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Understanding Parental Opt-Out: Determinants of Non-Enrollment in Early Childhood Education and Care in India

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Abstract
The bedrock of human development is laid in the initial years, that offers a crucial window of opportunity for intervention, and provides a strong foundation for academic achievements, and comprehensive development of the children. Early childhood Education and Care (ECEC) is envisioned as a comprehensive programme that holistically meets the child's needs for care, education, nutrition, and health, from a life cycle perspective. When a child misses out on early formative experiences enter primary school at a disadvantage and struggles lifelong to catch up with their peers. This study has been carried out to address the factors behind non-enrollment in ECEC which remain unexplored and needs in-depth analysis. The research primarily incorporates the cross-sectional data that has been collected from October 2024 to December 2024 through household survey by the researcher herself using direct personal interviews, structured schedules, and observation method through multistage random sampling in order to comprehend and address the research problem at hand. Exploratory factor analysis using principal component extraction and varimax rotation was performed on the questionnaire items using SPSS version 25 to address the supply-side and demand-side factors which affect the parent's decision to opt out and not to send their children for ECEC.

Keywords: Early childhood Education and Care, Multistage random sampling, Exploratory factor analysis, Principal component extraction, Varimax rotation

1. INTRODUCTION

The early years of life offers a crucial window of opportunity for intervention, and provides a strong foundation for academic achievements, and comprehensive development of the children. Early childhood education and care (ECEC) includes an array of programmes for young children offered in public and private preschools, day-care centres, and homes (Chattopadhyay & Aneja, 2021). ECEC is envisioned as a comprehensive programme that holistically meets the child's needs for care, education, nutrition, and health, from a life cycle perspective, and ensures gender equality and social cohesion (Kaul et al., 2015). It is a broad term, concerned with the comprehensive development of the children, incorporating a wide-range of stakeholders including, family, society, school, teachers, policy makers, and curriculum developers (Maloth, 2023).

The term ECEC has been defined by UNESCO (2023) as a broad spectrum of services offered to children from birth until they attain age of eight which, involves much more than preparing children for primary schooling and establishing a strong foundation for learning and emotional well-being throughout life. ECCE programs encompass services that promotes good hygiene, sanitation, and health; ensures adequate nutrition; boosts socio-emotional, cognitive, and physical development; and ensures protection to the children. ECCE refers to the rights of children in early years (conception to the attainment of six years of age), for their growth, survival, and optimum development, which requires comprehensive and inclusive approach from family, society, and government (Melhuish et al., 2014; Sahoo, 2016). While acknowledging the importance of ECEC, the United Nations(2015) has defined Sustainable Development Goal (SDG) 4.2, which aspires for all boys and girls to have access to high-quality pre-primary education and care, such that they become school ready by 2030.

The bedrock of human development is laid in the initial thousand days of childhood hence, there has been an urgent call for increased funding and resources for laying a solid foundation for children in early years (Ishimine & Tayler, 2014). Early childhood development is regarded as one of the most significant aspects of the sustainable development. ECEC has been used interchangeably with an array of terms, notably Early Childhood Education (ECE), pre-primary education, Early Childhood Development (ECD), pre-school education, school nursery education, and Montessori education. The effects of ECEC on enhancing linguistic, numeracy, cognitive, emotional, and social skills of the children have been exhaustively established in the academic literature (Boyden et al., 2019; Earle et al., 2018; Hungi et al., 2018). Quality ECEC plays a significant role in empowering children especially, from lower socio-economic backgrounds by providing adequate nutritional support, and monitoring their progress (Ghosh & Dey, 2020). ECCE assists in raising children's vocabulary, pre-literacy, and numeracy skills to the normative range (McCarthy et al., 2011). The Investment in ECEC programmes have higher economic returns, and plays a significant role in bridging the gap between social disadvantaged and advantaged children when, they start their primary schooling (UNESCO, 2024).

