. However, success from ECE that parent(s) may consider is in the form of cognitive and emotional development, school readiness, performance in later schooling etc.

For parents, the benefit of ECE is potentially two-fold: First, ECE can make it feasible for both parents (and the only parent in a single parent family) to be employed. This role has become increasingly important in an era of welfare

reform, in which able bodied mothers are expected to work regardless of the age of their children. Second, early intervention programs can enhance child development, particularly among disadvantaged children (Blau & Currie 2006: 1165) and human capital accumulation (Becker 1964, Heckman 2000) for the family and the society. There are plenty of theoretical and empirical pieces of evidence that confirm the fact that, investment on children's education pays off the dividend (in both economic and non-economic terms) at later stages of life when the children enter the labour market. (Becker 1964) Moreover, 'evidence is quite clear that inequality in the development of human capabilities produces negative social and economic outcomes that can and should be prevented with investments in early childhood education, particularly targeted toward disadvantaged children and their families' (Heckman 2011: 32). Parents want education for their children because they want their children to have a better future from all respect and providing early education could be one of the initial steps that parents could take for the better educational career of their children (Checchi 2006: 15). Providing a better start at the beginning of children's career could also increase the probability of success in future. Large differences among children grow over time because children learn more easily when they are better prepared. Therefore, even small differences among children in the preparation provided by their families are frequently multiplied over time into large differences.

Therefore, parents, who value the importance of education for their children, may try their best to provide the best services to their children, perhaps from the very beginning. Economists considered parental expenditure on children's education as an investment in children's human capital which has been defined as all skills, knowledge, and personal attributes acquired by the children to perform better in future and produce economic and non-economic values. Education is the most important investment in human capital because it raises earnings, improves health, or adds to a person's good habits over much of his lifetime. Therefore, economists regard expenditures on education, training, and so on as investments in human capital. Also, educational choices could be seen as investment decisions where current income opportunities are renounced in exchange for better future prospects. (Checchi 2006: 19) However, the benefits of pre-schooling may be perceived differently by parents based on their context. For example, educated parents provide more emphasis on benefits such as child's performance in later stage, maintaining family status etc., compared to less educated parents who might bring into consideration some other short run benefits such as retrieving free services like food, medicine, free time for the parents to work at home (especially mothers to take care of other siblings) etc. while making the decision for an ECE.

The cost of sending a child to a preschool includes financial costs and opportunity costs. These costs vary considerably depending on the demand and supply of different types of educational options. The financial cost comprises of all education related expenses necessary when children attend a school such as admission fee, expenses for uniform and other stationary, transport cost etc. Highly demanded educational degrees are more resource consuming and it is extremely burdensome for families with the less economic resource (Breen & Goldthorpe 1997). Whereas, the opportunity cost is the lost opportunities or income forgone because of choosing a preschool. The income lost in terms of opportunity cost is more important for families with poorer economic resources and therefore it is extremely difficult for them to invest in children's education. Since public provision of ECE is free of any cost in India, the main cost incurred by households who consider public provisions is likely to be in the form of opportunity costs only. Whereas, for parents who choose private preschool provisions the total cost incurred consists of both financial and opportunity costs. The assessment of the opportunity cost by parents varies based on the endowment of different resources, time and space. For example, parents with lower income may find it difficult to spend time in taking children to preschool because they can devote that time for other economic activities that might help them of a better livelihood. Also, the money spent on a child's education could alternatively be used for

other household expenditures. Even the opportunity costs and benefits of school attendance in developing countries and especially in rural areas deserve a closer look. The overall evaluation of preschool decision is based on the comparison of expected benefits and expected costs by the parents. Now, considering education as a commodity and spending on education as an investment, rational parents ultimately choose the one which offers maximum reward i.e. parents determine the preschool attendance for their children on the basis of the calculation of expected gains and the opportunity costs of attending preschool. Attendance will be lower when parents perceive that the opportunity cost of preschooling is higher than the expected benefits of it. There is a huge variation across households in preschool attendance patterns in developing countries like India. Some children may never enter preschool, while others may attend only part time. Even the degree of part time schooling may vary a lot like: absent for a few days a week to absent of several months. The reason for this variation is due to the fact that, different parents evaluate the costs and benefits of attending school differently and even the same parents may also evaluate it differently at different point of the year. For instance, during the harvest season, the opportunity costs of taking children to school may overshadow the benefits of it and results in temporary withdrawal; while at other times (such as lean agricultural seasons) the benefits may outweigh the

costs and result in regular school attendance. (Bedi and Marshall 2002)

3.3. Benefits and Costs in Indian Context

Given the Indian context, the cost-benefit analysis needs to be re-casted to explain differences in ECE decisions. Given the fact that, about 40% of the children in the country are still denied the access to any preschool (Ministry of Women and Child Development, Govt. of India, 2014-15), it is worthwhile to investigate the arguments behind parental decision of choosing or not choosing a preschool at the first place. Only if parents wish to send their children to any preschool, then the choice between public and private preschools arises.

Considering the Indian context, both economic and non-economic factors play an important role. Whereas the economic resources are decisive for actual costs (and perhaps opportunity costs) attached to the educational decisions; the cultural and educational resources in the family of origin (especially of parents) influence the probability of success, and possibly the perceived benefits and costs of schooling too. Moreover, ethnic background of the family and their place of living e.g. rural or urban could be equally important to consider. Given the variation in their socioeconomic status, the cost-benefit analysis differs from person to person and from region to region. The

CECED (2015) study in three states in India: Assam, Andhra Pradesh (AP) and Rajasthan has found that about 40 percent of the parents believe that by attending the ECE centres, their children would be better prepared for primary education and would do well in a formal school. Another 26 percent had a complementary view that participation in ECE would enable them to learn to sit in one place and obey, a competency associated closely with primary schooling. For a small number of parents, food was an important incentive and the reason to send their child to the ECE centre. These were possibly the parents of children who go to Anganwadi. Also, there exist differences in the reasons for choosing ECE among states: the majority of parents in Assam and Andhra Pradesh reported that they send their children to Anganwadi centres so that their children get prepared for formal schooling. However, the dichotomy to the responses of parents was found in Rajasthan, where most of them said that they send their children to Anganwadi for food (CECED 2015: 17-18). Though, there are very few studies in India that particularly focus on ECE decisions, these existing studies indicate that ECEC decisions are highly associated with the socioeconomic condition of families (Prochner 2002; FOCUS 2006; UNESCO 2006b; Rana & Sen 2008; CECED 2015). Resource endowment and ethnicity plays a crucial role in shaping parental motivation for ECE. The decisions mechanism has two steps: first to decide whether to send the child to a preschool; and if they decide to send then

which type of preschool. While a group of parents, under some socioeconomic situation may consider ECE as important for their children, another group of parents may not consider it worthwhile.

So, the cost benefit analysis by parents differs for each of these two decisions. This is so because the set of factors responsible for the first decision differs considerably from the set of factors influencing the second decision. Even though there are public preschool services which are free of any cost and located mostly in the neighborhood, still parents do not send children there because they do not realize the importance of ECE. As the responses from families suggest, it is more of a motivational issue and whether parents consider ECE as important influences their decision. For example, as Box 1 suggests, where some of the parents have mentioned lack of resource as the reason for not sending children to a preschool, some other have said that they did not feel the need to send children to preschool. Alternatively, example in Box 2 suggests that, some of the low-income parents who are highly motivated toward ECE sent their children to preschool even after having resource constraints.

Box 1

- One of the parents responded when asked during field work why they do not send their children to any preschool:

*“ দু বেলা খাবার জোগাতে হিমশিম খেয়ে যাচ্ছি...
পড়াশোনা নিয়ে কখন ভাববো?”*

(Translation from Bengali: Struggling to provide enough food each day, when shall I think about child's education.)

- Another father said,

“ও একেবারে প্রাইমারি স্কুল এ যাচ্ছে, অত ছোট বাচা স্কুল এ কি যাবে !”

(Translation from Bengali: We sent him directly to the primary school; he was too young to be in school earlier.)

Box 2

A low-income father who sent his son to a preschool had replied when asked the reason:

“পড়াশোনা না করলে ভবিষ্যত ভালো কিছু হবে না, তাই কষ্ট হলেও ছেলে কে স্কুল এ পাঠাই ”

(Translation from Bengali: without education there is no future, so even under hardship we provide education to our child.)

The example in Box 2 shows that, parents who value the importance of ECE may consider spending on their child's education irrespective of their economic status.

Then for the second decision of choosing a type of preschool, another set of variables comes into play. This decision also is associated with the availability of different types of preschools. As found in CECED (2015), 'parents' choice of their child's schooling is closely linked to availability and accessibility of ECE centres and mothers' education level which is further associated with the socioeconomic status and priorities and perceptions of the parents regarding the education of their children. Parents are interested in educating their children, but unaware of children's developmental needs and the importance of appropriate play and development based ECE' (CECED 2015: 25). The benefit and cost of attending a type of preschool might be interpreted differently by parents from different strata of the society, based on their endowment of resources. Also, the benefits perceived by parents depend on what parents actually expect from sending their children to preschool. If parents want early and quality education for their children, then they might find it beneficial to choose private preschool where children will get "better" education and therefore better orientation for further schooling. Also in private preschool children might get more disciplined and prepared in terms of school readiness. That, in turn,

will help the children to get admission in better primary school at a later stage. Parents might also positively consider private preschools for the school environment and quality of teachers, availability of facilities such as a playground, playing accessories etc. This is generally the case for parents with the higher level of education in many societies. Also, the differences in the educational decision could arise due to differences in the motivation of the parents to maintain the family's status and to restrict downward mobility (Breen & Goldthorpe 1997). Parents from privileged socioeconomic classes always find it beneficial to invest more in the education of their children so that certain position and status in the society can be maintained and therefore decide in favour of private preschools. On the other hand, parents with lesser education and economic resources might have less interest in early childhood education and therefore may not be so sensitive about the quality of education. Even though some parents would prefer to send their children to private preschools, alas they cannot do so because of their limited financial capabilities. For economically underprivileged parents it is worth to consider the meal and other facilities that are provided free of cost in public preschools. Moreover, if the main purpose of choosing preschool is solely for the purpose of daycare so that parents get time for work (both economic and household work) then parents might consider public provision which bears no cost.

Considering the cost of preschools, it is easy for economically well-off families to invest in a "good" school (or say private school in the Indian context) and in addition, the opportunity cost is also lower. On the contrary, for low-income families, not only the actual cost of private preschool is burdensome but also the opportunity cost of sending children to private preschool is much higher from several perspectives. Instead of investing on a child's preschool education, they might find it more reasonable to invest the money somewhere else that will help them secure future income or to merely spend the money to buy food for the family. Also, many consider public preschools as a free daycare where children will be engaged for some time and parents can work for income or take care of other siblings and household work. Availability and accessibility of different types of preschools might also add up to the cost. For example, if the distance of private preschool is far from the residence and incurs some economic cost to bring the child there then it might not be feasible for parents with less income despite their wish to send the child there. In addition, there might be implications on opportunity cost as bringing the child to and from preschool every day is time consuming for parents. Instead, they could have invested that time in some other productive activities to earn money that can improve their economic situation. Therefore, even though parents may wish to provide "good" education to their children, in many cases they can't

because of the lack of availability and difficulty in accessibility of such services.

3.4. Beyond Rationality

One criticism of rational choice theory is that, it lacks realism in its assumption that we calculate the expected consequences of our options and choose the best of them. A considerable part of social research reveals that, people often act impulsively, emotionally, or merely by force of habit. The question is that, are people always the informed and calculating agents that rational choice theorists assume them to be? Since these choices often take an emotional toll, it is easy to conclude that this theory is implausible (Hechter & Kanazawa 1997). Therefore, rational choice theory alone is not sufficient to explain differential educational choices, and expanding the analysis beyond the cost-benefits analysis is necessary to bring other socio-emotional dimensions into consideration. There are ample of other theoretical constructs that explain the differences in educational choices. Breen and Goldthorpe (1997) have proposed a framework by integrating rational choice theory with class differentiation and they have used three theoretical constructs to explain differences in educational outcomes: (1) the subjective probability that different educational careers can successfully be completed, (2) the cost of attending the course and (3) the expected return from it. Morgan (1998) on the other hand

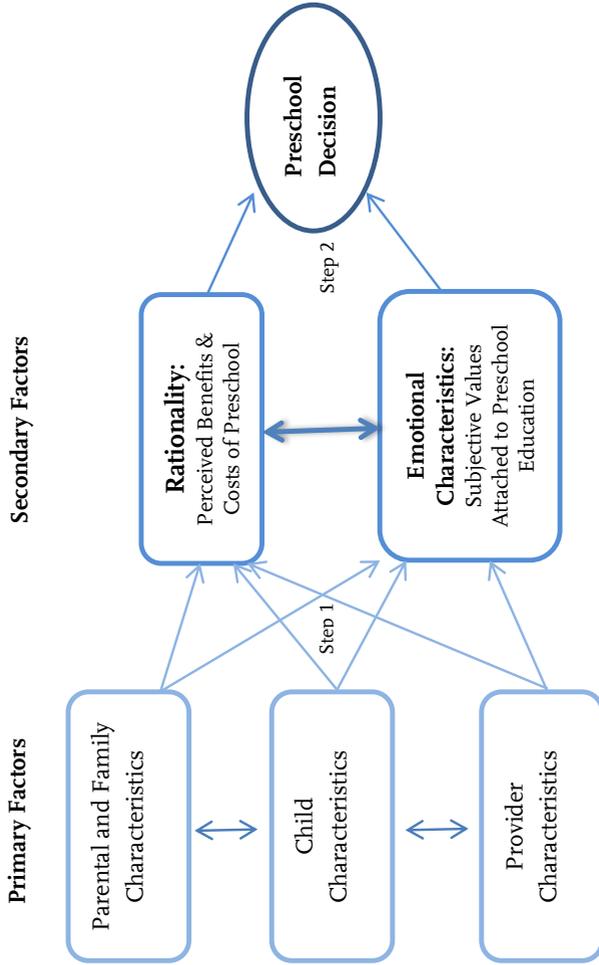
has explained educational differentials by combining rational choice theory with status attainment theory. He argued that both the theories have their own merits but rational choice theory deals with the responses to the costs and benefits associated with alternative choices whereas the status attainment theory views educational attainment as a behavioral outcome. He has treated education as a consumption good instead of an investment good and assumed that more education is always better. Therefore, 'the status attainment theory of educational aspirations need to be recast as a theory of educational intentions and grounded on the simultaneous cost-benefit calculations of students and their 'significant others' (Morgan 1998: 132). Alternatively, Murphy (1981) stated two major causes of class differentials in education: "structural bias" and "cultural handicap". As annotated in a structural view, class differentials in education are the consequence of the unequal distribution of power and privilege, and such inequalities are mostly responsible for the class differential provision of educational resources and also consumption of such resources. On the contrary, the cultural view focuses in general on the cultural consequences of such structural differences, particularly; emotional, psychological attributes which deprive the lower class of having equal opportunities in education (Murphy 1990). However, given the conception of poor as not just economically poor but also socially and culturally, these foundational assumptions have been undergirded by societal norms and beliefs about

who can provide ‘quality’ care and education to their children. This influence of cultural variation in shaping inequalities is explicitly brought forward by Goodwin and colleagues who introduced three paradigms: inferiority paradigm, culturally deprived paradigm and cultural difference paradigm. The inferiority paradigm is grounded in the assumptions of the biological inferiority of those who differ racially and culturally, whereas the culturally deprived paradigm compares racially, culturally, linguistically and socioeconomically diverse people. And the cultural difference paradigm rests in cultural differences on the lives, experiences, and identities of diverse groups (Goodwin et al. 2008).

The theoretical discussion on educational decisions so far suggests that, educational decisions may depend on the cost-benefit analysis by parents on one hand, and, it may also depend on parent’s emotional characteristics on the other. Therefore, these decisions may have components associated to parents’ rational as well as emotional characteristics. Now, to answer the second key question of how parents choose an ECE option for their children, it is important to examine how different socio-economic factors affect parents’ rationality to think, their emotion and values. This likely process of parental ECE decisions is explained on the next section.

3.5. Mechanism behind ECE Choice

In this section attempt has been made to explain plausible mechanism behind ECE choice and how different economic, social, emotional factors interact. As existing literatures suggests that parents' educational decisions are sometimes rational, but also emotional. Therefore, in this study both rational and emotional characteristics of parents in regard to ECE decisions have been considered. For that reason, this study explains the differences in educational opportunity at preschool level using a two-step model. The underlying assumption of the model is that several internal and external factors affect preschool decisions made by the parents rather indirectly through two different channels: the rational component of the decisions which mainly consists of the benefits and cost of a preschool option as perceived by parents and the emotional component of the decisions making which includes all emotional and subjective values attached to preschool education by the parents. This hypothesis complements the theoretical explanations behind ECE choices which suggest that educational decisions are rational but may also have components relating to socio-emotional characteristics.



Two-Step model for Preschool Decision

[Reproduced from Eccles et al. (1983) Model of Achievement Related Choice]

Two types of factors are considered in the model: 'primary factors' and 'secondary factors'. Primary factors include several parental and family characteristics, child characteristics and provider characteristics which have already been discussed in the previous sections. Whereas, secondary factors are considered in the model viz. perceived costs and benefits of preschool, and subjective values attached to preschool by parents. The model assumes that, the variation in ECE decisions comes in two steps: firstly, the variation in parents' rational choice and their cost-benefit analysis and secondly, the variation in parental values and emotions based on their economic, social and cultural characteristics.

Then differences in the cost-benefit analysis and the subjective values attached to ECE by each of the parents generate the variation in ECE choices. The diagram above shows that, in step 1, primary factors affect the secondary factors viz. costs-benefits analysis by the parents and also on the subjective values that parents attach to preschool education. These secondary factors, in step 2, affect the final preschool decision made by parents. It is evident from the model that, differences among parents in primary factors lead to variations in secondary factors and that in turn leads to differences in preschool decisions.

In the next section, an attempt has been made to identify plausible primary factors that have an impact on parental

ECE choices and which may have relevance in the Indian context.

3.6. Plausible Determinants of Early Educational Choices

It is clear from the theoretical analysis that, several social, cultural and economic factors influence on educational decisions and these effects vary a lot depending on time and space. This by reason that, countries vary in terms of their culture, resources, availability of ECE provisions and thus latent to different sets of variables for each country. The set of variables within a country might also change depending on the level of education considered. Therefore, in this section, an attempt has been made to identify plausible factors which may influence preschool decisions in India. Based on the model in previous section, these factors have been classified into three broad categories: *Family Characteristics*, *Child characteristics*, and *Provider Characteristics*.

3.6.1 Family characteristics

The family of origin has an impact not only on academic achievement but also directly on educational choice. It does so primarily because of the endowment of economic, cultural and social resources by parents, and the social status of the family of origin that influences parents' educational aspirations. In general, socioeconomic

background refers to parents' level of education, their occupational status, and their income level but there could have several other components of it such as ethnicity, single or both parents, migration background, child characteristics etc. (Spieß et al. 2008; Schober & Spieß 2013) Some of these aspects are positively associated with preschool decisions whereas others are associated negatively. Studies in the past have already found that, demand for early childhood care is usually negatively related to the presence of other adults in the household, the number of children, mother's age, perceived costs, and traditional child-rearing beliefs; and positively related to parent's education level, employment of the mother, social emotional development, preparing for elementary school etc. (Van den Berg & Vlug 1993) Socioeconomic background of a family would have an impact on educational aspiration because higher education of parents allows them to offer more to children which lead to a positive relationship between their socioeconomic background and the educational aspiration. The effect of parents' educational qualifications is a good indicator of cultural and educational resources in the family of origin. Parents' education influence parents' skills, values and knowledge of the educational system; which in turn, influence their educational practices at home and the skills children have to portray, as well as parents' ability to intervene in the educational system on their children's behalf. In other words, the positive effects of parents' level of education on children's educational attainment come through (1) better strategic knowledge about different

educational options available in the market, especially school types, curriculum etc., and (2) more qualified help with the learning of cognitive and other type of skills that improve the performance of the children and their probability of success. Parents with higher education make sure that their children are exposed to lots of educational opportunities in their communities. 'There are several plausible mechanisms by which, for instance, more educated parents reinforce the academic ability of their offspring and act consciously or not to improve their educational performance; these include choosing the right option for children and at right time, and motivating children to continue studying through verbal training during childhood and practical help with school work. Apart from that, parents can invest in good schools and in extra tuition for their children.' (Jonsson & Erikson 2000: 356) For any educational option that is to be positively considered by parents, it needs to be befitting with that family's endowment of all type of resources, and that aligning with parents' beliefs and values, balancing their needs and desire with those of other family members to being stable and predictable. (Vesely 2013) The differences in socioeconomic background are produced through the variances that exist in parents' (and family's) level of education, type of occupation, family income, asset owned, family demography and also their family of origin e.g. caste, religion etc. and values and beliefs attached to those. These differences in the background lead to the inequalities in educational opportunities at the preschool level (Seginer and Vermulst 2002). Parents' use of ECE

reflects structural (economic, social, and political system that shape families access to various resources for child rearing) and cultural (values and beliefs concerning child rearing) components in their decision making; and both these factors account for the differences in ECE use.

Conversely, the effect of socioeconomic status on educational opportunity has long been debated. Savit and Blossfeld (1993), in their study on 13 European countries found that, except the Netherlands and Sweden, all other countries exhibit stable socioeconomic inequality of educational opportunity even after dramatic expansion of education during the 20th century. Whereas De Graaf and colleagues (1993) have shown that, there is a significant downward effect of family background on educational attainment and the effect is higher in the initial (secondary) transition compared to later transition (higher secondary and tertiary). Similarly, the study by Breen and colleagues (2009) on eight European countries has claimed a clear decline in educational inequality in several countries over the course of the 20th century.

The economic condition of the family of origin affects the transition prospects by influencing the cost of schooling. The financial burden of an educational option is less for a family with greater economic resources and thus the marginal cost of education is lesser for them. 'Resourceful families do what they can to circumvent such political intervention or to oppose it politically. They transmit relevant knowledge and skills to their children; send them to expensive private schools....' (Jonsson &

Erikson 2000: 347). Wealthy parents have a wider range of choices from which they can choose the one that they prefer most; and doing the cost-benefit analysis is much easier for them because they can afford the actual cost of schooling and the opportunity cost is also less for them. Whereas, parents with low income often cannot afford better options and compromise their choices because either the actual cost is beyond their ability or the opportunity cost attached to it is too high for them. Therefore, they settle with a lower possible option for their children or they sometimes do not choose any option at all. Parent's ability to transmit skills and knowledge to their children may also depend on the parental work situation, for example, whether they themselves have a job that is intellectually stimulating or physically exhausting. (Johnson & Erikson 2000) Studies also suggest that the probability of having ever attended a day care facility during early childhood depends significantly on household income: that is, children of families with a lower household income attend such programmes for a shorter period of time compared to children from high-income families. (Spieß et al. 2008; Schober & Spieß 2013)

Several factors related to parents' employment such as the type of work and its duration, whether single or both the parents work etc. also influence preschool decisions by parents for their children (Vesely 2013; Han 2004). Having low paying and stressful jobs can also make it difficult for poor parents to provide cognitively stimulating experiences for their children. In addition, the type of job parents has

also influences the values and goals they have for their children. Whether parents have a full time and secure job, or they have a standard working hour etc. are also significant for their decision makings regarding children's preschool. Parents with stable income are often more focused on their child's future; whereas, parents with income uncertainty spend most of their time securing their income and find it difficult to concentrate on child's education and future. Parents in working class jobs are more likely to value obedience and less likely to value intellectual curiosity than parents in professional jobs (Kohn 1969; Hoff et al 2002). It is widely founded that in low-income families often both the parents must work to maintain their basic consumption level and therefore need someone to take care of their child at home. Usually the priority is extended to family members and grandparents, otherwise, they seek alternative childcare option which they can afford and leave their child during their working hours. Most often they prefer public ECEC over private ones because it is less expensive; even though the quality is not up to standard compared to the private preschools. In these circumstances parents often compromise quality over price.

Cultural beliefs and values carry considerable weight in the decision-making process about preschool education. Families from cultures in which family relationship and collectivism are emphasized may not usually send the children to formal preschool. As proposed by Johansen et al. (1996: 759), 'parents who value

developmental characteristics of care choose centre care, parents for whom hours, location, and costs of care are most important chose care at home.' They have further classified the determinants of parents concern as 'internal quality' related to developmental and educational aspects, whereas 'external quality' that is related to costs, opening hours and location etc. The concern with internal quality was determined positively by the level of urbanization, the age of the child, the income level of the parents, educational level of both parents, and the inclination to invest in the child's education, and negatively by the absence of a grandparent, the number of siblings etc. Leseman (2002) classified parental beliefs in two categories: traditional and modern. According to him, '[t]raditional beliefs are characterized by a so called collectivistic orientation, meaning that the interests of the individual child are subjected to the interests of the greater social unit of the (extended) family and local community, and emphasize socialisation goals such as obedience, control, respect for adults and authorities, conformity to rules, and responsibility. There are different rules, different roles and different socialization goals for boys and girls.' Whereas '[m]odern beliefs are characterised by a so called individualistic orientation, meaning that maximal actualization of the individual's talents- cognitive, creative, artistic are put on the foreground, and emphasize socialization goals as emotional independence, self-will, verbal intelligence, competitiveness, intellectual and artistic excellence, for boys and girls alike' (Leseman 2002: 1).

