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Program to Improve Private Preschool Education (PIPE)

SCALING AFFORDABLE PRIVATE SECTOR PRESCHOOL SOLUTIONS



 #PreschoolMatters

Agenda

1. Introducing FSG Inclusive Markets

2. Need and potential opportunity in preschool education
3. Customer research
4. Affordable private school research
5. Service provider research
6. Path forward

About FSG Inclusive Markets

We believe that **markets can and should benefit the poor and should be part of the portfolio of solutions for social change**

Our strength is in understanding how to **make inclusive business models work**, and how to get them to scale

We create impact in various program areas by:

- **Driving new thinking** for the field, and
- **Making change happen** on the ground

We are a “**mission driven**” and **non-profit** unit whose work is entirely in the public domain

An Example of MIM's Action – Housing

Starting with customers willing to pay and a market failure

Ganesh is a potential low-income house buyer...



- Self-employed Mechanic in Mumbai
- Monthly HH income ~ Rs 11,000, savings Rs 1000 p.m
- Lives in 150 sq. ft. room in slums, Rent Rs 2,400
- Married with 2 children
- Assets – Bank Account, LIC (Rs 1.5L), Refrigerator and PC
- Frequent increases in rent (moved house 5 x in 12 yrs)

...trapped in poor and insecure living conditions.



- Badly constructed, small houses
- Poor sanitary conditions
- Lack of facilities (walkways, schools, etc.)
- Poor social environment for children

Ganesh could afford a 250–350 sq.ft. house, a 20% down payment and pay up to 35% of monthly income in mortgage payments to realize his dream – **but the market was not supplying this**

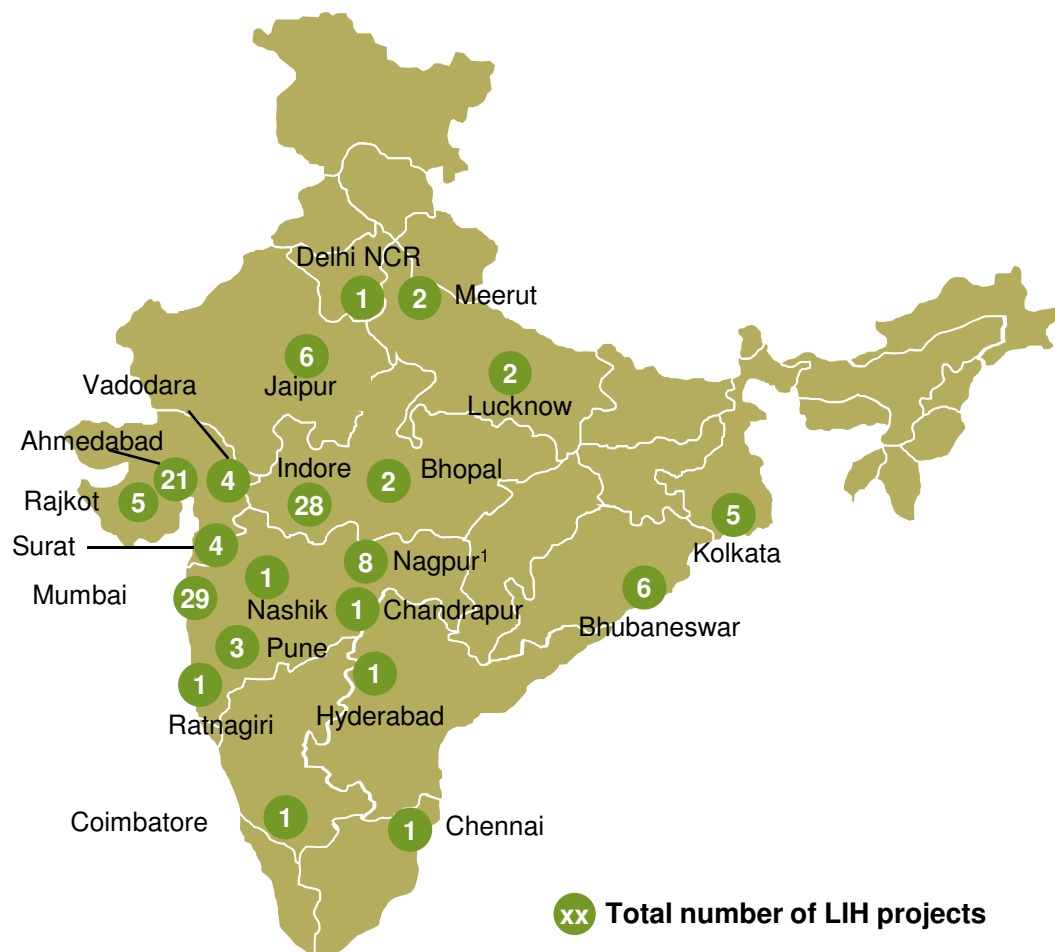
Impact: High quality, privately built homes for low income families at INR 4 – 10 lakh

Low-Income, High Quality Homes



Impact: State of the Market Report – July 31, 2013

30k units in 132 projects launched between Jun '11 – Jan '13



Note: ¹ Nagpur includes one project from Amravati
Source: State of the Market Study by Monitor Deloitte

Ecosystem beginning to work

- **Housing supply** - ~78,000 low income units launched in India
- **Housing Finance**
 - 10 HFCs have a portfolio of ~INR 1000 crore micro-mortgages
 - Bulk of the customers have informal incomes of < INR 25000 per month
 - Near zero NPAs for 6 firms
- **Government creating conducive policy**
 - MoHUPA, with inputs from MIM, recommended policy for states to adopt
 - HUDD, Odisha, with inputs from MIM, formulated conducive policy for low-income housing
 - NHB providing cheap refinance to stimulate the sector
- Our research, based on 4000 interviews, suggests market beginning to address customer needs (e.g. flexible payment plans, smaller houses supplied)

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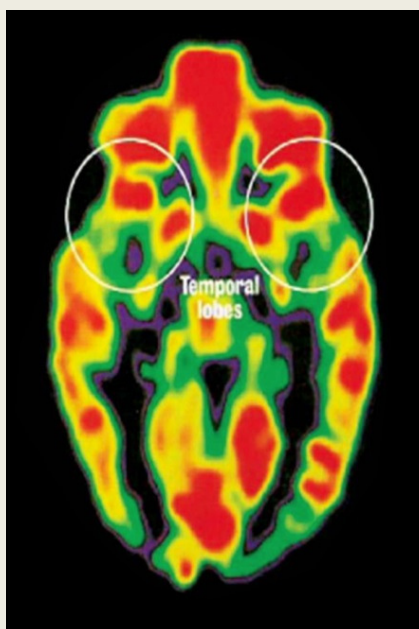
4. Affordable private school research

5. Service provider research

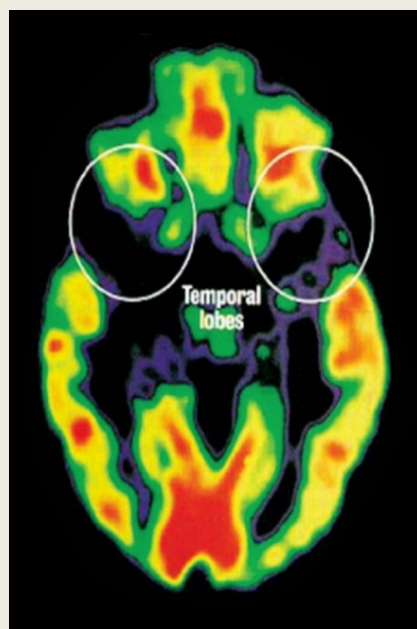
6. Path forward

Without the right conditions in the **first 5 years**, a child's brain is at risk of being **stunted for life**