Pre-primary education establishes a strong foundation for the success of every subsequent educational stage. Children who have attended at least a year of pre-primary education are more likely to acquire the essential skills for academic success, have less chances of dropping out of school or repeat grades, and are therefore more likely to contribute to prosperous economies and societies. Despite, the proven and lasting benefits, only half of all pre-primary aged children were attending pre-primary education programme, denying more than 175 million children the opportunity to develop the foundational skills requisite to succeed in primary school. The situation is substantially worse in low-income nations, where only one out of five young children are enrolled in pre-primary school (UNICEF, 2019). UNESCO (2022) data depicts that one in four-five-year-old i.e., 35 million out of 137 million 5-year-old children have never attended any kind of pre-primary schooling. Only half of all countries provide free pre-primary education and care worldwide. In Northern Africa, sub-Saharan Africa and Western Asia, less than fifty percent of children were enrolled in pre-primary school. COVID-19 has haltered the growth in pre-primary education, resulting in a decline of 1.5 percentage points (United Nations, 2024). According to National Family Health Survey 5 (2021), only 13.6% of 5-year-old children have attended pre-primary education in the academic year 2019–20 and 60% of children aged of 2-4 years do not attend preschool education in India. Pre-primary education plays a significant role in enhancing children's school readiness by ensuring quality learning through collective and engaging play methods under the supervision of trained and qualified instructors (Government of India, 2021). Low-income children and those most at risk of dropping out of

school can significantly benefit from high-quality early education programmes and can ultimately succeed in every domain of life (Matthews & Ewen, 2006). The government is dedicated to ensuring that every child, regardless of gender or social class, has access to the high-quality ECEC and has made significant efforts in this pursuit that could potentially raise the level and standard of the ECCE in the nation (Reetu et al., 2017). ECEC services offer a ray of hope for millions of children whose ability to develop is at risk due to starvation and a lack of stimulation (Lombardi & Koralek, 2007).

The issue of non-enrollment in ECEC is an alarming issue with wide-ranging consequences. When a child misses out on early formative experiences enter primary school at a disadvantage and struggles to catch up with their peers. India has had one of the most extensive programmes in the world for free, public early childhood education since 1975, known as the Integrated Child Development Scheme. However, the causes of this inequity are largely unknown, and over half of the children in India still do not have access to early childhood education (Ghosh, 2019). To increase the enrollment in pre-primary education and care, it is essential to first identify and address the root causes of non-enrollment. There has been no comprehensive and substantial study about the socio-economic factors affecting the parent's decision not to access ECCE for their children. In this present study, it is proposed to fill this gap by incorporating all the socio-economic factors that determines the parent's decision to opt-out and not to access ECCE services for their children in India. Exploratory factor analysis has been performed to address the factors behind non-enrollment in ECEC which remain unexplored and needs in-depth analysis.

The research is guided by the following research objectives:

RQ 1: To explore the supply-side factors affecting parent's decision not to enroll their children in pre-school education and care institution.

RQ 2: To explore the demand-side factors affecting parent's decision not to enroll their children in pre-school education and care institution.

2. Methodology

The present study has employed the use of qualitative descriptive research design to explore the factors affecting parent's decision not to enroll their children for pre-primary education. The research primarily incorporates the cross-sectional data that has been collected from October 2024 to December 2024 through household survey by the researcher herself using direct personal interviews, structured schedules, and observation method in order to comprehend and address the research problem at hand. Children in the age-group 3-4 years enrolled or not enrolled in pre-primary educational institutions constitutes the study's population. Due to pragmatic reasons like familiar culture and religion, regional language, administrative support by the local governments, and the fieldwork resources the state Haryana was selected for the household survey. In Haryana there were 628 functional registration centres in 2020, out of which 490 were in rural areas and 138 were in urban areas for the registration of vital events. During the year 2020, 591914 number of births registered in Haryana, and thus constituted the sampling frame because the beneficiaries of the ECEC in 2024-25 were the households where children were born in 2020 (Government of Haryana, 2020). Slovin's formula has been used in the study to determine the minimum sample size needed to estimate the statistic while, sampling the population based permissible error of margin. This formula draws upon a 5% margin of error, implying that there is a 95% chance that the parameter's actual value will lie within the estimated range.

