

# Pratham ECE Sample Based Assessment National Report

*March 2021*



# ECE Sample Based Assessment

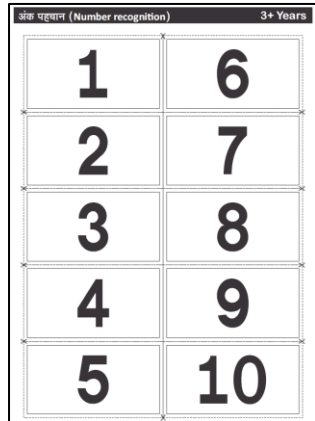
<b>When?</b>	The assessment was conducted in <b>Jan-2021</b>
<b>Where?</b>	The assessment was conducted in all those villages/communities where the SBA happened in AY 19-20, and where mobility was possible
<b>Which children were assessed?</b>	<p>A total of <b>11,852 children* were assessed in Jan-2021</b>. Out of these:</p> <ol style="list-style-type: none"><li><b>1) 5,579 children were assessed in Sept-2019</b> during the AY 19-20 SBA. These include only intervention Anganwadi children.</li><li><b>2) 6,273 children were not assessed in Sept-2019</b> during the AY 19-20 SBA. These children include:<ul style="list-style-type: none"><li>• Children who were in intervention Anganwadis last year, but not tested during the SBA (56%)</li><li>• Children who were in non-intervention Anganwadis last year, but started receiving messages during COVID (12%)</li><li>• Children who are newly enrolled in Anganwadis in AY 20-21, but started receiving messages during COVID (29%)</li></ul></li></ol>
<b>What data was collected?</b>	<p>In addition to conducting the assessment, the following information was also collected:</p> <ol style="list-style-type: none"><li><b>1) Child Profile:</b> Age, Last Year's Enrollment, This Year's Enrollment</li><li><b>2) Mother Profile:</b> Personal Phone Availability, Education Qualification</li><li><b>3) Participation in Home Activities:</b> Number of SMS/WhatsApp activities conducted in the last 7 days</li><li><b>4) Participation in Mohalla Activities:</b> Participation in Mothers' Group Meetings and Children's Groups</li><li><b>5) Additional Education Support:</b> Types of additional inputs received</li></ol>

*\***Note:** Pratham has a connect with all 11,852 children through home activities in 20-21*

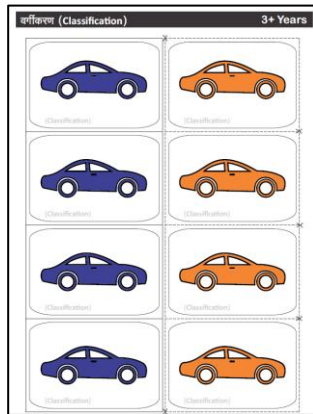
# Assessment Tool – For Children in the 3+ Age Bucket

## Pre-Math & Cognitive Development

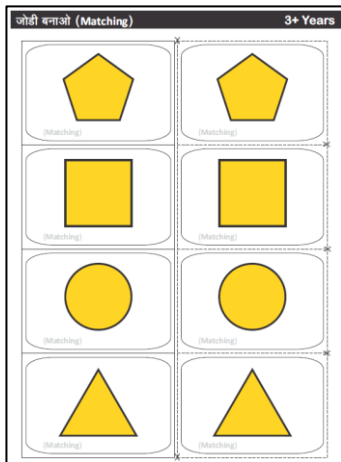
### Number Recognition



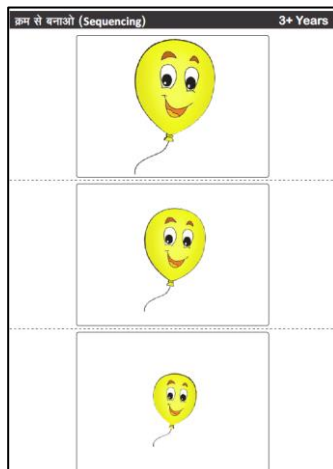
### Classification cards



### Matching cards



### Sequencing



## Language development

### Reading



### Book Handling



### Picture Card



## Social-Emotional

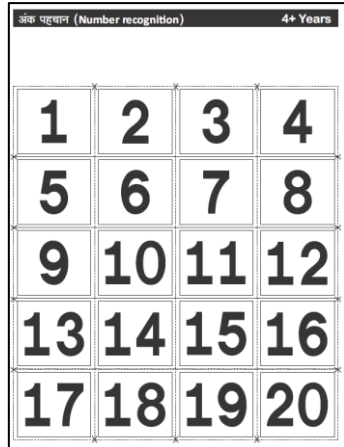
Social-Emotional development is assessed through Self Introduction, where the child is asked:

- 1) What is your name?
- 2) Where do you live?

# Assessment Tool – For Children in the 4.5+ Age Bucket

## Pre-Math & Cognitive Development

### Number Recognition



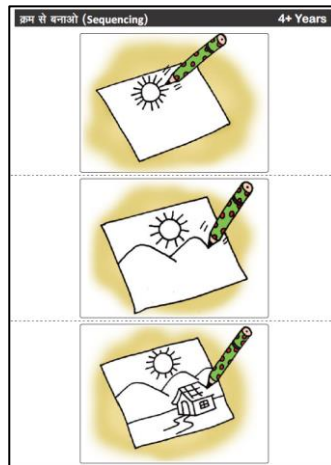
### Classification cards



### Matching cards



### Sequencing



## Language development

### Reading



### Book Handling



### Picture Card



## Social-Emotional

Social-Emotional development is assessed through Self Introduction, where the child is asked:

- 1) What is your name?
- 2) Where do you live?