Liang et al. (2000) examined the role of child rearing beliefs as a factor explaining ethnic differences in child care utilization and they have shown that there was no simple dimension explaining all interethnic differences. The degree of mother's education and employment were positively related to the use of preschool and partly explained ethnic differences. The number of children in the family and the presence of other adults (spouse, grandparents, relatives etc.) in the household were negatively related to the use of preschool and therefore explained ethnic differences. Furthermore, cultural beliefs and the importance attached by the parents to early childhood development were related to the choice for a preschool programme. According to the authors, the "[m]ost important for the selection debate is that we find that parents – from all ethnic groups – who hold explicit beliefs and practices related to early literacy development, engage in educational activities with the child, and control television viewing are more likely to select centre care. This finding is robust after taking into account a variety of other family economic and social structural factors" (Liang et al. 2000: 379). A similar study by Singer et al. (1998) revealed that, if regional supply variation, demographic characteristics of the family, parents' characteristics etc. were controlled, ethnicity no longer predicted choice patterns, although the overall effect without control for these variables was quite big.

Moreover, it is not always an "Either-Or" choice by the parents between center-based and home-based early

childhood care arrangement. There is also the possibility of combining them to some extent and a multiple care arrangement is also possible. Often parents deliberately choose multiple ECEC options to benefit their children the most. Even parents may use more than one type of arrangements in order to obtain all aspects of quality that they wish for their children. This depends on the family demography, parents' level of education, type of occupation they have and also the child characteristics like age, sex, and health (Gordon et. al 2013; Hewett et al. 2014).

Demographic factors like the structure of the family play an important part in the decision-making process of the parents for several reasons. The negative relation between the choice of a preschool with the number of siblings and presence of adults in the family has already been recognized by many studies. The number of siblings has an impact on sending children to preschool; regardless of parent's employment status and education. If there were three or more children in the family, the probability of sending children to preschool decreases considerably (Singer et al. 1998). Usually, families divide their total spending on children between the number of children and amount spent per child. The number of children and spending per children is negatively related. As increased number of children raises the effective cost of adding to the spending on each child because an additional hour or dollar spent on each child then means a larger total addition to spending. Similarly, an increase to the dollars or time spent on each child raises the cost of having an

additional child (Becker 1964). Furthermore, the presence of grandparents and other adult members in the family may also reduce the chances of choosing a preschool for the children because they could be taken care at home by their grandparents and other members. The presence of either both the parents or single parent also make a difference in the preschool decision. If both parents are having jobs and are unable to take care of their child at home then, the chances are higher of choosing a preschool for their children as working parents consider the preschool also as a child care centre.

The influence of '**significant others**' is also an important factor to consider, other than the socioeconomic status of the family. In this context, significant others' influence consists primarily of the educational status expected or exhibited to children. By definition, significant others are the persons exerting the greatest influence upon him/her (Sewell et. al 1969; Sewell et. al 1970). Given the social structure and cultural background, families in India are generally not bounded within parents and their children, but also include grandparents and other close relatives, especially in rural areas. Therefore, in many occasions, family members other than parents play an important role in household decision making which also includes child care decisions. Therefore, it is deemed important to assess the role of relatives and friends in the preschool decision.

Parental aspiration for a better future of children has a close association with their decision for preschool education for their children. Parents' motivation plays an important role on deciding early childhood services for their children and this motivation is known to have a positive association with the level of education achieved by the parents. Parental motivation influences decision for preschool education in many ways; either directly by helping them to choose a preschool option that they think is the best amongst what is available or indirectly by influencing the cost-benefit analysis. For example, parents, who think education is important for their children, may choose a preschool option they like, or alternatively, they have a positive marginal benefit of education whereby the opportunity cost of education is low, and are thus in favour of preschool education and spend more on education for their children. Furthermore, as mentioned earlier, there is a direct effect of social positioning on parents' motivations and aspirations for their children's education. For example, parents' social position sets a standard or 'family status' (Breen and Goldthorpe 1997) and parents want their children to reach at least that level. It is apparently seen that highly educated parents are more concern about their children's academic career and they invest time and resource in deciding the correct path for children to give them the right start. On the other hand, parents with comparatively lesser educational level somehow find it difficult to decide on their children's education because of their lack of social and cultural capital. 'Parents do two things to enhance their children's

probability of success in school: First, they engage in out of school teaching, i.e., they teach children themselves (often unintentionally as in everyday interaction, but also actively by helping with homework etc.). They may also, arrange other kinds of extracurricular teaching, and use their economic, social and cultural resources in various ways to improve their children's educational performance. Second, parents' guide their children through the educational system. Particularly highly educated parents are experts in navigating the array of choice in schools, and they can advise their children on how to behave strategically' (Jonsson & Erikson 2000: 361).

3.6.2 Child characteristics

Studies have found that individual child characteristic that may be significant in predicting differences in use of preschool include gender, and health; especially among low-income families. (Hewett et al. 2014) Families with limited economic resources find it difficult to invest in their children's education and often they must decide whom to send to school and who will stay at home. Two factors play a role in this decision making: sex of the child and their health status. Gender also plays a deterministic role in educational decision making by parents in a sense that when it comes to taking a decision in education, as boys always get the preference and advantage of going to school. Even if the cost of schooling is zero, in many societies, girls are expected to stay at home

and are most often held responsible for taking care of their younger siblings and help their mother with household work. There are also considerable differences in the health status of children from different social groups. Children from the disadvantaged social groups are expected to have poorer health and nutritional status compared to their counterpart. This, in turn, reduces their academic ability and probabilities of success. Therefore, the existence of primary effect in the educational opportunity at preschool level might be explained by the fact that, poor health and nutrition of children lessen their academic abilities. In this regard, if parents find their children physically weak then the perceived probability of success is rather low and that in turn affects parental decision regarding preschool. If any of the siblings in a family has poor health, then it makes parents believe that their child is not yet ready for formal ECE and parents might prefer to take care of the child at home instead of sending to a preschool.

3.6.3 Provider Characteristics

The difference in parental preference is not the only reason for the existing variances in attendance to preschool, rather, another reason for these differences in attendance can be found in the variations in services provided. The availability of ECE programme is crucial in enabling both parents to work and thus boost the family's income. Poverty can induce home environment in different

ways such as: lack of resources and infrastructure for children, inappropriate nutrition, poor learning environments, irregular attention from parents due to their over engagement in economic activities etc., which in turn can potentially exert a negative impact on child development. There exist major variations in the services provided in different ECECs and that subsequently affects the attendance. Differences may exist in terms of diversion in purpose of provision of the ECEC, regional variation in providers: Non-profit providers and profit-making providers, legal and organizational differences and differences in terms of financing the public ECEC programme across States. Based on these issues, the facilities provided in the preschools vary a lot in terms of what they provide, for how long, for whom, and also the quality of service provided.

The first two standards that parents apparently give most emphasis on are the cost of schooling and its distance from home. Apart from that parents probably also set some other criterion like: hours of operation, language of the programme, diversity of families enrolled, quality and quantity of accessories available, and qualification of teachers etc. The quality of services (sometimes perceived by parents) provided in the schools may also affect their decision: as low-quality services including a lower number of teachers or limited availability of teaching materials and other facilities may reduce the expected benefits from

attending school (Jacoby 1994). Where parents with low income may choose a preschool for benefits other than early education; parents with higher income may look mainly for the quality of education provided in the school. Each component of schooling, material and educational, is important for the parental decision and is based on their socioeconomic status. For example, 'the question of whether children receive a lunch at day care is of interest for a number of reasons. First, this service is of particular interest in terms of making it easier to combine work life with family life. Second, the provision of a high-quality lunch at a day care facility can be very important especially for children from low-income families' (Spieß et al. 2008: 17).

Parents, as informed 'child care consumers', value certain aspects of ECEC and they often assess the quality of ECEC in terms of health, safety, and positive staff-child interactions (Cryer & Burchinal 1997). In addition, the study by Van Horn et al. (2001) examined the criteria that low-income mothers use in selecting a child care. It has been found that structural characteristics of care, child safety, and caregiver characteristics were the most frequently cited reasons for the selection of a child care provider. Also, the lack of working knowledge is stated as an obstacle to children being placed in high-quality child care settings. Therefore, it is important to identify if the reason of non-attendance is either due to lack of demand

for schooling or poor/limited supply of schooling services. If the main problem is low demand for schooling, then the appropriate response may be policies designed to lower costs of schooling or a policy of enhanced investments in school inputs to increase the expected returns from schooling. On the other hand, the limited supply of schooling would suggest another set of policies.

Therefore, based on the evidence from India and other countries, different types of factors are considered in this study ranging from economic, social, and emotional factors.

3.7. Research Questions and Hypotheses of the Study

Given the Indian scenario of ECE, there are two possible ways through which the unequal opportunity in ECE may generate from the demand side. First, there may have differences in the decision of sending or not sending children to preschool and second, there may have differences in choice of a type of preschool among those who decided to send their children to a preschool. Therefore, this study separately focuses on each of the decisions and research questions and plausible hypothesis are divided in two sub-sections.

3.7.1. Decision of preschool or no-preschool

Main research questions

- *What are the determinants of the parental decision of sending (or not sending) their children to preschool?*

Sub-Questions: Furthermore, the main research question is disaggregated in several sub-questions for the ease of analysis.

- *Does the socioeconomic status of the family matter for their ECE decisions?*
- *What role does the ethnic background play in ECE decision?*
- *Does being a girl child or any other child characteristics matters for ECE attendance?*
- *What role parents' motivation towards ECE plays in increasing preschool attendance?*
- *How parental motivation varies across different socioeconomic groups?*
- *What are the effects of the supply side variations on ECE attendance?*
- *Does geographical area matter for preschool attendance?*

Hypotheses

Considering the Indian context of ECE and the theoretical discussion on educational decisions, there might have several factors ranging from economic, social, and emotional factors affecting the demand for ECE and preschool attendance of children. Therefore, the analysis in this study starts with some plausible hypothesis and presumptions, which have been commonly found in the cases of many other countries, and that, may also be suitable in the Indian context. Then using statistical analysis, the study is going to test whether these suppositions are able to explain the inequality in ECE in India. First, there is a considerable chance that parents' decision of sending (or not sending) children to preschool has an association with socioeconomic status of the family. It is assumed that children from higher SES families have the higher probability of attending a preschool. Factors such as: parents' education, income, employment status etc., play an important role in a preschool decision. Second, the ethnic background of the household is expected to influence the preschool decision and it is assumed that children from a minority background (both religion and caste based) are less likely to attend any preschool. Third, there may have a possibility of gender biasedness against girls, and being a girl child may reduce the probability of attending a preschool. Fourth, parental motivation plays an important role, and less motivated parents are less likely to

send their children to preschool. Fifth, it is also expected to have regional variations in preschool attendance in terms of rural-urban inhabitation and residing districts. It is assumed that children from rural areas and/or from backward districts are less likely to attend preschool compared to their counterpart. Sixth, supply side variations have significant association with preschool decision. Parents' assessment of the quality of the existing ECE provisions is estimated to have an impact on their preschool decisions.

3.7.2. Decision of public preschool or private preschool

Main research question

- *What are the determinants of the parental choice of a particular type of preschool?*

Sub-Questions: Furthermore, the main research question is divided in several sub-questions for the simplicity of analysis.

- *Does choice of a type of preschool depend on the socioeconomic status of the family?*
- *Does attending a particular type of preschool by children depend on their ethnic background?*
- *Does being a girl child or any other child characteristics matters for the type of preschool children attend?*

- *Is there regional variation in type of preschool attendance?*
- *Does type of preschool attended depend on availability or accessibility of preschools in a region?*
- *How the types of preschool attended vary depending on parental motivation?*

Hypotheses

The type of preschool that a child will attend is another important decision for parents to take which involves a lot of effort. Once parents decide in favour of providing their children ECE, they then need to choose a preschool from available alternatives. Given two major provisions available in most parts of the country: Anganwadi Centres (public) and private provisions, parents need to choose one that most appeals to them and also one that they can afford. As evidence suggests, although Anganwadi centres are chosen by a significant number of people as the main provision, private preschools are also getting popular by the day. Studies on different levels of education in India as well as in other countries have already shown a considerable degree of variation in the type of school attended based on socio-economic status and other household characteristics. Therefore, to explore the determinants of the parental decision of a type of preschool for their children, the study begins with some probable hypotheses. First, it is expected to have a variation in choice

of a type of preschool based on the SES of parents. Families with higher SES are more likely to choose private preschools for their children. Second, stratification based on religion and caste may play an important role in preschool choices. Children from minority backgrounds (based on religion and caste) are more likely to attend public preschools (Anganwadi centres). Third, being a girl child reduces the probability of going to a private preschool. Fourth, it is assumed that a household with a greater number of children (or the child with a greater number of siblings) has a lesser chance of attending a private preschool. Fifth, there exist differences between rural-urban inhabitation. Children residing in rural areas are more likely to attend Anganwadi centres compared to children from urban areas. Also, there exist inter-district difference in preschool choices; and parents in Howrah district are more likely to choose private preschools compared to those from Murshidabad district. Sixth, supply side variations, such as the distance of the preschool, are not expected to have an association with the type of preschool chosen; since it is expected that parents already considered the distance and other qualities of the existing ECE provisions while choosing one for their children. Seventh, more motivated parents are expected to send their children to private preschools as the general perception among parents is that private preschools are better.

In the next chapters, suitable methodologies have been developed to separately deal with these two main research questions and sub-questions, and to test each of the hypotheses based on the primary data collected for this study.

Chapter 4: Research Methodology

The research is based in West Bengal, one of the nineteen states in India, which is in the eastern part of India. Though the choice of the State was based on pragmatic reasons, the sampling method was carefully designed to have a sample that will be representative of the province and the country to an extent.

4.1. Sampling Framework

The sampling instrument used for this research was based on purposive sampling and multi stage sampling procedure. The choice of this sampling method was driven by the practical reasons such as convenience in terms of finding the sample more accurately, and efficiency in terms of cost and time. The unit of analysis for the study is the household of the children of 6-7 years age group. Consequently, we decided to choose the households of those children currently studying in 1st grade in primary schools as our sampling unit. The justification behind the choice of the household of children in the first grade is mainly related to the current education system⁷ in India.

⁷ The compulsory education for children (supported by the Right to Education Act 2009 by the Government of India) begins at the age of six

Since the prime objective of the research is to explore the factors responsible for the differences that exists in the demand for early childhood education or factors causing differences in parental decision for preschool education for their children; we necessarily need a sample that contains both the parents who have sent their children to any preschool and parents who have not sent their children to any preschool. Therefore, to draw a sample from the households with children who have or have not attended any type of preschool, it is appropriate to focus on the 1st graders in primary schools. This is the cluster that consists of children who have just completed their preschool or did not attend any preschool before getting admission to their present schools. Besides, it is easier for the parents of first graders to recall motives of their decisions if their children just have left preschool. This short recall period reduces item nonresponse and increases the data quality.

The entire sampling process is divided into four stages: (1) Selection of districts, (2) selection of sub districts and identifying all primary schools within it, (3) selection of schools, and (4) selection of children and their households. At the first stage of sampling, all nineteen districts of West

years. At that time parents must enroll their children in the 1st grade in primary schools. Before the age of six parents can decide if they wish to provide formal early childhood education (ECE) to their children and independently choose between public and private preschool provisions once the child turns three (the age of entry also differs depending on parent's decision). Alternatively, parents might also prefer to keep the child at home until the child turns six.

Bengal were classified (see annexure 1) according to their literacy⁸ rates (Census of India 2011) and were then clustered into two different categories named 'Above Average Literacy (AAL)' and 'Below Average Literacy (BAL)' districts in comparison to the adult literacy rate of the State which is 77.08 percent (Census of India 2011). Nine districts having adult literacy rate on or above the state average were classified as AAL and ten districts having adult literacy below the state average were clustered as BAL. Then, one district was selected randomly from each of the two categories: Howrah district (with an adult literacy rate of 83.85%) represents an AAL district and Murshidabad district (with an adult literacy rate of 67.53%) represents BAL district. In fact, according to the census 2011, Howrah district belongs to the top four districts whereas Murshidabad district belongs to the bottom four districts in terms of the adult literacy rate.

At the second stage, all sub-districts (both rural and urban) in these two previously identified districts were separately ranked (see Annexure.2) according to the size of their population. Then, in each of the districts, both rural and urban sub district having highest population were selected. The choice of sub districts based on the size of its

⁸ The reason of choosing literacy rate as the basis of the stratification was that education of the parents and family plays an important role in determining their socioeconomic level and thus the level of education for their children.

population was for practical reasons⁹. Finally, as shown in table 4.1, the sampling area in Howrah district includes the rural sub district named Domjur C.D Block and urban sub district named Howrah Municipal Corporation were chosen with 7.29% and 23.58% of the total district population respectively. Likewise, in Murshidabad district, Berhampur C.D Block and Berhampur Municipality were chosen with 6.46% and 5.25% of the total district population respectively. The sampling area consists of 169 villages and 75 municipal wards (an electoral district of a corporation/municipal council or town board) and represents a population size of about two million.

Table 4.1: Sub-district Wise Sampling Area

Name of District	Name of the CD Block/ Town	No. of villages/ Municipal wards	Population	Percentage of the district population
Howrah	Domjur C.D Block	38	311432	7.29%
	Howrah Municipal Corporation	50	1007532	23.58%
Murshidabad	Berhampur C.D Block	131	378,884	6.46%
	Berhampur Municipality	25	307,792	5.25%

Source: The Census of India 2001

⁹ The sub districts with the biggest size of the population provide easy availability of data and also allow having a representative sample for analysis.

Within these rural and urban sub districts; information on all existing primary schools was obtained from the data available from the school education department of the Government of West Bengal.

Table 4.2: Type of Primary Schools in Sampling Area

Study Area		Type of School			
		Public	Private	Madrasa	Total
Howrah District	Domjur C.D. Block	221	67	1	289
	Howrah MC	449	71	2	522
Murshidabad District	Berhampur C.D. Block	406	45	14	465
	Berhampur municipality	103	11	0	114
TOTAL		1179 (85%)	194 (14%)	17 (1%)	1390

Percentage share in the parenthesis.

Source: DISE 2008-09

< http://www.dise.in/Downloads/Publications/Publications%202008-09/SRC_2008-09.pdf>

At the next stage, three major types of primary schools were identified as main categories as shown in table 4.2: (1) publicly sponsored schools, (2) privately sponsored primary schools and (3) madrasa (especially for children from Islamic religion). The majority of the schools (around 85 percent of total primary schools) were publicly sponsored, about 14 percent were privately sponsored, and around one percent was madrasas. However, there was also some other

heterogeneous types of schools which were excluded from the sample because of the difficulty of identification¹⁰.

In retrospect, considering the existing resource and time frame, it was projected to include seventy primary schools in the sample (five percent of the 1390 number of primary schools) and consequently selecting twenty children from each of those seventy schools to have a sample size of approximately 1400 households. Herewith, seventy primary schools in the sampling area were selected randomly in proportion to the type of schools. At the same time, twenty¹¹ children in the 1st grade were selected randomly in each of those seventy schools. In the case of non-availability of at least twenty children in a school, an additional school (same type) was randomly chosen to cover the residual number of children. Since quite a few

10 These heterogeneous types of schools are very few in numbers (about one percent of all schools) and they differ in terms of funding, curriculum or method of teaching, serving different target groups etc.; and there exists no official information on their establishment, location, and operation. Therefore it is extremely difficult for us to identify/locate them or put them in one of the three categories mentioned.

¹¹ The reason behind selecting 20 children instead of all children in 1st grade in a school is that it appears from the secondary data and field experience that, in many schools, there was a high discrepancy between the official enrollment in grade-1 and the actual attendance. Therefore incorporating all children in the 1st grade in a school in the sample might have led to a high number of missing children. Hence it was decided to randomly select twenty children in grade-1 from each school. In the case of the actual attendance in the 1st grade is less than twenty children, all children attending school on the days of the survey were included in the sample and an additional school was selected to find the residual numbers of children.

schools had less than twenty children in the 1st grade, finally there were a total of eighty-four schools in the sample (which was approximately six percent of the total number of primary schools in the sampling area). Those eighty four schools consist of seventy-three publicly sponsored schools, ten privately sponsored schools, and one Madrasa. Subsequently, the total number of children selected in these eighty four schools was 1400. Once children were selected, respective households of those children were identified using the information provided by the schools; and those households were thus included in the sample based on their consent to be interviewed. Given the information on parents, the field work team was able to locate only 1373 out of 1400 households due to possible movement by missing households to some different address. All of those selected 1373 households agreed¹² to participate in the survey and thus the final sample is 1373 households. This sample size covers around 0.5 percent of the total children in the 1st grade in those two districts. Two important points have been considered during selection of households from each district. First, it was revealed from the secondary data that, out of the aggregate enrollment in the 1st grade in these two districts which was

¹² The reason behind 100% response rate of the households was mainly because of the availability of the official letter provided by the respective State Govt. In that letter, every household was requested to participate in the survey. Also, further administrative support was provided by other Govt. department during field work.

about 274583 children (DISE 2008-09), about 34 percent belongs to Howrah district and 66 percent belongs to Murshidabad district. Thus, it was decided to distribute the total sample size between these two districts according to the percentage share of the district in total enrollment in grade-1. Second, the distribution of the household within the district was based on the percentage share of the urban population in that district.

Table 4.3 provides the distribution of the final sample across districts and rural-urban inhabitation. The final sample consists of 473 households from Howrah and 900 households from Murshidabad, which makes a total of 1373 households.

Name of District	Total Sample Size (Households)	Rural (Households)	Urban (Households)
Howrah	473	235	238
Murshidabad	900	788	112
Total	1373	1023	350

Source: Author's calculation from primary data

4.2. Study Area

Before focusing on the study area, comparative statistics has been provided in Table 4.4 for having an idea about the variations between the country and the state with respect to some important macroeconomic variables. It can be seen from Table 4.4 that, with respect to macro characteristics such as percentage of child population, representation of the marginal groups in the population, adult literacy rates, rate of urbanization, work-participation etc. west Bengal is close to the national average. However, it does not always portray the huge cultural and other forms of diversities that exist across different parts of the country.

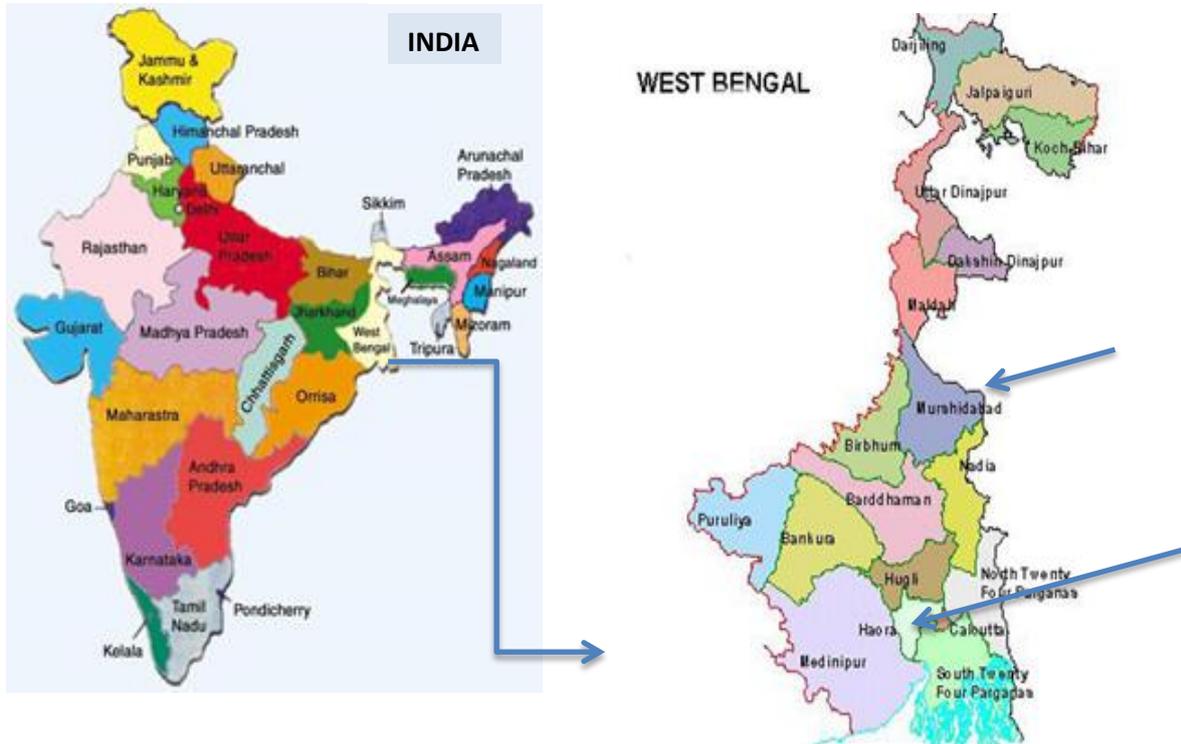
Table 4.4: Some Comparative Statistics Between India and West Bengal

State/District Name	Total Population (In Million)	Percentage of Population Btw. 0-6 yrs.	Percentage of Urban Population	Effective Literacy Rate Age 7 years and above)	Sex Ratio (per 1000 men)	Percentage of S.C population	Percentage of S.T Population	Main Worker ¹	Marginal Worker ²
India	1210.6	13.58	31.15	73	943	16.6	8.6	75.2	24.76
West Bengal	91.27	11.07	31.87	76.26%	950	23.51	5.8	28.14	9.94

Source: The Census of India 2011.