Slovin's Formula- $$n = \frac{N}{(1 + Ne^2)} = \frac{591914}{(1 + 591914*(0.05)^2)} = 399.73 = 400$$

n: The number of samples
N: The total population (N= 591914)
e: The margin of error (e= 5 % i.e. 0.05)

As per Slovin's formula, 400 was the adequate sample size to represent the population and thus constituted the sampling units of our study. The multistage random sampling has been used to draw a representative sample and data have been obtained from the sampled households. First, all the districts in Haryana were arranged in descending order of their composite SDGs score which was computed from by taking the arithmetic mean of SDG 1(No Poverty), SDG 2 (Zero hunger), SDG 3(Good Health and Well-Being), SDG 4(Quality Education), SDG 5(Gender Equality), SDG 6(Clean water and sanitation), SDG 8(Decent Work and Economic Growth) and SDG 10(Reduced Inequalities) scores (Refer Table 1 in appendix). On the basis of their composite SDGs score, the districts were divided into three strata: districts with a high composite score (Kaithal, Panchkula, Gurugram, Fatehabad, Ambala, Jind, and Karnal), districts with a medium score (Faridabad, Sirsa, Sonipat, Charkhi Dadri, Rewari, Mahendragarh, and Jhajjar) and districts with a low composite score (Hisar, Yamunanagar, Kurukshetra, Rohtak, Bhiwani, Panipat, Palwal, and Nuh). Employing the lottery method, one district was selected at random from each stratum, namely Kurukshetra from districts with a low composite SDG score, Jhajjar from districts with a medium composite SDG score, and Kaithal from districts with a high composite SDG score. The sample size of 400 was then allocated across these three districts according to their respective sizes using the proportional allocation method i.e., 163 samples from Kaithal, 103 samples from Jhajjar, and 134 samples from Kurukshetra have been collected (Refer Table2 in appendix).

At the second stage, urban and rural registration centres with highest number of registered birth rate were selected based on purposive sampling. In Jhajjar out of 6 registration centres in urban areas, Municipal Committee Bahadurgarh was selected and a sample of swenty-one was collected whereas, out of 27 registration centres in rural areas, Primary Health Centre Dujana was selected ana a sample of thirty-two was collected from these registration centre based on proportionate allocation formula (Refer table 3 in appendix). In Kaithal, out of 6 registration centres in urban areas, Municipal Committee Kaithal was selected and a sample of one hundred twenty-two and forty-one was collected whereas, out of 23 registration centres in rural areas, Community Health Centre Dujana was selected ana a sample of forty-one was collected from these registration centre based on proportionate allocation formula (Refer table 4 in appendix). In Kurukshetra, out of 6 registration centres in urban areas, Municipal Committee Thanesar was selected and a sample of one hundred seven was collected whereas, out of 21 registration centres in rural areas, Community Health Centre Pehowa was selected and a sample of twenty-seven was collected from these registration centre based on proportionate allocation formula (Refer table 5 in appendix). Once the registration centres were selected, the researcher visited with the office of the Municipal Committee Kaithal, Community Health Centre Siwan, Municipal Committee Thanesar, Community Health Centre Pehowa, Municipal Committee Bahadurgarh, and Primary Health Centre Dujana in order to get the address of the households where children were born in the year 2020. After obtaining the list of families where a child was born in 2020 from the respective registration centres, 32 households from Primary Health Centre Dujana, 71 households from Municipal Committee Bahadurgarh, 41 households from Community Health Centre Siwan, 122 households from Municipal Committee Kaithal, 27 households from Community Health Centre Pehowa, and 107 households from Municipal Committee Thanesar were selected randomly based on lottery method, because every household has an exactly equal chance of getting selected.

3. Analysis of the Data

In order to find out the factors that shapes the parent's decision to not send their children for pre-primary education and care exploratory factor analysis (EFA) has been carried out. EFA is a multivariate statistical technique that explains the correlations or covariances among a set of observed variables in terms of a fewer number of unobserved variables known as factors. This technique reduces a set of variables into a smaller number of factors by extracting the maximum common variance. A large number of inter-correlated measures are condensed into a few representative factors or constructs which can be employed for subsequent analysis (Gie Yong & Pearce, 2013; Lawley & Maxwell, 1962; Shrestha, 2021). In this study, factor analysis using principal component extraction and varimax rotation was performed on the questionnaire items using SPSS version 25. This statistical method effectively identified, streamlined, and grouped various questionnaire items into distinct underlying construct.