<b>SNO</b>	<b>TOPIC</b>
<b>1</b>	<b>Learning changes over the last 1.5 years</b>
<b>2</b>	<b>Factors that had a relationship with learning changes</b>
2.1	Engagement with daily home activities
2.2	Mothers' background – phone and education status
2.3	Inputs from Anganwadi workers and teachers
<b>3</b>	<b>Enrollment and participation trends</b>

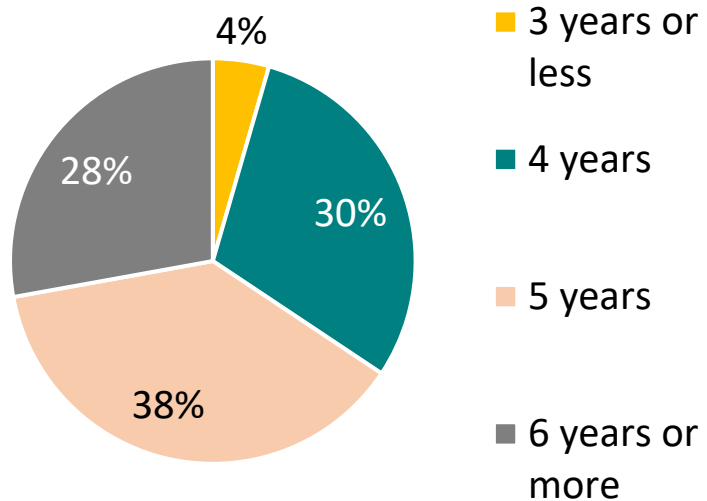
# **Learning changes over the last 1.5 years**

## Coverage - Children who were assessed in Sept-2019 and Jan-2021

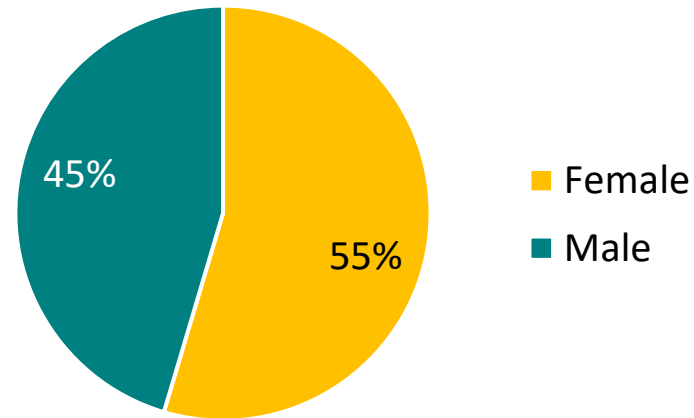
Program	State	# Villages/ Communities Covered	# Children Assessed in Sept-2019 and Jan-2021		Total
			Current 3 to 4.5 Years	Current 4.5+ Years	
Hamara Gaon	Gujarat	50	78	389	467
	Odisha	90	91	1,101	1,192
	Rajasthan	51	180	367	547
Stand Alone Anganwadi Support	Gujarat	50	161	167	328
	Uttar Pradesh	79	192	1,008	1,200
	Maharashtra	63	88	759	847
Direct (ITC, MH Urban, ADP, Verizon)	Andhra Pradesh	8	23	83	106
	Himachal Pradesh	7	8	29	37
	Karnataka	20	56	178	234
	Maharashtra	26	75	241	316
	Tamil Nadu	14	51	49	100
	Telangana	14	33	56	89
	Uttar Pradesh	6	8	47	55
	Uttarakhand	7	17	36	53
<b>Total</b>		<b>485</b>	<b>1,064</b>	<b>4,515</b>	<b>5,579</b>

# Overview of Children Assessed in Sept-2019 and Jan-2021

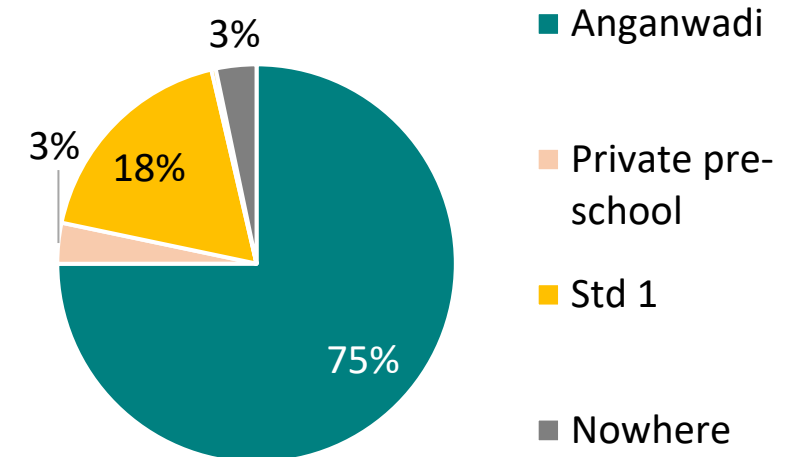
## Current Age (Jan-2021)



