



Save the Children®

First Read Thailand Baseline Report

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Executive Summary

This report examines the results of the First Read Thailand baseline assessment. The data collection was conducted over a period of one month in November/December 2016 and included 569 children, as well as 414 of their caregivers in 6 sub districts – three selected as intervention sites and three as control. The International Development and Early Learning Assessment (IDELA) was used to measure children’s learning and development, along with a caregiver questionnaire to capture information about the home environment.

First Read is a Save the Children UK (SCUK) approach that recognizes the importance of home-based ECCD approaches. Home-based ECCD is the cornerstone of First Read, stemming from an acknowledgment by Save the Children UK that in some parts of the world center-based interventions are simply not feasible.

The main objectives of this baseline are:

- to gather information about the parents, children and communities to establish a snapshot of the First Read communities in southern Thailand and inform program implementation, and
- to establish equivalency between intervention and control communities against which to measure the impact of future project implementation.

The domains tested with the IDELA tool included motor development, early literacy, early numeracy, and social-emotional development. The IDELA tool was translated into Thai for the enumerator team to use; the oral language of assessment was Patani-Malay. Children who reported multi-lingual competency were assessed in emergent literacy in both Thai and Patani-Malay. The key findings are summarized below:

- The most substantial differences found between study groups is that children in the control area are significantly older than children in the intervention area, and that children in the intervention area have significantly stronger skills than children living in control areas in all development areas except Patani-Malay literacy.
 - Because Patani-Malay literacy is the main outcome of interest in this study, these other skill differences are somewhat less problematic, but the consistency of the differences across learning domains suggests that age and baseline score must be controlled for in any future analyses of learning growth.
- Parents reported owning 7 out of 9 common household objects. Relevant to future programming, 97 percent reported having a mobile phone and only 38 percent reported owning a radio.
- About half of families reported having storybooks at home (47%), more commonly in Thai (65%) than in Jawi (32%). On average, parents reported engaging in many learning activities with their children (6.9 out of 9). However, they also reported engaging in negative discipline activities often.
 - For example, 77 percent of parents reported reading with their children, and 74 percent reported yelling at their children; 64 percent of parents reported singing songs with their children and also hitting them. This suggests that parenting sessions should focus on promoting child-friendly activities at home as well as discouraging negative discipline behaviors.
- Most children who participated in the baseline are enrolled in ECD services (public or private) (85% intervention and 93% control), but enrollment did not differ by age and is not significantly related to children’s learning and development. Further investigation into how often children actually attend the ECD services, and the quality of the learning environments is warranted.

- Results of the IDELA find that children have the weakest skills in literacy (Thai and Patani-Malay) and social-emotional development, and the highest in motor development and numeracy. Thus the focus of the First Read project on Patani-Malay literacy development is highlighted as a need in these communities. These results also suggest continuing to monitor the possible effects of more positive parenting engagement fostered through the program on children's social-emotional development. In addition, given that children may have Thai or Central Malay integrated into their primary schooling, it will be important to study how improvements in emergent mother tongue literacy support L2 learning as well.
- Poverty was seen to be consistently negatively related to children's skills and therefore actively involving these families will be important to the success of the program. In addition, the significant positive relationships of having reading materials at home with children's literacy and numeracy skills highlight the importance of this component of the project. Finally, the results of this study highlighted the range of skills children in target communities possess. Some children may have weaker skills due to their younger age or potentially having a learning disability, and it will be important for curriculum and parent session development to take a wide range of children's skills into consideration.

I. Introduction

Early childhood care and development (ECCD) in this report refers to the physical, cognitive, linguistic and socio-emotional development of a child from conception up to the age of under six years old. In this period, over 85 per cent of the human brain develops.¹ ECCD encompasses a wide range of activities, ranging from prenatal care to nutrition and from early childhood stimulation to pre-school education. Research shows that the environment in which a child grows up substantially affects the development of the brain and the intelligence level of the child.² This environment is influenced by a wide range of early childhood settings that all impact the development of the child, including the home and the school.