1. The percentage of main workers among the total worker.
2. The percentage of marginal workers (worked less than 6 months in a year) among the total worker.

Geographical Location of the Study Area



Source: Web

As already mentioned, two of the 19 districts¹³ in West Bengal, named: Howrah and Murshidabad were chosen for the study; Murshidabad in the north-central part of the state bordering Bangladesh and Howrah (or Haora) in the south-central part of the state. These districts were chosen in such a way that the high degree of diversity that characterizes the state is adequately represented.

Murshidabad district occupies 6% of the total area of West Bengal and comprises 7.78% of the total population of West Bengal. As per Census 2011, the total population of Murshidabad is approximately 7 million. Howrah district, on the other hand, occupies about 1.6% of the total area with the population share of 5.26% of the state. According to the Census 2011, the total population of Howrah is about 4.8 million. The aggregate population of these two districts represents about 13% of the total population of the State. The table below provides a comparative picture of these two districts with respect to basic indicators. In Howrah district, more than half of the populations live in urban areas, whereas the same in Murshidabad district is only about 12 percent. In terms of adult literacy rate, Howrah is much ahead of Murshidabad. In fact, Howrah places itself among top four districts in West Bengal with respect to literacy rate, while Murshidabad is among the bottom four districts.

¹³ During the field work in October 2014 West Bengal comprised of 19 districts, but as of April 2017 there are 23 districts with Aliporuar, Kalimpong and Jhargram became 3 new districts and former Burdwan district has been divided in East Burdwan and West Burdwan.

Table 4.5: Districts Overview

State/District Name	Number of Villages	Number of Towns	Total Population (in Million)	Percentage of Population Btw. 0-6 yrs.	Percentage of Urban Population	Overall Literacy Rate	Sex Ratio (per 1000 men)	Percentage of S.C population	Percentage of S.T Population
West Bengal	40203	129	91.27	11.07	31.87	76.26%	950	23.51	5.8
Howrah	650	3	4.84	10.27	63.38	83.31%	939	14.82	0.31
Murshidabad	2166	7	7.10	13.79	19.72	66.59%	958	12.63	1.28

Source: The Census of India 2011

Table 4.5 shows that, the number of 0-6 age group children is relatively higher in Murshidabad compared to Howrah, indicating a greater requirement of child care services in that district. The Scheduled Caste (S.C.) and Scheduled Tribe (S.T) population in both these districts are well below the state average. In terms of religion, there is a clear contrast between these two districts. The census data also shows that, population in Howrah comprises of 72.90% Hindus and 33.21% Muslims as two major religious groups, while the same in Murshidabad is 26.20% and 66.27% respectively (the Census of India 2011).

Table 4.6 provides a comparison of districts with respect to the occupational pattern of the people. Although the pattern is quite similar to the state and districts, the state has a slightly higher rate of total worker compared to districts. But there is a considerable difference between districts with respect to the type of main and marginal worker. Whereas Murshidabad is dominated by agriculture worker (of which majority is agricultural labour), Howrah is led by non-agricultural workers mainly consisting of industrial labour and others.

Table 4.6: Occupational Distribution of the Population

State/District Name	Total Population (in million)	Total Worker	Main Worker	Marginal Worker	Non-Worker	Type of Main and Marginal Worker			
						Cultivator	Agri. Labour	Household Industry	Other Worker
West Bengal	91.27	38.08	28.14	9.94	61.92	14.72	27.90	7.09	48.87
Howrah	4.84	37.52	30.85	6.67	62.48	4.43	9.98	16.36	69.23
Murshidabad	7.10	36.46	28.46	7.99	63.54	14.71	32.52	17.99	34.77

Source: The Census of India 2011

N.B. All values are in percentage of total population

Table 4.7: District-wise Coverage of Elementary Education

District Name	Total Primary Schools			Total Enrollment (% of total enrollment)		
	Govt.	Private	Madrassa & Unrecognized	Govt.	Private	Madrassa & Unrecognized
Howrah	2458	506	42	318455 (82.81%)	60568 (15.75%)	5555 (1.14%)
Murshidabad	4896	452	131	766804 (87.62%)	74241 (8.48%)	34066 (3.89%)

Source: District Elementary Education Report Card: 2010-11.

< <http://www.dise.in/Downloads/Publications/Publications%202011-12/DRC%202011-12.pdf>>

It can be found from Table 4.7 that, in terms of the coverage of the elementary education (grade I to IV), Government sponsored primary schools are dominant in both the districts with respect to the number of schools as well as enrollment. Besides, there also exist a number of privately sponsored schools, religious schools (named Madrassa) in both the districts. The number of Madrasas and enrollment in these schools are much higher in Murshidabad compared to Howrah. This may be due to the fact that Madrasas are specifically designed for children from an Islamic origin and catering more to Murshidabad which is dominated by Islamic population. Table 4.7 also shows that, enrollment in private schools is almost double in Howrah (15.75%) compared to Murshidabad (8.48%); which may indicate the possibility of relative preference towards private schools in Howrah but also the possibility of lack of private schools in Murshidabad.

Table 4.8 provides available information on coverage of the ICDS project in two districts. The number of Anganwadi centres in Murshidabad is double the number in Howrah. The percentage of 0-6 years old children enrolled in SNP in Howrah is about 59% of the child population of the district and in Murshidabad is about 60% of the child population of the district. In terms of infrastructure, only about 27% of Anganwadi centres in Howrah and 22% of Anganwadi centres in Murshidabad reported having their own building.

Table 4.8: District-wise Coverage of ICDS Programme

District Name	Child Population (Btw. 0-6 yrs.)	Total Number of ICDS Projects	Total Number of Anganwadi Centers (operational)	Total Children Beneficiaries in SNP (0-6 Years)	Total Children Beneficiaries in PSE (3-6 Years)	Angan wadi Centre having own building
Howrah	522802	22	4052	307813 (59% of total children)	NA	1123
Murshidabad	1013392	27	8670	612629 (60% of total children)	285818	1935

NA: Data not available

Source:

District Magistrate of Howrah < <http://www.howrah.gov.in/collectorate/ICDS/ICDS.pdf> > accessed on 2nd November 2016.

District Magistrate of Murshidabad < <http://murshidabad.gov.in/Section/ICDS.aspx> > accessed on 2nd November 2016.

Other Anganwadi centres take place in primary schools, rented houses, community halls or club houses etc. In Murshidabad, 2456 number of Anganwadi centres is reported taking place in open space (source: Official website of Murshidabad District). Many Anganwadi centres across districts are also lacking other facilities, for example the information available from the Howrah district official website shows that, out of 4052 number of Anganwadi centres in the district, only 2008 number of centres are having toilet for children. This indicates to the fact that, in almost half of the Anganwadi centres in Howrah district there is no toilet for children.

4.3. Questionnaires and Interviews

At the beginning, the residing addresses of children were obtained from secondary data provided by selected primary school authorities. Then, households of those children were visited by field workers and requested to participate in the household survey. There was a complete consensus among all identified parents to participate in the survey and as a result, there was no unit non-response in this study and the final sample resulting in 1373 households. However, there were some item non-responses mainly due to absence of any of the parents in the household. All these non-responded items were

marked as missing¹⁴ during the data analysis. At the next level, the household survey was conducted by personal visit to each household and filling in a paper based questionnaire. Among the respondent, 11% were fathers, 84% were mothers and rest 5% were grandparents or other relatives with whom the child lives. This is so because visiting the household and interviews were conducted during day time, when most of the fathers were busy elsewhere due to their economic activities.

The field work has been conducted by a team of 29 field worker consists of 5 principal investigators and 24 field interviewers divided into two districts, all of whom were adequately trained beforehand on interviewing process, ethics, good practice; and made familiar with the questionnaire. The field work took place during winter 2014-15 (October 2014 to January 2015) for about 4 months. All these field workers were trained and several workshops were held to make them familiar with this particular study. The main responsibility of the field interviewers were to visit sample households and interview parents of those children selected for the sample based on the questionnaire provided. Whilst principal investigators oversee the entire field work in the region allocated to them by communicating with each of these field interviewers

¹⁴ During the field work, information related to father in 15 households and information related to mother in 3 households was missing because these persons had passed away and thus the family does not provide any information on them.

and providing them technical and logistics support whenever needed. The entire field work covering both the districts was closely monitored by the author himself for quality assurance.

The interviews of the parents were performed by the field interviewers and all information has been collected according to the “Household Survey Questionnaire”. Though the household survey questionnaire was primarily in English, a Bengali (which is the regional language in West Bengal) version of the questionnaire along with a detailed explanation was also available to the field interviewers. The interviews had two major components: quantitative and qualitative. While the main focus of the study is on quantitative approaches, the questionnaire contains some qualitative questions as well to discuss early childhood education related issues in some more details with parents to get the idea of their sentiments and the challenges they face concerning that. Many of the parents spoken beyond what the questionnaire asked and they were open to discuss their sentiments and what they think about child’s education. Some of the ironic statements made by parents are included in the study for a better understanding of the situation.

The household survey questionnaire consists of three different blocks: (1) Child Information, (2) House hold Information and (3) Information on ECE. The first block includes child information such as age, sex, general health

status of the child. To get an idea of the health of the child, parents were asked whether the child was seriously sick in last six months and how they consider the general health of the child in a scale of 1 to 5 (very poor to very good).

The second block contains information on family's socioeconomic status and family structure. To capture the economic standard of household, parents were asked about the monthly income and expenditure of the household. Other than these, the quality of the house they live and the type of ownership of the house they have were also collected. To assess the social status of the family, parents were asked about their marital status, highest educational level each of them achieved, and their occupational status. Then information on family demography such as total family size and the number of children in the family, gender variation of the family members, and whether grandparent(s) live with the family was also collected. Furthermore, information on ethnic background of the family including the caste origin and religious origin of the household was also collected.

The third block consists of information on the child's ECE experience and parents' opinion about ECE. At the beginning of this section, parents were asked about the approximate distance of the nearest preschool they have, and whether the child attended any preschool. For those families where the child attended any preschool, several items were also asked pertaining to this period. For

example, at what age they started preschool, what type of preschool (public or private), daily hours of operation in that preschool, daily hours the child spent in that preschool, financial cost associated to that preschool. Parents were also asked whether the timing of the preschool was suitable for them and whether they liked or disliked the services provided in that preschool etc. parents were also requested to mention some of the key components they liked or disliked about the preschool.

One crucial component of the third block of the questionnaire was open ended questions to parents to open a discussion about their opinion on ECE. For that reason, both types of parents including those who did and did not send their children to preschool were furthermore asked the reasons for their decision. And the reasons forwarded by them to explain their decisions were noted. It has been found that, reasons forwarded by different individual families differ but also coincide in many cases. When parents were allowed to express their opinion, open discussion took place where many parents conveyed their feelings and emotions related to children and their upbringings. These discussions were helpful in understanding and explaining the sentiments associated with parental decisions.

4.4. The Data

Out of the 1373 households, 906 households reported sending their children to any preschool whereas 467 households never sent their children to any preschool. Table 4.9 gives a glimpse of the sample, in which 66 percent of the children attended any preschool before getting enrolled in primary school. The sectoral composition shows that about 94 percent of all parents interviewed in Howrah district reported sending their children to preschool, whereas in Murshidabad district it was only about 51 percent.

Table 4.9: District-wise Distribution of Preschool Attendance

Name of District	Number of Children Attended Preschool (Percentage in parenthesis)		
	No	Yes	Total
Howrah	30 (6%)	443 (94%)	473
Murshidabad	437 (49%)	463 (51%)	900
Total	467 (34%)	906 (66%)	1373

Source: Authors calculation from primary data

Also, it can be found from Table 4.10 that, out of 906 children who attended any form of preschool, almost 70 percent attended public preschool i.e. Anganwadi centres and rest attended private preschool.

Table 4.10: Preschool-wise Distribution of Sample

Name of District	Type of Preschool Attended		
	Public Preschool	Private Preschool	Total
Howrah	313 (70%)	130 (30%)	443 (100%)
Murshidabad	333 (72%)	130 (28%)	463 (100%)
Total	646 (70%)	260 (30%)	906

Source: Authors calculation from primary data

Although the previous table shows a higher percentage of preschool attendance by children from Howrah compared to Murshidabad, the distribution pattern between public and private preschools is quite similar across districts. In both the districts, the majority of children in the sample (about 70%) attended Anganwadi centres.

4.5. Regression Strategy

4.5.1 The decision of preschool or no-preschool

The purpose of this analysis is to identify the key determinants of demand for preschool. In other words, to identify factors those influence parental decision of sending or not sending their children to a preschool. Here demand for preschool has been captured by whether or not a household has sent their child to any preschool. Thus

whether a child in the sample has attended any preschool indicates the parental demand for ECE. Therefore, the dependent variable, in this case, is preschool attendance which is a categorical variable denoted as P_i , which takes the value 1 if the i th child in the sample attended any preschool or 0 otherwise. The impact of the change in several households, child and provider characteristics on the probability of attending a preschool is estimated by a binary response model assuming a standard normal distribution of the response variable P_i and it is written as:

$$P_i = \alpha + \beta_1 SES_i + \beta_2 H_i + \beta_3 L_i + \beta_4 D_i + \beta_5 ATT_i + \epsilon_i \dots (i)$$

The exploratory analysis begins with the basic model investigating the impact of the socio-economic status of parents' on preschool attendance, where all other household characteristics were controlled for. Here SES_i represents the socio-economic status of the i^{th} household in the sample. Drawing from the elements of literature on educational decisions and educational inequalities, and also keeping in mind the Indian context, socioeconomic status consists of two main components: economic status and social status of parents. To capture the economic status of the household, a number of variables are used. Monthly household income is included as indicators of the economic status of the household. House type such as 'concrete', 'semi-concrete' and 'non-concrete', and ownership of house such as 'owned house' or 'rented house' is also used as controls to assess economic

condition. Furthermore, highest education levels achieved by parents and their occupational status were included as an indicator for their social status.

Other than this, several controls relating to household and child characteristics have been introduced to the model. The set of control variables representing the household and child characteristics have been denoted by the vector H_i . To characterize the households by social group and religion, dummies for caste and religion have been used. The categorical variable for caste is coded into Lower caste [Scheduled Castes (S.C), Scheduled Tribes (S.T.) and Other Backward Caste (OBC)] and Upper castes (which is the General caste taken as reference). Since the two main religions of the survey region are Hindu and Muslims, and the sample consist of a marginal proportion of households belonging to any other religion, the religion dummy is divided into two categories, namely, "Hindu" (the major religious group in the Indian population; taken as the reference category) and "Muslim" (the largest group among religious minorities). Apart from these controls, demographic variables like number of members of the household, sex of the child, the number of siblings are used. Furthermore, to control for location fixed effects, district wise and rural-urban wise fixed effects are also included in this study, which are symbolized by the vector L_i . At the next level, the variable for parent's attitude towards ECE is introduced in the estimation which is

denoted by the variable ATT_i . This dichotomous variable captures whether parent(s) considers ECE as important for their children. Finally, to incorporate the supply side variation in the model, the variable 'distance of the nearest preschool from the residence' denoted as D_i has been included in the estimation. This exogenous variable D_i will help to minimize the chances of multicollinearity in the model, whereas, all other supply side variations mentioned by parents are at their own observations which could be influenced by their socio-economic status. Furthermore, existing public preschools (Anganwadi centres) are expected to deliver same services (both in terms of quantity and quality) since they follow the same norms and regulations prescribed by the State. As each of these preschools received the same budgetary allocation, and the curriculum and methods should also be same because they are supposed to follow the same guideline provided by the Government of India. Therefore, in principal, these preschools are not supposed to vary with respect to supply other than their distance from households.

The purpose of stepwise estimation of the model was to check the robustness of the model and it also highlights for any collinearity among variables. Furthermore, this also helps to understand the variation in the impact of different types of factors not only on the dependent variable but also possible association among independent variables. The estimation has been conducted using logistic regression in

STATA 13; and the findings are presented in the next chapter.

4.5.2 The decision of public preschool or private preschool

Since the main objective of this section is to identify the determinants behind the choices of a type of preschool, the outcome variable is the type of preschool that the child has attended. There were mainly two types of preschools available: public preschools which are known as Anganwadi centre and private preschools. Attending private preschool has been categorized by '1' and public preschool by '0'.

As the choice of a type of preschool is conditioned only on demand basis, therefore preschool choice can only be observed for those households who have decided to send their children to preschool. Taking just the "type of preschool" choices implies dealing with a selected sample (906 households which have sent their children to preschool) of random households that in turn may lead to the classic case of "sample selection bias" (Heckman, 1979). Families may decide not to send their children to any preschool if they find that the available alternatives are not suitable for them. Typically this type of incidence goes unobserved if only the households where children attended preschool are selected. Hence using logistic regression estimation considering only those households which

decided to send their children to a preschool can lead to a biased estimation. Therefore, this study follows a bivariate probit model with sample selection correction by Heckman methods (Van de Ven and Van Pragg 1981). This involves two steps. First, estimate the selection equation, and second, the outcome equation.

a) Selection Equation: This is a probit regression (binary dependent variable taking a value of '1' if the household had sent their child to any preschool and '0' otherwise) to explain the demand for ECE.

b) Outcome equation: This is also a probit regression to explain the choice of a particular type of preschool by the household, observed only for those who demanded ECE.

In terms of econometrics model, the Selection equation or the probit model to estimate the probability of households to demand ECE can be explained in terms of the following relationship:

$$y_i^{\text{attended_preschool}} = z_i\gamma + u_{2i} \dots \dots \dots \text{(Selection Eqn.)}$$

$$y_i^{\text{preschool_type}} = x_i\beta + u_{1i} \dots \dots \dots \text{(Outcome Eqn.)}$$

Where $u_1 \sim N(0,1)$ and $u_2 \sim N(0,1)$ and $\text{corr}(u_1 u_2) = \rho$

We observe only the binary outcome $y_i^{\text{preschool_type}}$ if $y_i^{\text{went_preschool}} = 1$ or $z_i\gamma + u_{2i} > 0$ (Wooldridge, 2006, page 618-620). In the outcome equation, X_i is the vector of independent variables for household i affecting its

probability of choosing a type of preschool, β is the vector of coefficients of independent variables and U_{1i} are the error terms. In the selection equation, Z_i is the vector of independent variables affecting the probability of sending children to preschool of the i^{th} household, γ is the vector of coefficients of independent variables and u_{2i} are the error terms. $N(0, 1)$ represents the standard normal distribution of the error terms. When $\rho \neq 0$, standard probit estimations using only the outcome equation, taking only the households who have sent their children to preschool, would yield biased and inconsistent estimates. Hence, bivariate probit regression with sample selection is applied, following the two steps Heckit method. In the first stage, we estimate a probit model of $y_i^{\text{went_preschool}}$ on z_i and obtain the estimate $\hat{\gamma}$. Then compute the Inverse Mills Ratio (imr) $\hat{\alpha}_i = \alpha(z_i \hat{\gamma}) = \varphi(z_i \hat{\gamma}) / \Phi(z_i \hat{\gamma})$ [it is the ratio between the standard normal pdf and the standard normal cdf] for those with $y_i^{\text{went_preschool}} = 1$.

In the second step using the selected sample, i.e. observations with sample $y_i^{\text{Went_preschool}} = 1$, $y_i^{\text{Preschool_type}}$ is regressed on z_i , $\hat{\alpha}_i$. This procedure will give an estimator \hat{b} , which is consistent and approximately normally distributed. The usual t test was followed, to test the selection bias, on the coefficient on 'imr' i.e. coefficient on $\hat{\alpha}$ as a test of $H_0 = \rho = 0$. In the result section both the results with and without sample selection correction are reported, where results without

sample selection correction are the estimates without incorporating 'imr' as one of the covariates.

One of the important assumptions of this two steps sample selection model is that x is a strict subset of z . This implies that all regressor used in the second step needs to be included as explanatory variables in the first step and we should have at least one variable in z that is excluded from the second stage regression (Wooldridge 2006; 618-620). As required in these two step models, at least one of the independent variables used for estimating the selection equation has to be excluded while estimating the outcome equation. Otherwise, the model is identified by the functional form and the coefficients have no structural interpretations (Cameron & Trivedi, 2009). The exclusion restriction demands at least one such variable, which influences household's decisions of sending or not sending children to preschool, but would not influence the choice of a particular type of preschool. The exclusion restriction demands at least one such variable, which influences household to demand ECE, but would not influence the probability of those households to choose a type of preschool. In this case, the exclusion variable chosen is 'parents' attitude' that explains whether parents consider ECE as important for their children or not. The argument¹⁵

¹⁵ It has been empirically tested in this study that, parents' attitude towards ECE has a significant effect on preschool attendance but no such effect on choice of a type of preschool (refer to Appendix 2).

behind this is that, whether parents consider EEC as important for their children is decisive for their decision of whether they send their children to any preschool, but not for their choice of a type of preschool. Because if they decide to send their children to a preschool then the choice of a type of preschool depends on their capabilities or what they can afford and also the availability of different types of preschools. For example, considering a parent who is highly motivated towards ECE and eventually wishes to send the child to a private preschool, the important factor is that there needs to be a private preschool available within reachable distance and parents need to be able to afford all costs. Now, if they cannot afford the expense then eventually they may send the child to the Anganwadi centre. Therefore, for the second decision of what type of preschool the child will attend, it is more important to consider other factors like income and supply side variations. Although, there is another possibility that, parents will not at all send the child to any preschool because they cannot get what they wish for their children. Positive parental attitude towards ECE may not necessarily reflect the choice of a private preschool. Therefore, the choice of a type of preschool is more dependent on factors like income other than parents' attitude. Simple probit regression has been used to estimate the probability of choosing a type of preschool (after demanding for ECE) on the 'parental attitude towards ECE' and the coefficient of that is statistically insignificant. But 'parental attitude

towards ECE' is statistically highly significant in selection equation i.e. in demanding ECE. This suggests that the exclusion variable chosen in this analysis affects demand for ECE or whether the child attends a preschool, but does not affect the type of preschool attended.

The set of independent variables and control variables have been introduced in the analysis are similar to the previous analysis, other than the parental attitude towards ECE. These include socio-economic, demographic characteristics of the households, child characteristics, location fixed effects and supply side features. The economic condition of the household is indicated by monthly household income, house type and ownership of the house. The highest education level achieved by parents, their occupational status was included as an indicator for their social status. Controls for ethnic origin of the household such as religion and caste have been introduced. Apart from these, demographic variables like the number of members of the household, the number of siblings, and sex of the child are used. To control for the location fixed effects, district wise and rural-urban wise fixed effects are included. The dummy 'distance of the nearest preschool from residence' has been introduced to capture the supply side variation. Findings from the exploratory and confirmatory data analysis have been presented in the next chapter.

Chapter 5: Findings of the Study

This chapter presents the findings from both exploratory and confirmatory data analysis. Following the previous discussions on two debates i.e. preschool or no preschool and private or public preschool, this chapter is divided into two consecutive sections. The first section will deal with children's attendance (or not attendance) of any preschool (the type of preschool is not considered here). And the second section will then deal with children's attendance of a type of preschool e.g. public or private. This is so because parents who wish to send their children to a preschool might have a desire to choose the best option for them but in many cases, due to economic and social barriers they often are not able to do so. Therefore, this study incorporates two types of differences in preschool decisions i.e. whether to choose a preschool and if yes, then which type of preschool?

5.1. Findings on Preschool or No-Preschool Debate

As already mentioned, this section investigates the plausible determinants behind preschool attendance. In other words, what are the factors that affect

the parental decision of sending (or not sending) their children to a preschool or alternatively factors responsible for preschool attendance or non-attendance?

5.1.1 Descriptive data analysis

Firstly, an attempt has been made to predict the pattern of this decision based on the descriptive statistics and then having a multivariate analysis to find the causal relation. Table 5.1 shows the variation in income and expenditure between households based on preschool attendance. A significant difference with respect to the monthly household income can be noticed between two groups of families. Parents whose children had attended any preschool have considerably higher monthly income compared to the parents whose children had not attended any preschool. Similar pattern can be seen in case of monthly household expenditure as well, and these differences are statistically significant.

Also, differences in preschool decision with respect to other indicators such as type of housing and ownership of housing, which are also used to assess economic condition of the households, have been presented in table 5.2.

Table 5.1: Economic Status and Preschool Attendance

Variable Name	Definition	Values	Preschool Attended- No		Preschool Attended- Yes		t-statistics
			Mean	Std. Dev.	Mean	Std. Dev.	
Monthly Household Income	Gross monthly income of the household	In Indian Rupee.	4809.20	2592.52	6802.64	4726.02	t(1365)=-10.09***
Monthly Household Expenditure	Gross monthly expenditure of the household	In Indian Rupee.	4217.34	2152.28	5629.47	3541.27	t(1335)=-9.16***

Source: Author's calculation based on primary data.

*p<0.05, **p<0.01, ***p<0.001.

Table 5.2: Housing Pattern and Preschool Attendance

Variable Name	Definition	Values	Preschool Attended- No	Preschool Attended- Yes	Pearson χ^2
			Number of Households	Number of Households	
House Type	Type of housing household have	1= Concrete	113 (21.16)	421 (78.84)	Chi2 (2)=86.63***
		2=semi-concrete	141 (34.31)	270 (65.69)	
		3=non-concrete	213 (49.77)	215 (50.23)	
House Ownership	Ownership of the house that the family residing	1= Owned	424 (33.23)	852 (66.77)	Chi2(1)=4.94*
		2= Rented	43 (44.33)	54 (55.67)	

Source: Author's calculation based on primary data.
 Row percentage in parenthesis. *p<0.05, **p<0.01, ***p<0.001.