Brain of a “healthy environment” child



Brain of an orphan child

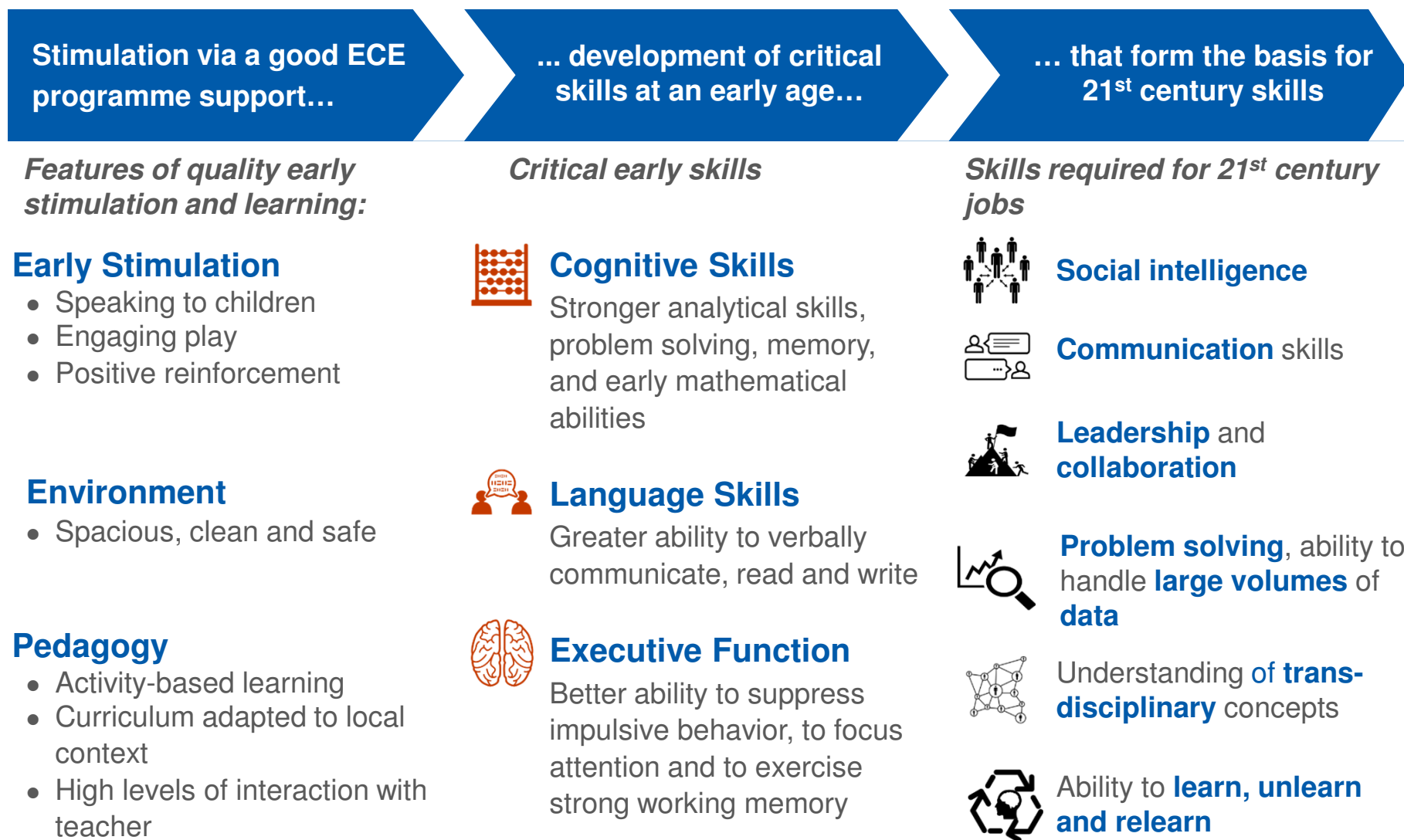


Most Active  Least active

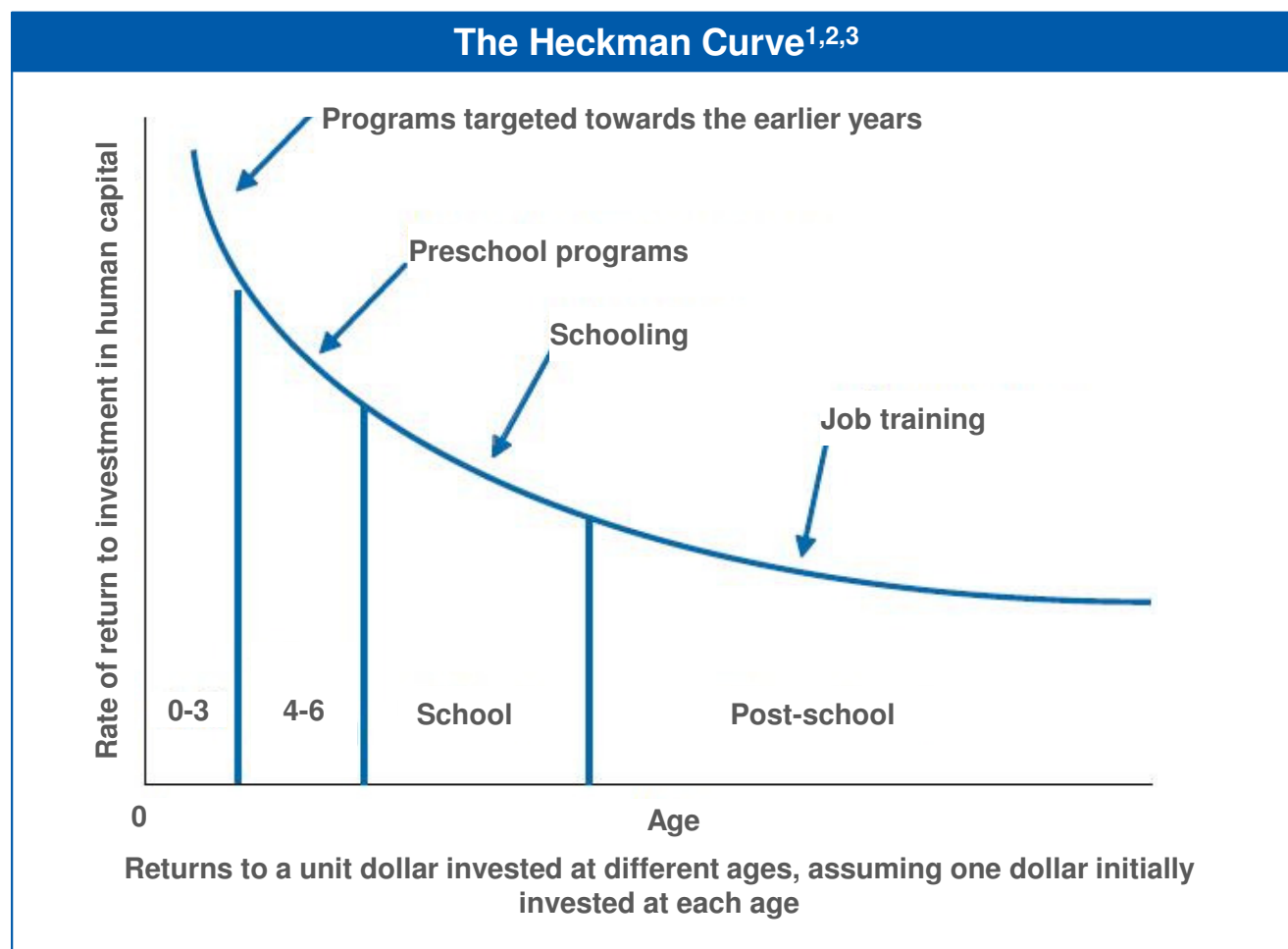
- **Stimulation or deprivation** plays a key role in brain development
- **Neural synapses** developed between 2-6 yrs. form the basis for **cognitive** and **emotional functioning** for the **rest of a child's life**¹
- A good ECE program **stimulates** the development of neural synapses
- Research has shown that **skill begets skill** – early skills increase the capability to acquire skills in the future²

1. [Early Childhood Development](#): Unicef; 2. [Skills and Scaffolding](#): Brookings Institution; 3. Brain of a Romanian orphan child, cared for by the state under the regime of dictator Nicolae Ceausescu; **Image source**: [First5 Contra Costa](#), Children and Families Commission, California

Skill formation is a dynamic process – skills beget skills – and good ECE programme can play a crucial role



Nobel laureate James Heckman has shown that investment in ECE has much greater impact than later education



“No levels of later childhood skill investments...can bring [severely disadvantaged] children to a level of social and economic performance attainable from well-targeted early investments”

– James Heckman⁴

1. “The Productivity Argument for Investing in Young Children” – James Heckman and Dimitriy Masterov, (2004); 2. Image source: [Department of Children and Youth Affairs](#), Govt. of Ireland ; 3. The Heckman Curve is a stylized representation of the rates of return to investment at different ages; 4. Excerpts from “[Interview with James Heckman](#)”, Federal Reserve Bank of Minneapolis;

Quality of ECE currently offered in the market is very poor

The majority of the providers we observed offered “**Bad ECE**”...

Some places do offer “**Good ECE**” but they are in the minority

Pedagogy	<ul style="list-style-type: none">• Rote memorization-based learning• Lecture-based model with students as passive listeners• Teaching of writing at an early age when motor skills are not yet sufficiently refined (particularly between the ages of 2-4)• Negative reinforcement through regular rebukes and punishment	<ul style="list-style-type: none">• Activity-based learning where the child leads activities and the teacher facilitates the child’s exploration• Reinforcing concepts through mediums that leverage different sensory perceptions (e.g., music, painting, games)• Positive reinforcement through encouragement and compliments
Context	<ul style="list-style-type: none">• Teaching lacks local context and relevance (e.g. “S for Snowman”)	<ul style="list-style-type: none">• Teaching customized to the local context for the child
Environment	<ul style="list-style-type: none">• Cramped	<ul style="list-style-type: none">• Spacious
Ratios	<ul style="list-style-type: none">• High child-adult ratios	<ul style="list-style-type: none">• Low child-adult ratios

Left alone, we do not believe that the market will produce operators offering “Good ECE” at scale and at affordable prices

From: “Bad ECE”



To: “Good ECE”

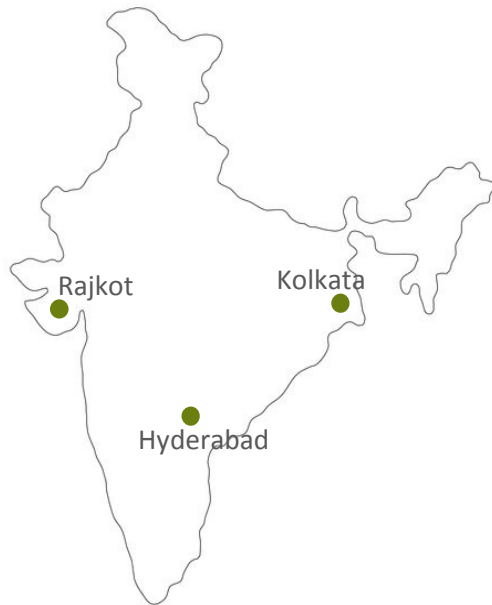


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Scope of customer research

Qualitative



- **108 customers**
 - 4 focus groups and 4 in-depth family interviews in each city
- Across **3 cities**