3.1. Factors affecting parent's decision not to enroll their children for ECEC

30.3% of the households surveyed were not sending their children for pre-primary education and care hence, denying their children the opportunity to realise their potential to the optimum level (Table 1). Based on a primary sample of 400 households, this study thoroughly explores the determinants of parent's choices of not accessing ECEC services for their children. Parents may choose not send their children for pre-primary education and care mainly due to demand-side factors like lack of awareness, cultural beliefs, proximity, alternative informal arrangements, as well as supply-side factors such as non-availability, high costs, poor infrastructure, lack of trained teachers etc.

Table 1 Children attending and not attending ECEC

Area	No	Yes	Total
Rural	43 (43)	57 (57)	100 (100)
Urban	78 (26)	222 (74)	300 (100)
Total	121 (30.3)	279 (69.8)	400 (100)

Source: Primary Survey

Note: The figures in parentheses refer to percentage within area

3.1. Supply-side factors

3.1.1. Assessment of the Suitability of the Data

To determine the suitability of a particular set of data for exploratory factor analysis, sample size and strength of the relationship between the items is to be considered (Williams et al., 2010). The adequacy of the sample size, is tested through Kaiser-Meyer-Olkin (KMO) while, Bartlett's test of sphericity provides the strength of the relationship among the items. is tested through KMO value ranges from 0 to1, with 0.50 considered sufficient for factor analysis(Kwao Nkansah, 2018). The sampling is adequate if, KMO value is greater than 0.5. Bartlett's Test of Sphericity is an estimator of multivariate normality of a set of distribution and tests the null hypothesis that the original correlation matrix is an identity matrix i.e., the variables are orthogonal. The data is suitable for factor analysis if significant value is less than 0.05 (Reddy & Kulshrestha, 2019; Ul Hadia et al., 2016).

Table 2: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.747
Bartlett's Test of Sphericity	**Approx. Chi-Square**	245.252
	df	45
	Sig.	.000

Table 2 illustrates that the Kaiser-Meyer-Olkin statistics is equal to .747, exceeding the minimum acceptable value of 0.5 which indicates that the sampling is adequate and factor analysis is appropriate for the data (Kaiser, 1974). The Bartlett's Test of Sphericity value is 245.25 and the associated degree of significance is less than 0.0001. The Bartlett's test of Sphericity is highly significant at $p < 0.001$ thus, the variables are not orthogonal and the data is suitable for factor analysis.

3.1.2. Factor extraction

Factor extraction is a statistical method of determining the least number of factors which can be used to accurately depict the relationships among the set of variables. This study has used Principal Component Analysis (PCA), to extract the minimum number of factors that best represents the available data set. This approach is used to generate the uncorrelated linear relationships of the observed variables. The first component explains the maximum variance and the successive components explains relatively smaller portion of the variance (Holland, 2008; Mackiewicz & Ratajczak, 1993). Kaiser's criterion (Eigenvalue Criterion) has been used to determine the number of factors to be retained. Eigen value explains the amount of total variance explained by that factor and factors with eigenvalue greater than one were significant and were retained (Barrett & Kline, 1986; Plonsky, 2015).

Table 3: Total Variance Explained

	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.015	30.145	30.145	3.015	30.145	30.145	2.374	23.744	23.744
2	1.574	15.737	45.882	1.574	15.737	45.882	1.918	19.184	42.928
3	1.308	13.084	58.966	1.308	13.084	58.966	1.604	16.038	58.966
4	.888	8.876	67.842						
5	.671	6.708	74.550						
6	.604	6.045	80.595						
7	.547	5.468	86.062						
8	.523	5.228	91.290						
9	.470	4.695	95.985						
10	.401	4.015	100.000						
Extraction Method: Principal Component Analysis.									

Table 3 demonstrates the total variance explained and eigenvalues of the components. Before extraction, ten linear components have been identified within the data set. After extraction and rotation process, three distinct linear components whose eigen value greater than one has been retained. These three factors account for a combined 58.96 % of total variance i.e., 58.96% of common variance shared by ten variables can be accounted by three factors. The first factor explains 23.74% of total variance with eigenvalue 3.015.