## Gender



## This Year's (AY 20-21) Enrollment

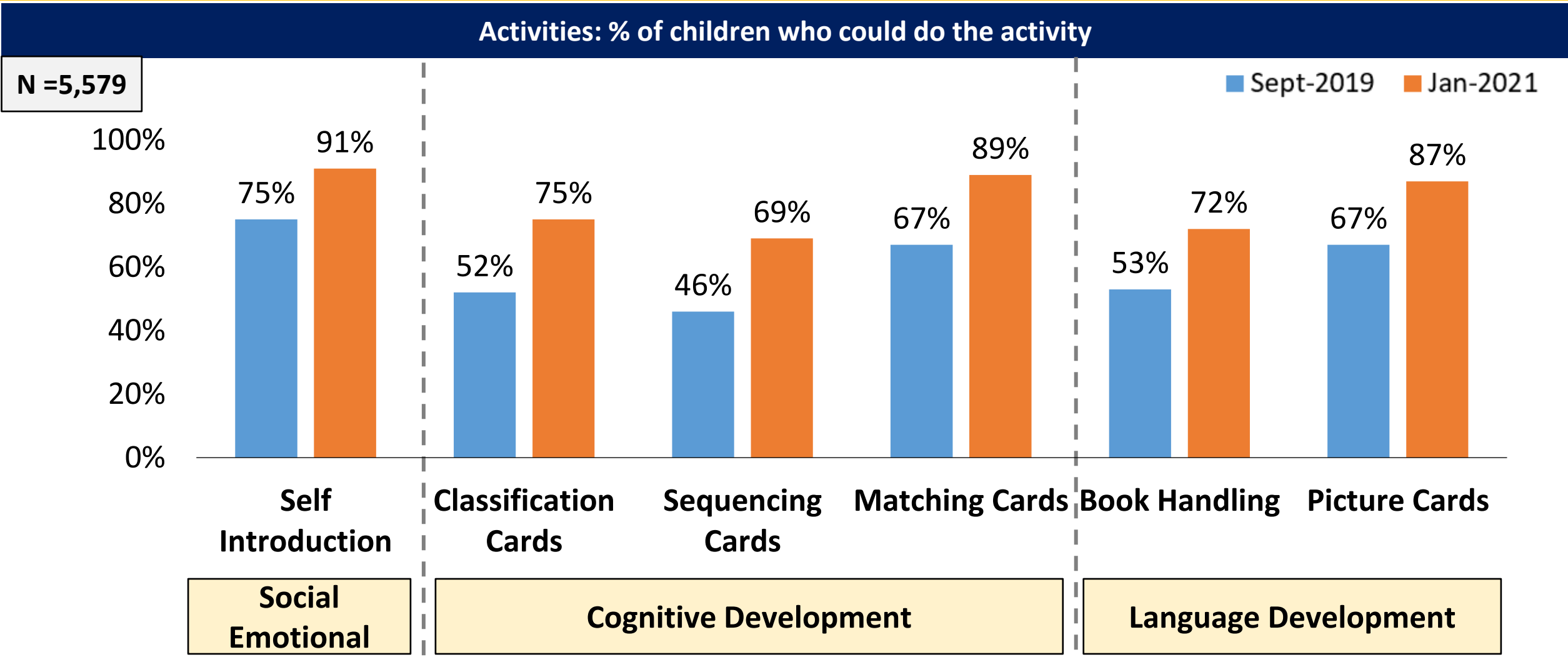


**N = 5,579**

- A very small percentage of our sample for comparing learning changes were age 3 children - the learning changes were primarily for age 4 to 6+ children
- This year (AY 20-21), 75% of children were enrolled in Anganwadis and 18% were enrolled in Std 1



# % Children who could do various activities increased by ~20 percentage points



• Across most activities, there was a growth of ~20 pp in children who could do an activity in Jan-2021

# A significant number of children made progress in cognitive development activities

## Classification Cards: Sept-19 vs Jan-21

		Jan-2021 Assessment		
		Cannot Do	Can Do	Total
Sept-2019 Assessment	Cannot Do	38%	62%	2,654 (48%)
	Can Do	14%	86%	2,925 (52%)
	Total	1,402 (25%)	4,177 (75%)	5,579 (100%)

## Matching Cards: Sept-19 vs Jan-21

		Jan-2021 Assessment		
		Cannot Do	Can Do	Total
Sept-2019 Assessment	Cannot Do	22%	78%	1,827 (33%)
	Can Do	6%	94%	3,752 (67%)
	Total	631 (11%)	4,948 (89%)	5,579 (100%)

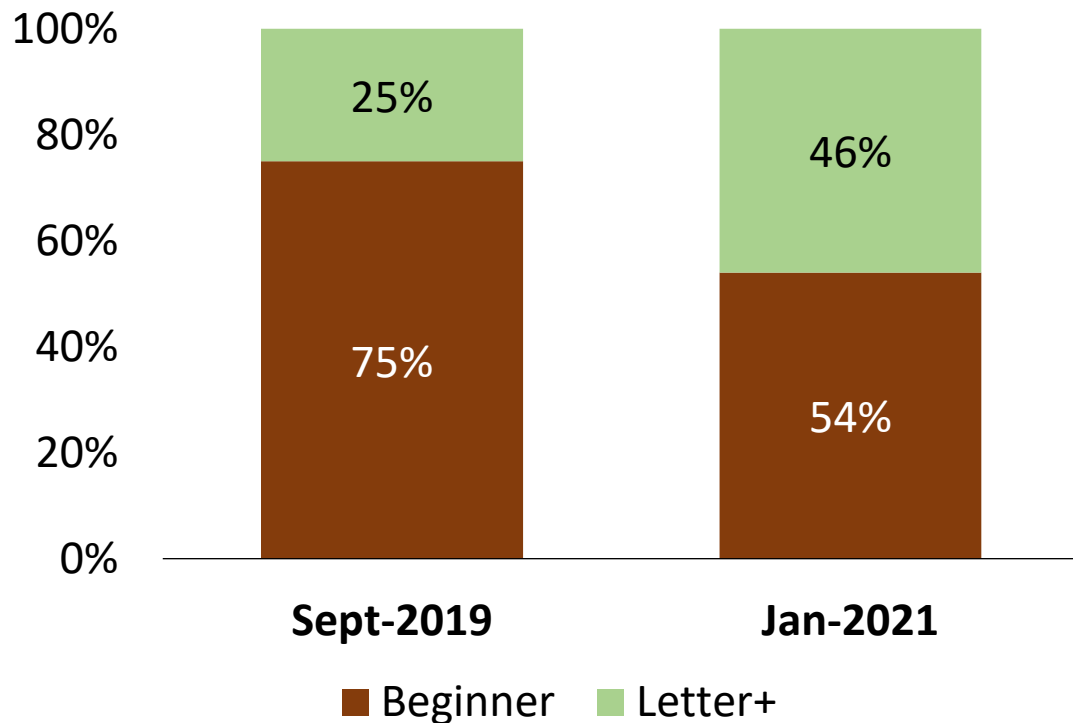
## Sequencing Cards: Sept-19 vs Jan-21

		Jan-2021 Assessment		
		Cannot Do	Can Do	Total
Sept-2019 Assessment	Cannot Do	44%	56%	3,032 (54%)
	Can Do	16%	84%	2,547 (46%)
	Total	1,735 (31%)	3,844 (69%)	5,579 (100%)