Among those living in concrete house, around 79 percent sent their children to a preschool compared to only 21 percent who did not send. Similar pattern can also be found for families living semi-concrete house. However, there was no variation for families living in non-concrete houses. Besides, majority of the households had ownership of their house and a few also lived in rented house. Parents living in own housing have higher percentage of sending their children to a preschool compared to the parents living in rented house. Among those own their house, about 67 percent sent their children to preschool compared to about 33 percent who did not. Whereas the same for families living in rented house is about 55 percent and 44 percent respectively.

Now, descriptive statistics of the social status of households are presented in table 5.3. With respect to parents' level of education, there is significant difference in preschool attendance in different educational levels. The higher the level of education of the parents, the greater is the percentage of child attended preschool compared to those not attended in that group. Whereas, half of the sample parents with primary education sent their children to preschool, the same is 68 percent for parents with secondary education and 92 percent for parents with education level higher secondary or above. Also among father with a regular job, 77 percent sent their children to preschool compared to only 23 percent who did not.

Alternatively, among those with temporary job, about 48 percent sent their children to preschool compared to about 52 percent who did not. No significant difference has been found with respect to mothers' occupational pattern and children's preschool attendance. Moreover, parents who consider the importance of ECE for their children have a considerably higher percentage of sending their children to a preschool. The table also shows that among parents who consider ECE as importance, about 84 percent had sent their children to any preschool, where the percentage was only 7 percent for parents who did not consider ECE important for their children.

Significant differences are observed with respect to ethnicity and residing areas. Among children from Islamic and other minority communities, percentage of children attended preschool was about 73 percent, and the same was about 64 percent among Hindu children. There was also significant variation in preschool attendance based on ethnic caste. About 55 percent of all backward caste children attended preschool, whereas percentage of children attended preschool was about 71 percent of general caste children. With respect to the residing area i.e. rural or urban, those who live in the urban areas have higher percentage (79%) of sending their children to preschool. Also, comparing the district-wise preschool attendance, almost all the parents (94%) from Howrah district sent their children to preschool, whereas only about half of the children (51%) from Murshidabad district attended any preschool.

Table 5.3: Social Status and Preschool Attendance

Variable Name	Definition	Values	Preschool Attended- No	Preschool Attended- Yes	Pearson χ^2
			Number of Households	Number of Households	
Parent Edu	Highest education level achieved by either of the parents	1= up to primary	240 (49.79)	242 (50.21)	Chi2(2)=126.25***
		2= up to secondary	208 (31.80)	446 (68.20)	
		3=higher secondary or above.	19 (8.02)	218 (91.98)	
Father job	Occupational status of the father	1=Regular	191 (22.60)	654 (77.40)	Chi2(1)=126.83***
		2= casual or no job.	269 (52.44)	244 (47.56)	
Mother Job	Occupational status of the mother	1=Regular	20 (28.99)	49 (71.01)	Chi2(1)=0.79
		2= casual or no job.	445 (34.20)	856 (65.80)	

Table 5.3 Contd.

Parents' Attitude	Whether parent consider ECE as important for their children	1=Yes	164 (15.66)	883 (84.34)	Chi2(1)=661.50***
		2=No or indifferent	303 (92.94)	23 (7.06)	
Religion	Religious origin of the household	1= Hindu	383 (35.93)	683 (64.07)	Chi2(1)=7.79**
		2=Islam and others.	84 (27.36)	223 (72.64)	
Caste	Caste origin of the household	1=Backward casts (S.C, S.T. & OBC together)	180 (45.00)	220 (55.00)	Chi2(1)=30.35***
		2=General Caste.	287 (29.50)	686 (70.50)	
Address	Residing location of the household	1=rural	394 (38.51)	629 (61.49)	Chi2(1)=36.22***
		2=urban.	73 (20.86)	277 (79.14)	
District	Residing district of the household	1=Howrah	30 (6.34)	443 (93.66)	Chi2(1)=246.16***
		2=Murshida bad.	437 (48.56)	463 (51.44)	

Source: Author's calculation based on primary data.

Row percentage in parenthesis. *p<0.05, **p<0.01, ***p<0.001.

Therefore, the incidence of not attending any preschool seems to be more relevant for rural areas and in socio-economically backward districts like Murshidabad.

Now, comparing the family structure and variation in preschool attendance among households, it can be found from table 5.4 that, although there is no significant difference in preschool attendance based on the family size; however, there exist significant variation abed on the number of siblings the child has.

Table 5.4: Family Demography and Preschool Attendance

Variable Name	Definition	Values	Preschool Attended- No		Preschool Attended- Yes		t-statistics
			Mean	Std. Dev.	Mean	Std. Dev.	
Family Members	Total number of family members.	Number of persons	4.53	1.48	4.46	1.46	t(933)=0.74
Siblings	Number of siblings the child have.	Number of persons	0.86	0.81	0.69	0.72	t(851)=3.97***

Source: Author's calculation based on primary data.

*p<0.05, **p<0.01, ***p<0.001.

Also, there is significant variation in preschool attendance based on the distance of the preschool from residence. Table 5.5 shows that, 70 percent of those reported having a preschool within 500 meters of their residence had sent their children to preschool. While the percentage of preschool attendance was 63 percent for those reported having preschool at a distance more than 500 meter from their residence.

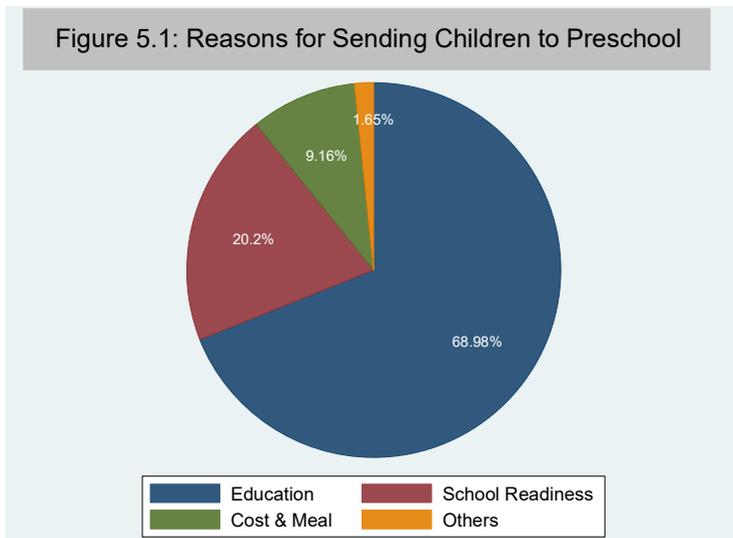
Table 5.5: Supply Side Variation and Preschool Attendance

Variable Name	Definition	Values	Preschool Attended- No	Preschool Attended- Yes	Pearson χ^2
			Number of Households	Number of Households	
Distance	Distance of the nearest preschool from residence	1=within 500 meter	166 (29.80)	391 (70.20)	Chi2(1)=7.40**
		2=more than 500 meter	301 (36.89)	515 (63.11)	

Source: Author's calculation based on primary data.

Row percentage in parenthesis. *p<0.05, **p<0.01, ***p<0.001.

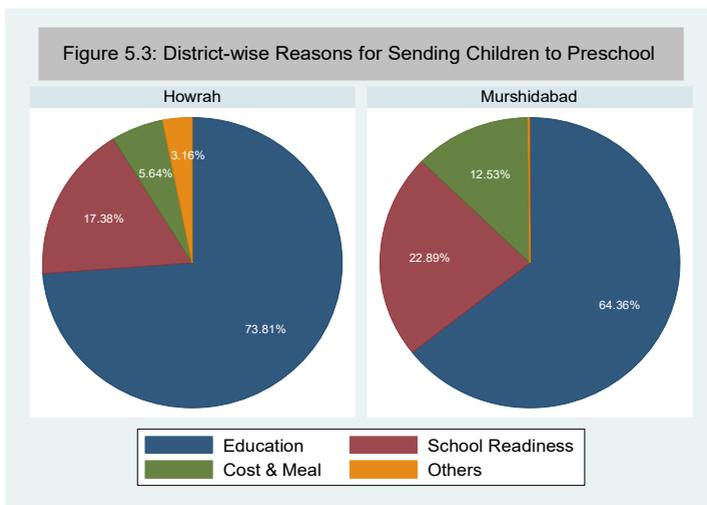
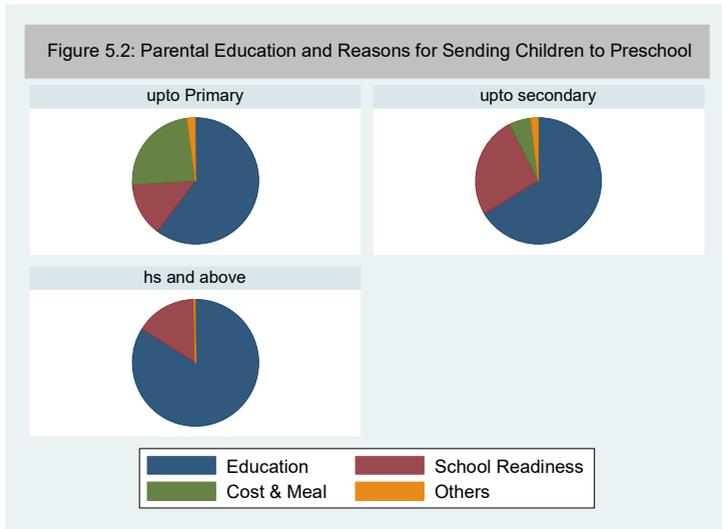
Parents were also asked about the reasons behind their decision for sending or not sending their children to preschool. The reasons¹⁶ provided by parents were then classified into four broad sub-categories: ‘early education’, ‘school readiness’, ‘cost and meal’, and ‘all others’. Figure 5.1 shows that, about 89% of parents sent their children to preschool for early education or school readiness. However, some parents indicated sending their children for free meals and other material benefits of the preschool.



As revealed in Figure 5.2, parents with a higher level of education emphasize more on education and school readiness whereas parents with less education emphasize

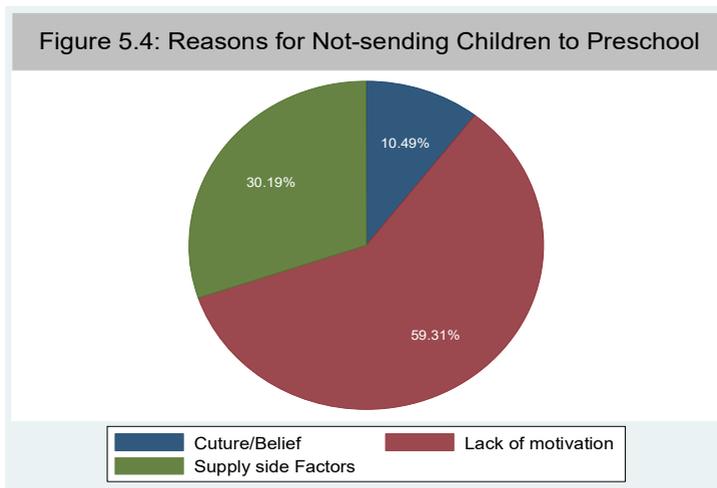
¹⁶ Details of these reasons can be found in the codebook in Annexure 3.

more factors like cost-less facilities and availability of free meal etc.



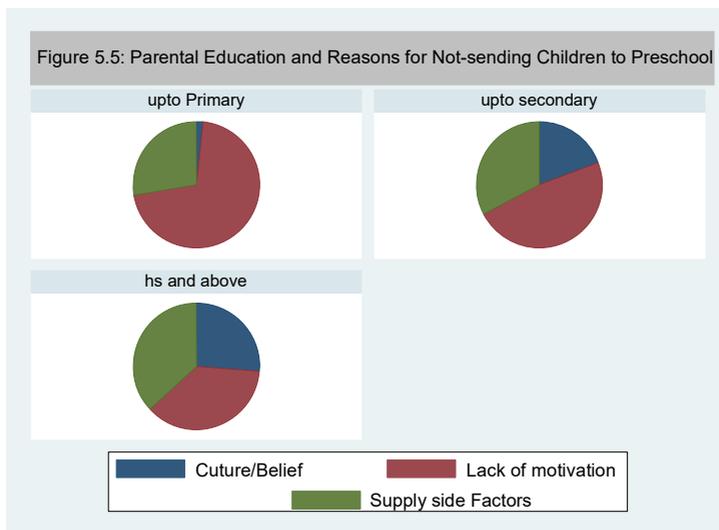
There was a difference in pattern of reasoning by the parents between the two districts. As indicated in Figure 5.3, although the main reason behind preschool attendance was school readiness and early education in both the districts, but the percentage of parents sending their children to preschool for the reason of 'cost and meal' were higher in Murshidabad compared to Howrah.

Similarly, those parents who did not send their children to any preschool were asked the reason behind their decision, and the reasons¹⁷ mentioned by them were classified into three sub-categories namely: culture/belief, lack of parents' motivation, and supply side factors.



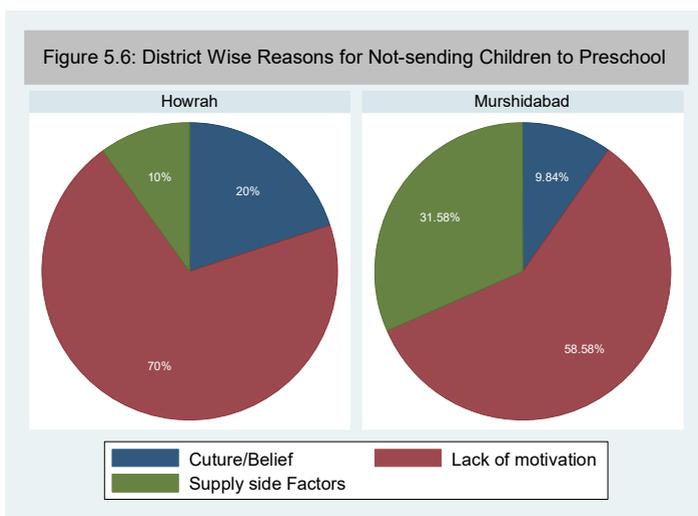
¹⁷Details of these reasons can be found in the codebook in Annexure 3.

The lack of parental motivation, as shown in Figure 5.4, is a major reason behind preschool non-attendance. As indicated in Figure 5.5, lack of parental motivation is more evident amongst parents with the lower level of education compared to higher educated parents.



Moreover, a considerable percentage (about 30%) of parents mentioned insufficient supply or poor quality of available preschools as the reason for not sending children to any preschool. The major complaints were far-off location of preschool associated with nobody to take the child there, poor quality of service provided and high cost (the last reason gives the impression of response from parents who desired to send their child to private preschool but were not able due to financial capabilities). Many of the

parents complained about the quality of food and services provided in Anganwadi centres and district wise comparison of these reasons in Figure 5.6 shows that, preschool non-attendance due to factors related to the supply side was higher in Murshidabad district compared to Howrah district.



It is evident from the figures above that, parents' motivation towards ECE and the subjective values they attach towards it may vary considerably depending on their level of education. This finding is in line with the theoretical argument which says about possible association between parental subjective values and their socioeconomic status. As explained during the discussion of the decision mechanism in section 3.5 of chapter 3, there is possibility of association between the emotional or subjective variables

and primary variables such as parents' socioeconomic status etc. Based on the theoretical discussion, parental attitude or motivation towards ECE has been included in the study as a proxy for the subjective values they attach to early education.

The association between parental attitude towards ECE and their educational and occupational status is provided in Table 5.6. It can be seen from table 5.6 that, there is a significant variation between parents' attitude and their level of education; and more the level of education of parents higher the percentage of parents considering ECE as important for their children. Similarly, there also exists significant difference in attitude based on father's occupational status. However, the association between mother's occupational status and attitude towards ECE is not significant.

Table 5.6: Parents' Motivation and Their Socioeconomic Status

Variable Name	Definition	Values	Parents Attitude towards ECE: ECE good for Children		Pearson χ^2
			Yes	No	
Parents' Education	Highest education level achieved by either of the parents	1= up to primary	287 (59.54)	195 (40.46)	Chi2(2)=132.63***
		2= up to secondary	534 (81.65)	120 (18.35)	
		3=higher secondary or above.	226 (95.36)	11 (4.64)	
Father job	Occupational status of the father	1=Regular	720 (85.21)	125 (14.79)	Chi2(1)=95.54***
		2= casual or no job.	318 (61.99)	195 (38.01)	
Mother Job	Occupational status of the mother	1=Regular	52 (75.36)	17 (24.64)	Chi2(1)=0.84
		2= casual or no job.	994 (76.40)	307 (23.60)	

Source: Author's calculation based on primary data.
 Row percentage in parenthesis. *p<0.05, **p<0.01, ***p<0.001.

The descriptive analysis indicates towards an association between preschool attendance and socioeconomic status of the households. Also, parental attitude towards ECE seems to be another key factor behind preschool attendance and whether parents consider the importance of the ECE for their children may have an impact on preschool attendance of their children. Besides, the analysis also suggests a likely association between parental attitude and their socioeconomic status. Moreover, as acknowledged from parent's response, the availability and quality of preschools and its regional disparity may play an important role in preschool attendance. These associations are examined at the next level using regression analysis.

5.1.2 Regression analysis

The multivariate data analysis is conducted in this section following the regression strategy that has been described in section 4.5.1. Considering the hypotheses, the estimations are carried out in three steps: first estimating only the impact of SES and household characteristics on preschool attendance (or preschool decision), second introducing parental attitude towards ECE to observe the influence of these variables on preschool attendance and third, introducing the supply side factor in the model to see if it has any impact on preschool decisions. Advantage of introducing parental attitude for ECE separately in the model is that, it will help

understanding the possible mechanism that has been explained in previous chapter and will also help in identifying the possible correlation between parental attitude and their socioeconomic characteristics. Three columns of coefficients in Table 5.6 represent three different models which are estimated using probit regression¹⁸. All the coefficients in table 5.6 represent marginal effect of the probit regression.

In table 5.7, Model 1 represents the estimation of SES on the probability of preschool attendance. It shows that, families with higher monthly income are significantly more likely to send their children to a preschool. However, type of housing and its ownership have no statistically significant effect on the probability of preschool attendance. Furthermore, parents with secondary and higher secondary and above education are significantly more likely to send their children to a preschool compared to parents with only up to the primary education. Therefore, parents' level of education seems to have an important influence on preschool decision. Besides, father's employment status has a significant impact on preschool attendance and children in a family where the

¹⁸ Same models are also estimated using logistic regression and the odd ratios are presented in appendix 1 for a comparative analysis and better understanding of the findings based on two type of regression analysis.

father has a regular employment are in general more likely to attend preschool compared to children whose father have temporary or casual employment. However, mothers' employment has no significant here which may because male members of the family are the primary bread winners in this patriarchal society. Therefore, model 1 suggests that family's socio-economic status plays an important role in their preschool decision.

Among other household characteristics presented in Model 1, religious origin has played a significant role in preschool attendance; children from the minority religion were significantly more likely to attend preschool compared to the children from the Hindu religion. This is an interesting finding and differs from the hypothesis of the study and also from other studies (e.g. Asadullah et al. 2009; Desai & Thorat 2013).

There could have two possible explanations for this finding based on this analysis: First, households from minority religion were found to have a lower level of income¹⁹ in general and have a greater number²⁰ of children, compared to households from Hindu religion.

¹⁹ There exists a significant difference in household income with respect to the religious origin of the household:
 $t(423) = -10.19, p < 0.001$.

²⁰ There also has a significant difference in the number of children in the household between the household with different religious origin. Households with Islamic origin have on an average more child: $t(721) = 3.94, p < 0.001$.

Table 5.7: Findings from the Multivariate Analysis

(Base Outcome: Preschool non-attendance)	Model 1	Model 2	Model 3
Log(Household Income)	0.062* (0.030)	0.024 (0.023)	0.020 (0.023)
House Type (Ref: Kucha House)			
Pucca (Concrete)	0.039 (0.034)	-0.018 (0.025)	-0.015 (0.025)
Semi Pucca (Semi Concrete)	0.024 (0.028)	-0.014 (0.022)	-0.015 (0.022)
Hose Ownership (Ref: Rented)			
Owned House	0.055 (0.045)	-0.012 (0.035)	-0.018 (0.034)
Parents' Level of Education (Ref: up to Primary)			
Secondary	0.062* (0.028)	-0.008 (0.022)	-0.007 (0.022)
HS and above	0.194*** (0.044)	0.081* (0.034)	0.084* (0.034)
Fathers' Employment Status (Ref: Casual Job)			
Regular Job	0.067* (0.027)	0.022 (0.020)	0.021 (0.020)
Mothers' Employment Status (Ref: Casual Job)			
Regular job	-0.089 (0.058)	-0.023 (0.049)	-0.027 (0.049)

Table 5.7 Contd

Religious Origin (Ref: Hindu)				
	Islam and others	0.175*** (0.028)	0.092*** (0.023)	0.089*** (0.023)
Caste Origin-Backward Caste (Ref: General Caste)				
	Backward castes (S.C., S.T., OBC)	-0.023 (0.027)	-0.003 (0.021)	-0.005 (0.021)
Sex of the Child-Female				
		0.026 (0.022)	0.022 (0.018)	0.022 (0.017)
Number of Family Members				
		-0.008 (0.010)	-0.003 (0.007)	-0.003 (0.007)
Number of Siblings				
		0.006 (0.019)	0.009 (0.015)	0.011 (0.015)
Residing Location (Ref: Urban)				
	Rural	-0.011 (0.033)	-0.002 (0.025)	0.001 (0.025)
Residing District (Ref: Howrah)				
	Murshidabad	-0.347*** (0.028)	-0.220*** (0.028)	-0.220*** (0.028)
Parents' Attitude towards ECE (Ref: Negative or indifferent)				
	Positive Attitude	--	0.645*** (0.031)	0.643*** (0.031)
Distance of the nearest Preschool (Ref: within 500 m.)				
	More than 500 m.	--		-0.047** (0.018)
N		1355	1355	1355
Pseudo R ²		0.233	0.475	0.479
N.B. Coefficients represents marginal effects after probit regression. Standard Error in parenthesis. *p<0.05, **p<0.01, ***p<0.001.				

This means lower per capita expenditure for children and, therefore, greater need for free services such as meal etc. It has also been found that these parents were significantly more likely to send their children to Anganwadi centres²¹ as 82 percent of sample parents from Murshidabad district reported sending their children to public preschools.

Therefore, the greater preschool attendance by children from minority religious community may be due to the fact of having free meals and care for children in preschool. Second, these parents were found to be more motivated²² to provide better education to their children compared to Hindu parents. Therefore, the higher preschool attendance could be related to motivation of parents in providing a strong foundation for their children so that they can “catch up” with others in formal schooling. However, this finding is significant only for Murshidabad district, which is dominated by Muslim population²³. Only children from the minority background in Murshidabad has about 14 percent more probability of attending preschool compared to

²¹ There was a significant difference between the type of preschool chosen by parents and their religious origin. Parents from minority community usually choose public preschool: $t(448.76)=4.33$, $p<0.001$.

²² There exists a significant difference in parental attitude towards ECE with respect to the religious origin of the household: $t(536)= 2.23$, $p<0.01$.

²³ According to the Census 2001, about 64 percent of the total population of Murshidabad belongs to the Islamic religion, whereas the same for Howrah is only about 20 percent. Also, in the sample, 4% of households in Howrah were from Minority religion and the same for Murshidabad was 32%.

Hindu children (refer to Appendix 3). Besides, family structure such as the number of family members and children has no significant impact on preschool attendance. Also, there was neither any caste based discrimination²⁴ nor any gender biasedness against girls.

Looking at the variation based on residing area, the regression analysis provides that, whether the family is residing in a rural area or urban area does not make any significant difference for the preschool attendance. However, residing district has a major impact on preschool attendance even after controlling for socioeconomic background of parents. Children from Murshidabad district were significantly less likely to attend a preschool compared to a child from Howrah district. This implies that, there may have some unobserved factors in the model which have significant effect on the probability of preschool attendance between districts. Therefore, other than the differences in the socioeconomic status of parents between two districts, there are variations with respect to some other factors between districts that are bringing significant variation in preschool attendance. Now, recalling the qualitative analysis in the earlier section, supply side issues were cited as the reason for preschool non-attendance relatively more frequently by the parents in Murshidabad

²⁴ Similar claim has been made in FOCUS 2006 that, there was no caste based discrimination witnessed in the access of ICDS. As claimed by the study “the Anganwadi is a site of relative social equality” (FOCUS 2006; 54).

district. To further observe the district wise variations, the probit model was separately estimated for each of the districts (refer to Appendix 3), and empirical evidence from the regression analysis shows that the coefficient for the variable called 'distance of preschool from residence' is negative and statistically significant for Murshidabad district whereas it was negative but not statistically significant for Howrah district. This finding indicates towards a relative shortage of availability of preschools in Murshidabad district and complies the findings showed in figure 5.6 where parents cited lack of availability or quality of preschools as a major reason for not sending children to a preschool. Therefore, it can be inferred that, supply side issues are relatively more severe in less-developed district and that is another reason for having relatively lower preschool attendance in this district and having regional variation in preschool attendance across districts. However, the possibility of having some other unobserved variables from parent's side which may also cause regional variation cannot be ruled out.

Also, there was variation between districts with respect to religion. Religious origin of children was found to play an important role in the preschool decision in Murshidabad district but not in Howrah district.

