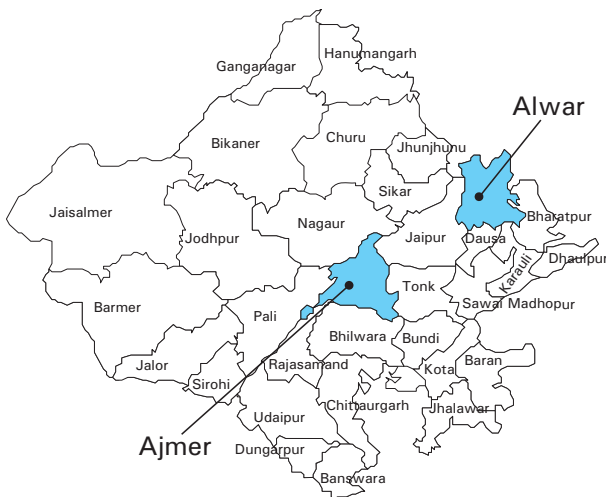


The India Early Childhood Education Impact Study

The IECEI Study is a large scale, in-depth examination of the nature of young children’s participation in preschool facilities in India, and the impact of this participation on their school readiness and early grade learning. Conducted in three major states (Assam, Rajasthan and Telangana), this longitudinal study tracked a total of about 14,000 children for four years, from age 4 to age 8. This fact sheet summarizes major findings from the IECEI Study from Rajasthan.

Study districts and sample



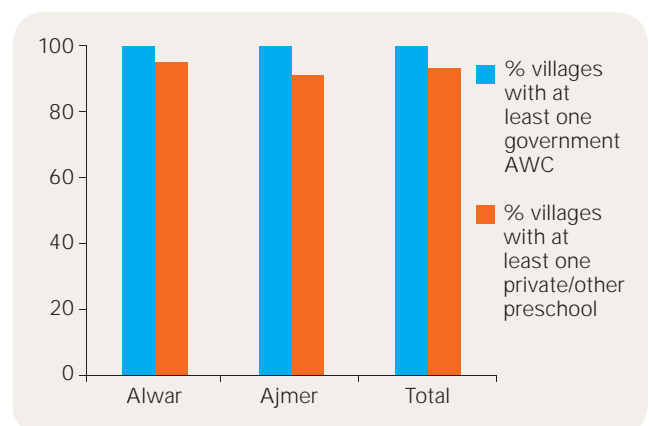
In Rajasthan, the study was conducted in Alwar and Ajmer districts, where 103 villages were randomly sampled for the larger survey-based strand of the study and 22 villages were covered as part of the quasi-experimental strand of the study.

A total of 4,544 and 857 four-year-olds were randomly sampled from the ICDS survey records in these villages as part of the larger survey-based strand and quasi-experimental strand. These children were tracked for four years.

Are preschool facilities available for children?

Rajasthan is very well provisioned in terms of preschool facilities.

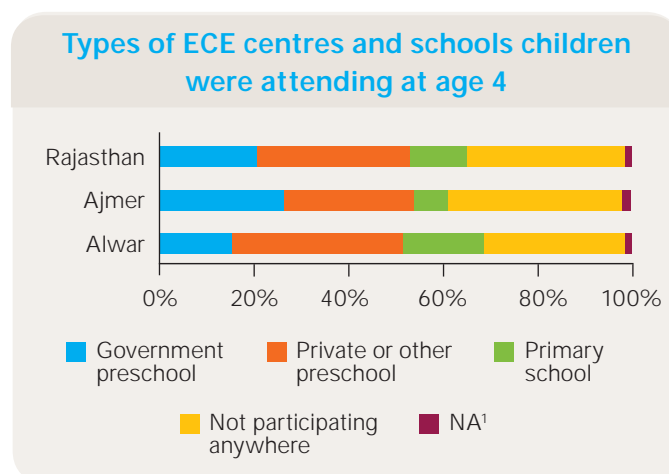
- During the baseline field visit for this study, a total of 627 preschools were listed in 120 sampled villages.
- Overall, 8 out of 10 sampled villages had 4 or more preschool facilities available. Every village had at least one government Anganwadi Centre (AWC) and over 90% villages also had at least one private preschool facility.



Where are children at age 4?

According to the National Early Childhood Care and Education Policy (2013), four-year-old children should be enrolled in preschool, and they should enter Grade 1 only at age 6. Just over half of sampled children in Rajasthan, however, were in preschool at age 4.

- One third of all sampled children were not participating anywhere. This figure was higher in Ajmer and lower in Alwar.
- A considerable proportion of four-year-olds were already participating in primary schools: almost 10% in Ajmer and close to 20% in Alwar.