Crucial foundations are laid in the first years of a child's life which, if weak, can have a permanent and detrimental impact on the child's long term development. Quality guidance, care, love and protection from harm impact a child's future choices, attainment, wellbeing, happiness and resilience. A lack of ECCD services disproportionately affects vulnerable children around the world. As a result, these children often lag behind in terms of their physical, cognitive and socio-emotional development. As children grow older, the development gap increases and gets ever harder to overcome. Children who participate in quality ECCD programs are generally better prepared for primary school, perform better at school, and are less likely to repeat grades or drop-out of school, all reducing the costs of the education system.³ Therefore, it is crucial to focus investment on children in their early years. Thailand has consistently allocated from 18-25% of total government expenditure to the education sector, each year for the past 10 years; in 2012, the Thai government invested 0.32% of total government expenditure on pre-primary education.⁴ The Thai education system is still struggling to tackle socio-economic inequality – the population with the best living conditions have a 19.1 times greater opportunity to access tertiary education than the population with the worst living conditions.⁵ The systemic socio-economic disparity challenges children's health, education, and well-being from the start.

I.1 First Read project

First Read is a Save the Children UK (SCUK) approach that recognizes the importance of home-based ECCD approaches. Whilst SCUK recognizes that the ideal intervention is a complementary approach of home-based and centre-based interventions, First Read recognizes that in some parts of the world center-based interventions may not be feasible to establish in the near future due to running costs or dispersed settlements meaning that a centralized ECCD center may still not be convenient for *everyone*, for this reason First Read promotes a community-based parenting approach.

Since launching First Read in 2013, the program has worked to develop an evidence base that can demonstrate that working through parents and caregivers in the home environment is not only cost and

¹ UNICEF (2014) Building Better Brains: New Frontiers in Early Childhood Development. Key messages generated from a Neuroscience Symposium organized by UNICEF on April 16, 2014

² Deray, Ian J (2000). Looking Down on Human Intelligence: from Psychometrics to the Human brain. Oxford: Oxford University Press.

³ Heckman, J.J. (2008). Schools, Skills and Synapses. IZA Discussion Paper No. 3515

⁴ OECD-UNESCO (2016) Education in Thailand: an OECD-UNESCO Perspective. OECD publishing - Page 64.

⁵ MDGs Thailand 2015 Report (2015) page 179 file:///C:/Users/k8/Desktop/_MDGS%202015%20Eng_Final.pdf

resource effective but it can result in more equitable gains for children irrespective of background (e.g. socio-economic status, literacy of parents), can lead to increased emergent literacy and numeracy scores, and more confident children and parents.

The project goals for First Read Thailand are:

1. To strengthen emergent literacy and numeracy for ethnic minority children aged 3 to 6 in Si Sakhon district through improved parenting practice and increased access to quality, age appropriate, Patani-Malay⁶ reading materials.
2. To generate evidence on the impact of a home based ECCD intervention in a conflict setting.

2. Rationale: scope and purpose of the evaluation

The main objective of this baseline is to gather information about the parents, children, and communities in southern Thailand against which to measure future growth and change. Some of the research questions this baseline aims to answer are:

1. What are the common learning materials and practices in homes in the First Read intervention area?
2. What are average child development levels for children in the First Read intervention area?
3. Are children and parents in the intervention and control groups statistically similar in terms of learning materials and practices, and child development levels?

3. Methodology

3.1 Assessment tools

The International Development and Early Learning Assessment (IDELA) was used to measure child development and learning and the IDELA Caregiver Questionnaire was used to interview parents/caregivers. IDELA is an international assessment tool developed by Save the Children which has been used in 32 countries to measure child development and learning,⁷⁸ and was used as to assess children aged 3.5-5 years old. The IDELA child assessment contains 22 direct assessment items covering four domains: motor development, emergent literacy, emergent numeracy and socio-emotional development. In addition, two optional direct assessment items were added to measure children's executive functioning, as well as assessor-reported items focused on children's learning approaches.

⁶ The innovation of the First Read project is development of Patani-Malay language books in the Jawi script; this enables parents and caregivers to read in their preferred script while also enabling young children emergent literacy in the Mother Tongue.

⁷ <http://resourcecentre.savethechildren.se/library/assessing-construct-validity-save-childrens-international-development-and-early-learning>

⁸ <http://resourcecentre.savethechildren.se/library/international-development-and-early-learning-assessment-technical-paper>

The IDELA Caregiver Questionnaire contains questions about children’s family and household environments. Specifically, caregivers are asked about their educational background, daily play and learning interactions with children, feeding and health practices, and disciplinary behaviors. They are also asked about their expectations and attitudes regarding their children’s development and the importance of education for their future.