Now looking at Model 2, where parents' attitude towards ECE is included in the model, results differ considerably compared to Model 1. Socioeconomic status is no more an

important predictor for preschool attendance, and all the variables representing parent's socioeconomic status such as household income, parents' level of education (only except parents' education 'HS and above'), their occupational pattern have no statistically significant effect on preschool attendance any more after controlling for parents' attitude. Besides, the coefficient for attitude towards ECE is positive and statistically significant which reveals that, parents who considered ECE as important for their children were in general more likely to send their children to a preschool compared to the parents who either did not consider ECE as important or were indifferent. This indicates towards the association between socioeconomic status and parental attitude, and the impact of the SES on preschool attendance may have reflected by parental attitude. This could be the reason for socioeconomic status being not significant any more after controlling for parental attitude. Thus, variation in SES may have caused differential parental attitude towards ECE and that in turn generates differences in preschool decisions. This incidence is further examined at the next level by estimating the impact of SES on parental motivation. Also, by comparing the pseudo R2 of the first two estimations, it can be seen that the explainability of the model has considerably increased after introducing parents' attitude in the model. The effect of religious origin and residing districts remain similar across Model 1 and Model 2. Furthermore, Model 3 represents the estimation after

controlling for supply side variation in the form of distance of preschool from the residence. It indicates that the availability of preschools has played an important role in preschool attendance. Those reported not having a preschool within their neighborhood (i.e. approx. within 500 meters of residence) were significantly less likely to send their children to a preschool.

It is evident from table 5.6 that, parental attitude towards ECE plays an important role in preschool attendance, and there is a possible of association between parental attitude and their socioeconomic status. However, the magnitude of the effect of parental attitude on preschool attendance varies across districts and relatively stronger effects can be found for the less developed district Murshidabad (refer to Appendix 3).

The descriptive statistics already indicate towards the association between parents' level of education and their attitude towards ECE; and the same can be derived from the regression analysis where after controlling for parental attitude, socioeconomic status has no more significant impact on preschool decisions. This association between parents' attitude towards ECE and their socioeconomic status has been observed by estimating socioeconomic status over parental attitude for ECE using probit regression and the findings are presented in Table 5.8.

Table 5.8: Relation Between Parents' SES and Their Attitude towards ECE

(Base Outcome: Negative or Indifferent Attitude)	Estimation 1
Log(Household Income)	0.056 (0.029)
House Type (Ref: Kuccha House)	
Pucca (Concrete)	0.098** (0.031)
Semi Pucca (Semi Concrete)	0.059* (0.027)
House Ownership (Ref: Rented)	
Owned House	0.092* (0.044)
Parents' Level of Education (Ref: up to Primary)	
Secondary	0.097*** (0.026)
HS and above	0.160*** (0.041)
Fathers' Occupation Status (Ref: Casual Job)	
Regular Job	0.073** (0.024)
Mothers' Occupation Status (Ref: Casual Job)	
Regular job	-0.100 (0.058)
Religious Origin (Ref: Hindu)	
Islam and others	0.111*** (0.025)
Residing District (Ref: Howrah)	
Murshidabad	-0.194*** (0.026)
N	1355
Pseudo R ²	0.211

Coefficients represent marginal effects and Standard Error in parenthesis. *p<0.05, **p<0.01, ***p<0.001.
N.B. Only coefficients of selected variables are presented in this table.
For the entire result refer to the Appendix 4

Findings suggest that parents with higher SES are in general more motivated towards ECE. Although monthly household income has no significant influence in this regard, parents having a stable job, better housing and own house were, in general, more likely to appreciate the importance of ECE for their children's future compared to their counterpart. The strongest effect has been found in parents' level of education, and parents with higher education (education level more than primary) were significantly more likely to have a positive attitude towards ECE compared to the parents with the lower level of education (no education or only up to the primary level of education). Among other control variables in this estimation, it has been found that parents from minority religion were significantly more motivated compared to Hindu parents. This finding complements the previous argument for higher preschool attendance for children from minority religious group. Besides, parents from less developed district Murshidabad have been found to be significantly less motivated compared to parents from Howrah, which is obvious given the lower level of adult literacy rate in this district. This could possibly be one of the reasons behind lower preschool attendance in this district.

To summarize the findings from the above analysis, it can be said that parents' decision to send their children to a preschool depends mainly on parents' attitude and what

they think about ECE. Parental attitude varies according to the socioeconomic status and parents from higher socioeconomic strata are in general more likely to value ECE for their children. This may be because higher educated parents have more knowledge and information about different educational options and children's education is more important for them. Also, parents with a stable job can more focus on their children and plan according to their wish. Given this scenario, socioeconomically less developed regions are also affected by the lack of parental motivation, and in turn lower preschool attendance. Besides that, insufficient availability and lower quality of preschools in these regions may also play a role behind lower attendance. On a positive note, there were no case based discrimination in preschool attendance that has been noticed and preschool attendance was higher for children belonging to the minority religious groups.

5.2. Findings on Public vs. Private Preschool Debate

In this section, an attempt has been made to investigate the reasons behind the differential choice of a type of a preschool by parents who already decided to provide ECE to their children. This will thus help in understanding which the factors responsible for choice between public and private preschool are.

5.2.1 Descriptive data analysis

Firstly, an attempt has been made here to have a bivariate analysis to observe the pattern of association between the type of preschool attended and different factor of interests. Table 5.9 shows the variation in type of preschool attended based on economic status of families. The independent sample t-test shows a significant difference in both monthly income and expenditure between two types of households. Those who had chosen private preschools for their children had higher average monthly income and expenditure compared to parents who sent their children to public preschools.

Table 5.9: Economic Status and Type of Preschool Attended

Variable Name	Definition	Values	Public Preschool		Private Preschool		t-statistics
			Mean	Std. Dev.	Mean	Std. Dev.	
Monthly Household Income	Gross monthly income of the household	In Indian Rupee.	5371.36	2651.34	10358.36	6537.06	t(293)=-11.91***
Monthly Household Expenditure	Gross monthly expenditure of the household	In Indian Rupee.	4581.11	1875.20	8234.23	5050.77	t(288)=-11.35***

Source: Author's calculation based on primary data.

*p<0.05, **p<0.01, ***p<0.001.

Table 5.10: Housing Pattern and Type of Preschool Attended

Variable Name	Definition	Values	Public Preschool	Private Preschool	Pearson X ²
			Number of Households	Number of Households	
House Type	Type of housing household have	1= Concrete	227 (53.92)	194 (46.08)	Chi2(2)=128.29***
		2=semi-concrete	216 (80)	54 (20)	
		3=non-concrete	203 (94.42)	12 (5.58)	
House Ownership	Ownership of the house that the family residing	1= Owned	604 (70.89)	248 (29.11)	Chi2(1)=1.17
		2= Rented	42 (77.78)	12 (22.22)	
		2=more than 500 meter	374 (72.62)	141 (27.38)	

Source: Author's calculation based on primary data.
 Row percentage in parenthesis. *p<0.05, **p<0.01, ***p<0.001.

Besides, housing pattern was also used to explain economic status of families. The variation in type of preschool attended based on housing pattern is shown in Table 5.10. Whereas about 47 percent of the parents living in concrete housing send their children to private preschool, the percentage is much lower for parents having semi-concrete (20%) and non-concrete (5.5%) housing. However, no significant difference observed in relation to ownership of house.

Now, the variation in type of preschool attended depending on social status of families is considered by introducing variables such as parents' education and employment and their ethnic background etc. It can be seen from table 5.11 that, among those parents having education only up to primary level about 94 percent sent their children to public preschool. Whereas the percentage distribution between two types of preschool attended is almost same for the group of parents having education level higher secondary or above.

There was no significant variation in preschool choices with respect to employment status of the father; whereas, the difference was significant for mother's employment status. Among children whose mother was having causal employment, majority of them (72%) attended public preschool. Also, there was no significant difference in type of preschool attended based on parental attitude towards ECE.

Table 5.11: Social Status and Type of Preschool Attended

Variable Name	Definition	Values	Public Preschool	Private Preschool	Pearson χ^2
			Number of Households	Number of Households	
Parent Edu	Highest education level achieved by either of the parents	1= up to primary	227 (93.80)	15 (6.20)	Chi2(2)=107.04***
		2= up to secondary	309 (69.28)	137 (30.72)	
		3=higher secondary or above.	110 (50.46)	108 (49.54)	
Father job	Occupational status of the father	1=Regular	461 (70.95)	193 (29.51)	Chi2(1)=0.52
		2= casual or no job.	178 (71.16)	66 (27.84)	
Mother Job	Occupational status of the mother	1=Regular	26 (53.06)	23 (46.94)	Chi2(1)=8.51**
		2= casual or no job.	620 (72.43)	236 (27.57)	
Parents' Attitude	Whether parent consider ECE as important for their children	1=Yes	626 (70.89)	257 (29.11)	Chi2(1)=2.82
		2=No or indifferent	20 (86.96)	3 (13.04)	
Religion	Religious origin of the household	1= Hindu	464 (67.94)	219 (32.06)	Chi2(1)=15.37***
		2=Islam and others.	182 (81.61)	41 (18.39)	

Caste	Caste origin of the household	1=Backward casts (S.C, S.T. & OBC together)	177 (80.45)	43 (19.55)	Chi2(1)=11.89***
		2=General Caste.	469 (68.37)	217 (31.63)	
Address	Residing location of the household	1=rural	466 (74.09)	163 (25.91)	Chi2(1)=7.78**
		2=urban.	180 (64.98)	97 (35.02)	
District	Residing district of the household	1=Howrah	313 (70.65)	130 (29.35)	Chi2(1)=0.17
		2=Murshidabad.	333 (71.92)	130 (28.70)	
		2=more than 500 meter	374 (72.62)	141 (27.38)	

Source: Author's calculation based on primary data.

Row percentage in parenthesis. *p<0.05, **p<0.01, ***p<0.001.

The type of preschool attended differs considerably with respect to the religious origin of households. As found from the data, about 67 percent of the Hindu children attended public preschools and the same percentage was about 82 percent for children from other minority groups. Also, the percentage of children attended private preschools was relatively higher for urban areas compared to rural areas. No significant variation in type of preschool attendance was noticed based on districts.

With respect to family structure, type of preschool attended varied significantly depending on the number of sibling that the child has. In general, children who attended private preschool had a lower mean value for sibling. Besides, there was no notable difference in preschool choices with regards to the number of family members.

Also, table 5.13 shows that, with respect to the supply side variations measured in this study as distance of preschool from residence of families, no significant difference has been observed.

Table 5.12: Family Demography and Type of Preschool Attended

Variable Name	Definition	Values	Public Preschool		Private Preschool		t-statistics
			Mean	Std. Dev.	Mean	Std. Dev.	
Family Members	Total number of family members.	Number of persons	4.51	1.39	4.34	1.61	t(422)=1.49
Siblings	Number of siblings the child have.	Number of persons	0.75	0.73	0.53	0.67	t(518)=4.40***

Source: Author's calculation based on primary data.

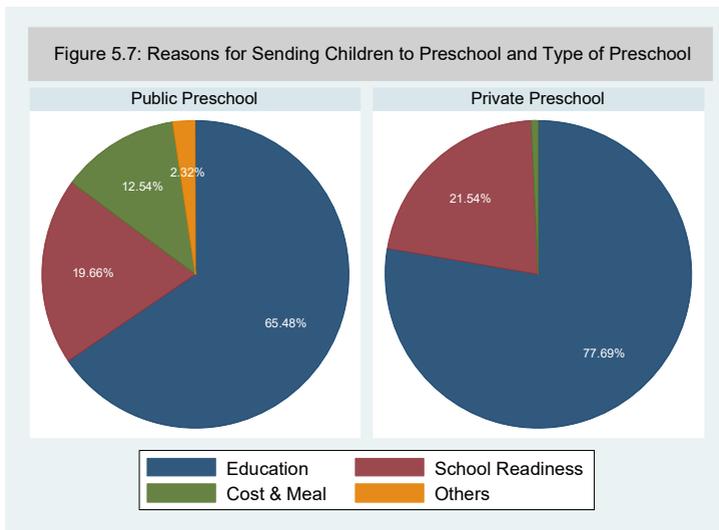
*p<0.05, **p<0.01, ***p<0.001.

Table 5.13: Supply Side Variation and Type of Preschool Attended

Variable Name	Definition	Values	Public Preschool	Private Preschool	Pearson χ^2
			Number of Households	Number of Households	
Distance	Distance of the nearest preschool from residence	1=within 500 meter	272 (69.57)	119 (30.43)	Chi2(1)=1.01
		2=more than 500 meter	374 (72.62)	141 (27.38)	

Source: Author's calculation based on primary data.
 Row percentage in parenthesis. *p<0.05, **p<0.01, ***p<0.001.

In previous section, major reasons for sending children to preschool are already categorized and shown. Organizing these categories according to the type of preschool give an idea of what parents expect of the preschool they had chosen. Figure 5.7 illustrates that in general parents sent their children to preschool mainly because of early education and school readiness.



But, at the same time, the reason for attending ECE centre varies according to the type of preschool. For example, data suggests that, Anganwadi centres elicited more response in favour free meal and low cost, and about 15% of parents specifically mentioned this reason for sending children this preschool. On the other hand, private preschools were

mostly preferred for pre-school education, and about 99% of the parents mentioned sending their children to private preschool for early education and school readiness (this complements the finding by the CECED 2015 study).

Although, most of the parents (about 98%) were satisfied with the preschool provision they had chosen for their children, the components behind their satisfaction varies depending on the type of preschool.

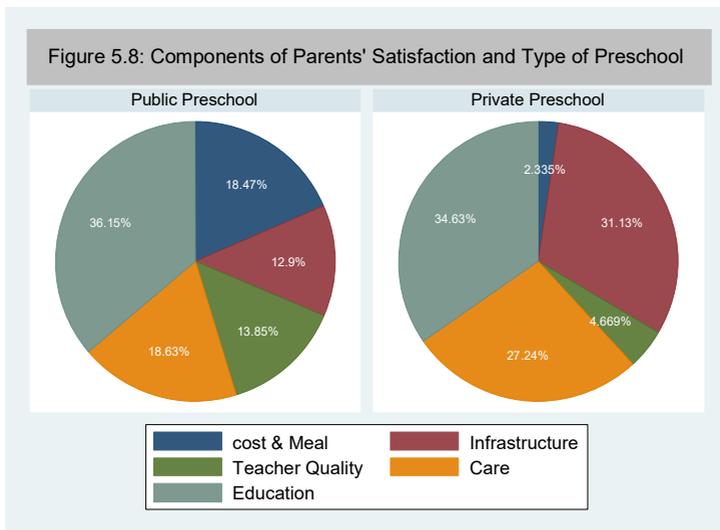


Figure 5.8 shows that, the common factors for parental satisfaction were the infrastructure of the preschool, quality of education, quality of care towards children and quality of teachers. However, low cost and free meals were major reasons for parents' satisfaction in case of public preschools, whereas infrastructure was relatively more

appreciated component in case of private preschools. Besides, only a few parents were not satisfied with the preschool provision they had chosen and almost all of them had chosen public preschool i.e. Anganwadi centres. The main reasons for their dissatisfaction were the poor quality of care and low-quality education in the Anganwadi centres.

Considering the transition trend from preschool to primary school, it can be inferred that the choice of a type of preschool may also depend on which type of primary school the child eventually will attend afterwards.

Table 5.14: Preschool to Primary School Transition Trend

Type of Preschool Attended	Type of Primary School Attending	
	Public	Private
Public	629 (97%)	17 (3%)
Private	127 (49%)	133 (51%)

Source: Author's calculation based on primary survey.

Table 5.14 indicates towards a trend where 97% of the children who attended Anganwadi centres in the past are currently attending publicly sponsored primary schools. Also, about 96% those children who did not attend any preschool in the past are also enrolled in public primary schools. Therefore, there is almost no transition from

public preschool to private primary school which may indicate that those parents who sent their children to Anganwadi centres had already decided to continue in public education system. This happen due to the lack of parents' motivation, their financial incapability, their level of education etc., those have been discussed in the literature review. On the other hand, almost half of those attended private preschools in the past still continue in private primary schools and rest enrolled in public primary schools. The transition from private preschool to public primary school is dependent on several reasons such as parents' inability to continue their child's education in private preschool due to the financial burden, unavailability of private primary schools in the vicinity etc.

It can be inferred from the descriptive statistics that, there may have an association between different resource endowment by the parents and their choice of a type of preschool. This association is examined at the next stage using the multivariate analysis.

5.2.2 Regression analysis

Table 5.6 provides the estimated results of the Selection equation and Outcome equation. The first column represents the estimation of the selection equation, the second column represents the estimation of the outcome equation with Heckman sample selection correction, and the third column represents the outcome equation without

Heckman sample selection correction. Looking at the first column that represents the selection equation, the coefficient for the exclusion variable called 'parents' attitude' in the 1st column is statistically significant which reveals that parents with positive attitude towards ECE are significantly more likely to send their children to preschool compared to parents with negative or indifferent attitude. This result complements the finding from the previous section.

The central concern of the analysis in this section is to compare the variation in type of preschool attendance which is represented in the second column of table 5.15. Before focusing on explanatory variables, it can be seen from the second column that, the coefficient of the Inverse Mills Ratio (IMR) is not significant, which means that there is no selection bias in the model. Therefore, estimating the outcome equation with or without Heckman sample selection corrections make no substantial statistical difference in the findings. Thus, comparing the estimates with (column 2) and without (column 3) correction of Heckman selection bias, there exists no substantial difference in direction and magnitude of the effects of these two estimations. However, this study focuses on the second column that represents the outcome equation with Heckman selection control.

Table 5.15: Estimation of Probit Regression (With and without Sample Selection)

	Selection Model (Base Outcome: Preschool Attended)	Outcome Model with Heckman Correction (Base outcome: Public Preschool)	Outcome Model without Heckman Correction* (Base outcome: Public Preschool)
Log(Household Income)	0.111 (0.126)	1.486*** (0.151)	1.493*** (0.150)
House Type (Ref: Kuccha House)			
Pucca (Concrete)	-0.082 (0.140)	0.792*** (0.197)	0.774*** (0.196)
Semi Pucca (Semi Concrete)	-0.080 (0.120)	0.526** (0.189)	0.504** (0.187)
House Ownership (Ref: Rented house)			
Owned House	-0.101 (0.196)	0.176 (0.244)	0.172 (0.243)
Parents' Level of Education (Ref: up to Primary)			
Secondary	-0.036 (0.113)	0.842*** (0.176)	0.846*** (0.176)
HS and above	0.492* (0.203)	0.878*** (0.217)	0.912*** (0.214)
Fathers' Occupation Status (Ref: Casual Job)			
Regular Job	0.111 (0.106)	0.216 (0.139)	0.229 (0.138)
Mothers' Occupation Status (Ref: Casual Job)			
Regular job	-0.141 (0.252)	0.002 (0.261)	-0.001 (0.261)
Religious Origin (Ref: Hindu)			
Islam and others	0.500*** (0.131)	-0.354 (0.181)	-0.293 (0.171)

Table 5.15 Contd.

	Selection Model	Outcome Model with Heckman Correction	Outcome Model without Heckman Correction*
Caste Origin-Backward Caste (Ref: General Caste)			
Backward castes (S.C., S.T., OBC)	-0.028 (0.115)	-0.216 (0.145)	-0.223 (0.144)
Sex of the Child-Female	0.117 (0.095)	0.285* (0.112)	0.289** (0.111)
Number of Family Members	-0.014 (0.040)	-0.020 (0.041)	-0.023 (0.041)
Number of Siblings	0.058 (0.082)	-0.155 (0.101)	-0.148 (0.100)
Residing Location (Ref: Urban)			
Rural	0.008 (0.137)	0.080 (0.137)	0.076 (0.136)
Residing District (Ref: Howrah)			
Murshidabad	-1.146*** (0.144)	1.294*** (0.198)	1.185*** (0.164)
Parents' Attitude towards ECE (Ref: Negative/Indifferent Attitude)			
Positive Attitude	2.228*** (0.127)	---	---
Distance of Preschool			
- more than 500 meter	-0.258** (0.098)	-0.117 (0.112)	-0.140 (0.109)
Inverse Mills Ratio	---	-0.269 (0.271)	---
Constant	0.909 (1.087)	-15.575*** (1.386)	-15.642*** (1.381)
Observation	1355	897	897
Pseudo R2	0.479	0.339	0.338

Standard Error in parenthesis. *p<0.05, **p<0.01, ***p<0.001. *For the marginal effects of the coefficients please refer to Appendix 2A.

The result indicates that the socioeconomic condition of households play an important role in choice of a type of preschool. Families with better economic condition such as higher income and better housing are in general significantly more likely to choose private preschools for their children compared to low-income parents. Also with respect to parents' level of education a similar pattern has been observed, and well educated (secondary or above level) parents are significantly more probable to send their children to private preschools compared to the parents with educational qualification only up to primary level. Occupational status of parents had no significant effect on type of preschool selected.

Another important observation from the analysis is that being a girl child significantly increases the probability of attending private preschools. This finding is quite different from what has been found by previous studies at the preschool level which evidenced that the proportion of girls was actually less than boys in private preschools and a higher proportion of girls were found to attend government institutions (CECED 2015b). There is also evidence of gender discrimination against girls in education when it comes to school enrollment retention (UN 2007, White et al. 2016) in school education in India. Further analysis, that unfolded the reasons behind this unusual finding of this current study, shows that the positive gender effect in favour of girls was effective for parents having secondary or

above educational level, and for parents residing in Howrah district only (refer to Appendix 5 and Appendix 6). The possible explanation behind the higher attendance of girls in private preschool could be due to the narrowing of gap of gender based discriminations. Considering the very young age of children going to preschool, it is highly unlikely to have gender based discriminations. One of the major reasons behind the discrimination against girl children (especially in developing countries) is the opportunity cost in terms of their participation in household work and taking care of their younger siblings at home. Girls were mostly retained at home while prominences were given to boys to attend school. This is also defined by the limited family income and a higher number of children, where preferences are usually given to boys when it comes to educational expenditure. Now, considering the very young age of the children i.e. girls under question here, the opportunity cost is low (if not nil) because it is highly unlikely for them to help in household activities. To this, well-educated parents are expected to be more motivated and unbiased to provide a better foundation for their children (irrespective of their sex) given their knowledge and open-mindedness. Besides, it has been found from the data that, those children who attended private preschool had lesser number of siblings²⁵

²⁵ The t-test between two groups of children based on the type of preschool attended shows a significant difference in the number of siblings they have, $t(518)=4.40$ $P<0.001$. Children attended public

compared to those who attended public preschools. In addition, this is also evident for girls in the sample that girls who attended private preschools had a relatively lesser number of siblings²⁶ compared to girls who attended public preschools. Therefore, it can be inferred from the analysis that, those parents who send their girl to a private preschool probably have only one child or lesser number of children compared to those who sent their girl to a public preschool. This indicates that, given the monthly income, the gross expenditure on children's education is usually less (and thus per-child expenditure is higher) in these families that sent their girl child to a private preschool. Having said that and considering the quality of care, security and safety of the children there may have the higher preference for private preschools by some parents for their girl children.

Furthermore, the result also demonstrates a location fixed effect with respect to the residing district, whereby children from Murshidabad district were significantly more likely to attend private preschool compared to children from Howrah district. This is an intriguing observation, given the fact that the previous finding of this study already exhibited a relatively less preschool attendance by children from this district. Thus, the question arises why attending

preschools, in general, had a greater number of siblings compared to the children attended private preschools.

²⁶ The mean value of siblings was 0.82 for girls attended public preschool compared to 0.52 for girls who attended private preschools.

private preschool is relatively higher among children from Murshidabad, even though the overall preschool attendance is relatively lower in this district. Further exploring this finding to find plausible reasons for why private preschool attendance in Murshidabad district was relatively higher even though the enrollment in preschool is relatively lower for them. Further sensitivity analysis (refer to Appendix 5) shows that, the location fixed effect is statistically significant only for parents with relatively higher educational level (i.e. secondary or above) in Murshidabad district. Also comparing type of preschool attended by children between two districts (refer to Appendix 7) it can be seen that, in Murshidabad district 92 percent of children from low-educated parents (with education level up to primary) attended public preschool, whereas only about 24 percent of children from higher educated parents (with education level HS and above) attended the same. The pattern of private preschool attendance by these groups is exactly reverse and is about 8 percent and 75 percent of the total children in these groups respectively. The distribution of type of preschool attendance among highly educated parents is more symmetric compared to Murshidabad, and about 58 percent sent their children to public preschool and 42 percent to private preschool. Therefore, it can be inferred that, educated parents in Murshidabad in general have a stronger preference for private preschool. The reason could be that, preschool non-attendance due to supply side issues

is more frequent in Murshidabad district and that can also play a role in this regard. For example, educated parents focus more on early education and school readiness, and they may find the performance of public preschools inadequate in this respect, and that in turn make private preschools preferable to them. The possibility of relatively poor performance of public preschools in backward regions can't be disregarded. Therefore, given the limited availability of "good" public preschools in this region, parents are compelled of choosing private ones. Another possibility is, over attendance of children from less educated parents in public preschools in Murshidabad (refer to Appendix 7). This may act as demoralization for higher educated parents to send their children to public preschools and they can consider private preschools as a better alternative matching their status and prestige. Even though, there is differential preschool choice based on districts, the coefficient for the constant term, representing the intercept of the model, is negative and statistically significant which refers to a preference towards public preschools in general.