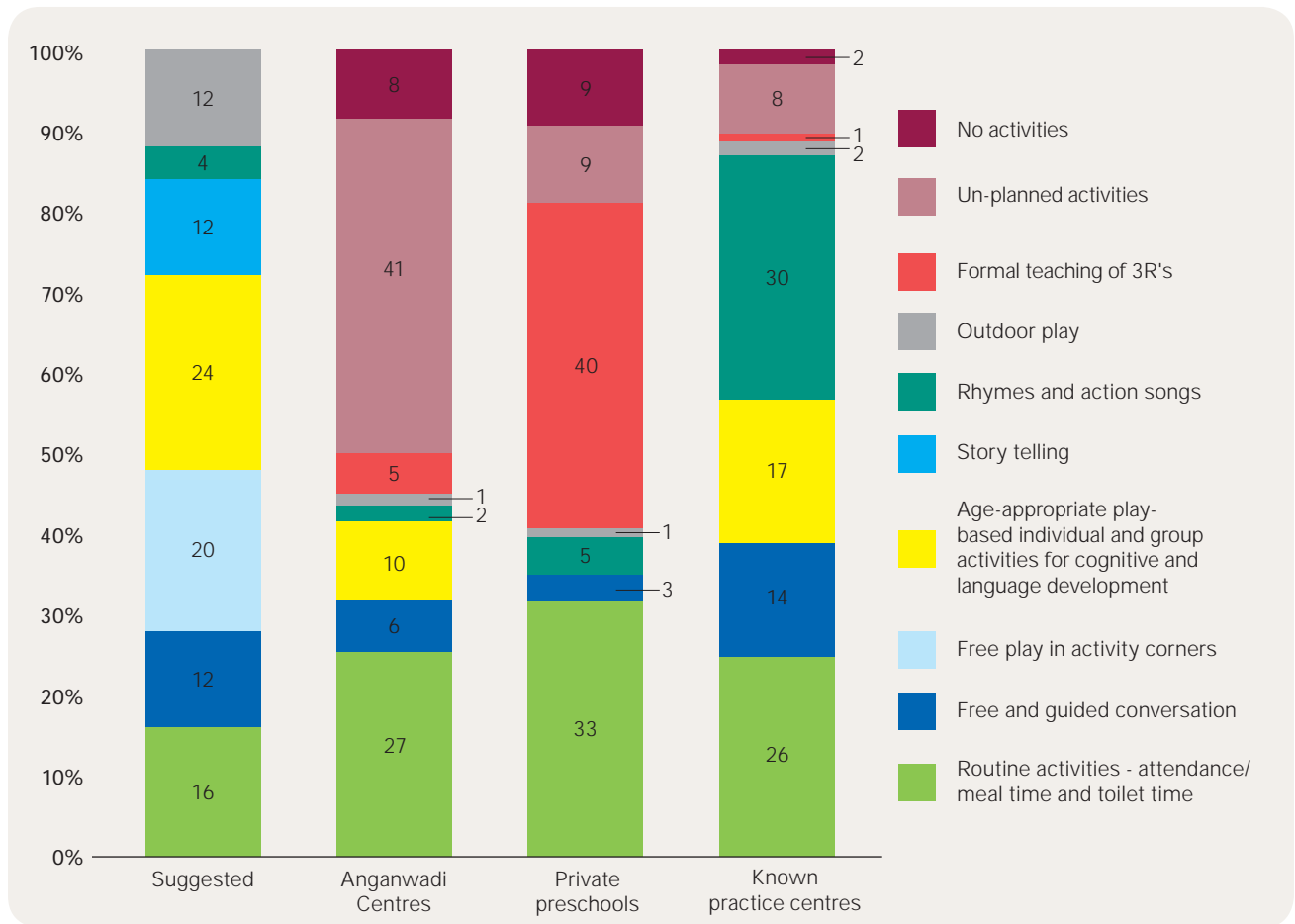
What is the quality of preschool programmes attended by children?

In the quasi-experimental strand of this study, the quality of preschool programmes that sampled children attended were assessed on specific dimensions. A total of 52 preschool programmes were assessed in the two districts (27 in Ajmer and 25 in Alwar) using an observation-based rating scale, called Early Childhood Education Quality Assessment Scale. Three distinct models were observed – Anganwadi Centres, private preschools and known practice centres. Preschool sections attached to community primary schools for disadvantaged children, run by an NGO known for its innovative educational programmes, were included in the sample as known practice centres. They were, however, limited to one sample district (Alwar). The three models are presented below within a comparative framework.

Anganwadi Centres (N=10)	Private preschools (N=33)	Known practice centres (N=9)
Limited infrastructure and learning aids in classrooms	Good infrastructure and limited learning aids in the classrooms	Better infrastructure and availability of activity books for children
Heterogeneous group of children 2-6 years of age with a larger proportion of younger children	Homogeneous group of children	Heterogeneous group of children, who are divided into smaller groups according to activities
Preferable pupil-teacher ratio	Higher pupil-teacher ratio	Mostly preferable pupil-teacher ratio
No schedule followed	Subject-wise timetable is followed	Flexible weekly and monthly curriculum plans
Limited planned activities with most of the time spent on routine activities	Formal teaching with rote memorization primarily and a few age-appropriate activities	Age and developmentally appropriate activities with no formal teaching
Anganwadi workers provided with minimal on-the-job training	Teachers untrained in ECE	Trained teachers provided with in-service and continuous training and supportive supervision

¹ In the first wave of fieldwork, information on the type of the institution could not be documented for a small proportion of children. Such institutions have therefore been categorized as 'NA' for this round.