The second factor explains 19.18% of total variance with eigenvalue 1.574 and the third factor explains 16.03% of total variance with eigen value 1.30.

In a Scree plot the eigenvalues are represented as dots within the graph, and the successive values are connected by a line. Factor extraction should be stopped where there is levelling of the plot or an "elbow", because the amount of specific variance starts to outweigh the common variance. All the factors above the 'elbow' or levelling of the plot are retained for the further analysis (Cattell, 1966). Figure 1 depicts that there are three factors which account for most of the total variability and have eigenvalue greater than one. The remaining factors account for a very little proportion of the total variability in data and are considered as irrelevant.

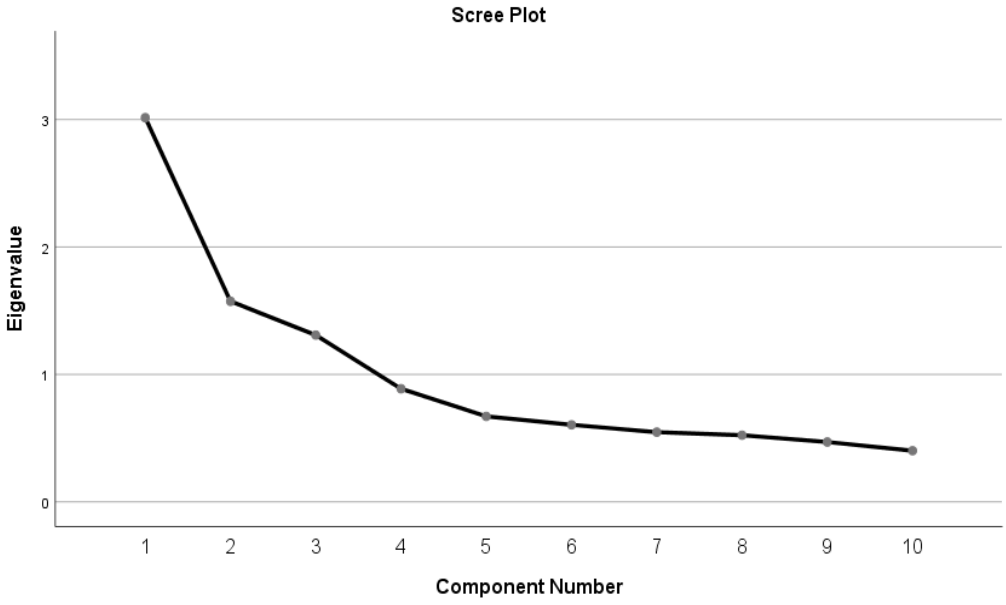

Figure 1: Scree Plot of the Supply-side Factors affecting Households decision not to send their children for Pre-primary Education and Care

3.1.3. Factor Rotation and Interpretation

Factor rotation reduces the intricacy of the factor loadings and simplify the structure. In the initial extraction phase, many factors are correlated with multiple variables because of significant cross loadings. Rotation of the factor loading matrices minimizes the complexity and makes the structure easier to interpret. There are mainly two types of factor rotation- orthogonal and oblique. Oblique factor rotation allows the extracted factors to be correlated with each other whereas, orthogonal factor rotation generates factors that are uncorrelated with one another (Darton, 1980; Rennie, 1997). This study has used orthogonal factor rotation with varimax rotation as majority of variables have high loadings loads on only one factor and variables with low loadings loads only on the other factor and thus maximizes the variance of squared loadings (Abdi, 2003; Kaiser, 1974; Sass & Schmitt, 2010).