Summarizing findings on type of preschool attendance from descriptive and multi-variate analysis, it can be construed that the choice of a type of preschool (or attending public or private preschool) depends mainly on the socio-economic condition of the family. This is a combination and interaction between what parents want

and what they can afford. Private preschools are costly and therefore may not be affordable for low-income parents. Also, preference towards private preschools by well-educated parents could have generated for several reasons such as these parents may be better informed about available preschools and their quality, they might have higher desire to provide a better start to their children, and they might consider private preschools as "better" due to its focus on education. Besides, public preschools are mostly chosen by socioeconomically marginalized section of the society. Possible reasons are easy availability, no financial costs, and other benefits attached to public preschools i.e. Anganwadi centres.

5.3. Synopsis of Outcomes

In this section, an attempt has been made to understand how much the Indian context of preschool choices complies with the existing theoretical discussion on early educational decision. The assumption of the study that there are two possible way through which variation in ECE may generate from the demand side in the Indian context is well supported by the empirical evidence of the study. Results confirm that there are unequal opportunities in early childhood education firstly due to the decision of sending or not sending children to preschool, and second, choosing a type of preschool among those who decided to send their children to a preschool. Results also confirm this

assumption and show that the set of variables responsible to bring about variation in preschool decision differs depending on the decision that is considered.

Therefore, it is obvious from the findings that, separately analyzing the two different preschool decisions in the Indian context is justified, as the set of factors responsible for generating variation differ considerably for each of the decisions. Also, the way in which these factors affect parental educational decision varies depending on the type of preschool decision considered.

First, considering the parental decision of sending children to preschool or not, family of origin has been found to play a crucial role which follows previous studies. In accordance to Savit and Blossfeld (1993), this study has also found strong correlation between socioeconomic inequality and educational opportunity. Particularly, economic condition and educational background of parents were found to have important implication for preschool decision in Indian context. However, not all components of the socioeconomic status have similar effect as suggested by earlier studies. For example, mother's occupation found to have negligible effect on the probability of preschool attendance. Also, in contrary to other studies, the effect of ethnic origin on preschool decision also differs in this study. Whereas, most of the studies suggested a higher probability of preschool attendance by children from upper

strata of the society, findings of this study suggest an opposite relation with respect to religion, and no effect with respect to caste. Interestingly, some of these variables discussed above were found to have varied effect on preschool decision across districts. For example, religious origin and distance of preschool from residence were found to have significant effect only for a specific district.

Both qualitative and empirical evidence of the study suggest that, parental belief plays an important role in preschool decision which has already been identified as an important factor by previous studies (Leseman 2002; Johansen et al. 1996; Liang et al. 2000). Unlike Singer et al. 1998, this study found no significant implication of family demography on children's probability of attending preschool. Furthermore, it has also been found that, providers characteristic measured by the distance of the available preschool from residence has played a significant role in the decision of sending children to preschool. Also, many parents mentioned issue relating to supply side as their reasons for not sending children to preschool.

The mechanism through which these factors brings the variation in preschool decision is rather indirect which comply with the assumption and prescribed model of the study. It has been found that the impact of socioeconomic factors (which can be called as primary factors according to the model prescribed in section 3.5) come indirectly through parental attitude towards ECE (which can be

labeled as secondary factor as per the same model). Parents' income and educational level shapes their attitude towards early childhood education, and that attitude in turn affect the decision of sending (or not sending) children to preschool. Therefore, impact of several primary factors comes indirectly through the values they attach to early childhood education.

Now bringing in the next preschool decision i.e. choosing public or private preschool in discussion; findings also confirm the theoretical discussion and hypotheses in general, with some exceptions. As assumed, socioeconomic status of parents' plays a deterministic role in type of preschool children attended. Families with better economic condition and higher level of education were found to prefer private preschools which are considered as superior over public ones. Clearly parents with greater income and education try to provide the best they can to their children (as also mentioned in Jonsson & Erikson 2000; Spieß et al. 2008; Schober & Spieß 2013). This may because, educated parents usually have greater motivation for education of their children and they also possess more knowledge about existing educational options. Also, they can also afford to provide their children relatively expensive options given their better economic condition. Interestingly, unlike the findings of the earlier decision, the impact of socioeconomic status on choice of a type of preschool comes directly.

Another interesting finding in contrast to existing studies (for example Hewett et al. 2014) is that girls were found to have higher probability of attending private preschools relative to boys. However, this finding varies across different regions within India. Also, ethnic origin was found not having any significant role in choice of a type of preschool.

Further similarities have been found with existing studies with respect to provider characteristics. It has been found that the perceived quality of existing preschool by parents plays an important role for their decision. Whereas, education focused curriculum of private preschools attracts many parents, provision of free meals and other benefits also interests others.

Therefore, comparing findings of this study with previous studies on educational decisions, it can be clearly inferred that educational decisions are time and space dependent. Therefore, the set of factors bringing about variation in educational decisions with respect to one country varies considerably for another. Also, there may have variation across regions within a country as well. Factors relating to the economic, social, cultural, and emotional characteristics of parents seem to have important role in preschool decisions in general. However, the magnitude of effects varies considerably depending on the time and space. Therefore, it is understandable why some of the findings of this study differs from the theoretical

discussions which is rested on previous studies based on other countries.

The discussion is further continued in the next chapter to comprehend the extent to which findings of this study complement or contrast with other existing studies on educational decision.

Chapter 6: Discussion

Childhood is the most decisive period of human life hence providing all the necessary support to children to have a strong foundation is critically important and significant not only for the children and their families, but also the society and the nation as a whole. Although, ECE provisions in India are able to bring a considerable number of children under their service; however, a substantial number of children still have no access to any ECE. As evident in this study, the reason behind the unequal opportunity in ECE is manifold and thus a multi-pronged approach is needed to deal with the diverse sources of inequality in early childhood education. Even though the overall picture about India cannot be portrayed, there still is enough information in this study to draw some general image of the inequality in ECE, and, most importantly to form an understanding of the principal problems that are faced and how they can be addressed.

6.1. Issues Relating to Preschool Attendance

The key issue that has already been raised is whether parents' realization of the necessity of ECE for children makes any difference in preschool attendance; and, the answer to this question is affirmative. It is

observed from the findings that, a considerable number of parents do not consider the importance and necessity of ECE for their children, and that caused a number of children not having any ECE experience. In fact, it is evident that the most important factor that contributes to the variation in preschool attendance is parents' aspiration towards ECE and whether they consider ECE crucial for their children. The variation in the preschool attendance by children depends mainly on the variation in parental aspiration. Preschool decisions are subjective and vary from one parent to another depending on their socioeconomic status and what they expect from preschool. For example, depending on differential parental aspirations for child development, preschool attendance may result from the need to have early education, socialization, and also for some material benefits such as free meal, the role of the preschool as child care centre, etc. In general, the study observed a strong preference by parents for preschool education of their children. The major outcome parents expect from a preschool is early education so that their children can be ready for formal schooling and can perform well. A similar picture has been brought forward by the Pratiche study (2009) in the state of West Bengal and by the FOCUS (2006) in six states of India named Chhattisgarh, Himachal Pradesh, Maharashtra, Rajasthan, Tamil Nadu and Uttar Pradesh. Furthermore, evidence is quite clear that attending preschool also associates with

children getting admission in a primary school that parents' desire.

As already mentioned:

“the aspiration of the mothers to acquire education by their children was found to be very high. They thought that some bit of schooling at the pre-school age would help their children (a) develop a habit of schooling, (b) eradicate the gap of communication with teachers, (c) help them grasp the lessons in the primary schools when enrolled in the next years” (Pratichi 2009; 9).

Now the question is which are the factors responsible for this varying parental attitude towards ECE and what they expect from preschool? There is an array of factors, affecting parental aspiration and expectation, and thus causing variation in preschool attendance. These range from economic, educational, social, and emotional factors. All these factors contribute to the differential parental aspiration and also determine what parents expect from an ECE centre. Also, the pattern in which these factors bring about variation in parental aspiration towards ECE is also diverse.

The economic condition of the family, for example, can play a crucial role in the preschool decision in many ways. Families with enough endowment of economic resources not only can afford what they want for their children but

also focus more on issues related to child development since they don't need to worry much about daily consumption expenditure. Moreover, having a stable employment and income can provide a peace of mind, and parents can invest enough time and effort for child development. Whereas, for parents with unstable employment and irregular income it is most important to focus on basic needs of the family. Since their daily routine involves the struggle to secure food and clothing for the family on a daily basis; issues like ECE and child development are of lesser significance to them (for example see Box 6.1).

Box-6.1

- ❖ One of the low-income parents responded during the field interview when asked the reason behind not sending children to preschool, "কোনো ভালো কাজ নেই, সারাদিন শুধু চলে যায় পরিবার এর জন্য খাবার জোগাড় করতে, আর বাচ্চা দেড় পড়াশোনা নিয়ে কখন ভাবব".

(I have no regular job, so the entire day I spent securing food for the family, where is time to think about education for children)

- ❖ Another father was asked the same and he replied, "খালি পেট এ কি পড়াশোনা হয়? ভালো করে খেতেই দিতে পারি না"

(Has education any role in empty stomach? We can't always provide sufficient food!)

Unless the basic needs of the children and the family (in the form of food, clothing, and health care are fulfilled), education is considered as a sheer luxury by many low-income families. Even though children can at least have one daily meal by attending the Anganwadi centre, sometimes parents are hesitant about it either because of unavailability of Anganwadi centre in close neighborhood or parents do not consider the food provided in the Anganwadi centres of “good quality”.

Sometimes low-income families do send their children to the Anganwadi centres as children can have a free meal every day. It is observed that, availability of free meal is an important reason for a number of low-income parents to send their children to preschool (mainly Anganwadi centres). Although there was variation in preschool attendance by these children and in many places, children attend preschool only to have the meal provided and they do not participate in any other activities there. Some of the children have also been found taking their food home instead of having it at the preschool.

In contrary to the argument that low-income parents send their children to ECE centres only for food, some of the low-income parents also send their children to preschool irrespective of the financial challenges they face (refer to Box 6.2); and the reasons behind that are in two prongs. Firstly, irrespective of their financial hardship, some of the low-income parents wanted to provide a better foundation

for their children so that they can perform well during school education.

Box-6.2

- ❖ A low-income household did send the child to preschool and when asked the reason behind their decision he replied, "কষ্ট করে হলেও বাচ্চা কে পড়াই যাতে ভবিষ্যত এ ভালো কিছু করতে পারে"
(We provide education to our children even under hardship, so that they can do something better in future)

Therefore, they decided in favour of ECE and their children attended preschool, mostly in the form of Anganwadi centres since they cannot afford the financial burden of private preschool. This is similar to the findings in CECED (2015a), where it has also been found that majority of the parents send their children to ECE centres to prepare them for primary schools and only a few send their children to ECE centres for food (CECED 2015a: 19).

Secondly, the role of the preschools as a child care centre is also important for many parents, mainly in families where both the parents must work due to their poor economic condition. Despite the patriarchal structure of the society in most part of the country, where the male members of the family are considered the primary bread earners; economic hardships are requiring many mothers from low-income families to work to supplement the household income. This enhances the need of a place where children could be

looked after while both the parents are working. For the low-income families, it is important to have a child care option which they can afford and Anganwadi centres seem supportive in this regard. In addition to having a place where children could be kept for several hours, children are also provided with a free meal every day, and additional benefits such as health checkups. Although questions have been raised by parents regarding the quality of the food provided in many cases, still most of the parents are happy to have something in the form of a child-care centre within their reach. Albeit the importance of ECE has not been seriously considered by these parents, nevertheless, they send their children to a preschool so that they can have free time. It is observed that, in families where both the parents are working, mostly as daily laborers in agricultural activities, or in some cases in home based economic activities, children were sent to Anganwadi centres so that parents can invest the free time into economic activities. This is particularly also helpful for mothers with more than one-child to lighten her burden as she can send her older children to centre and take care of her younger kids and simultaneously manage household work.

Furthermore, the variation in preschool attendance can also be attributed to parents' education. Parents' level of education found to be the strongest indicator behind the variation in the preschool decision. The level of education achieved by parents' can influence their ECE decision and

children's preschool attendance in many ways. Educated parents, in general, have greater educational values and aspiration, and eventually want to see their children achieving a higher educational level. Parents have shown a strong desire to provide good education to their children which they think will help children in obtaining good employment opportunities. This also may be linked to the societal status of parents, who provide all means of support to their children in encouraging them to also achieve and maintain the status level as their parents. Besides, educated parents usually possess greater knowledge and are more aware of the existing educational options they can offer to their children. They are more capable in efficiently evaluating the performance of existing preschools to choose the one that best fit their children. A set of parents has also shown their desire to send their children to "good" primary schools (which are mostly private) where the schools have very competitive entry requirements. Therefore, parents consider providing early education to their children in helping them prepare for the entrance tests as well as helping them to cope with the "tough" curriculum agenda of these schools.

On the other hand, parents with less education are less likely to recognize the importance of ECE for their children, and found to have weak educational aspirations for their children. They are less equipped with information about the existing educational options and what they can

best offer to their children. This could be a major reason why, irrespective of having public preschools, which is free from any financial burden on parents, yet some parents are not interested in sending their children to the ECE centres.

However, in contrary to this argument, some parents, regardless of their low level of education, do send their children to preschool. It has been observed that this set of parents someday regret their low educational achievements and somehow realize the importance of education. They,

Box-6.3

- ❖ One family during the interview said: "নিজেরা কোনোদিন পড়াশোনা করি নি আর এর মর্ম বুঝি নি তাই আজ এই অবস্থা. আমরা চাই না যে আমাদের বাচ্চা এরকম হোক."

(We have neither studied nor realized the importance of education, that's why we are in this hardship. We do not want our children to suffer like this in future)

therefore aspire that their children achieve a higher educational level, so that they can secure a better job and higher income in future.

Another notable difference between parents with different educational level is in the form of what these parents expect from an ECE centres. Whereas, educated parents are more focused on components such as early education, teacher quality and infrastructure of available preschools; less-

educated parents, on the other hand, focus also on the availability of other benefits for their children. However, irrespective of income and education, family tradition and beliefs too plays an important role in preschool decisions. Some families believe that, children should be taken care-off within the family system and they should spend time with their siblings and family, and not with others in the preschools. Other parents have considered ECE as “too early” and are particularly concerned about the burden that is put on the children at very early age by private preschools. To them, providing basic education to children at home is the “best practice” in preparing them for primary schooling.

There was no evidence, in this study, of caste and religion based discrimination against the marginalized section of the society. Whereas, previous studies (FOCUS 2006: 46-54) observed such social exclusions, that prevents children from the marginalized section of the society to participate in ECE programmes. Besides, this study displays the possible incidence of “catching up” effect in favour of children from minority religious origin, as preschool attendance was greater for these children compared to children from Hindu religion. There may be two possibilities behind the higher preschool attendance by minority children. First, Muslim parents may have relatively higher aspiration to provide a better start to their children, which has been empirically evident from this

study. These minority parents may desire to match themselves with the mainstream society by providing the foundation to their children from the very beginning, and this could be one reason why they send their children to the ECE centre more compared to Hindu parents. The question is, how long will this “catching up” effect persists and is a matter for further investigation. Second, evidence suggests that most of these children were found to attend public preschools, and this raises the possibility of having other reasons for sending children to a preschool instead of parents' attitude towards ECE. For example, considering the significantly greater number of children in the sample Muslim households in comparison to Hindu households, it may be possible that the decision to send children to preschool is driven by the need to have time to take care of other siblings. Besides, relatively low monthly household income of these Muslim families also suggests towards the possibility of sending children to preschool because of free meals and other material benefits. Third, the preference towards public preschools by Muslim families could actually make these preschools less attractive for children from Hindu religion. Since the greater preference towards Anganwadi centres by minority parents is observed in Muslim dominated regions, it could possibly be the case that the Hindu parents in this region may not prefer to send their children to preschools because they are overshadowed by children from minority religion. In case there is no alternatives other than Anganwadi centres,

there is possibility of Hindu children may not attend any preschool at all.

There are several factors from the supply side, which have an impact on preschool attendance. For example, a number of parents have mentioned availability and suitability of existing preschool as reasons of their dissatisfaction. One important reason for not sending any preschool was due to no available preschool in that region or the preschool was located at a far-off distance. Availability and accessibility of preschool are the leading concerns for the unequal opportunity in ECE because it plays an important role in parental decisions. It is empirically evident from the study where about twelve percent of sample parents cited availability and accessibility of preschool as the primary reason for not sending their children to any preschool. Similar conclusion is also drawn by other studies, such as 'parent's choice of their child's schooling is closely linked to availability and accessibility of ECE centres' (CECED 2015a: 25).

The distance of existing ECE centres from the residence, may jeopardize the attendance in two ways: (1) Parents usually prefer a preschool which is located nearby as children can go as a group, supervised by one or two adult members, and not necessarily be accompanied by parents. This especially helps families where there is nobody to take the child to preschool daily. In addition, this can also help parents to save some time and utilize it on some other

purpose. For children it is more comfortable to attend nearby preschools with a familiar environment; as the environment of the preschool is quite like their own, which is encouraging as they often see familiar faces of other children from the same community attending the preschool. (2) The opportunity cost of choosing a preschool, which is located far-off, is high especially for families where both parents are working, and also for families where the mother needs to take care of other siblings and manage household work. Sometimes, parents have strongly been against preschools located far-off their residence for several reasons such as the time parents need to invest regularly to take the child to preschool and bring them back home. Moreover, many parents do not support the idea of sending little children to a far-off preschool because of the security and well-being of their children, and the difficulty in reaching the school in case of emergencies. Therefore, inaccessibility of preschools is a major concern, especially in remote villages and cause of lower preschool attendance. Even though there are a considerable number of Anganwadi centres across districts, still the coverage seems not enough.

A similar picture has been drawn by Pratchi (2009) study conducted in West Bengal, the same state of the present study itself:

‘A large number of new centres have been established recently. Nevertheless, for many

children, particularly from the underprivileged background, the inaccessibility of the centres was found to be a major problem' (Pratichi 2009: 80)

Besides availability and accessibility, quality²⁷ of care in preschool is another concern for parents, and this accounts for about seven percent of sample households which did not send their children to preschool due to poor quality of the preschool.

The dissent was primarily against Anganwadi centres for reasons such as insufficient infrastructure, irregular service, low-quality care towards children and low-quality food. The quality of service provided, particularly in Anganwadi centres, was not satisfactory to some parents,

Box-6.4

- ❖ One of the parents said: "বাম্বা কে পাঠাই যাতে কিছু শেখে কিন্তু ওখানে কিছুই শেখায় না, এর থেকে বাড়িতে থাকা ভালো"

(We send our child there so that the child can learn something but they don't teach anything, it is better to keep the child at home)

and therefore, these centres became less attractive to parents and failed to serve its purpose. Similar impressions

²⁷ Although, the actual quality of existing preschools has not been directly assessed in this study, what has been referred here is 'perceived quality' by parents.

depicted by other studies evaluating the performance of the ICDS and Anganwadi centres:

‘The poor delivery of the services was found to be a major area of concern. Regrettable as it was in most cases the programme was found to be limited to Supplementary nutrition and Pre-primary schooling leaving the other agendas aside. Even these two programmes had apparently failed to gain appreciation from parents. A large number of parents expressed their dissatisfaction with the services, which led to disappointment of parents and poor attendance by children’ (Pratichi 2009: 80).

“...the development needs of young children are poorly understood by communities, and therefore the monitoring of PSE is limited. This leads to some casualness about pre-school education in many anganwadis” (FOCUS 2006: 45).

Another possible reason may be the combination of poor quality education and care in Anganwadi centres associated with high financial burden of private preschool to parents. If parents are not satisfied with the Anganwadi centre and also can't afford private preschools, then, it may cause their children not attending any preschool. As a few parents (about 8.5% of the sampling households) mentioned high financial cost as their reason for not sending children to

any preschool, perhaps these are the parents who wished to send their children to private preschool but were not able due to their financial capabilities, and ended up not sending their children to any preschool at all.

Furthermore, there is evidence of regional disparities in preschool attendance in this study and areas, especially districts with relatively lower literacy rate and per capita income, have low preschool attendance compared to other districts. As previously stated, the performance and coverage of ECE services in India vary considerably across regions. The same is the case to answer the question of how is ICDS doing, depends on first and foremost on which state we are talking about (FOCUS 2006: 39). The reason behind this regional inequality is manifold, and it may be due to factors purely from the demand side or may also be due to factors relating to the supply side. Given the lower level of literacy and income, parents in less developed districts are likely to be less motivated towards ECE compared to parents from other relatively developed districts. Therefore, difference in parental attitude towards ECE between districts can play an important role in shaping the regional variation in preschool attendance. Besides, regional variation in supply i.e. differences in availability and quality of preschools between districts may also play an important role in shaping unequal preschool attendance. There are plenty of evidences (for example as written by Kaul 1998b; FOCUS 2006; Praticchi 2009;

Ministry of Women and Child Development, Govt. of India) of regional differences in availability and functioning of ECE provisions (mainly the ICDS), whilst some regions are doing well in terms of enrollment some other regions are still lagging. Incidence of preschool non-attendance due to factors like availability and accessibility is more prominent in less-developed²⁸ districts like Murshidabad. In several cases, parents were not able to send their children to an ECE centre, even though they desired to do so, solely because there were no preschool available within reachable distance. This incidence reveals that the public provisions of ECE, the ICDS programme, is unable to provide universal coverage and to reach all corners of the country. In fact, this uneven coverage across the country can further generate different forms of inequalities in education.

6.2. Issues Relating to Type of Preschool Attended

It is obvious from this study and preceding studies (Pratichi 2009; FOCUS 2006; CECED 2015a) that education is the main focus of most parents who sent their children to preschool. Parents expect that, by attending preschool, their children should learn the basics such as alphabets, counting, some rhymes etc. and also acquire

²⁸ Less-developed with respect to adult literacy and Per capita income, as per the Census of India 2011.

some social skills such as obeying orders, be friendly with others etc. Moreover, parents want their children to be ready for primary schools in the form of children having basic skills and knowledge required for schooling and are getting used to spending time without family for some hours a day. Given this fact, the choice of a type of preschool viz. Anganwadi or private preschool depends mainly on: (1) which of the preschool can best deliver what parents want? And, (2) which of the preschools can they best afford, given their socioeconomic status? Considering the available ECE alternatives that parents have and the delivery of services in these preschools, there are differential choices based on the socioeconomic status of parents and their expectations from these preschools.

The evidence is quite clear that a significant number of children are having their ECE experience from Anganwadi centres, as Anganwadi centres are the primary ECE providers in India. Many parents have shown their consent in favour of Anganwadi centres and appreciated the availability of such centres for child care. However, for a number of parents, it was not the primary choice and they were compelled to send their children to Anganwadi centres since they cannot afford the other available options. Children from the socioeconomically affluent families mostly attend private preschools, whereas, Anganwadi centres are attended by children from the marginalized section of the society. Socioeconomically well-off parents

have a relatively higher desire to provide better education to their children and early education and school readiness is their primary focus. Therefore, they usually choose private preschools which also have the focus on early education and these parents can also afford the cost. On the other hand, parents from the lower socioeconomic strata choose Anganwadi centres which are easily and inexpensively available. However, it has been found that early education and school readiness are the two important components that parents consider while sending their children to preschool irrespective of their socioeconomic status. Therefore, it can be seen that early education is an important element that parents expect as outcome, not only from private preschools but also from Anganwadi centres. But for a number of parents, who had chosen Anganwadi centres mainly for early education of their children, it is in most of the cases were sheer disappointment for them. This variation in service delivery between Anganwadi centres and private preschools with respect to the early education actually makes private preschools the most preferred alternative for parents. There are several evidences (Kaul et. al 2015; CECED 2015b) that private preschools are getting increasingly popular among parents. There is an array of reasons behind the aversion towards Anganwadi centres and that in turn makes private preschools fancier. There is a clear gap in coverage of the ICDS programme-both qualitative and quantitative (Govt.

of India 2011). For example, although the main product parents wanted from preschool was early-education for their children, this was neglected in most of the Anganwadi centres due to over emphasis on the supplementary nutrition programme. As already mentioned:

'While khichuri has almost become synonymous with AWCs the mothers generally expressed their strong preference for pre-primary schooling – another component of the ICDS – rather than for SNP' (Pratichi 2009: 63).

Another important reason for not choosing Anganwadi centres is because of the “low quality of education” (as perceived by parents) provided in these centres, if provided at all. Similar observation has been revealed in FOCUS 2006,

'Pre-school education is in high demand, especially in areas where parents are relatively well educated. However, the development needs of young children are poorly understood by the communities and therefore the monitoring of PSE is limited' (FOCUS 2006: 45)

Box 6.5

One parent responded when asked why they do not choose Anganwadi centre which is free of cost: “অঙ্গনওয়াড়ি তে সারাদিন বাচ্চা রা শুধু খেলা করে, পড়াশোনা কিছু হয় না; কি লাভ হবে পাঠিয়ে ? আর খাবার যা দেয় বাচ্চা খেতে চায় না।

(Children play the whole time in Anganwadi centre and learn nothing, what is the benefit of sending them there. Also, they do not like the food provided there)

There may be several reasons behind this low-quality education and care and one such reason is the excessive workload on Anganwadi workers that makes it difficult for them to perform all of their duties efficiently and this has already been evident from previous studies.

“The duties of the AWWs are very demanding if not virtually impossible to accomplish them all, at least in the present circumstances where basic support and facilities are often lacking. Moreover, the monetary compensation that she is provided with is a pittance...Unfortunately, the programme has so far not been able to move closer to a rational arrangement, which substantially reduces the effectiveness of the AWW. Many of the AWWs complained during the conversations with us that it was

extremely difficult for them to deliver all the duties that are expected of them' (Pratichi 2009: 49-50).