Quantitative

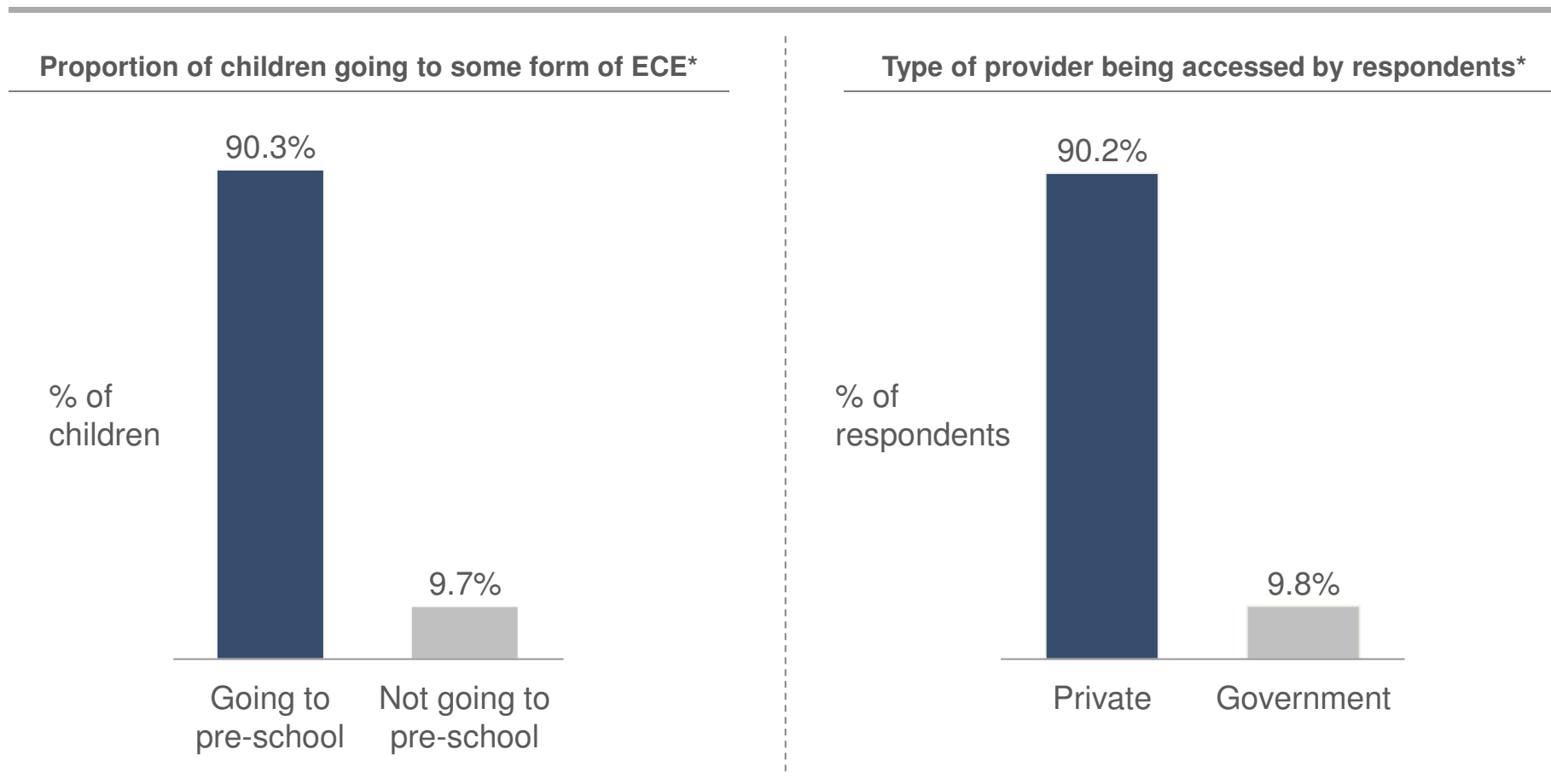


- **4,299** listing interviews and **2,010** structured interviews
- Across **8 cities** (5 cities of over 5 million people and 3 cities with between 1-5 million people)

Key questions answered in our findings

- 1 What do parents **believe** about early childhood development?
- 2 What **motivates** parents to send children for ECE?
- 3 What do parents **consider** to be 'good' ECE?
- 4 What do parents **look for** when selecting an ECE provider?
- 5 How do parents **gather information** when selecting an ECE provider?
- 6 What do parents **expect** from their ECE provider and how do they **monitor** the provider, post admission?
- 7 How are parents and providers **engaging** with each other?
- 8 Could better educated mothers be **early adopters** of 'good' ECE practices?

Most 3-6 year olds in urban India in our target segment are **accessing ECE**, predominantly from the **private sector**

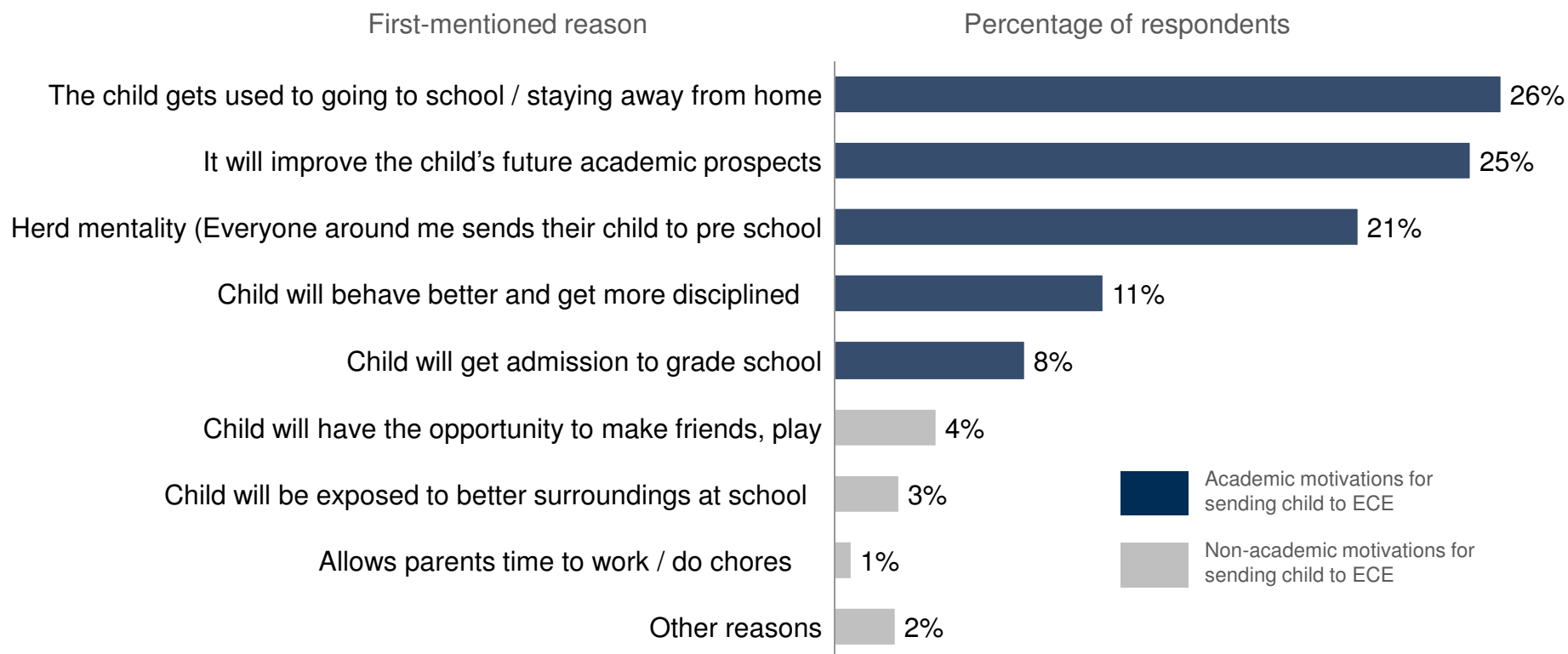


- There are **4.6 million children** aged between 3-6 in our target segment
 - Target segment is defined as households from NCCS classes A3 to D1 in urban cities with population greater than 1 million

* Data has been weighted by age to account for different number of children from each age group in the sample. Source: FSG primary customer research using 4,179 listing interviews.

What **motivates** parents to send children for ECE?