Table 1. IDELA domains and subdomains

Gross and Fine Motor Development	Emergent Literacy and Language	Emergent Numeracy	Social-emotional Development	Executive function
Copying a shape	Print awareness	Measurement and control	Peer relations	Short-term memory
Drawing a human figure	Expressive vocabulary	Classification/ Sorting	Emotional awareness	Inhibitory control
Folding Paper	Letter identification	Number identification	Empathy	
Hopping on one foot	Emergent writing	Shape identification	Conflict resolution	
	Initial sound discrimination	One-to-one correspondence	Self-awareness	
	Listening comprehension	Simple operations		
		Problem solving		
Approaches to learning				

3.2 Sample

The assessment was conducted in 21 communities situated in the 6 sub districts of Si Sakhon district: Si Sakhon, Tamayong, ChengKiri, Sako, Kalong and Sibaphot sub districts. No intervention activities had begun prior to the research design so assignment to treatment and control groups was random. A simple randomization strategy was used to sort sub-districts into treatment and control areas. Each sub district was labeled with a number, then a randomization generator was used (i.e. first number = treatment, second number = control). The population of children aged 0 to 6 was collected by village, situated in the treatment and control areas. A number was assigned to each village. A random number generator was used to compile the sample of 11 treatment and 10 control villages to be visited by the enumerator team. The recorded child population aged 3 to 6 in the villages selected included 666 boys and 696 girls. Children aged 3.5 to 5 situated in the selected sample communities were randomly invited from the school catchment area list in the community to a local school or health center to participate in the assessment. Home visits were not possible in many sample villages due to security risk associated with the on-going conflict situation. Due to the security risk and no existing experience of any actor with home visits we do not plan to include this activity in First Read Southern Thailand – we could look at adding it in a future phase. The PES sessions will be offered twice per month over at least 8 months, PES sessions will include parents/caregivers and children aged 3 to 6. We will have separate sessions for male and female caregivers in each of the villages in the target areas for 2017.

The baseline survey was conducted at the start of the rainy season during the El Nino/La Nina Southern Oscillation (ENSO) cycle, the season in 2016 was particularly wet, and some children were unable to participate due to sickness or transport difficulties. For example, the SCI Thailand team has been active in the flood response for affected communities in Narathiwat province – the same area where the baseline occurred.

Table 2 describes the assessment sample disaggregated by gender.

Table 2. Children sampled in intervention and control communities by gender

Gender	Control		Intervention	
	N	%	N	%
Male	94	45%	102	50%
Female	114	55%	104	50%
Total	208	100%	206	100%

Table 3. Children sampled in intervention and control communities by child age

Child age	Control Average age =4.1		Intervention Average age = 3.8	
	N	%	N	%
Younger than 4 years	44	21%	87	42%
4-5 years	92	44%	80	39%
5-6 years	72	35%	37	18%
6 years or older	0	0%	2	1%
Total	208	100%	206	100%

Table 4. Children sampled in intervention and control communities by child language

Child language	Control Average age =4.1		Intervention Average age = 3.8	
	N	%	N	%
Patani-Malay	206	99%	184	89%
Thai	2	1%	22	11%
Total	208	100%	206	100%

3.3 Data collection training and pilot test

Prior to the quantitative data collection enumerators attended a five day training on how to administer the IDELA child and caregiver tools. The training consisted of three days of reviewing the tools in an office and two days practicing with the tools in the field. The field testing of the IDELA tools with children and caregivers served to increase assessor’s comfort with the instruments and also to finalize any contextual or translation modifications that were needed to the tools.

During the formal data collection, assessors were split into teams and were supervised by designated team leaders. Each data collector used a tablet with access to the KoBo software to collect child and

caregiver responses. The use of tablets facilitated timely data collection and uploading, and improved the accuracy of data collection. Data collection took 15 days to complete including travel time, time spent searching for the correct households and travel challenges. Data entry was overseen by Save the Children's MEAL Officer.

3.4 Data analysis

The main purpose of the quantitative analysis is to investigate the current status of children's development, as well as of caregiver knowledge and behaviors related to early development, care and learning. Summary statistics will be presented to display children's performance on IDELA questionnaires, as well as the involvement of parents and caregivers in the ECCD development of children.

This report also tests the differences between children in intervention and control areas at the time of data collection using summary statistics and t-tests. These differences are important as they will provide insights regarding relevant existing differences between the intervention and control sites, especially regarding the frequency of enrolment to ECCD services and other possible characteristics that might bias the results of the upcoming First Read intervention evaluation such as: children's age, gender, home learning environment, family possessions, and parents' literacy, and attitudes.