'The condition of the AWH is probably worse. She has to perform a number of jobs³ that involve a lot of physical labour. But what she gets in return is a miserable package of 900 rupees a month' (Pratichi 2009: 52).

Yet another reason could be the under-qualification of the Anganwadi workers to efficiently perform the early education activities. In most cases, the Anganwadi workers were inadequately trained and because of this, the preschool education component run by them is of low quality (FOCUS 2006; Rana & Sen 2008; Pratichi 2009; Govt. of India 2011).

The free meal provided in the Anganwadi centres, another important reason for children to attend Anganwadi centres, was also highly criticized by parents for its poor quality and lack of variety. There were several instances during this study, where parents send their children to Anganwadi centres but children do not eat their lunch at the Anganwadi centre because they neither like the taste nor the same food every day. Due to the repetition of the same menu called 'khichuri'²⁹ every day in most of the centres,

²⁹ Khichuri is a mixture of rice and pulses (daal) and sometimes little vegetables cooked in very little oil and spices.

Anganwadi centres were referred as 'khichuri school' by many parents and children. As also mentioned in Pratichi study (2009: 53):

'It is rather strange that the supplementary nutrition provided to the children in the anganwadis took the form of a single-item menu that has remained unchanged for ever, viz. khichuri – dal and rice boiled together with salt, turmeric and very little oil and some vegetables, the quantity of which varies from time to time and centre to centre. As a disgusted worker pointed out, "even the poorest of the poor would revolt against a repetitive menu. But the children are voiceless. They are so hungry that they never complain. But, you know, children whose parents can feed them well at home don't touch the khichuri in the centre.'

Another drawback of most of the Anganwadi centres is the absence of necessary infrastructures (details can be found in Govt. of India 2011: 44-51). It is already revealed in previous chapter that the available secondary data that three-quarter of the Anganwadi centres in the research area had no building of their own and many also have no toilet for children. In depth study evaluating the current scenario of ICDS in West Bengal and other states reveals that only limited number of centres had their own buildings while

the rest were operated from some temporary places like club houses, primary schools etc. (Pratichi 2009; FOCUS 2006). Many of the Anganwadi centres have faced various challenges because of non-availability of proper shelter ranging from lack of storage for materials and food grains, no cooking place, conducting the SNP programme in open place, to difficulties in running the centre in rainy season etc. Centres taking place in some temporary shelter such as in a room of a primary school or club houses were not much better and had to compromise in many ways. Other than these, lack of space or playground to conduct preschool activities, availability of drinking water, and toilet facilities for children and Anganwadi staffs, unavailability of sufficient stationaries, etc. were other major impediments faced by these centres. The limitations faced by Anganwadi centres seem to have an impact on its performance and participation and as mentioned:

'This is a highly unsatisfactory arrangement, which entails frequent disruptions in ICDS activity and restricted access for some communities of the village.' (FOCUS 2006: 43)

The limitations of Anganwadi centres, makes it less attractive to parents. It is solely chosen by parents if they cannot afford private preschool or only if private preschools are not available within a manageable distance.

Understandably, Anganwadi centres were not the first choice of most of the parents as there were several complaints against those centres. However, some parents also admitted the usefulness of having an Anganwadi centre nearby for many reasons. Understandably, for many low-income families, Anganwadi centres were the only possibility and they were glad to have at least something that they can access.

In contrast to the colorless appearance of most of the Anganwadi centres and various challenges faced by them, the private preschools, on the other hand, appear as an attractive alternative for parents. Albeit the limited information available on private preschools as these are highly heterogeneous in scale of operation and unregulated, however it appears from author's field experience and what most of the parents mentioned that most of the private preschools have the basic infrastructure to operate and are usually adequately funded. The formal school like structure and curriculum of the private preschools has been favored by parents irrespective of the financial costs associated with it. Functioning of these preschools is more regular and the curriculum followed is mainly focused on preschool education which is the first and foremost thing parents expect from a preschool. The curriculum in private preschools is mainly based on "three Rs" (Read, Write and Arithmetic) which is highly criticized by experts; yet, favored by parents. Whilst the effectiveness

of the curriculum practiced by private preschools is under question and subject to research, in most of the parents' perception that, this is more effective way of educating children and makes them ready for the primary school. There is a clear preference towards formal school like curriculum rather than the curriculum followed in Anganwadi centres because the former provides some immediate outcomes, such as: children remembering the alphabets, counting numbers, telling rhymes, etc. There were comparisons being made by parents whose child attended private preschool and another child who attended an Anganwadi centre; and took vanity and were really proud in mentioning that their child could read and write from a very young age.

Another important observation drawn is, as attending private preschool is often associated with financial costs,

Box 6.6

As mentioned by some parents:

- ❖ "এতো খরচ কি করে করবো? তাই অঙ্গণওয়াড়ি'তেই পাঠাই"
(We cannot afford the cost of private schools, so we send our children to Anganwadi centre)
- ❖ "প্রাইভেট স্কুল ভালো জানি, কিন্তু টাকা কোথায় পাবো"
(We know private schools are better, but where shall we get the money for that)

the choice made by parents were deliberate and more conscious. Parents, who choose private preschool, are

commonly focused on early education and can really afford the costs attached to private schools.

As a result, these private preschools are dominated by children from the upper socio-economic strata of the society. This makes private preschool distinct and sometimes represents the “status” of the families who send their children there.

Box 6.7

It is quite symbolic what some of the parents said about private preschools:

- ❖ "ও তো বড়লোক দের স্কুল, আমাদের ক্ষমতা নেই বাচ্চা কে ওখানে ভর্তি করার "
(Those schools are for the rich people; we cannot afford to send our children there)
- ❖ "আমার বাচ্চা ও প্রাইভেট স্কুল এ যায়! "
(My child also goes to the private school!)

The incidence of over preference towards private preschools by parents from higher socioeconomic strata acts as a testimony in favour of private preschools. Many lower socioeconomic endowed parents have the perception that private preschools are better, as these preschools are mostly attended by children from affluent families. This can also be an explanation to the findings of previous studies (e.g. Kaul et al. 2015; CECED 2015b) that witnessed a steady expansion of private preschools, and these are not

only selected by the high-income families but also preferred by the middle and sometimes low-income families as well. Other than considering the "better" education provided in private preschools, some parents might also show off their status promotion in the society by sending their children to private preschool.

Considering the contrasting features of Anganwadi centres and private preschools, it is obvious that private preschools appear to be of "better" quality. However, given the fact that a large number of children are enrolled in the public sector across the country, it is obvious that Anganwadi centres are also hugely popular among people. Although, Anganwadi centres suffer from many challenges, nevertheless, this has so far been the main ECE provision in India and provides various forms of support, especially to the marginalizes section of the society. In summary, the importance of Anganwadi centres is immense for nutritional, cognitive and non-cognitive development of children and in alleviating child poverty.

6.3. Conclusion

There is no doubt that early childhood education and care programmes are of great importance for a developing country like India. The existing practices proved to be helpful in bringing down child poverty up to a certain extent; however, it is far from what is needed. Since about one-third of the children in India still have no ECE

experience, it is quite clear that the existing ECE provisions are unable to provide universal coverage.

The reason behind this unequal opportunity in ECE is multi-layered with several factors, both from demand side as well as supply side that should be held responsible. Evidence suggests that there exists lack of demand for ECE which can mainly be attributed to the variation in the socioeconomic status of the parents. Educational, occupational, and social factors all operate to create differences in preschool attendance, with educational factors appearing to carry the greatest share of the variance. Given the fact that, a substantial percentage of population still is illiterate, even in the 21st century, many Indian parents still do not understand the importance of ECE for children and the society. The study clearly shows that, the importance of ECE for children has not been acknowledged by a number of parents, especially with low level of education; thus, making it difficult for the ICDS programme to provide universal coverage. However, not much effort has been seen from Government's side in making people aware on the importance of ECE for their children. Policies are clearly needed to encourage parents and explain to them the different roles of ECE in building a strong foundation for their children.

However, the deficiency in demand for ECE can also be attributed to the availability and quality of the existing ECE

provisions, especially the public ones. It seems that there is clearly a gap between ‘promise’ and ‘practice’. For example:

‘About two decades ago it was recognised that an ideal AWCs should have a room with sufficient space for indoor activities of the children, a kitchen and a small store, and there should have a separate bathroom with sanitary latrine. Unfortunate as it is, even after three decades of the launching of the programme many of the AWCs in West Bengal are run in a variety of places which hardly qualify for a structure appropriate for carrying out the activities of the centres.’(Pratichi 2009: 43)

There are numerous examples which show that the functioning of the Anganwadi centres are disappointing in many cases and have failed to meet the expectation of people. The policy prescriptions regarding different components like cooked meal, and pre-school education were not adequately followed in real life on many occasions. To reduce these discrepancies and to make it more acceptable, the functioning of the Anganwadi centres, especially, those situated in socio-economically backward regions, need to be regularly monitored. Most importantly, it also needs to be understood that, in recent times, general focus of parents’ is mainly on the PSE component of the ICDS rather than SNP. Therefore, significant emphasis

needs to be given on the PSE component which has already been mentioned as the “backbone” of the ICDS programme. Besides, a considerable number of children are dependent on the food provided under ICDS scheme and that counts as an important part of their daily nutritional intake. Therefore, maintaining a healthy quality of the food provided in Anganwadi centres is also essential. Recasting existing child care and educational practices of ICDS in meeting the demand of the people by ensuring its availability and accessibility and delivery of efficient and effective services, will make it more appealing and attractive for parents.

Furthermore, there is strong evidence that private preschools are also very popular among parents for several reasons, even though the effectiveness of these preschools has been questioned by experts and said to have a rather negative effect on children. Since these preschools are highly unregulated and lacks appropriate control by the government, it is difficult to assess their performance and have a clear picture of their functioning. Perhaps there are several private preschools with good practices and are having positive effect on children, but these are unknown to outside of their region of operation. Considering the fact that approximately 10 million children are enrolled in these form of preschools, it is utmost important to bring them under one umbrella where the curriculum and practices of these preschools can be scientifically examined for its effect

on children. This will not only make sure that the children attending private preschools get stimulant experience but also bring forward existing good practices which could be replicated by others.

An effort is needed at all levels, by government, policy makers, ECE providers, and most importantly parents and extended families of children to eliminate this unequal opportunity in ECE and provide all children an equal start. An all-out action is therefore needed to mobilize awareness among parents as well as amongst professionals in expanding preschool education programmes, implementing interventions for childhood development in infancy through families and caregivers, particularly for disadvantaged children, and to exponentially reach a full coverage, so that not a single child is left behind. This is undoubtedly the prerequisite for a better future since today's children are tomorrow's asset for the nation. Effort is therefore needed from all corners as mentioned by Jolly (2007):

'The challenge is clear. The size and nature of the problem is defined, along with the seriousness of its long term consequences. What remains open is only the world's response, and our own.'
(Jolly 2007: 9)

6.4. Limitations

Although this study is one of its kinds in the Indian context, however, there are several issues beyond the capacity of the study to explain. One limitation of the study comes from the coverage of the study with respect to the sample size and geographical area. The study represents only one of the nineteen states in India and the sample size is also very low if compared with the total population of the country. Each of the States varies greatly with respect to population and its composition, per capita income, and other macro-level parameters, as well as cultural diversities. Also, there exists variation with respect to coverage of existing ECE provisions, willingness and performance of respective authorities in each of these states to provide ECE to children. Therefore, the findings of this study may not be generalized for the country. However, since West Bengal is close to the national average with respect to several macroeconomic parameters, findings of the study can be used as a reference for the country and could be an indicative hunch to the national policy level. But it would definitely be a confirmative suggestion to the state level policy ground.

As suggested by the theoretical discussion that one important component of parental preschool decision is their emotion and sentiments about the upbringing of their children which is subjective and therefore difficult to capture in an empirical study of this kind. Variables used to

capture parental sentiments about ECE are limited in this study and only express their opinion about early childhood education and may not be adequate to explain their feeling about children. Therefore, the unobserved error terms of both the regression equations of the study may contain several unobserved parental characteristics which may have an important impact on the parental decision but beyond the limit of this study.

Given India context, the society where families live and “significant others” may have an important implication in their preschool decisions. As people constantly interact with neighbors and relatives, and extended family members often contribute to several family decisions, it is likely that parents take their advice during preschool decisions as well. But this has not been considered in this study due to lack of information available; thus, limit the explainability of the findings. Also, there was no information available on the child-rearing practices of the families.

All the information collected on early childhood education of children was retrospective in nature. Parents had to recall their decisions taken a few years back and this may lead to biases. As several household characteristics may change in last few years and therefore the present socioeconomic status of households may not represent the socioeconomic status they had few of years back. Since the goal of the study was to compare between groups of

parents who send their children to preschool and who did not, the only possibility to have both these groups of parents together and with minimum recall period was in the first grade in primary schools. Although, the cause and effect relationship cannot be clearly determined using retrospective studies; however, these are helpful in showing the direction of possible effects. Since there are limited studies and research in the context of early childhood education in India, this study design may provide a vehicle for research by guiding the future prospective studies in this area.

Another important set back of the study is that it is not able to identify whether the choice of a type of preschool was driven by a voluntary decision by parents or their compulsion. The study explains the possible factors behind the variation in the type of preschool chosen, but it does not explicitly bring out the motives behind the parental choice of a type of preschool. For example, considering parents who had chosen Anganwadi centres, it is not clear from the findings whether their choice was deliberate and they really wanted their children to go there in the first instance.

One major challenge that was faced during the study was the unavailability of enough empirical pieces of evidence and studies on early childhood education in India. Some of the references used in this study, explaining the ECE scenario in the Indian, are old. The ECE scenario in India

has gone through a drastic restructuring over time, but very little is documented and accessible. Particularly in case of private provisions of ECE in India, there is not much reliable information available which makes it difficult to assess the existing scenario. Therefore, predictions were made in this study based only on the available studies and author's own field experience, which may differ from region to region and may not be generalized in all aspect.

Despite its limitations, this study provides a solid understanding of the underlying mechanism behind the unequal opportunities in early childhood education in India. It is perhaps first of its kind addressing possible inequalities at the very early childhood level, which is consider the most important period of life. Moreover, it shows possible variation in parental preschool decisions from a demand side perspective; and the impact it may have on preschool attendance by their children. It is quite clear from the findings that, emphasis need to be given not only in improving the service provisions of ECE programmes but also in improving the general well-being of people such as providing them better living condition, and education. Therefore, a holistic approach is needed to address issues both from the demand side as well as the supply side to have a more egalitarian opportunity in early childhood education in India.

References

- Arnold, F., S. Parasuraman, P. Arokiasamy, & M. Kothari (2009) 'Nutrition in India. National Family Health Survey (NFHS-3), India, 2005-06', Mumbai: International Institute for Population Sciences; Calverton, Maryland, USA: ICF Macro.
- Asadullah, M., U. Kambhampati, & F. Lopez Boo (2009) 'Social divisions in school participation and attainment in India', *IDB-Research Department Working Papers* Number 692.
- ASER (2017) Annual Status of Education Report (Rural). New Delhi: ASER Centre.
- Barnett, S.W. (1995) 'Long-Term Effects of Early Childhood Programs on Cognitive and School Outcomes', *The Future of Children* 5(3): 25-50.
- Becker, G. S. (1964) Human Capital. The University of Chicago Press.
- Bedi, A.S. & J. H. Marshall (2002) 'Primary school attendance in Honduras', *Journal of Development Economics* 69: 129-153.
- Blau, D. & Currie, J (2006) 'Pre-School, Day Care, and After-School Care: Who's Minding The Kids?' in Hanushek, E. & F. Welch (eds) *Handbook of the Economics of Education* (Vol 2), pp. 1163-1278. Elsevier.
- Blossfeld, H. P. & Y. Shavit (1993) 'Persisting Barriers: Changes in Educational Opportunities in Thirteen Countries' in

- Blossfeld, H.P. & Y. Shavit (eds) *Persistent Inequality*; pp. 1-24. Westview press.
- Boudon, R. (1974) *Educational Opportunity and Social Inequality. Changing Perspective in Western Society*. New York: Wiley.
- Breen, R, R. Luijkx, W. Muller, R. Pollak (2009) 'Nonpersistent Inequality in Educational Attainment: Evidence from Eight European Countries'. *AJS* 114(5); 1475-1521. The University of Chicago.
- Breen, R. & Goldthorpe, J. H. (1997) 'Explaining Educational Differentials: Towards A Formal Rational Action Theory'. *Rationality and Society* 9; 275-305. SAGE.
- Cameron, A. C., & Trivedi, P. (2009) *Microeconometrics: Methods and applications*. New York: Cambridge University Press.
- CECED (2015a) 'Indian Early Childhood Education Impact Study- I: Quality and Diversity in Early Childhood Education: A view from Andhra Pradesh, Assam and Rajasthan' <<http://ceced.net/CECED-Report.pdf>> Accessed 30 August 2015. Centre for Early Childhood Education and Development: Delhi.
- CECED (2015b) 'The Indian Early Childhood Education Impact Study' Policy Brief-November 2015.
<<http://img.asercentre.org/docs/Research%20and%20Assessments/Current/Education/Research%20Projects/iecepolicy>>

- [brief_november2015.pdf](#)> Accessed March 2017. Centre for Early Childhood Education and Development: Delhi.
- CECED (2017) 'The Indian Early Childhood Education Impact Study' Policy Brief-July 2017. <
<http://ceced.net/IECEI%20Study%20Policy%20Brief%20July%202017.pdf>> Accessed July 2017. Centre for Early Childhood Education and Development: Delhi.
- Checchi, D (2006) *The Economics of Education*. Cambridge University Press.
- Coleman, J. S. (1990) *Foundations of Social Theory*. Cambridge: Harvard University Press.
- Coleman, J.S. (1988) 'Social Capital in the Creation of Human Capital'. *The American Journal of Sociolog* 94; S95-S120. The University of Chicago Press.
- CRY (2017) Child Rights and You <<http://www.cry.org/issues-views>>
- Cryer, D. & Burchinal, M. (1997) 'Parents as Child Care Consumer', *Early Childhood Research Quarterly* 12; 35-58.
- De Graaf, P. M. & H. B. G. Ganzeboom (1993) 'Family Background and Educational Attainment in the Netherlands for the 1891-1960 Birth Cohort' in Blossfeld, H.P. & Y. Shavit (eds) *Persistent Inequality*; pp. 51-74. Westview press.
- Desai, S. & A. Thorat (2013) 'Social Inequalities in Education' in IDFC Foundation (2013) *Indian Infrastructure Report 2012*, pp 44-51. London: Routledge.

- Eccles, J.S., T.F. Adler, R. Futterman, S.B. Goff, C.M. Kaczala, J. Meece & C. Midgley (1983) 'Expectancies, Values and Academic Behaviors' in Spence, J.T. (ed.) *Achievement and Achievement Motives*; pp. 75-146. San Francisco: W. H. Freeman & Co. Ltd.
- Eccles, S.J. & P.E. Davis-Kean, (2005) 'Influence of parents' education on their children's educational attainments: the role of parent and child perceptions', *London Review of Education* 3(3); 191-204. Routledge.
- Edwards, J.H.Y., B. Fuller, & X. Liang. (1996) 'The mixed preschool market: Explaining local variation in family demand and organized supply', *Economics of Education Review* 15(2): 149-161.
- Evans Judith L., Robert G. Myers and Ellen M. Ilfeld (2000) *Early Childhood Counts: A Programming Guide on Early Childhood Care and Development*. Washington D.C.: The World Bank.
- FOCUS (2006), Abridge Report: Citizen's Initiative for the rights of Children Under Six 2006, New Delhi.
- Goodwin, A.L., R. Cheruvu, C. Genishi (2008) 'Responding to Multiple Diversities in Early Childhood Education' in Genishi, C. & A.L. Goodwin (eds) *Disparities in Early Childhood Education*; pp. 3-10. Routledge.
- Gordon, R.A., A.C. Colaner, M.L. Usdansky & C. Melgar (2013) 'Beyond an "Either-Or" approach to home- and center-based

child care: Comparing children and families who combine care types with those who use just one.' *Early Childhood Research Quarterly* 28; 918-935. ELSEVIER.

Government of India, Department of Social Welfare (1974) 'National Policy for Children'. New Delhi
<http://www.saathii.org/ovc/child_rights_and_policies/i-04-national_policy_for_children.pdf> accessed 11May 2012.

Govt. of India (2011) 'Evaluation Study on Integrated Child Development Scheme (ICDS)- Vol. 1', PEO Report No. 218. Planning Commission of India: New Delhi.

Han, W.J. (2004) 'Nonstandard work schedules and child care decisions: evidence from the NICHD study of Early Child Care', *Early Childhood Research Quarterly* 19; 231-256. ELSEVIER.

Hechter, M. & Kanazawa, S. (1997)'Sociological Rational Choice Theory'. *Annual Review of Sociology* 2; 191-214. Annual Review.

Heckman, James J. (1979) 'Sample selection bias as a specification error', *Econometrica* 47(1); 153-161.

Heckman, James J. (2000) 'Policies to Foster Human Capital', *Research in Economics* 54; 3-56. IDEAL.

Heckman, James J. (2011) 'The Economics of Inequality- The value of Early Childhood Education', *American Educator* 35(1); 31-35. Hegewisch, Ariane.

- Hewett, C.N., N. Sweller, A. Taylor, L. Harrison & J. Bowes (2014) 'Family, child and location factors and parents' reasons for multiple concurrent childcare arrangements in the years before school in Australia', *Early Childhood Research Quarterly* 29; 51-63. ELSAVIER.
- Hoff, E, L. Brett & T. Tardif (2002) 'Socioeconomic Status and Parenting' in Bornstein, M.H. (Ed.) *Handbook of Parenting Volume 2: Biology and Ecology of Parenting*. pp 231-252. Mahwah, NJ.
- Jacoby, H.G. (1994) 'Borrowing Constraints and Progress Through School: Evidence from Peru', *The Review of Economics and Statistics* 76(1): 151-160. The MIT Press.
- Johansen, A.S., A. Leibowitz, , & L.J. Waite, (1996) 'The importance of child-care characteristics to choice of care', *Journal of Marriage and The Family* 58: 759-772.
- Johansen, A.S., A. Leibowitz, , & L.J. Waite, (1996) 'The importance of child-care characteristics to choice of care', *Journal of Marriage and The Family* 58: 759-772.
- Jolly, R. (2007) 'Early Childhood development: the global challenge', *The LANCET* 369(9555); 8-9.
- Jonsson, J.O. & Erikson, R (2000) 'Understanding Educational Inequality: The Swedish Experience' *L'Annee sociologique (1940/1948-)*. *Troisieme serie* 50(2); 345-382. Presses Universitaires de France.

- Kaul, V. & Sankar, D. (2009) 'Early Childhood Care and Education in India'. New Delhi: NUEPA.
- Kaul, V. (1992) 'Early Childhood Education in India' in Woodill, G.A., J. Bernhard & L. Prochner (eds) *International Handbook of Early Childhood Education*, pp. 275-292. New York: Garland Publication.
- Kaul, V. (1998a) 'Early Childhood Care and Education in the Context of EFA.' Paper prepared for the Government of India. Education for All-The Year 2000 Assessment Report. New Delhi.
- Kaul, V. (1998b) 'Minimum Standards for Quality in Early Childhood Education' in Report of the national Consultation Meeting on Streamlining of Early Childhood Services, New Delhi, 26-27 March 1999; pp. 55-60. New Delhi: NIPCCD.
- Kaul, V., P. Mathur, P. Kohli & P. Chadha (2015) 'Early Childhood Education in India: A Snapshot' ECED Brief-2 <<http://ceced.net/wp-content/uploads/2015/03/ECED-Brief-2.pdf>> Accessed 30 August 2015.
- Kohn, M.L. (1969) *Class and Conformity: A study in Values*. The University of Chicago Press.
- Leseman, P.P.M. (2002) 'Early childhood education and care for children from low-income or minority Backgrounds'. OECD.
- Liang, X., B. Fuller, & J. Singer, (2000) 'Ethnic differences in child care selection: The influence of family structure,

- parental practices, and home language', *Early Childhood Research Quarterly* 15(3): 357-384.
- Morgan, S.L. (1998) 'Adolescent Educational Expectations: Rationalized, Fantasized, or Both?' *Rationality and Society* 10(2); 131-162. SAGE.
- Murphy, J. (1981)'Class Inequality in Education: Two Justifications, One Evaluation but No Hard Evidences' *The British Journal of Sociology* 32(2); 182-201. Wiley.
- Murphy, J. (1990) 'A most Respectable Prejudice: Inequality in Educational Research and Policy' *The British Journal of Sociology* 41(1); 29-54. Wiley.
- National Health Mission (2017) < <http://nhm.gov.in/nrhm-components/rmnch-a/child-health-immunization.html>>.
- National Institute of Public Cooperation and Child Development (NIPCCD) (n.d) 'Handbook for Angwanwadi Workers', New Delhi: National Institute of Public Cooperation and Child Development. Aviable at < <http://nipccd.nic.in/syllabi/eaw.pdf>>.
- National Institute of Public Cooperation and Child Development (NIPCCD)(1992). 'National Evaluation of Integrated Child Development Services'. New Delhi.
- National Institute of Public Cooperation and Child Development (NIPCCD)(2006). 'National Evaluation of Integrated Child Development Services'. New Delhi.