First-mentioned reason when asked why child was being sent for ECE



- The primary motivation for sending children for ECE remains academic across
 - NCCS classes / income brackets
 - Mothers with differing levels of education

What do parents **consider** to be ‘good’ ECE? (1/4)

‘Good’ ECE is often viewed in purely **traditional academic terms**

‘Good’ ECE is often thought of as doing grade school earlier

- Learning number and alphabets early on
- Getting into ‘school habits’ like attending everyday, or doing homework regularly



The focus on academic competition and achievement can lead to three strong beliefs about what constitutes ‘good’ ECE:

- A** Regular homework
- B** Regular exams
- C** Tuition classes

“Younger children need tuitions to perform better. Once they are older, they are more able to study by themselves”

-Mother of 3-year-old boy, Rajkot

What do parents **consider** to be 'good' ECE? (2/4)

A

98% of parents want their children to be given homework everyday

- They typically want homework that allows the child to practice academic skills e.g., repeatedly writing alphabets and numbers

"Children should be given at least 2-3 pages of homework everyday, or else they will just play around at home."

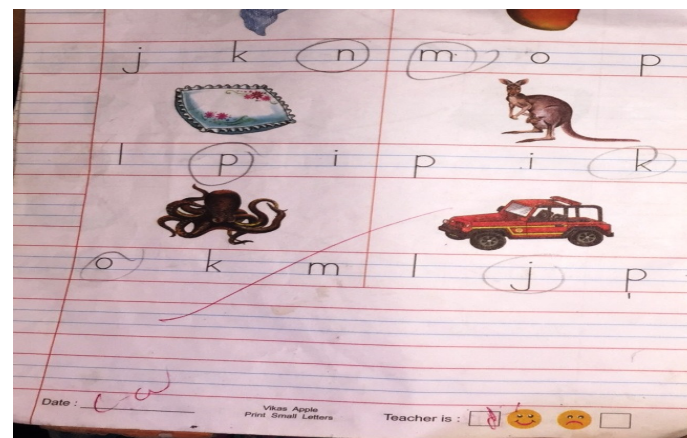
- Father of 4-year-old boy, Mumbai

"Homework is important, but in moderation. At this age, the child should also have time to play."

- Mother of 3-year-old girl, Kolkata

Underlying Drivers

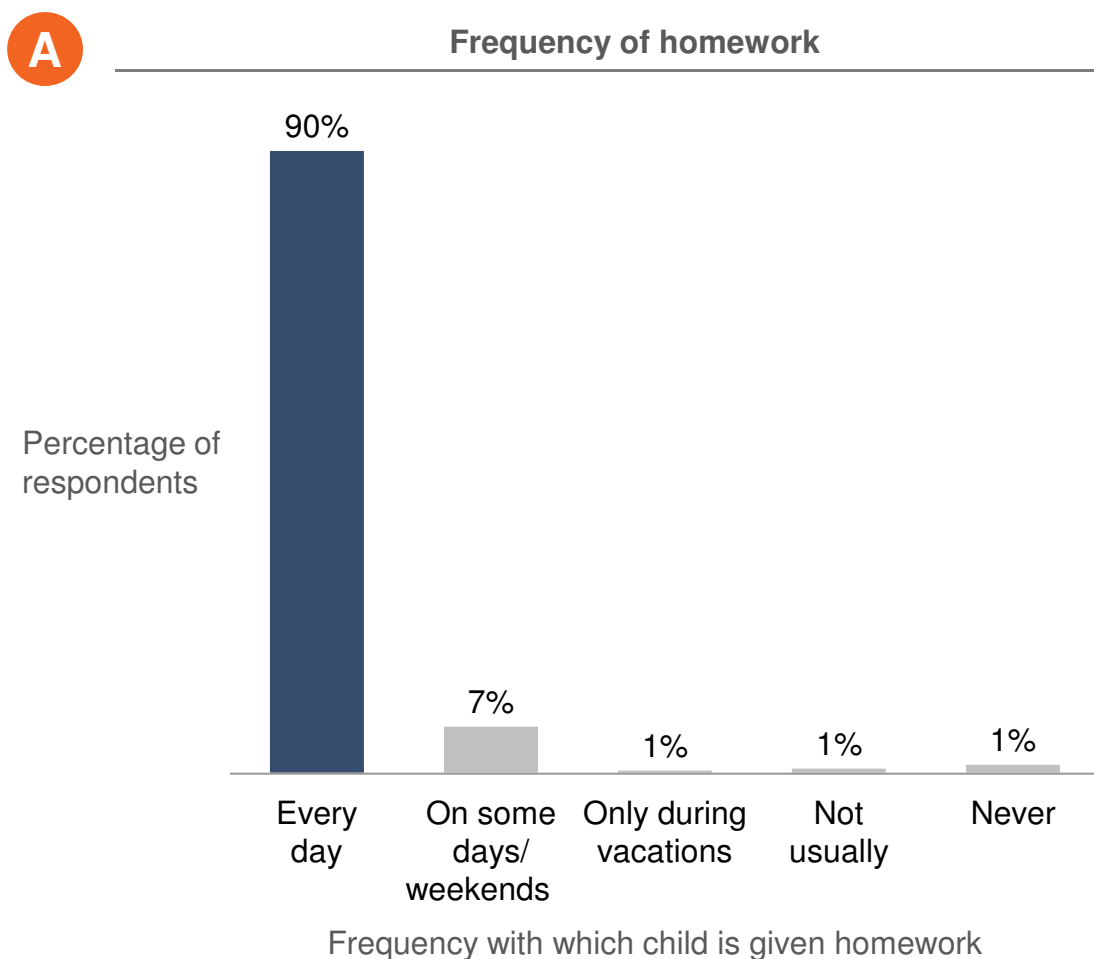
- **60%** of respondents feel homework helps **reinforce lessons from school***
- **30%** of respondents feel homework is important during ECE years as it helps the child get into the **habit of doing homework**
- **22%** of respondents feel homework is important in helping ensure that the child **does not 'waste' time at home**



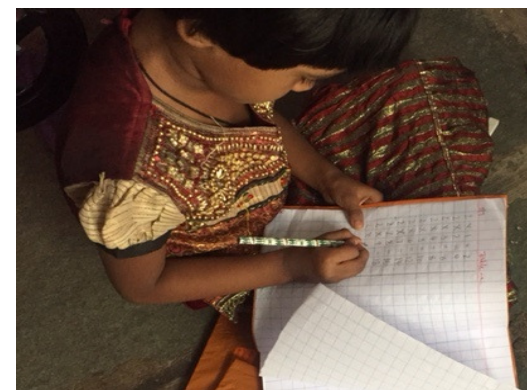
* Multiple responses were permitted for this question. Source: FSG primary customer research using qualitative interviews and 2,010 main interviews. See supporting document for underlying data Photo: FSG customer research

What do parents **consider** to be 'good' ECE? (3/4)

*The market is catering to parents' demand for homework everyday, even for 2 year old children**



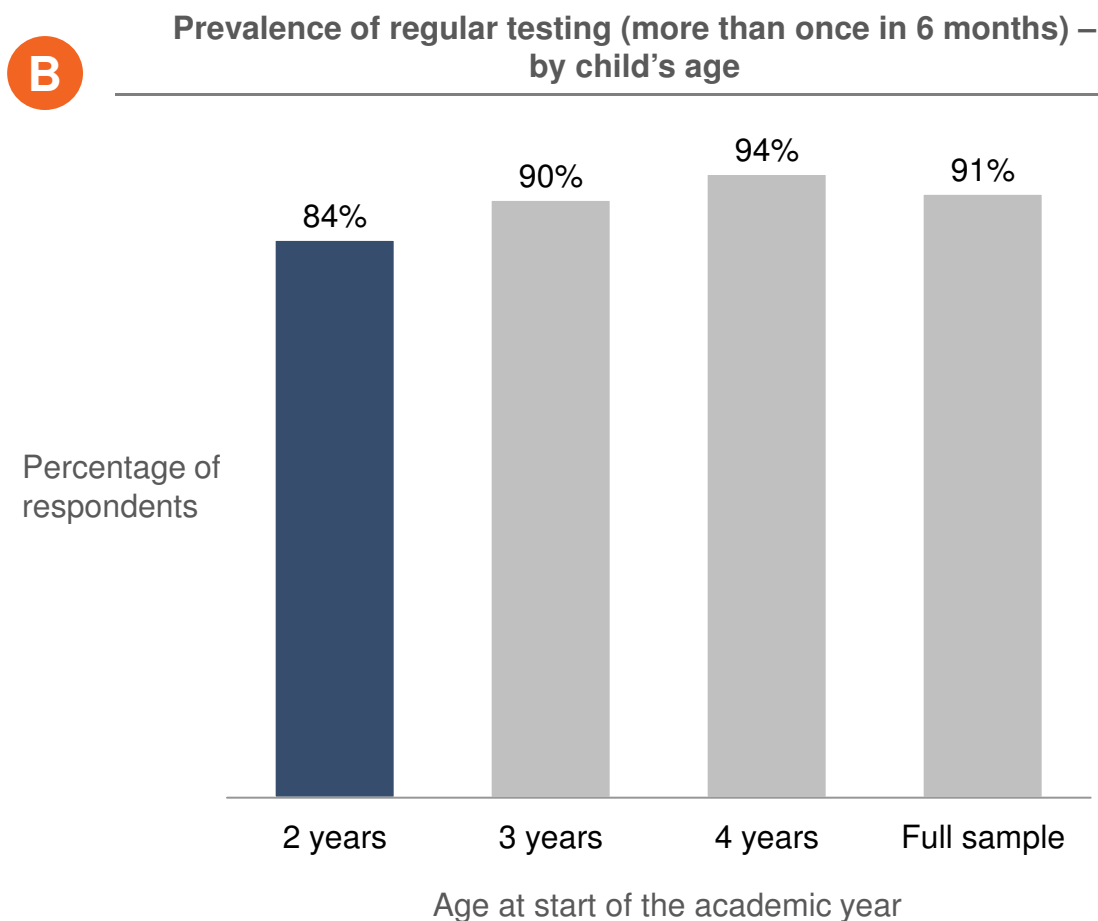
- There is **variance by age** in the frequency of homework given
 - 84% of 2 year old children* were given homework everyday, compared to 93% of 4 year old children*
- There is no significant variation in this trend by NCCS class / income bracket