Table 4 depicts factor loading, mean, standard deviation, communality after extraction and diagonal anti-image correlation. The communalities demonstrate the common variance in the data structure after the extraction of factors. The variables with large loadings values > 0.50 depict that they are representative of the factor and are retained for analysis. Only one item i.e., staff of the pre-school education and care is not trained, compassionate and lack adequate skills has been dropped because the communality after extraction was .243 which was less than .50. The diagonal anti-image correlation is an indicator of

sampling adequacy of each and every item. The factor 1 is labelled as 'Deficiencies in Pre-school institutions' encompassing four items namely availability, quality of education and care, inadequate amenities, and improper attention to the child which have a correlation of -.721, .754, .750, and .577 with factor 1 respectively. The first factor has explained 23.74% of total variance with eigenvalue 3.015. Households tend to agree with the items quality of education and care and improper attention to the child whereas, they tend to be neutral with the item inadequate amenities, and the item availability of pre-school institution have a tendency towards disagree according to their mean score of the scale. Hence, the households do not access ECEC services because there is non-availability of pre-school institution in their vicinity, and the quality of pre-school education and care which the family could afford is poor and they cannot compromise on their child safety as the staff do not give proper attention to the child and he roams outside the pre-school institution.

Table 4: Supply-side Factors affecting Households decision not to send their children for Pre-primary Education and Care

Factors		Diagonal Anti-image Correlation	Communality after Extraction	Mean	SD	Factor Loading
Item	Factor 1: Deficiencies in Pre-school institutions					
1.	Pre-school institution is not available in my vicinity.	.758	.528	2.44	1.19	-.721
2.	Quality of pre-school education and care which the family could afford is poor.	.750	.668	3.61	1.38	.754
3.	Pre-school institution which the family could afford is inadequately furnished and lack basic amenities.	.799	.568	3.20	1.13	.750
4.	The staff do not give proper attention to the child and he roams outside the pre-school thus, we cannot compromise on our child safety.	.848	.576	3.80	1.06	.577
Item	Factor 2: Operational and management lags					
1.	The environment of the pre-school is not engaging, lively, and captivating hence, our child cries a lot and the staff sends back the child to home.	.750	.639	4.51	1.04	.701
2.	The food which the pre-school institution provides is inedible as it contains insects and is of poor quality.	.798	.612	3.76	.966	.624

3.	The pre-school institution does not enroll our child as we do not have documents such as Aadhar card and domicile of that locality.	.688	.663	1.95	.740	-.804
Item	Factor 3: Lack of public confidence					
1.	There is high teacher-student ratio.	.627	.665	2.09	.548	.796
2.	Pre-school institution which the family could afford is relatively more inclined towards playful activities than education.	.610	.734	3.51	.490	.846
Extraction Method: Principal Component Analysis Rotation Method: Varimax with Kaiser Normalization						

The second factor entitled 'Operational and management lags' consist of three items namely environment, food, and documents which have a correlation .701, .624, and -.804 with factor 2 respectively. The second factor has explained 19.18% of total variance with eigenvalue 1.574. Households tend to strongly agree with the item environment, agree with item the food whereas, disagree with the item document based on their mean score of the scale. The third factor marked as 'Lack of public confidence' contains two items namely teacher-student ratio, and inclination towards playful activities which have a correlation of .796 and .846 with factor 3 respectively. The third factor has explained 16.03% of total variance with eigen value 1.30. The household tend to disagree with the item higher-teacher student whereas, agree with the item inclination towards playful activities according to their mean score of scales. Hence, the households opt out because the environment of the pre-school is not engaging, lively, and captivating hence, our child cries a lot and the staff sends back the child to home instead of indulging him in playful activities, and the food which pre-school institution provides is inedible and has insects in it and not because there is high-teacher student ratio.

3.2. Demand-side factors

3.2.1. Assessment of the Suitability of the Data

Table 5 depicts that the Kaiser-Meyer-Olkin statistics is equal to .520, exceeding the minimum acceptable value of 0.5 which illustrates that the sampling is adequate and factor analysis is appropriate for the data set. The Bartlett's Test of Sphericity value is 88.68 and the associated degree of significance is less than 0.0001. The Bartlett's test of Sphericity is highly significant at $p < 0.001$ hence, the variables are not orthogonal i.e., correlation matrix has significant correlation among variables and the data is appropriate for factor analysis.