- Pattnaik, J. (1996) 'Early Childhood Education in India: History, Trends, Issues, and Achievements', *Early Childhood Education Journal* 24(1); 11-16.
- Pratichi (2009) 'The Pratichi Child Report I- A Study on the delivery of the ICDS in West Bengal', Pratichi (India) Trust. New Delhi.
- Prochner, L (2002) 'Preschool and Playway in India' *Childhood* 9(4); 435-453. SAGE.
- Rana, k. & S. Sen (2008) 'The ICDS Programme in West Bengal: Scopes and Challenges', Pratichi (India) Trust. Presented at the "Regional Consultation on the Status of the Young Child" on 12th & 13th March 2008 at Ranchi, Jharkhand.
- Schober, Pia S. & C. Katharina Spieß (2013) 'Early Childhood Education Activities and Care Arrangements of Disadvantaged Children in Germany', *Child Indicators Research* 6(1). Springer.
- Seginer, R. & A.D. Vermulst (2002) 'Family Environment, Educational Aspiration, And Academic Achievement in Two Cultural Settings', *Journal of Cross-Cultural Psychology* 33(6); 540-558. Western Washington University.
- Sewell, W.H., A.O. Haller, A. Portes (1969) 'The Educational and Early Occupational Attainment Process' *American Sociological Review* 34(February); 82-92.
- Sewell, W.H., A.O. Haller, Ohlendorf, G.W. (1970) 'The Educational and Early Occupational Attainment Process:

- Replication and Revision' *American Sociological Review* 35(6); 1014-1027.
- Sharma, A. (1987) 'Monitoring Social Components of Integrated Child Development Services: A Pilot Project.' New Delhi: National Council for Educational Research and Training.
- Sharma, A. (1998) 'Opportunity, Challenges and Vision' in M. Swaminathan (ed.) *The First Five Years: A Critical Perspective on ECCE in India*, pp. 285-301. New Delhi: SAGE.
- Singer, J. D., B. Fuller, M. K Keiley, A. Wolf (1998) 'Early child-care selection: variation by geographic location, maternal characteristics, and family structure', *Developmental psychology* 34(5); 1129-1144.
- Smith, Anne B. (2003) 'School Completion/Academic Achievement-Outcomes of Early Childhood Education'. Encyclopedia on Early Childhood Development, Children's Issues Centre, New Zealand <<http://www.child-encyclopedia.com/documents/SmithANGxp.pdf>> accessed 11 May 2012.
- Spieß, C. Katharina, Eva M. Berger & Olaf Groh-Samberg (2008) 'Overcoming Disparities and Expanding Access to Early Childhood Services in Germany: Policy Considerations and Funding options', *Innocenti Working Paper* 2008-03. Florence, UNICEF Innocenti Research Centre.

- Swaminathan, M. (1998) *The First Five Years: A Critical Perspective on Early Childhood Care and Education in India*. New Delhi: SAGE.
- UNESCO (2006a) 'EFA Global Monitoring Report 2007'. Paris: United Nations Educational, Scientific and Cultural Organization.
- UNESCO (2006b) 'Select issues concerning ECCE india', Paper commissioned for the EFA Global Monitoring Report 2007, *Strong foundations: early childhood care and education*.
- UNICEF & World Bank Group (2016) 'Ending Extreme Poverty: a Focus on Children'. <https://www.unicef.org/publications/files/Ending_Extreme_Poverty_A_Focus_on_Children_Oct_2016.pdf> accessed January 2017.
- UNICEF (2001) 'The State of the World's Children' <<http://www.unicef.org/sowc01/pdf/SOWC3.pdf>> accessed 12 June 2012.
- UNICEF (2016) 'The State of the World's Children: A Fare Chance for Every Child' <https://www.unicef.org/publications/files/UNICEF_SOWC_2016.pdf> accessed June 2016.
- UNICEF (2017) *Early Childhood Development* <<https://www.unicef.org/earlychildhood/>> Accessed June 2017.

- United Nations (2007) Gender Disparity in Primary Education: The Experience in India. UN Chronicles Vol. XLIV (4) <<https://unchronicle.un.org/article/gender-disparity-primary-education-experience-india>>accessed on November 2016.
- Usmani, G. & N. Ahmad (2017) 'Health Status of Children in India', *Journal of Perioperative & Critical Intensive Care Nursing* 3(1).
- Van De Ven, W. P. M. M., & V. B. Praag (1981) 'The demand for deductibles in private health insurance: A probit model with sample selection', *Journal of Econometrics* 17(2); 229–252.
- Van den Berg, M.J.M., & I. Vlug, (1993) 'Turkse en Marokkaanse ouders en kinderopvang in Kralingen-West'. Rotterdam, Netherlands: RISBO.
- Van Horn, L., S.L. Ramey, B.A. Mulvihill & W.Y. Newell (2001) 'Reasons for child care choice and appraisal among low-income mothers', *Child & Youth Care Forum* 30(4); 231-249.
- Vesely, C.K. (2013) 'Low-income African and Latina immigrant mothers' selection of early childhood care and education (ECCE): Considering the complexity of cultural and structural influences', *Early Childhood Research Quarterly* 28; 470-486. ELSEVIER.
- White, G., M. Ruther & J. Kahn (2016) 'Educational Inequality in India: An Analysis of Gender Differences in Reading and

Mathematics', *India Human Development Survey Working Paper Number 2016-2*.

WHO (2015) 'India: WHO Statistical Profile', available at <
<http://www.who.int/countries/ind/en/>>.

Wooldridge, Jeffery M. (2006) *Introductory Econometrics- A Modern Approach*. South-Western CENGAGE Learning.

World Education Forum (2000) 'The Dakar Framework for Action, Education for All: Meeting Our Collective Commitments'. Dakar, Senegal: World Education Forum.

Appendices

Appendix 1			
Logistic regression on the debate of preschool vs. no-preschool			
(Base Outcome: Preschool non-attendance)	Estimation 1	Estimation 2	Estimation 3
Log(household Income)	1.611* (0.314)	1.376 (0.325)	1.346 (0.320)
House Type (Ref: Kuccha House)			
Pucca (Concrete)	1.208 (0.238)	0.780 (0.197)	0.810 (0.205)
Semi Pucca (Semi Concrete)	1.186 (0.196)	0.868 (0.188)	0.862 (0.188)
House Ownership (Ref: Rented)			
Owned House	1.404 (0.376)	0.867 (0.318)	0.800 (0.294)
Parents' Level of Education (Ref: up to Primary)			
Secondary	1.451* (0.226)	0.942 (0.191)	0.960 (0.195)
HS and above	3.472*** (1.102)	2.484* (0.982)	2.610* (1.035)
Fathers' Occupation Status (Ref: Casual Job)			
Regular Job	1.417* (0.212)	1.163 (0.223)	1.142 (0.221)
Mothers' Occupation Status (Ref: Casual Job)			
Regular job	0.656 (0.247)	0.797 (0.359)	0.763 (0.347)
Religious Origin (Ref: Hindu)			
Islam and others	3.138*** (0.587)	2.717*** (0.656)	2.684*** (0.649)
Caste Origin-Backward Caste (Ref: General Caste)			
Backward castes (S.C., S.T., OBC)	0.895	1.010	0.984

Appendix 1 contd.

	Estimation 1	Estimation 2	Estimation 3
Sex of the Child-Female	(0.145) 1.176 (0.160)	(0.210) 1.235 (0.214)	(0.205) 1.232 (0.214)
Number of Family Members	0.931 (0.054)	0.942 (0.068)	0.942 (0.068)
Number of Siblings	1.076 (0.123)	1.118 (0.169)	1.147 (0.175)
Residing Location (Ref: Urban)			
Rural	0.911 (0.186)	0.943 (0.240)	0.962 (0.246)
Residing District (Ref: Howrah)			
Murshidabad	0.0994*** (0.023)	0.112*** (0.032)	0.111*** (0.032)
Parents' Attitude towards ECE (Ref: Positive Attitude)			
Negative or indifferent		51.93*** (13.401)	53.14*** (13.726)
Distance of the nearest Preschool (Ref: within 500 m.)			
More than 500 m.			0.586** (0.106)
N	1355	1355	1355
Pseudo R ²	0.237	0.477	0.482
Exponential Coefficients, Standard Error in parenthesis.			
*p<0.05, **p<0.01, ***p<0.001.			

Appendix 2
Parental attitude as an exclusion variable

	Selection Model (Base Outcome: Preschool Attended)	Outcome Model (Base outcome: Public Preschool)
Log(household Income)	0.111 (0.126)	1.497*** (0.151)
House Type (Ref: Kuccha House)		
Pucca (Concrete)	-0.082 (0.140)	0.786*** (0.197)
Semi Pucca (Semi Concrete)	-0.080 (0.120)	0.521** (0.188)
House Ownership (Ref: Rented house)		
Owned House	-0.101 (0.196)	0.172 (0.244)
Parents' Level of Education (Ref: up to Primary)		
Secondary	-0.036 (0.113)	0.837*** (0.176)
HS and above	0.492* (0.203)	0.903*** (0.215)
Fathers' Occupation Status (Ref: Casual Job)		
Regular Job	0.111 (0.106)	0.232 (0.139)
Mothers' Occupation Status (Ref: Casual Job)		
Regular job	-0.141 (0.252)	-0.010 (0.261)
Religious Origin (Ref; Hindu)		
Islam and others	0.500*** (0.131)	-0.300 (0.171)

Appendix 2 Contd.

	Selection Model	Outcome Model
Caste Origin-Backward Caste (Ref: General Caste)		
Backward castes (S.C., S.T., OBC)	-0.028 (0.115)	-0.217 (0.145)
Sex of the Child (Ref: Male)		
Female	0.117 (0.095)	0.294** (0.112)
Number of Family Members		
	-0.014 (0.040)	-0.021 (0.041)
Number of Siblings		
	0.058 (0.082)	-0.152 (0.100)
Residing Location (Ref: Urban)		
Rural	0.008 (0.137)	0.080 (0.137)
Residing District (Ref: Howrah)		
Murshidabad	-1.146*** (0.144)	1.201*** (0.165)
Parents' Attitude towards ECE (Ref: Positive Attitude)		
Negative or indifferent	-2.228*** (0.127)	-0.487 (0.412)
Distance of Preschool		
- more than 500 meter	-0.258** (0.098)	-0.135 (0.110)
Constant		
	0.909 (1.087)	-15.696*** (1.387)
Observation	1355	897
Pseudo R2	0.479	0.339
Standard Error in parenthesis.		
*p<0.05, **p<0.01, ***p<0.001.		

Appendix 2A		
Marginal effects of the outcome equation without Heckman selection correction		
(Base outcome: Public Preschool)	Outcome Model without Heckman Correction	Outcome Model without Heckman Correction
Log(household Income)	1.493*** (0.150)	0.335*** (0.028)
House Type (Ref: Kuccha House)		
Pucca (Concrete)	0.774*** (0.196)	0.169*** (0.040)
Semi Pucca (Semi Concrete)	0.504** (0.187)	0.102** (0.036)
House Ownership (Ref: Rented house)		
Owned House	0.172 (0.243)	0.037 (0.051)
Parents' Level of Education (Ref: up to Primary)		
Secondary	0.846*** (0.176)	0.176*** (0.032)
HS and above	0.912*** (0.214)	0.194*** (0.045)
Fathers' Occupation Status (Ref: Casual Job)		
Regular Job	0.229 (0.138)	0.050 (0.030)
Mothers' Occupation Status (Ref: Casual Job)		
Regular job	-0.001 (0.261)	-0.000 (0.059)
Religious Origin (Ref; Hindu)		
Islam and others	-0.293 (0.171)	-0.064 (0.037)

Appendix 2A Contd.

	Outcome Model with Heckman Correction	Outcome Model without Heckman Correction
Caste Origin-Backward Caste (Ref: General Caste)		
Backward castes (S.C., S.T., OBC)	-0.223 (0.144)	-0.049 (0.031)
Sex of the Child (Ref: Male)		
Female	0.289** (0.111)	0.065** (0.025)
Number of Family Members	-0.023 (0.041)	-0.005 (0.009)
Number of Siblings	-0.148 (0.100)	-0.033 (0.022)
Residing Location (Ref: Urban)		
Rural	0.076 (0.136)	0.017 (0.030)
Residing District (Ref: Howrah)		
Murshidabad	1.185*** (0.164)	0.243*** (0.028)
Distance of Preschool		
- more than 500 meter	-0.140 (0.109)	-0.031 (0.025)
Constant	-15.642*** (1.381)	
Observation	897	897
Pseudo R2	0.338	
Standard Error in parenthesis. *p<0.05, **p<0.01, ***p<0.001. Coefficients represent marginal effects of the estimation.		

Appendix 3

District wise findings on the debate of preschool vs. no-preschool

(Base Outcome: Preschool non-attendance)	Estimation for Howrah District	Estimation for murshidabad District
Log(household Income)	-0.022 (0.021)	0.066 (0.035)
House Type (Ref: Kuccha House)		
Pucca (Concrete)	-0.034 (0.019)	-0.030 (0.036)
Semi Pucca (Semi Concrete)	-0.099** (0.031)	0.020 (0.030)
House Ownership (Ref: Rented)		
Owned House	-0.016 (0.026)	-0.033 (0.049)
Parents' Level of Education (Ref: up to Primary)		
Secondary	-0.018 (0.030)	0.000 (0.029)
HS and above	0.021 (0.031)	0.103 (0.054)
Fathers' Occupation Status (Ref: Casual Job)		
Regular Job	-0.030 (0.021)	0.020 (0.027)
Mothers' Occupation Status (Ref: Casual Job)		
Regular job	0.022 (0.026)	-0.030 (0.079)
Religious Origin (Ref; Hindu)		
Islam and others	-0.015 (0.045)	0.143*** (0.033)
Caste Origin-Backward Caste (Ref; General Caste)		
Backward castes (S.C., S.T., OBC)	-0.017 (0.024)	0.007 (0.030)

Appendix 3 Contd.

	Estimation for Howrah District	Estimation for murshidabad District
Sex of the Child-Female	-0.000 (0.018)	0.030 (0.025)
Number of Family Members	0.021 (0.012)	-0.018 (0.011)
Number of Siblings	-0.019 (0.019)	0.030 (0.021)
Residing Location (Ref: Urban)		
Rural	0.005 (0.020)	0.005 (0.041)
Parents' Attitude towards ECE (Ref: Negative or Indifferent)		
Positive Attitude	0.531*** (0.115)	0.648*** (0.027)
Distance of the nearest Preschool (Ref: within 500 m.)		
More than 500 m.	-0.013 (0.018)	-0.050* (0.025)
N	467	888
Pseudo R2	0.412	0.399
N.B. Coefficients represents marginal effects. Standard Error in parenthesis. *p<0.05, **p<0.01, ***p<0.001.		

Appendix 4	
Findings on parental attitude	
(Base Outcome: Negative Attitude)	Estimation 1
Log(household Income)	0.056 (0.029)
House Type (Ref: Kuccha House)	
Pucca (Concrete)	0.098** (0.031)
Semi Pucca (Semi Concrete)	0.059* (0.027)
House Ownership (Ref: Rented)	
Owned House	0.092* (0.044)
Parents' Level of Education (Ref: up to Primary)	
Secondary	0.097*** (0.026)
HS and above	0.160*** (0.041)
Fathers' Occupation Status (Ref: Casual Job)	
Regular Job	0.073** (0.024)
Mothers' Occupation Status (Ref: Casual Job)	
Regular job	-0.100 (0.058)
Religious Origin (Ref; Hindu)	
Islam and others	0.111*** (0.025)
Caste Origin-Backward Caste (Ref; General Caste)	
Backward castes (S.C., S.T., OBC)	-0.033 (0.025)
Sex of the Child-Female	0.004 (0.021)
Number of Family Members	-0.004 (0.009)
	Appendix 4 Contd.

	Estimation 1
Number of Siblings	-0.007 (0.017)
Residing Location (Ref: Urban)	
Rural	-0.008 (0.030)
Residing District (Ref: Howrah)	
Murshidabad	-0.194*** (0.026)
Distance of the nearest Preschool (Ref: within 500 m.)	
More than 500 m.	-0.009 (0.021)
N	1355
Pseudo R2	0.211
<p>N.B. Coefficients represents marginal effects. Standard Error in parenthesis. *p<0.05, **p<0.01, ***p<0.001.</p>	

Appendix 5
Type of preschool and parents' education

(Base Outcome: Public Preschool)	Parents' Education-Up to Primary (Probit Estimation)	Parents' Education-Secondary and above (Probit Estimation)
Log(household Income)	2.512** (0.821)	1.450*** (0.153)
House Type (Ref: Kuccha House)		
Pucca (Concrete)	0.000 (.)	1.085*** (0.247)
Semi Pucca (Semi Concrete)	0.181 (0.338)	0.784** (0.251)
House Ownership (Ref: Rented house)		
Owned House	-0.693 (0.623)	0.332 (0.268)
Fathers' Occupation Status (Ref: Casual Job)		
Regular Job	0.461 (0.385)	0.212 (0.153)
Mothers' Occupation Status (Ref: Casual Job)		
Regular job	0.000 (.)	0.128 (0.280)
Religious Origin (Islam and others)	-0.149 (0.473)	-0.397* (0.196)
Caste Origin-Backward Caste (SC, ST, OBC)	0.131 (0.537)	-0.263 (0.154)
Sex of the Child-Female	0.072 (0.342)	0.356** (0.121)
Number of Family Members	0.057 (0.123)	-0.033 (0.044)

Appendix 5 Contd.

	Parents' Education-Up to Primary	Parents' Education-Secondary and above
Number of Siblings	(Probit Estimation)	(Probit Estimation)
Residing Location (Ref: Urban)		
Rural	0.000 (.)	0.068 (0.140)
Residing District (Ref: Howrah)		
Murshidabad	0.000 (.)	1.194*** (0.173)
Parents' Attitude towards ECE (Ref: Positive Attitude) Negative or indifferent		
Distance of Preschool		
- more than 500 meter	-0.022 (0.344)	-0.139 (0.118)
Constant	-22.198** (6.822)	-14.795*** (1.425)
N	156	659
Pseudo R2	0.194	0.291
Standard Error in parenthesis. *p<0.05, **p<0.01, ***p<0.001		

Appendix 6
Type of preschool and residing districts

(Base Outcome: Public Preschool)	Howrah District (Probit Estimation)	Murshidabad District (Probit Estimation)
Log(household Income)	1.746*** (0.214)	1.122*** (0.234)
House Type (Ref: Kuccha House)		
Pucca (Concrete)	-0.122 (0.212)	0.969*** (0.224)
Semi Pucca (Semi Concrete)	0.000 (.)	0.334 (0.204)
House Ownership (Ref: Rented house)		
Owned House	0.699 (0.389)	-0.205 (0.332)
Parents' Level of Education (Ref: up to Primary)		
Secondary	0.037 (0.172)	0.662*** (0.188)
HS and above	0.000 (.)	0.869** (0.316)
Fathers' Occupation Status (Ref: Casual Job)		
Regular Job	0.010 (0.266)	0.444* (0.174)
Mothers' Occupation Status (Ref: Casual Job)		
Regular job	-0.137 (0.316)	0.207 (0.553)
Religious Origin (Ref; Hindu)		
Islam and others	-0.257 (0.432)	-0.459* (0.206)
Caste Origin-Backward Caste (Ref; General Caste)		

Appendix 6 Contd.

	Howrah District	Murshidabad District
Backward castes (S.C., S.T., OBC)	-0.311 (0.222)	-0.160 (0.206)
Sex of the Child (Ref: Male)		
Female	0.590*** (0.166)	-0.024 (0.159)
Number of Family Members	-0.060 (0.054)	0.103 (0.067)
Number of Siblings	0.031 (0.154)	-0.324* (0.139)
Residing Location (Ref: Urban)		
Rural	-0.004 (0.173)	0.428 (0.270)
Distance of Preschool - more than 500 meter	-0.186 (0.163)	-0.143 (0.158)
Constant	-16.505*** (2.025)	-11.434*** (2.059)
N	347	460
Pseudo R2	0.287	0.359
Standard Error in parenthesis.		
*p<0.05, **p<0.01, ***p<0.001		

Appendix 7: Parents' education and type of preschool attended in districts

Parents Education	Murshidabad			Howrah		
	Type of Preschool Attended (Percentage in Parenthesis)		Total	Type of Preschool Attended (Percentage in Parenthesis)		Total
	Public	Private		Public	Private	
Upto Primary	178 (92.23)	15 (7.77)	193	49 (100)	0	49
Upto Secondary	143 (64.71)	78 (35.29)	221	166 (73.78)	59 (26.22)	225
HS and Above	12 (24.49)	37 (75.51)	49	98 (57.99)	71 (42.01)	169

Source: Author's estimation from primary data

Annexures

Annexure 1: Ranking of districts in West Bengal according to the Adult Literacy Rate

	Sl. No.	District	Adult Literacy Rate (%) 2011
Above Average Literacy (AAL)	1	Purba Medinipur	87.66
	2	Kolkata	87.14
	3	North Twenty Four Parganas	84.95
	4	Haora	83.85
	5	Hugli	82.55
	6	Darjiling	79.92
	7	Paschim Medinipur	79.04
	8	South Twenty Four Parganas	78.57
	9	Barddhaman	77.15
State Average	West Bengal		77.08
Below Average Literacy (BAL)	10	Nadia	75.58
	11	Koch Bihar	75.49
	12	Dakshin Dinajpur	73.86
	13	Jalpaiguri	73.79
	14	Bankura	70.95
	15	Birbhum	70.90
	16	Murshidabad	67.53
	17	Puruliya	65.38
	18	Maldah	62.71
19	Uttar Dinajpur	60.13	

Source: The Census of India 2011

Annexure 2: Ranking of sub-districts according to population

Name of the District	Type of Sub-District	Name of Sub-Division	Total population
Howrah District	Rural Sub-districts	Domjur*	377588
		Sankrail	343933
		Jagatballavpur	257941
		Panchla	251930
		Amta - I	223218
		Bagnan - I	221500
		Uluberia - I	215392
		Bally Jagachha	209504
		Amta - II	208132
		Shyampur - I	205849
		Shyampur - II	196164
		Uluberia - II	191599
		Udaynarayanpur	190186
	Bagnan - II	164405	
	Urban Sub-Districts	Howrah Municipal Corporation*	1077075
Bally Municipality		293373	
Uluberia Municipality		232290	
Murshidabad District	Rural Sub-Districts	Berhampore*	446887
		Domkal	363976
		Lalgola	335831
		Beldanga - I	319322
		Sagardighi	310461
		Samserganj	284072
		Suti - II	278922
		Farakka	274111
		Khargram	273332
		Raghunathganj - II	265336
		Hariharpara	257571
Annexure 2 Contd.			

	Burwan	257466
	Jalangi	252477
	Beldanga - II	250458
	Murshidabad Jiaganj	234565
	Nabagram	227586
	Nawda	226859
	Kandi	220145
	Bhagawangola - I	202071
	Raghunathganj - I	195627
	Raninagar - II	190885
	Raninagar - I	189105
	Suti - I	179908
	Bharatpur - II	176368
	Bharatpur - I	172702
	Bhagawangola - II	158024
	Berhampur municiplaity*	195223
Urban Sub-Districts	Dhulian Municipality	95706
	Jangipur Municipality	88165
	Kandi Municipality	55632
	Jiaganj-Azimganj Municipality	51790
	Murshidabad Municipality	44019
	Beldanga Municipality	29205
	Beldanga Municipality	29205
Source: Official websites of the respective Districts		

Annexure 3: Code Book for the Household Questionnaire

Variable Name	Value level	Code
Household Income	Monthly income of the family from all sources	In Indian Rupee
House Type	Pucca Semi-Pucca Kuccha	1 2 3
House Ownership	Owned Rented Others	1 2 3
Parent_Education	Up to Primary Up to Secondary Higher secondary or above	1 2 3
Father_Occupational Status	Regular employed Casual or not Employed	1 2
Mother_Occupational Status	Regular employed Casual or not Employed	1 2
Religious Origin	Hinduism Islam and other	1 2
caste	General Caste Backward Castes (SC, ST, OBC)	1 2
Sex of the Child	Male Female	1 2
Number of Family Members	Total member in the household	
Number of Siblings	Number of siblings the child has	
Residing Location	Village Town	1 2
Residing District	Howrah Murshidabad	1 2
Annexure 3 Contd.		

Parents Attitude towards ECE	Preschool is important		1
	Preschool not important or Indifferent		2
Distance of Preschool (from residence)	Less than 500 m.		1
	More than 500 m.		2
Child went to preschool	Yes		1
	No		0
Type of Preschool	Public		1
	Private		2
Reason for choosing Preschool	Education is important for the child's future. Child learns something early.	Early Education	1
	Child will get used to go to school. Child gets ready for primary school. Child get more socialized	School Readiness	2
	Get free meal and accessories. No cost for schooling.	Cost & Meal	3
	Mother gets time for other siblings. Parents get time for housework. Parents get time for paid work. Others	Others	4
Reason for not choosing Preschool	Want to raise children ourselves Child should spend time with other siblings Child is too young for school	Culture	1
			2
Annexure 3 Contd.			

	<p>Did not consider pre-schooling important</p> <p>Child not interested in education</p> <p>Had no idea about preschools.</p>	Motivation	3
	<p>No preschool was available at that time</p> <p>Preschools were far away (inaccessible)</p> <p>Timing was inconvenient</p> <p>Cost was high</p> <p>Quality of schooling was very poor</p> <p>Preschool service was irregular</p>	Supply Side	4
	<p>Nobody to take the child to the Centre</p> <p>Others</p>	Others	