* Age at start of the academic year Source: FSG primary customer research using 2,010 main interviews. See supporting document for underlying data

What do parents **consider** to be 'good' ECE? (4/4)

The market is catering to parents' demand for regular tests, even for 2 year old children

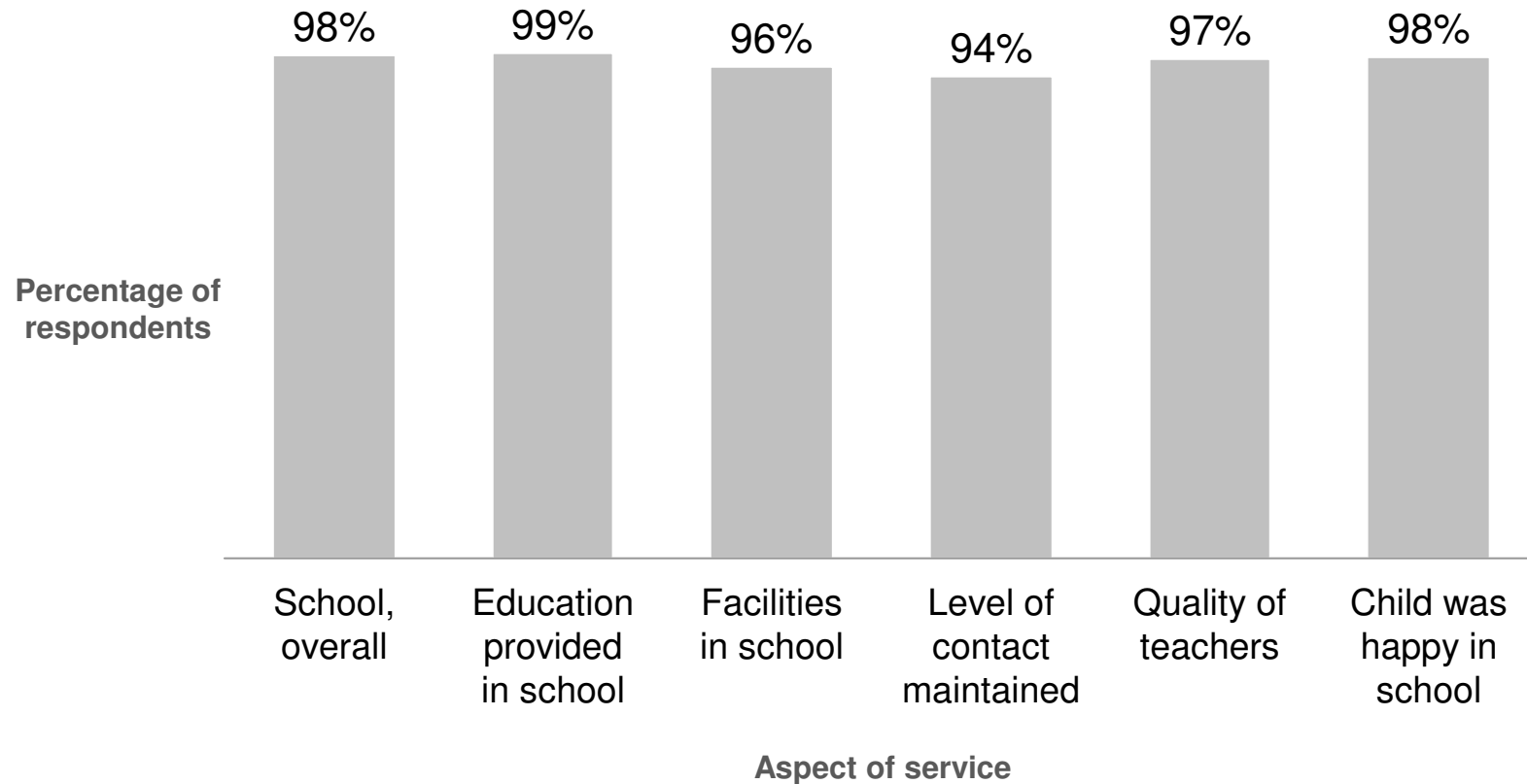


- This trend **varies by city**
 - The trend is strongest in Hyderabad (33% get tests every week)
 - And weakest in Delhi (Only 2% get tests every week and 18% either do not get tests, or get them less than once in 6 months)
- There is no significant variation in this trend by NCCS class / income bracket
- Only 23% of respondents reported that the child was being assigned ranks

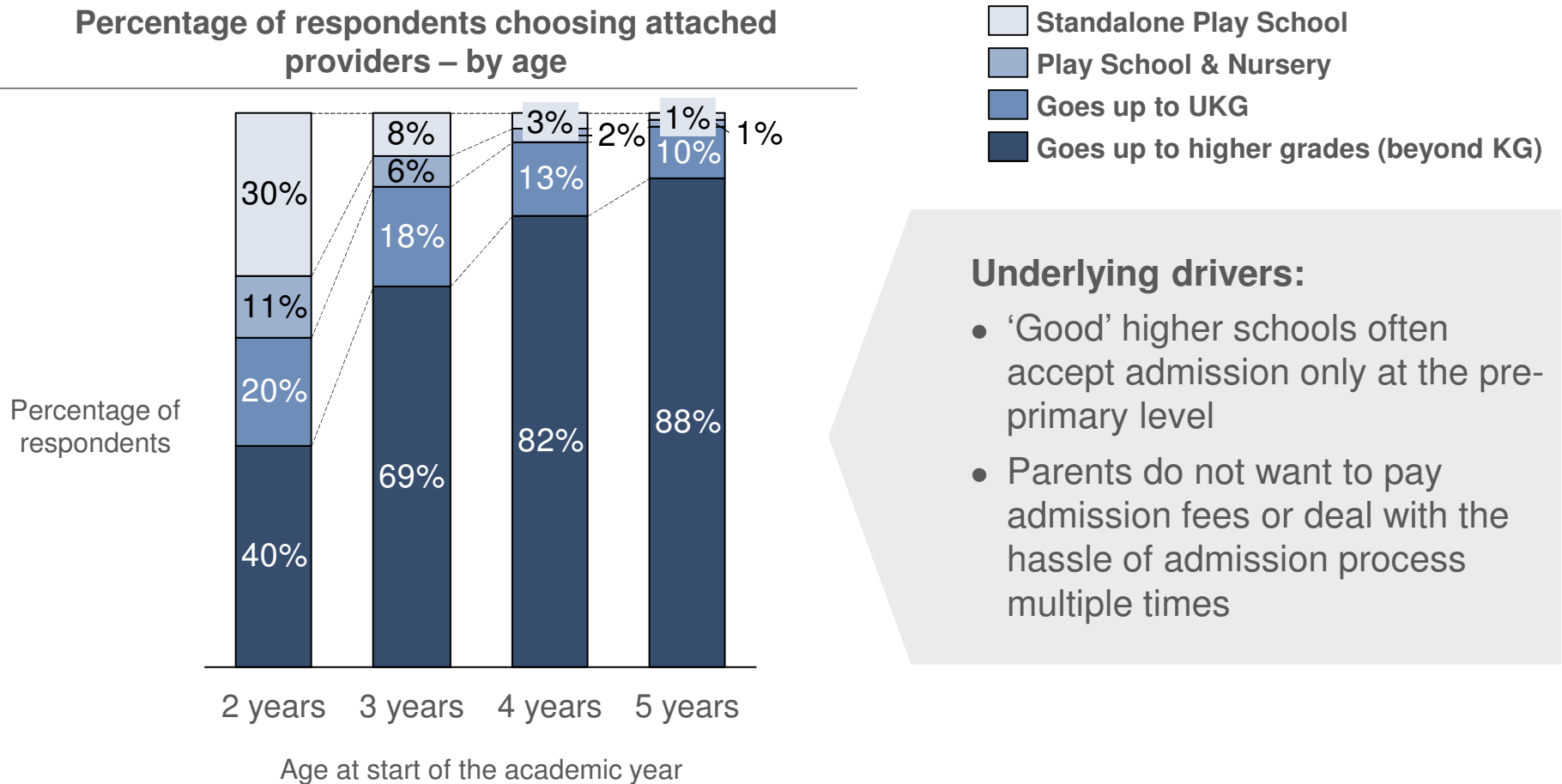
What do parents **expect** from their ECE provider and how do they **monitor** the provider, post admission?

Parents are **overwhelmingly satisfied** with their ECE provider...