Table 5: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.520
Bartlett's Test of Sphericity	**Approx. Chi-Square**	88.684
	df	36
	Sig.	.000

3.2.2. Factor extraction

Table 6: Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1.718	19.085	19.085	1.718	19.085	19.085	1.508	16.756	16.756
2	1.515	16.838	35.923	1.515	16.838	35.923	1.419	15.772	32.528
3	1.266	14.062	49.985	1.266	14.062	49.985	1.325	14.718	47.246
4	1.041	11.566	61.551	1.041	11.566	61.551	1.287	14.304	61.551
5	.931	10.349	71.899						
6	.819	9.095	80.995						
7	.701	7.785	88.779						
8	.527	5.860	94.639						
9	.482	5.361	100.000						
Extraction Method: Principal Component Analysis.									

Table 6 illustrates the total variance explained and eigenvalues of the components. Before extraction, nine linear components have been identified within the data set. After extraction and rotation process, four distinct linear components whose eigen value greater than one has been retained. These four factors account for a combined 61.55% of total variance i.e., 61.55% of common variance shared by nine variables can be accounted by four factors. The first factor explains 16.75% of total variance with eigenvalue 1.72. The second factor explains 15.77% of total variance with eigenvalue 1.515, third factor explains 14.718% of total variance with eigen value 1.266, and the fourth factor explains 14.30% of total variance with eigen value 1.041. Figure 2 depicts that there are four factors which account for most of the total variability in the data set and have eigenvalue greater than one. The remaining factors account for a very little proportion of the total variability in data and are considered as irrelevant.

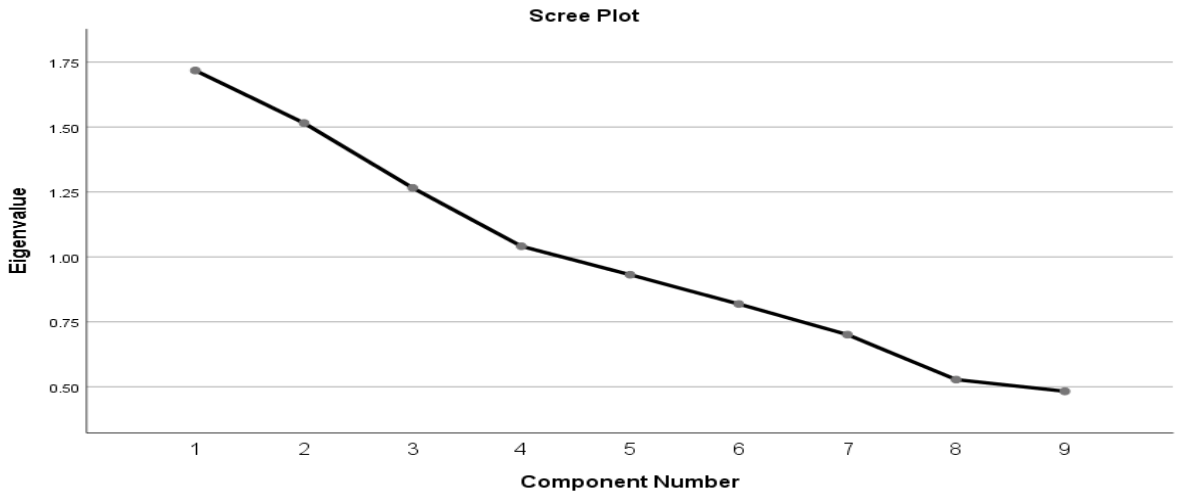

Figure 2: Scree Plot Demand-side Factors affecting Households decision not to send their children for Pre-primary Education and Care

3.2.3. Factor rotation and interpretation

Table 7: Demand-side Factors affecting Households decision not to send their children for Pre-primary Education and Care

Factors		Diagonal Anti-image Correlation	Communality after Extraction	Mean	SD	Factor Loading
Item	Factor 1: Social barriers and family's financial priorities					
1.	Our child is too young for pre-school education and care.	.532	.545	3.77	.834	.723
2.	We don't want our child to sit with children from lower income families.	.539	.708	2.33	.952	.678
3.	We have to look for the financial arrangements to raise and provide basic amenities to other family members.	.522	.569	3.60	.899	-.675
Item	Factor 2: Availability of informal arrangements					
1.	There is availability of informal childcare arrangement in our family.	.541	.562	3.82	1.37	-.724
2.	There is no one to pick and drop our child to the pre-school institution.	.512	.702	3.61	1.37	.754
Item	Factor 3: Family unawareness and child's unfitness for ECEC					
1.	Family members do not have awareness regarding diverse form of childcare services.	.510	.509	2.05	.590	.665
2.	Our child is not mentally and physically fit (special child)	.525	.629	2.46	1.10	.786
Item	Factor 4: Parental neglect and child's reliance on mother					
1.	Family do not consider pre-school education important.	.536	.715	2.36	.784	.793
2.	The child does not sit without me and I have to do household chores	.520	.600	2.46	1.22	-.701