- For children who could not do various cognitive development activities in Sept-2019, a significant proportion had learning progress
- Furthermore more than ~85% who could do the activities in Sept-2019 retained their learning levels

# A considerable number of children remained at the beginner reading level over ~1.5 years

## Reading: Progress of children from Sept-2019 to Jan-2021 Assessments



		Jan-2021 Assessment		
		Beginner	Letter+	Total
Sept-2019 Assessment	Beginner	66%	34%	4,184 (75%)
	Letter+	18%	82%	1,395 (25%)
	Total	3,016 (54%)	2,563 (46%)	5,579 (100%)

29% children had a gain, 6% had a loss, 65% had no change

- 66% of children who were beginners in Sept-2019, remained at the beginner level in Jan-2021
- The % of Letter+ children grew from 25% to 46% (21 pp improvement) over the course of 1.5 years

...and this applies to children across all ages

Reading Progress: Age 4				
		Jan-2021 Assessment		
Sept-2019 Assessment		Beginner	Letter+	Total
	Beginner	64%	36%	1,389 (84%)
	Letter+	11%	89%	267 (16%)
	Total	915 (55%)	741 (45%)	1,656 (100%)

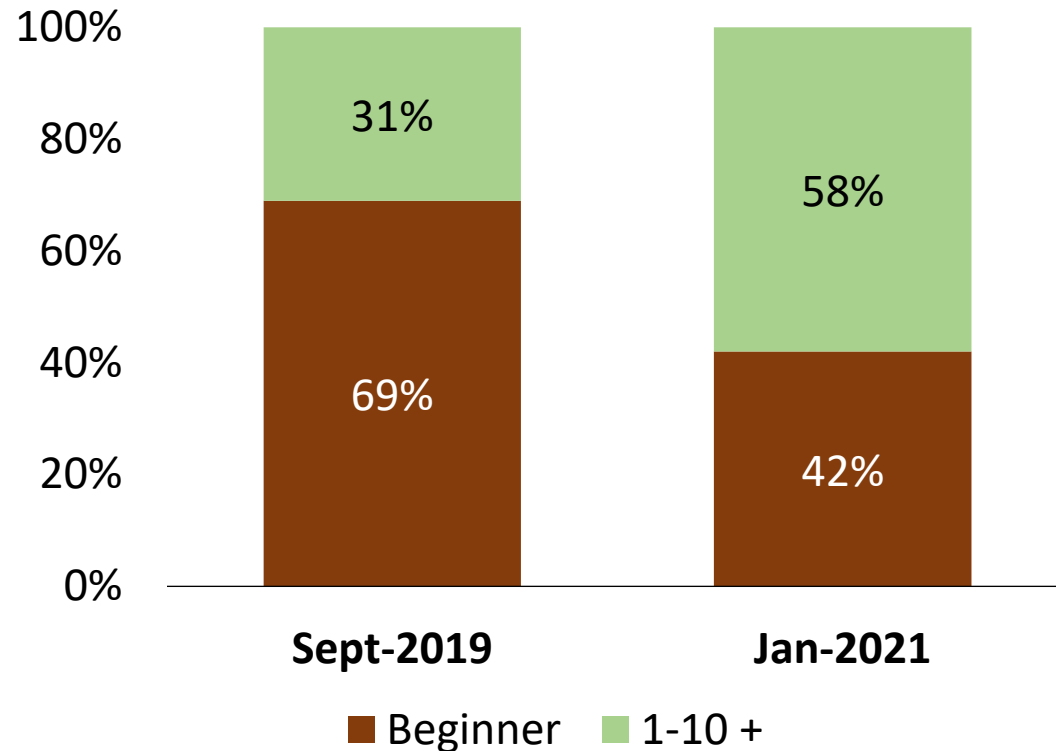
Reading Progress: Age 5				
		Jan-2021 Assessment		
Sept-2019 Assessment		Beginner	Letter+	Total
	Beginner	69%	31%	1,627 (77%)
	Letter+	19%	81%	482 (33%)
	Total	1,214 (58%)	895 (42%)	2,109 (100%)

Reading Progress: Age 6 or more				
		Jan-2021 Assessment		
Sept-2019 Assessment		Beginner	Letter+	Total
	Beginner	66%	34%	950 (61%)
	Letter+	20%	80%	609 (39%)
	Total	746 (48%)	813 (52%)	1,559 (100%)

• Even amongst children of Ages 5 and 6, more than 65% children remained at the beginner reading level across the two assessments – **we need to focus on foundational skills before school re-openings**

# A considerable number of children remained at the beginner number recognition level as well

## Number Recognition: Progress of children from Sept-2019 to Jan-2021 Assessments



		Jan-2021 Assessment		
		Beginner	1 to 10 +	Total
Sept-2019 Assessment	Beginner	56%	44%	<b>3,844 (69%)</b>
	1 to 10 +	11%	89%	<b>1,735 (31%)</b>
	Total	<b>2,355 (42%)</b>	<b>3,224 (58%)</b>	<b>5,579 (100%)</b>