Satisfaction with provider



The vast majority of low income parents are sending their children for ECE to APSs offering higher grades



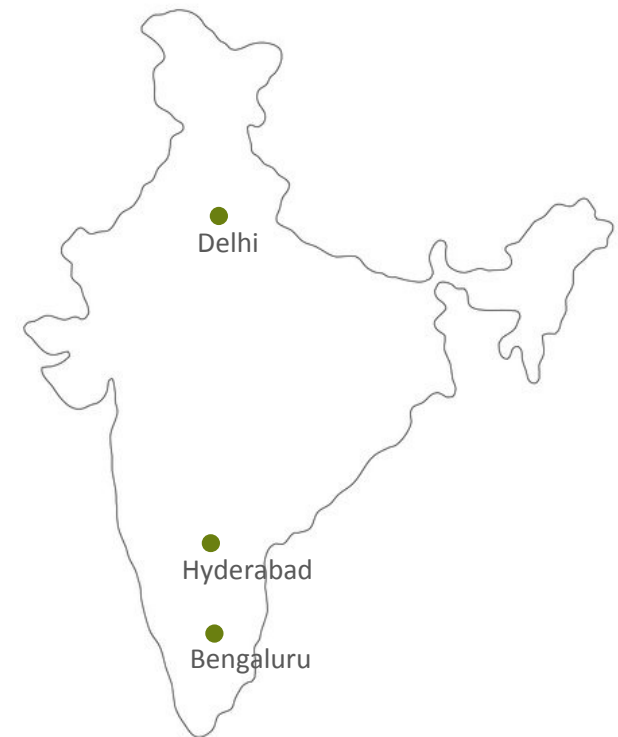
APSs are moving to lower grades due to competitive pressure in local micro market

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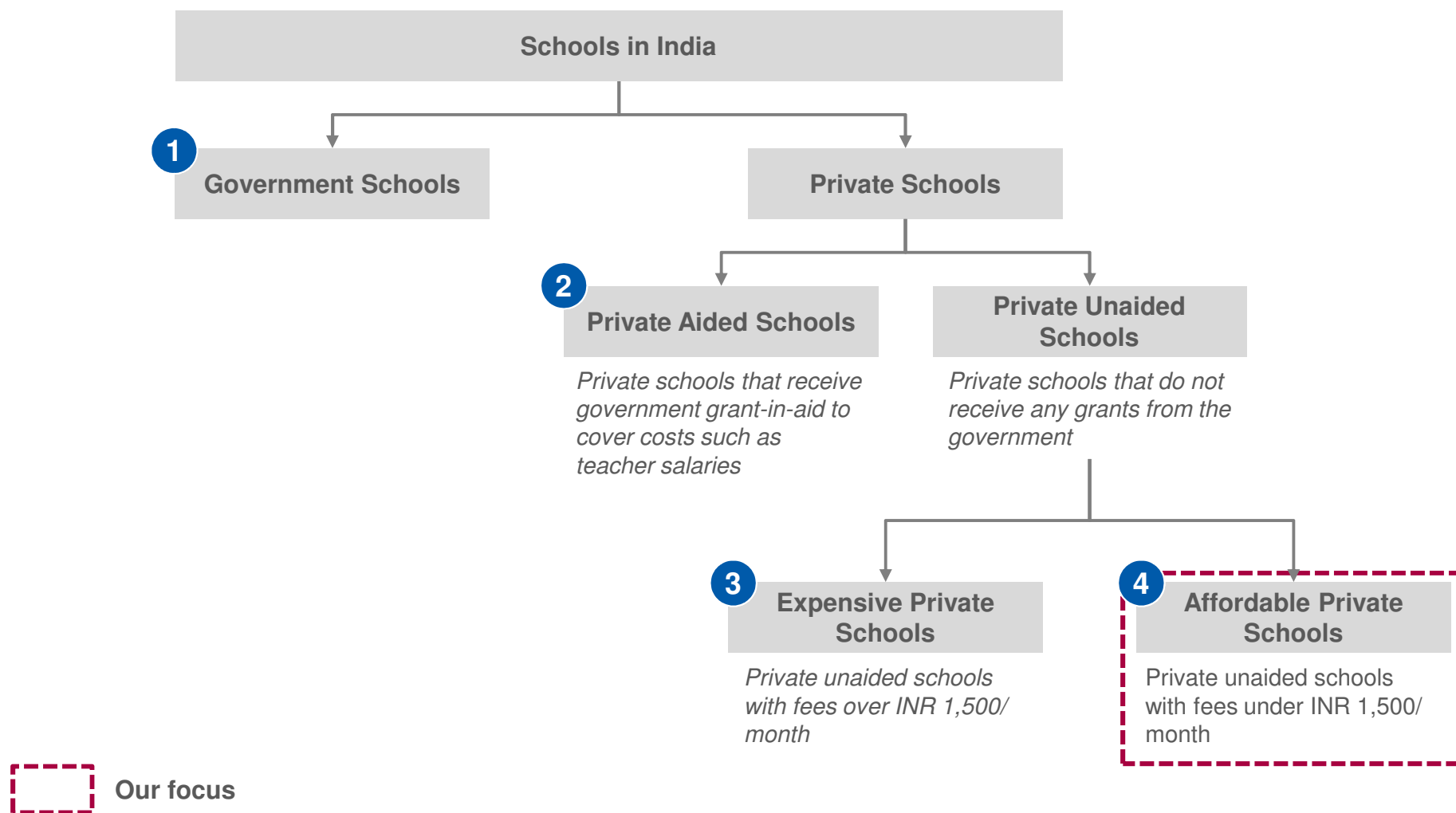
Scope of research – interviewed 28 school owners, service providers and experts

- **28 schools**
 - 28 APS owners
 - 19 ECE teachers
- **Across 3 cities**
 - Bengaluru
 - Delhi
 - Hyderabad
- Research limited to schools that are
 - Operating on a **for-profit** basis (i.e., not run by a religious trust etc.)*
 - Providing **2–3 years of ECE**
 - Charging all inclusive monthly **fees of between INR 700 – 1,500** for the ECE section
 - **Doing well financially**
 - School strength of more than 250 students
 - Increasing or static enrolments
 - Increasing or static student retention
 - **Potential ‘early adopters’** (i.e., have shown some inclination towards improving quality, or have taken loans to make changes / improvements to the school)



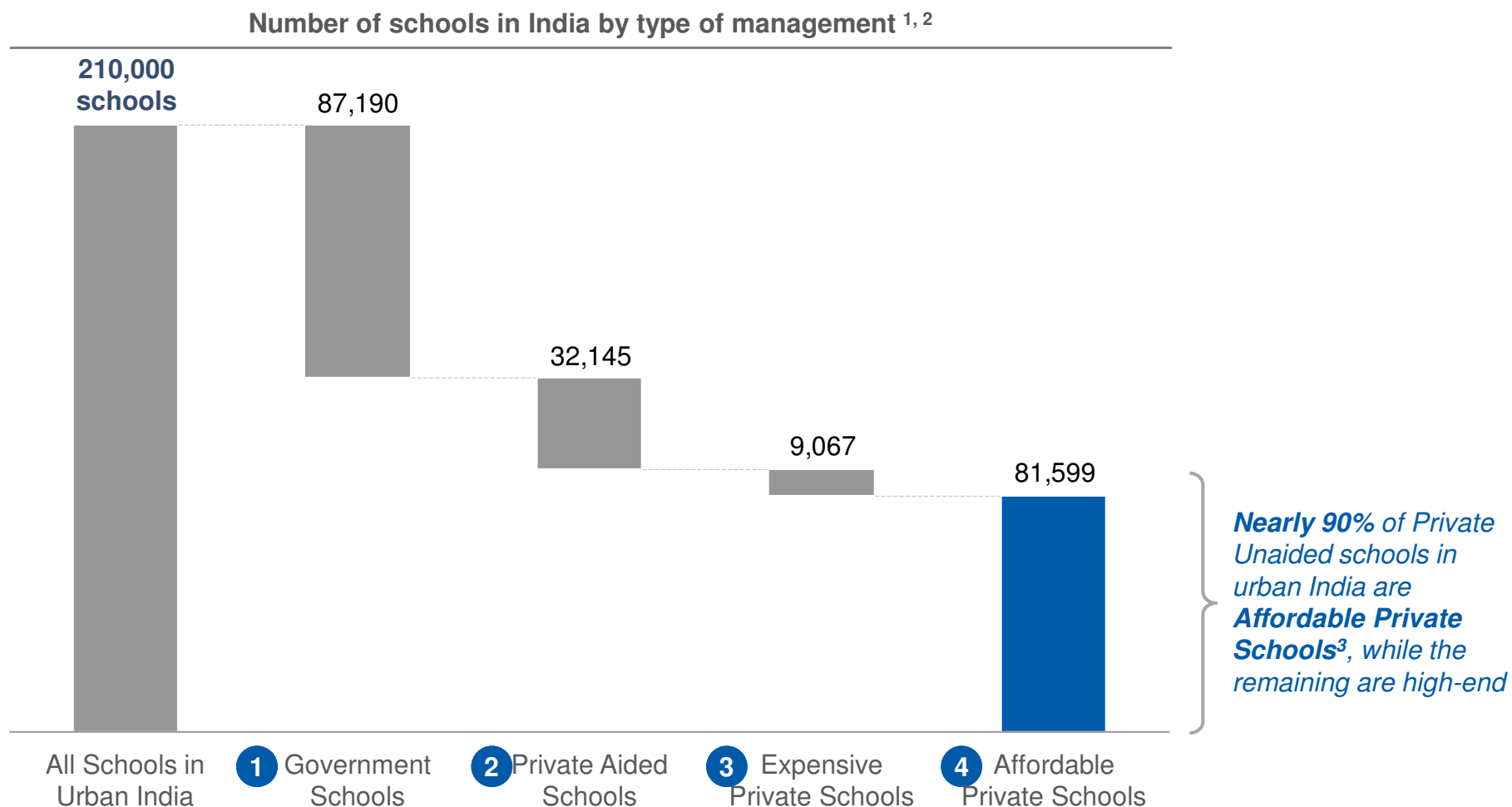
* All schools in India are required by law to be registered as trusts, but often operate as for-profit businesses in practice