Table 7 depicts that Factor 1 entitled as 'Social barriers and family's financial priorities' has three items namely child is too young, children from low-income families, and financial arrangements which have a corelation of .723, .678 and -.675 with factor 1 respectively. The items child is too young and financial arrangements tends to be agreeing whereas, the item children from low-income families tend to be disagreeing based on their mean score of scale. The factor 2 is labelled as 'Availability of informal arrangements' which contains two items namely informal childcare arrangement, and pick and drop which have a corelation of -.724 and .754 with factor 2 respectively. Both the items have a tendency towards agree according to their mean score of scale. Hence, the households do not send their children for ECEC because they believe that their child is too young for pre-school education and care, and there is non-

availability of family members to provide childcare and to pick and drop the child to the pre-school institution; and not because households have to look for the financial arrangements to raise and provide basic amenities to other family members, or they don't want their child to sit with children from lower income families is.

The factor 3 is marked as 'Family unawareness and child's unfitness for ECEC' and encompasses two factors namely family awareness, and child fitness which have a correlation of .665 and .786 with factor 3 respectively. Both the items have a tendency towards disagree according to their mean score of scale. The factor 4 is labelled as 'Parental neglect and child's reliance on mother' and has two items namely importance of ECEC, and child's reliance on mother which have a corelation of .793 and -.701 with factor 4 respectively. Both the items have a tendency towards disagree according to their mean score of scale. Hence, parent's decide not to enroll their child for pre-schooling because the child does not sit in the ECEC institution without his mother which is already occupied with household chores, and not because their child is mentally or physically unfit, or the family members are unaware regarding diverse form of childcare services or because the family consider pre-school education and care unimportant.

4. Conclusion

ECEC is envisioned as broad spectrum of services offered to children from birth until they attain age of eight which, involves much more than preparing children for primary schooling and establishing a strong foundation for learning and emotional well-being throughout life. Children who have attended at least a year of pre-primary education are more likely to acquire the essential skills for academic success, have less chances of dropping out of school or repeat grades, and are therefore more likely to contribute to prosperous economies and societies. Despite, the proven and lasting benefits, only half of all pre-primary aged children were attending pre-primary education programme, denying more than 175 million children the opportunity to develop the foundational skills requisite to succeed in primary school. Hence, this study has been carried to explore all the socio-economic factors (Supply-side and Demand-side) that determines the parent's decision to opt-out and not to access ECEC services for their children in India. The research primarily incorporates the cross-sectional data that has been collected from October 2024 to December 2024 through household survey by the researcher herself using direct personal interviews, structured schedules, and observation method through multi-stage random sampling. In this study, exploratory factor analysis using principal component extraction and varimax rotation was performed on the questionnaire items using SPSS version 25. Among the supply-side factors that shapes parent's decision to opt-out, environment of the pre-school plays a significant role as, the pre-schools which the family could afford is not lively, and captivating hence, their child cries a lot and the staff sends back the child to home instead of indulging him in playful activities and the food which pre-school institution provides is inedible and has insects in it. There is non-availability of pre-school institution in their vicinity, and the quality of pre-school education and care which the institution provide is very poor, and the staff do not give proper attention to the child and he roams outside the pre-school institution as well. Whereas, among the demand-side factors, parent's perception that their child is too young for pre-school education, non-availability of family members to drop the child in pre-school institutions, and the child does not sit in the ECEC institution without his mother which is already occupied with household chores limits parent's to enroll their children for ECEC. Hence, to increase the enrollment in pre-primary education and care, it is essential to first identify and address the root causes of non-enrollment.

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