**36%** children had a **gain**, **6%** had a **loss**,  
**59%** had **no change**

- 56% of children who were Beginners in Sept-2019, remained at the Beginner level in Jan-2021
- The % children who could recognize numbers grew from 31% to 58% (27 pp improvement) over the course of 1.5 years

...and this applies to children across all ages

Number Recognition Progress: Age 4				
		Jan-2021 Assessment		
Sept-2019 Assessment		Beginner	1 to 10 +	Total
	Beginner	54%	46%	1,303 (79%)
	1 to 10 +	10%	90%	353 (21%)
	Total	743 (45%)	913 (55%)	1,656 (100%)

Number Recognition Progress: Age 5				
		Jan-2021 Assessment		
Sept-2019 Assessment		Beginner	1 to 10 +	Total
	Beginner	59%	41%	1,488 (71%)
	1 to 10 +	12%	88%	621 (29%)
	Total	947 (45%)	1,162 (55%)	2,109 (100%)

Number Recognition Progress: Age 6 or more				
		Jan-2021 Assessment		
Sept-2019 Assessment		Beginner	1 to 10 +	Total
	Beginner	56%	44%	847 (54%)
	1 to 10 +	10%	90%	712 (46%)
	Total	547 (35%)	1,012 (65%)	1,559 (100%)

• Even amongst children of Ages 5 and 6, more than 55% children remained at Beginner across the two assessments – we need to focus on foundational skills before school re-openings

## Learning Levels

- A significant number of children made progress in cognitive development activities over the last 1.5 years
- However, amongst children of Ages 5 and 6, more than 55% children could not read letters or recognize numbers over the last 1.5 years – focus on foundational skills is essential before school re-openings

# Factors that had a relationship with learning changes

1

Engagement with daily home activities

2

Mother's background – phone and education

3

Inputs from Anganwadi workers and teachers



# Learning gains are higher when engagement with home activities is higher

*Engagement with home activities refers to the % of daily activities that were conducted with the child over the last 7 days (completion rate in the sampled week is taken as a proxy for engagement)*

% Children who had activities at home	Number of Children	% Children at Letter+ Level			% Children who can recognize numbers		
		Sept-2019	Jan-2021	Growth	Sept-2019	Jan-2021	Growth
Less than 50%	541	23%	31%	8 pp	30%	49%	19 pp
50% to 74%	1,831	26%	45%	19 pp	34%	58%	25 pp
75% to 100%	3,047	25%	51%	26 pp	30%	59%	29 pp

- Children who completed more than 50% of the activities, i.e. children with higher engagement, have higher learning gains
- **Thus children have better outcomes if engagement with home activities is higher**

# Learning gains are higher when the mother owns a personal phone

*Mother's personal phone refers to the phone that the mother owns, meaning the father's phone/other family member's phone is not considered*

Mother's Personal Phone	Number of Children	% of Children at Letter+ Level			% of Children who can recognize numbers		
		Sept-2019	Jan-2021	Growth	Sept-2019	Jan-2021	Growth
No Phone*	787	8%	21%	13 pp	11%	28%	17 pp
Regular Phone	2,503	29%	48%	19 pp	36%	60%	25 pp
Smart Phone	2,285	27%	52%	25 pp	33%	65%	32 pp

*\*Note: 85% of these 787 children still received messages because messages were sent to some other family member's phone (52% had regular phones, 33% had smart phones) – thus, these mothers were secondary users of phones*

- Learning gains were higher for those children whose mothers owned phones - furthermore, children of smartphone mothers performed better than children of regular phone mothers
- **Thus additional support will need to be given to those mothers who don't own phones**

# Even if the mother is not educated, if she has a smart phone her child has better learning outcomes

*Mother's personal phone refers to the phone that the mother owns, meaning the father's phone/other family member's phone is not considered*

Mother's Education Level	Mother's Personal Phone	Number of Children	% of Children at Letter+ Level			% of Children who can recognize numbers		
			Sept-2019	Jan-2021	Growth	Sept-2019	Jan-2021	Growth
Never went to school	No Phone <sup>1</sup>	194	10%	23%	12 pp	15%	34%	19 pp
	Regular Phone	687	33%	43%	10 pp	41%	58%	17 pp
	Smart Phone	272	31%	53%	22 pp	41%	68%	27 pp
Went to school	No Phone <sup>2</sup>	593	7%	21%	13 pp	9%	26%	17 pp
	Regular Phone	1,816	27%	50%	23 pp	34%	61%	27 pp
	Smart Phone	2,013	26%	52%	26 pp	32%	65%	33 pp

1) 77% of these 194 children still received messages as messages were sent to other family member's phone (50% had regular phones, 27% had smart phones)

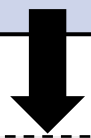
2) 87% of these 593 children still received messages as messages were sent to other family member's phone (53% had regular phones, 35% had smart phones)

- Even if the mother never went to school, if she had a smart phone, her children had better learning outcomes compared to if she had a regular phone or no phone
- For mothers who were educated, having any type of phone led to comparable results – however if the educated mother did not have a phone, her children had weaker outcomes

# Learning gains are higher for children who receive additional inputs from AW workers and teachers

*Additional Inputs refer to education related inputs that the child received, excluding Pratham. These could be inputs from Anganwadi workers/school teacher, tuitions, and textbooks*

Inputs received by children	Number of Children	% of Children at Letter+ Level			% of Children who can recognize numbers		
		Sept-2019	Jan-2021	Growth	Sept-2019	Jan-2021	Growth
Only Pratham inputs received	2,962	23%	42%	19 pp	28%	53%	25 pp
1 or more additional inputs received	2,616	28%	51%	23 pp	34%	63%	29 pp