APSSs are private unaided schools with fees under INR 1,500 / month*



* This definition is based on a synthesis of the following reports: "Education Technology in India: Designing Ed-Tech for Affordable Private Schools", by Hila Mehr et al. (2013); "Affordable Private Schools (APS) Sector Analysis Report-2012" by Gray Matters Capital (2012); "Market assessment of Affordable Private Schools in Five Cities", by MSDf (2014)

According to government data (2009), 39% of schools in urban India are APSs



1.Eighth All India Educational Survey conducted by the National Council for Educational Research and Training (2009); 2.DISE Analytical tables 2014-15; 3. Affordable Private Schools (APS) Sector Analysis Report-2012" by Gray Matters Capital (2012)

A typical APS owner is a small businessman looking to differentiate and grow his business

Profile

Name: Kamal Kumar Sharma

Age: 34

Education: Graduate

Years in-charge of school: 6

Prior experience: Owned a real estate brokerage firm

- Has inherited the school which was started by his father
- Divides his time between the school and a real estate business
- Has hired a Principal to take care of most of the day-to-day affairs of the school
- Believes that parents are not interested in quality and only run after big brands and gimmicks
- Feels increasing fees is not easy as the newer schools are happy to undercut fees in attempt to lure parents
- Wants to add a new building to increase his school's capacity
- Faces challenges with fee collection, and bureaucratic issues due to RTE

APS owner's primary motivation is financial return

Financial

APSs are often run as **businesses** (family businesses in many cases).

Most owners see APSs as a source of **livelihood**.

Decisions about the school are therefore analyzed on the basis of their **impact on costs and revenues**.

Some owners may believe that improving **quality could lead to better financials** in the long-term.

"I cannot introduce anything for which the parents are not willing to pay"

Social

APS owners enjoy a certain **standing within the local community**.

Being seen as providing 'quality' or 'caring about students' can enhance this standing, and may drive some decisions made by the owner

"My schools is well-respected in this community and everyone greets me with respect"

Altruistic

Some owners may be committed to **improving the quality of education for its own sake**.

Decisions to invest in certain aspects may therefore be driven by an 'altruistic' motivation to improve quality

"I noticed that my students were bored in class and wanted to do something to engage them"

Running a successful APS is potentially a very profitable business...

Illustrative income statement of an APS

(Indicative calculations based on owner interviews and FSG estimates)

Revenues		Costs	
<i>All numbers in INR unless otherwise stated</i>		<i>All numbers in INR unless otherwise stated</i>	
Average fee per child per month¹	860	Teacher salary per month	126,000
Number of children in school	390	Number of teachers in school	18
ECE years	3	Average salary per teacher ³	7,000
Highest grade	10	Staff salary per month	42,500
Average number of children in each grade	30	Number of staff	12
Gross monthly fee revenue	335,400	Average salary per staff member ³	3,542
Loss due to fee delinquency per month	(16,770)	Power and utility costs³	20,000
Delinquency rate	5%	Cost of learning aids³	10,000
Net monthly fee revenue	318,630	Cost of maintenance³	10,000
Net annual fee revenue	3,823,560	Expenses on marketing³	10,000
Total commissions from books and uniforms	307,125	Sundry costs³	10,000
Average annual cost of books per child	1500	Total monthly costs	228,500
Average annual cost of uniforms per child	750	Total annual costs	2,742,000
Margin offered to owner ²	35%	Total annual costs (USD)⁴	42,185
Net annual revenues	4,130,685		
Net annual revenues (USD)⁴	63,549		
Net annual profit INR 1,388,685 (USD 21,364)⁴			

1. Average fee of APSs in research sample (excluding book and uniform costs)

2. Assuming the mid-point of the 30%-40% margin range mentioned by APS owners during research

3. FSG estimates

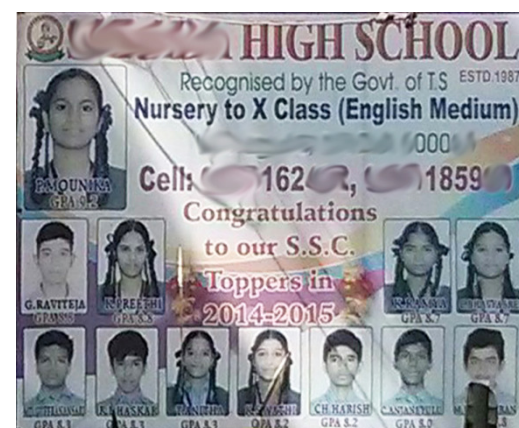
4. Assuming USD 1 = INR 65

They understand that parents judge the school mostly on more ‘superficial’ aspects

*Key factors on which APS owners believe **parents judge schools***

- **English language**
 - Conducting classes in English medium
 - Considered a minimum requirement
 - Also emerged during FSG’s customer research as a key requirement by parents¹
 - Speaking more English words, either in conversation or as rhymes
 - Writing English alphabets and words, particularly in cursive style
- **10th standard results**
 - Percentage of students that pass the exam
 - Results of the best performing students
 - Results of entrance exam for other schools, in cases where the school itself does not offer 10th standard (e.g., many APSs in Delhi offer classes only till 8th standard)
- **Physical infrastructure of the school** (e.g., well maintained building)
- **Technology-related interventions** (e.g., smart class system, computer lab, SMS alerts)
- **‘Discipline’ and ‘confidence’** exhibited by children, often judged in relation to other children in the locality or building

(Govt. Recognised)
Smart Class Available
Smashing Ball Pool
Fully A.C.
Large Playway Area
CCTV Cameras
Computer Lab
Convene Facilities
(Van, Rickshaw)



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Transforming APSs would require interventions that are financially rewarding to owners and improve child outcomes

Improve child outcomes

- Improve child development outcomes
- Reduce “bad” or damaging ECE
- Embed a more story or activity based learning approach

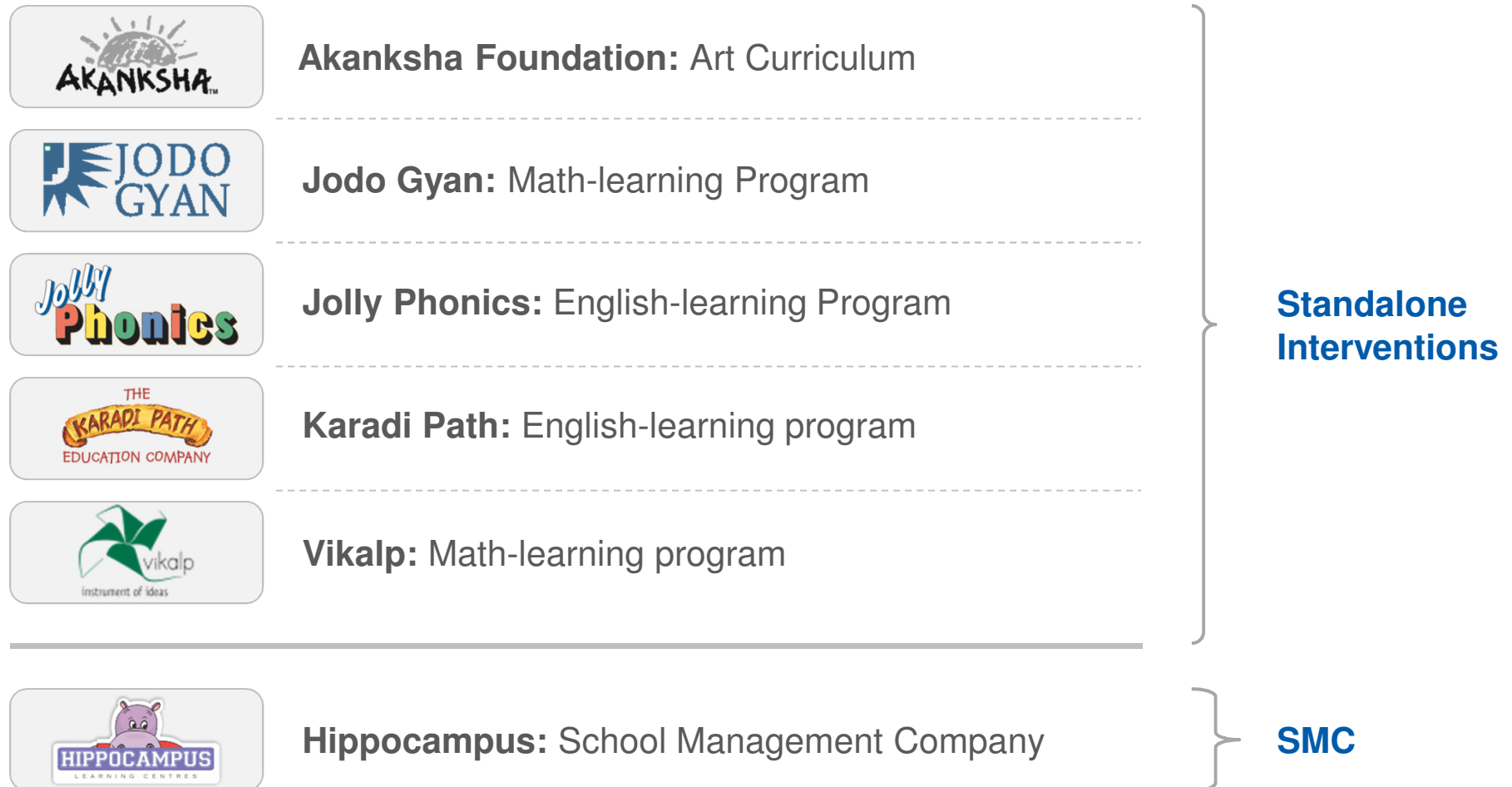


Improve APS financials

- Improve APS’s brand in the local micro market by appealing to attributes that parents value (e.g. spoken English, Math, confidence) leading to financial gain
- Inexpensive and easy to integrate