Additionally, results of multivariate regression models exploring the relationships between early learning and development, parental knowledge, attitudes and home environments are presented. Throughout the report statistical significance is defined in line with social science research standards at the probability of rejecting the null hypothesis due to random sampling error less than 5 percent. Finally, standard errors are clustered at the ECCD school (public or private) level to account for the shared variance of children within these pre-primary schools.

3.5 Limitations

The main limitation of this study is that the IDELA items were not able to be translated into Patani-Malay because it is an oral language. Historically Patani-Malay has been an oral language, a Thai based script was developed by linguists for the Patani-Malay language and trialed in six schools. Most people have no familiarity with the new Thai based script and more conservative communities see it as over colonialism. In this case the First Read team translated the IDELA to the Thai based Patani-Malay script and most enumerators could not read it and were not familiar with it. Most people in the southern border provinces of Thailand speak Patani-Malay and write the Central Melayu language in the Jawi script. Most adults are able to read the Jawi script. By word picking those Central Melayu words that are identical to oral Patani-Malay we can create emergent literacy materials for First Read. This is only really appropriate for adult led emergent literacy.

We tried one form of transliteration of the spoken language but most assessors had never seen the language written before (although they speak it) so this proved to be more distracting than helpful. Instead assessors translated on the spot from a Thai-based tool. Assessors practiced this translation process throughout the training and field testing period and appropriate vocabulary choices were discussed at length. However, this does introduce the potential for administration differences between assessors.

Village leaders were informed of the baseline activities and schedule by the district office and many village leaders used the network or public and private ECCD teachers to reach out to families. Children were contacted about the study by ECCD teachers because they were seen as the people who were in closest contact with families with young children in target communities in both the treatment and control areas.

However, this may bias the sample toward children who are enrolled in ECCD services. The Thai government has an effective system in place to track and encourage all school age children who have completed their birth registration to enroll in compulsory schooling in their locality. However, Si Sakhon district includes a shadow population of children who have not completed birth registration. For example, some Muslim mothers prefer birthing in the home with a mid-wife or in Malaysia where they are guaranteed a female doctor and do not realize they need to later register the birth with the Ministry of Interior. Lastly, there are many migrants, including children, in the area from neighboring countries who may be undocumented. It is not clear if the baseline was effective in reaching the hard to reach children in the district. Finally, there were a limited number of child assessment responses accurately matched with a caregiver questionnaire response. While the IDELA and household survey databases contain 603 and 523 observations respectively; only 414 observations were matched from both databases after different match procedures. This limits the power available for regression analyses focused on the relationships between family and household characteristics and children’s learning.

4. Caregiver questionnaire

4.1 Family and caregiver characteristics

The majority of respondents to the IDELA caregiver questionnaire were children’s mothers (76%) followed by children’s fathers (9%), older siblings (7%) and grandparents (6%). The differences among languages at home is of particular interest to the study, due to the multicultural context of southern Thailand. On average, 93% of the sample children reported speaking both Patani-Malay and Thai, while a limited minority of children responded that they speak only one language - Thai (7%), or Central Melayu (1%). In response to a question about which language children use when upset, caregivers reported that 87% use Patani-Malay, 6% Thai, 1% Central Melayu and 5% other languages. The language a child uses when angry or upset is a good indicator of the child’s dominant language.⁹

Respondents were asked about the parents’ age and level of education, as well as the number of children they were caring for. The majority of mothers and fathers were 25-35 years old and fathers were older on average. On average, 92 percent of mothers and 90 percent of fathers self-reported as literate. The most common, highest level of education, for mothers was completion of secondary education, while for fathers it was completion of primary education. Finally, parents reported having 2.5 children on average.

The only statistically significant difference between households in intervention sites compared to the households in the control sites was that on average, children in control sites were significantly older than children in interventions sites. Therefore age will be controlled for in all calculations of children’s skill differences between study groups. There were no statistically significant differences in parents’ age, literacy, or education levels.

Table 5. Average parent characteristics

	All	Intervention	Control	Difference
Child is female	53%	50%	55%	

⁹ Lust, Barbara (2009) Child Language: acquisition and growth. SIL International publications.