**For these 2,616 children:**

- 55% received inputs from Anganwadi workers/school teachers
- 32% received inputs from tuitions
- 18% had textbooks

• Learning gains were higher for those children who received some additional inputs  
**Thus children have better outcomes if they have some support from Anganwadi workers/school teachers and tuitions – maintaining a connection with AWs and schools is crucial**

# Key Takeaways

## Learning Levels

- A significant number of children made progress in cognitive development activities over the last 1.5 years
- However, amongst children of Ages 5 and 6, more than 55% children could not read letters or recognize numbers over the last 1.5 years – focus on foundational skills is essential before school re-openings

## Factors that Impact Learning Levels

- Children have better outcomes if engagement with home activities is higher
- Learning gains are higher for those children whose mothers own phones and are educated – additional support will need to be given to those mothers who don't own phones and are not educated
- Children have better outcomes if they have support from Anganwadi workers/teachers – maintaining a connection with AWs and schools is crucial

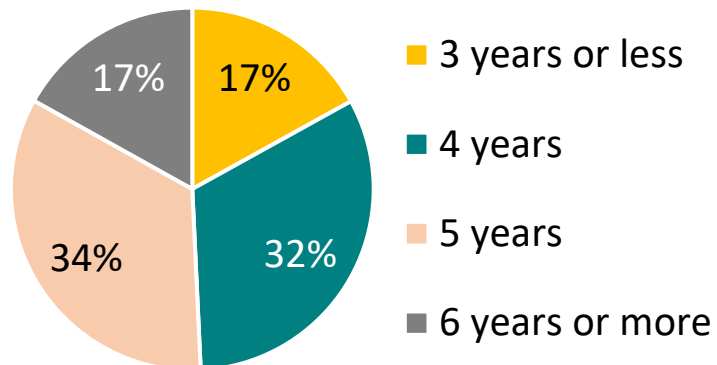
# **Enrollment and participation trends**

## Coverage – All children who were assessed in Jan-2021

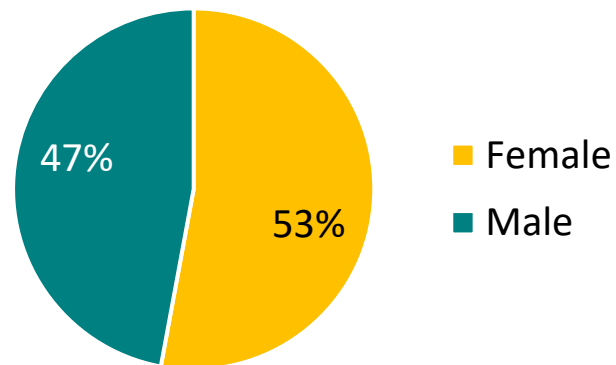
Program	State	# Villages/ Communities Covered	# Children Assessed in Jan-2021		Total
			Current 3+ Years	Current 4.5+ Years	
Hamara Gaon	Gujarat	50	326	627	953
	Odisha	90	734	2,081	2,815
	Rajasthan	51	325	403	728
Stand Alone Anganwadi Support	Bihar	65	509	620	1,129
	Gujarat	51	368	288	656
	Uttar Pradesh	79	542	1,737	2,279
	Maharashtra	63	223	837	1,060
Direct (ITC, MH Urban, ADP, Verizon)	Andhra Pradesh	9	94	136	230
	Himachal Pradesh	13	68	82	150
	Karnataka	20	184	286	470
	Maharashtra	26	220	375	595
	Tamil Nadu	16	107	111	218
	Telangana	18	162	181	343
	Uttar Pradesh	6	45	61	106
	Uttarakhand	7	71	49	120
<b>Total</b>		<b>564</b>	<b>3,978</b>	<b>7,874</b>	<b>11,852</b>

# Overview of all Children Assessed in Jan-2021

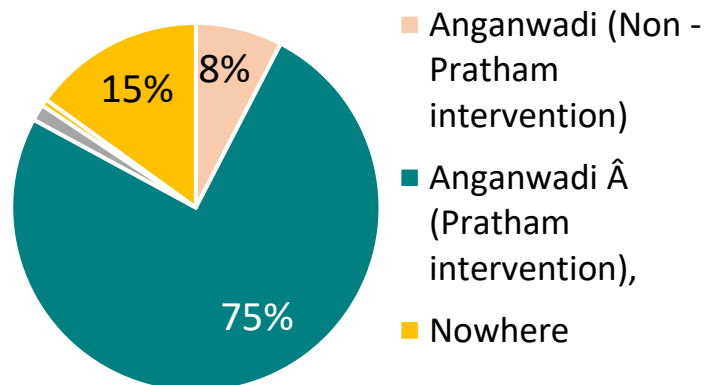
## Current Age (Jan-2021)



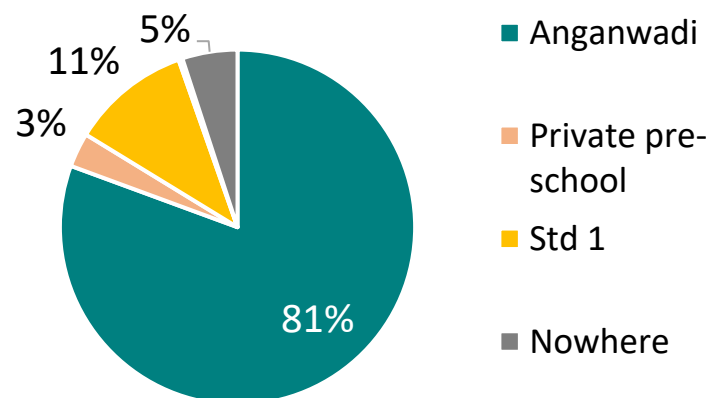
## Gender



## Last Year's (AY 19-20) Enrollment



## This Year's (20-21) Enrollment



**N = 11,852**

- The majority of children assessed were of ages 4 and 5
- More number of girls were assessed compared to boys
- Last year (AY 19-20), 75% of the children assessed were in Pratham intervention Anganwadis, and 15% were not enrolled anywhere
- This year (AY 20-21), 81% of children are enrolled in Anganwadis, and 11% are enrolled in Std 1