We reviewed ~26 interventions against these dual objectives

5 standalone interventions and at least 1 SMC¹ to be piloted in AY 2016/17



1. We may pilot more than one SMC in AY 2016/17, as we are still actively pursuing 2 more SMCs

Examples of Jodo Gyan's teaching and learning materials



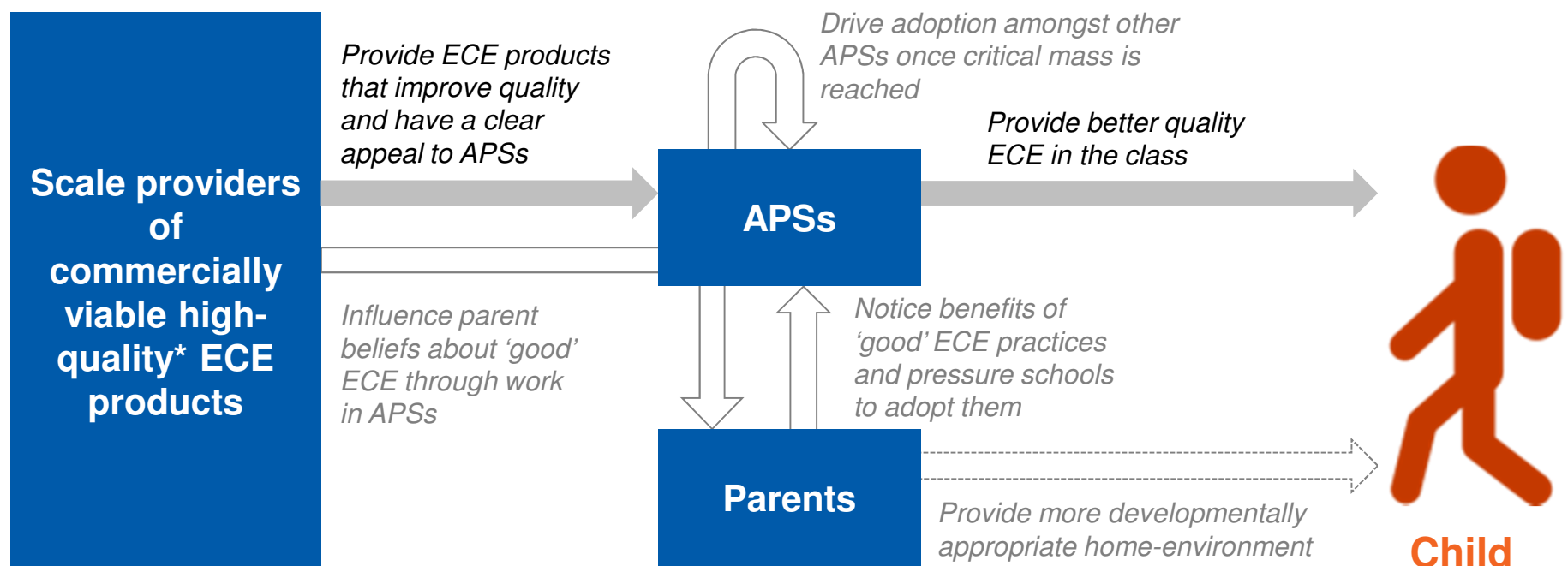
Example of an activity using the Jodo Gyan dice

- Teacher asks a child to come forward and roll the dice
- Depending upon the number that comes up, the teacher and student jump together that many number of times
- If the dice shows zero, the teacher and the child do not jump - thus instilling the concept of zero

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Theory of change



Absence of key barriers to scale for product providers

A contextually appropriate tool for assessing quality that can be used at scale

Greater awareness and interest in ECE amongst all stakeholders

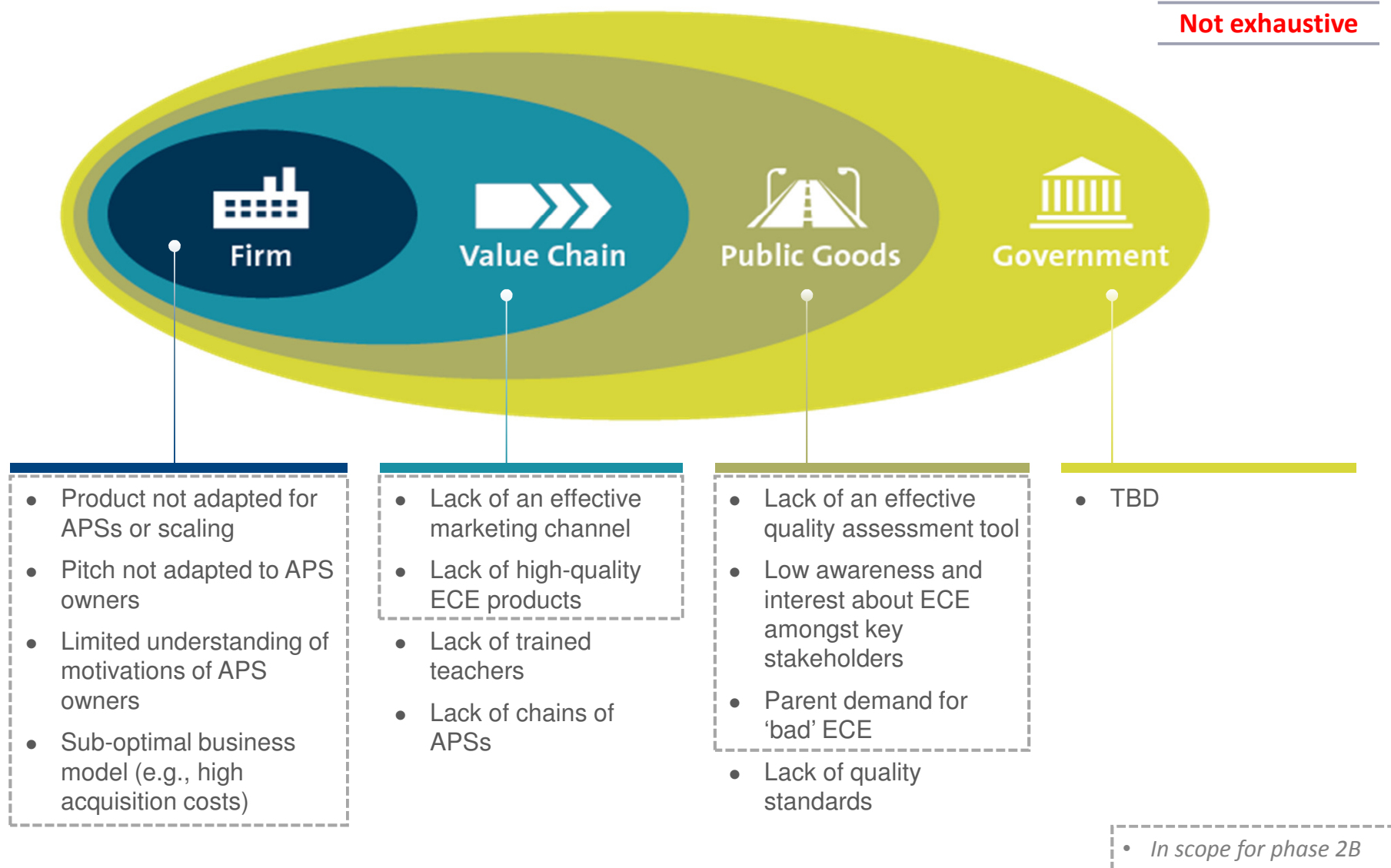
- Core system for impact
- Enabling environment for impact

- Direct impact
- Indirect impact
- Spill-over impact

* Products that have significant positive developmental impact on the child

Framework to enable scaling of ECE Product Providers: Identify and address ecosystem barriers as they become critical

Not exhaustive



How can you engage with FSG?

- Please feel free to download and share our research www.fsg.org/pipe
- We are hiring!! Visit our careers page www.fsg.org/careers
- Please write to pipe@fsg.org
 - For volunteering or joining our small group knowledge sharing sessions
 - For connecting us to companies offering early learning products to APSs





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