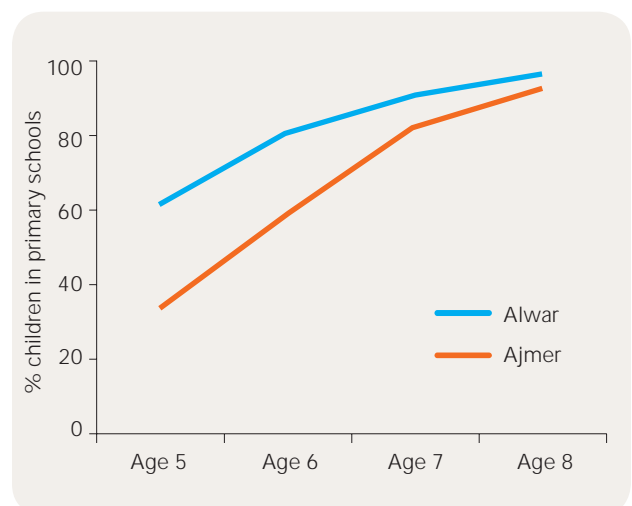
A time on task analysis carried out of a day's schedule (figure below) shows that the two models of preschool programmes – Anganwadi Centres and private preschools – that most of the children in Rajasthan were exposed to were, on the whole, not age and developmentally appropriate. Most of the children attended private preschools and their experiences were observed to be largely limited to formal reading and writing activities, which are a downward extension of the primary school curriculum. For considerable periods, children were not engaged in any planned activities in Anganwadi Centres and private preschools, and only a very small proportion of time was spent on play-based activities for cognitive, language and social development, that too only in Anganwadi Centres. The NGO-run programmes, which were available to children in only a few villages, were better in terms of the quality of exposure, as some developmentally-appropriate activities to foster cognitive and language development were observed in these centres.



When do children join primary school?

There are stark differences between districts with respect to the age at which children enter primary school. It is only by age 8 that more than 90% children in both districts are in primary school.

- In Alwar, at age 5, about 6 out of every 10 children were in primary grades. The corresponding figure for Ajmer is about 3 out of every 10 children.



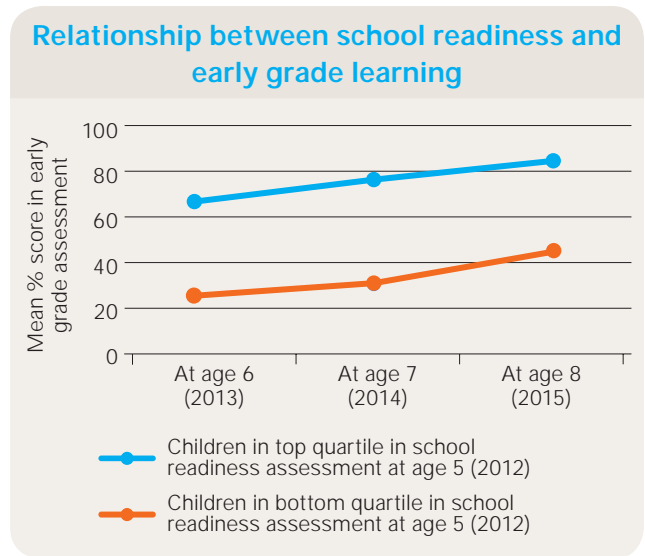
- The proportion of children attending private institutions was also higher in Alwar than in Ajmer. For example, at age 5, 6 out of every 10 children in Alwar were enrolled in private institutions, while in Ajmer this proportion was 5 out of every 10.

Overall trends shown in the figure above, however, mask the fact that for large numbers of children, the pathway to stable participation in primary school is not linear and includes back-and-forth movements between preschool and primary school. That is, a considerable proportion of children were observed to move from preschool to primary school, back to preschool and then again to primary school. Across the three states in the study, these non-linear trajectories were observed more frequently in districts where participation in private schools was higher. In Alwar, at age 5, about 20% of children had experienced this kind of non-linear movement at least once within the past year, while in Ajmer, such movement had been experienced by about 10% of children.

Does participation in preschool between age 4 and age 5 improve children’s school readiness and early grade learning?

As part of the IECEI Study children’s school readiness was tested at age 4 and age 5, and their early grade learning was assessed at age 6, 7 and 8.

The study finds that regular participation in preschool from ages 4 to 5 years has a significant impact on children’s school readiness levels at age 5+, with the quality of preschool education emerging as an important factor in enhancing school readiness levels. School readiness at age 5+ is in turn associated significantly with learning outcomes in early primary grades. In other words, children with higher school readiness scores at age 5+ continued to do better in each subsequent assessment round, relative to their peers with lower school readiness levels. Overall in Rajasthan, however, children’s school readiness at age 5 was below expected levels, and the lowest among all the three study states.



These data indicate the importance of investing in high quality and age-appropriate preschool education as an important mechanism to help disadvantaged children catch up with their more advantaged peers.

Additionally, other than preschool participation, gender, household affluence and mother’s education emerged as significant factors which influence young children’s school readiness levels between age 4 and age 5 in Rajasthan.