# Enrollment Trends for Age 3 to 6 (Academic Year 20-21)

N = 11,852

Age	Number of Children	Anganwadi	Private Pre-School	Std 1	Nowhere	Total
3 years or less	1,995	88%	1%	0%	11%	100%
4 years	3,813	93%	2%	1%	4%	100%
5 years	4,023	87%	4%	6%	3%	100%
6 years or more	2,021	39%	6%	49%	5%	100%

- There were still 11% of Age 3 children who were not enrolled anywhere
- Only 50% of Age 6 children transitioned to Std 1 in AY 20-21, while 40% were still in Anganwadis
- **We need to ensure that Age 3 are enrolled in Anganwadis, and Age 6 children are enrolled in Std 1 next academic year**

# ASER 2018 - Enrollment trends of Age 3 to 8 (National)

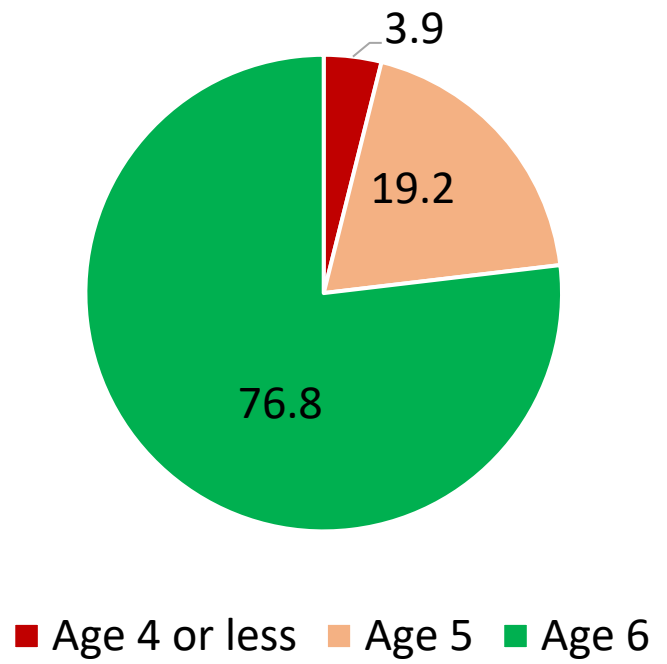
## ASER 2018: % of age 3 to 8 children who were enrolled in various pre-school and schools

Age	Pre-School			Pre school total	School			School total	Not enrolled	Total
	AW	Govt Pre-Primary	Pvt LKG/UKG		Govt	Pvt	Other			
Age 3	57	1	10	68	2	1	0	3	29	100
Age 4	51	2	23	76	5	3	0	9	16	100
Age 5	28	3	28	58	23	10	0	33	8	100
Age 6	8	2	16	26	50	21	1	71	3	100
Age 7	2	1	7	10	59	29	1	88	2	100
Age 8	1	0	3	4	63	31	1	94	2	100

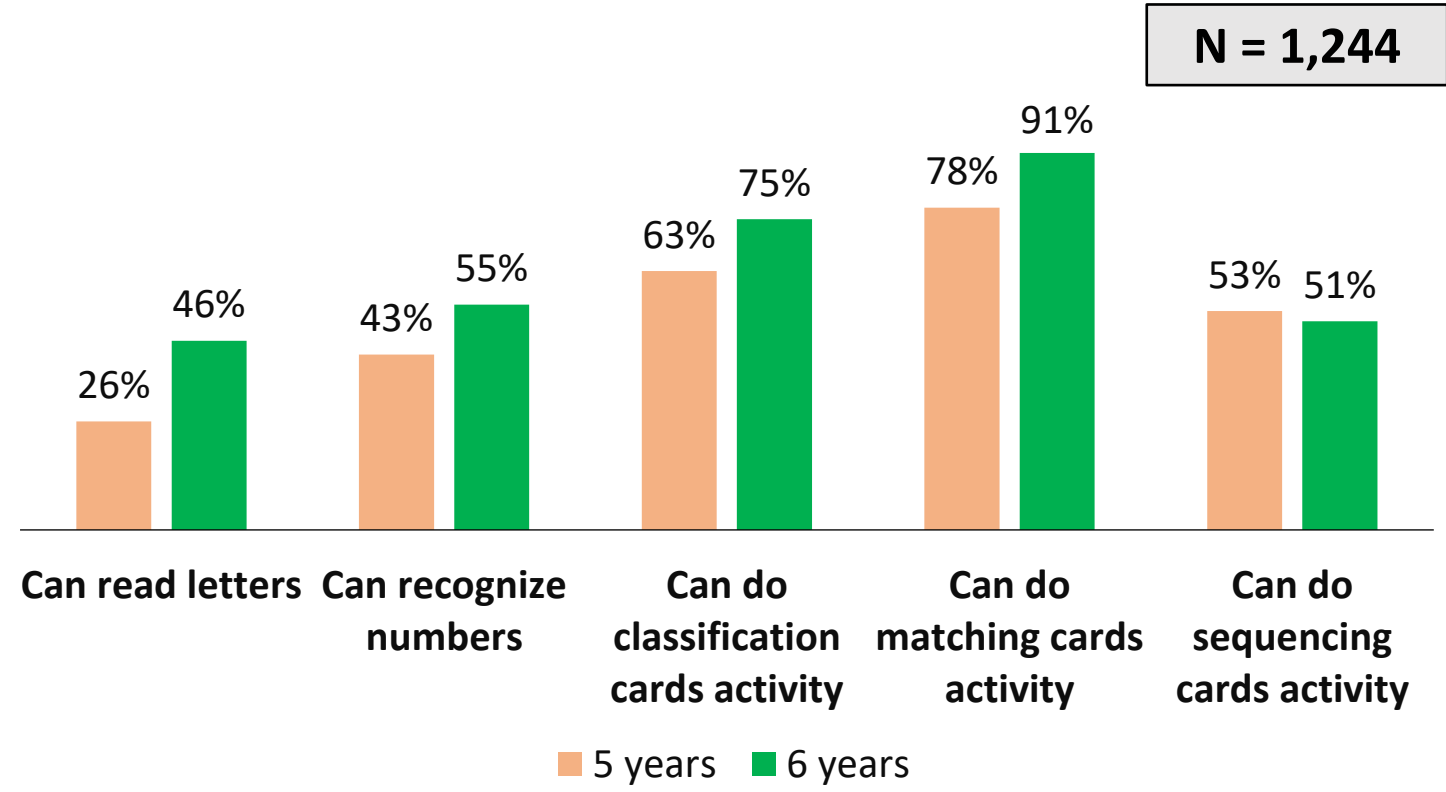
- As per ASER 2018 national data, almost 30% of Age 5-6 children were not enrolled anywhere – this figure was lower in ECE SBA locations (11%)
- More than 30% Age 5 children were enrolled in school – this figure was also lower in ECE SBA locations (5%)
- About 25% of Age 6 children were still in pre-school – this figure was much higher in ECE SBA locations (45%)

# Entry into Std 1 at the right age is important because age makes a difference in learning

### % of Std 1 Children by Age (in Jan-2021)



### Std 1 Reading and Arithmetic Levels by Age (in Jan-2021)



- Overall, almost 20% of children enrolled in Std 1 in Academic Year 20-21 were of Age 5
- Children who entered Std 1 at Age 5 had poorer reading and arithmetic skills- **hence entry into Std 1 at the right age is very important**

## Participation in home and mohalla activities by age

Child's Age	# of Children	Participation in Home Activities			Participation in Mohalla Activities	
		Avg # of activities <u>sent</u> in the last 7 days	Avg # of activities <u>conducted</u> in the last 7 days	% of activities conducted	% who participate in Mothers' Group Meetings	% who participate in Children's Groups
3 years or less	1,995	5	4	75%	70%	51%
4 years	3,813	5	4	76%	75%	58%
5 years	4,023	5	3	74%	75%	55%
6 years or more	2,021	4	3	73%	51%	73%
<b>Total</b>	<b>11,852</b>	<b>5</b>	<b>4</b>	<b>75%</b>	<b>70%</b>	<b>58%</b>

- Parents had conducted 75% of the activities sent to them in the last 7 days. The completion rate in June 2020 was 93% (for a sample of 525 children).
- 70% of mothers were a part of an active mothers' group. Participation dropped for mothers of 6+ children.
- 58% of children were a part of a volunteer-led children's group. Participation was higher for 6+ children.

# Participation in home and mohalla activities varies across programs

Program	State	# of Children	Participation in Home Activities			Participation in Mohalla Activities	
			Avg # of activities sent in last 7 days	Avg # of activities conducted in last 7 days	% of activities conducted	% who participate in Mothers' Groups	% who participate in Children's Groups
Hamara Gaon	Gujarat	953	2	1	76%	79%	67%
	Odisha	2,815	3	2	83%	73%	42%
	Rajasthan	728	6	4	68%	94%	76%
Stand Alone Anganwadi Support	Bihar	1,129	6	4	59%	73%	12%
	Gujarat	656	2	2	90%	29%	96%
	Uttar Pradesh	2,279	6	5	76%	82%	84%
	Maharashtra (Talasari)	1,060	6	3	56%	98%	100%
Direct (ITC, MH Urban, ADP, Verizon)	Andhra Pradesh	230	7	7	98%	5%	5%
	Himachal Pradesh	150	5	4	72%	75%	78%
	Karnataka	470	6	6	91%	29%	51%
	Maharashtra	595	6	5	76%	4%	0%
	Tamil Nadu	218	7	5	79%	77%	36%
	Telangana	343	7	7	100%	99%	80%
	Uttar Pradesh	106	5	4	72%	53%	61%
	Uttarakhand	120	4	3	69%	17%	23%
<b>Total</b>		<b>11,852</b>	<b>5</b>	<b>4</b>	<b>75%</b>	<b>70%</b>	<b>58%</b>

- There was considerable variation in participation in mohalla activities between Direct programs and Hamara Gaon/ Anganwadi Support

# Key Takeaways

## Learning Levels

- A significant number of children made progress in cognitive development activities over the last 1.5 years
- However, amongst children of Ages 5 and 6, more than 55% children could not read letters or recognize numbers over the last 1.5 years – focus on foundational skills is essential before school re-openings

## Enrollment

- We need to ensure that Age 3 children are enrolled in Anganwadis, and Age 6 children are enrolled in Std 1 next academic year
- Entry into Std 1 at the right age is very important, as age makes a difference in learning

## Factors that Impact Learning Levels

- Children have better outcomes if engagement with home activities is higher
- Learning gains are higher for those children whose mothers own phones and are educated – additional support will need to be given to those mothers who don't own phones and are not educated
- Children have better outcomes if they have support from Anganwadi workers/teachers – maintaining a connection with AWs and schools is crucial

## Participation in Home and Mohalla Activities

- Engagement with daily home activities has been strong, even after 9+ months of sending messages
- Participation in mothers' group meetings is also strong in Hamara Gaon/Anganwadi Support programs