Child age	3.95	3.77	4.13	***
Language at home: Patani-Malay	94%	89%	99%	
Language at home: Thai	13%	15%	10%	
Language at home: Central Malayu	2%	2%	1%	
Language at home: Other	0%	0%	0%	
Mom's age	30.5	30	31	
Mom can read	92%	91%	92%	
Mom's highest education level				
None	11%	12%	11%	
Primary	30%	26%	35%	
Secondary	24%	27%	22%	
High school	20%	20%	20%	
Higher education	10%	12%	8%	
IBTIDA-E	0%	0%	0%	
Mutawasith	1%	2%	0%	
Sanwiya	1%	0%	1%	
Dad's age	37.2	35.10%	39.3	
Dad can read	90%	92%	89%	
Dad's highest education level				
None	15%	16%	13%	
Primary	35%	29%	41%	
Secondary	15%	17%	13%	
High school	15%	20%	10%	
Higher education	10%	9%	12%	
IBTIDA-E	1%	1%	0%	
Mutawasith	1%	1%	1%	
Sanwiya	2%	1%	2%	
No. children at home	2.5	2.4	2.5	

Note: * $p < .05$, ** $p < .01$, *** $p < .001$

Parents were also asked about common household items that they possessed in order to gather information on the relative wealth of the family. On average caregivers reported owning 7 out of 9 common possessions. On average, **there were no significant differences between household's number of possessions in intervention and control sites.**

Table 6. Average home possessions

	All	Intervention	Control	Difference
# HH possessions (9)	7.0	7.0	6.9	
Electricity	97%	98%	96%	
Radio	38%	37%	39%	
Television	88%	89%	87%	

Fridge	76%	78%	74%	
Bike	79%	77%	81%	
Motorcycle	97%	98%	96%	
Mobile phone	96%	97%	94%	
Land	71%	73%	69%	
Livestock	56%	55%	57%	

Note: * $p < .05$, ** $p < .01$, *** $p < .001$

4.2 Home learning environment

Caregivers were also asked about the materials available in their homes for children's early learning as well as the activities they participated in with their children. On average, caregivers reported owning 4 out of 8 types of reading materials and 4 out of 9 types of toys. **There were significant differences between the households in intervention sites and control sites.** Households in intervention sites reported having more newspapers than households in control sites, but the main difference in home learning environment is the variety of toys; **households in intervention sites reported owning significantly more types of toys compared to households in control sites, particularly toys related to drawing, and involving hand-eye coordination, colors and shapes, and numbers.**

Table 7. Average types of reading materials

	All	Intervention	Control	Difference
No. types of reading materials (8)	3.6	3.7	3.5	
Storybook	47%	50%	44%	
Number of storybooks	6.1	6.3	5.9	
Lang. storybook: Jawi	32%	32%	32%	
Lang. storybook: Thai	65%	65%	65%	
Lang. storybook: Other	3%	3%	2%	
Textbook	74%	73%	75%	
Magazine	15%	17%	13%	
Newspaper	15%	18%	13%	*
Religious	76%	77%	75%	
Coloring	81%	80%	83%	
Comic	51%	53%	49%	

Note: * $p < .05$, ** $p < .01$, *** $p < .001$

Table 8. Average types of toys

	All	Intervention	Control	Difference
No. types of toys (9)	3.6	3.9	3.4	***
Homemade	37%	37%	36%	
Shop	77%	78%	75%	

House objects	36%	35%	36%	
Outside objects	52%	54%	50%	
Drawing	52%	54%	50%	*
Puzzles	60%	64%	55%	**
Hand-eye	30%	35%	26%	*
Colors-shapes	27%	31%	23%	***
Numbers	23%	29%	18%	*
Other toys	19%	23%	15%	*

Note: * $p < .05$, ** $p < .01$, *** $p < .001$

Regarding the types of early learning behaviors caregivers participate in with children, on average, caregivers reported engaging in 7 out of 9 learning and play activities with their children in the past week, with mothers being the ones who participated in more early learning behaviors as well as in disciplinary action than other family members. The most common activity was taking children outside and the least common was telling stories and singing songs. **There were no significant differences on parents' learning behaviors among households in intervention and control sites.**

Most of caregivers reported hugging children, while discipline behaviors such as spanking, hitting, and yelling were also reported by a considerably high proportion of caregivers (65 percent for spanking and hitting, and 74 percent for yelling). Mothers were also the ones who participated in more discipline behaviors and hugging of children. **There were no significant differences among parents' disciplinary action among households in intervention and control sites.**

Table 9. Average home learning activities and discipline behaviors

	All	Intervention	Control	Difference
No. HLE interactions (9)	6.9	6.8	6.9	
Read books	77%	76%	79%	
Tell stories	64%	65%	62%	
Sing songs	65%	62%	68%	
Take outside	94%	94%	93%	
Play games	68%	69%	68%	
Name objects	77%	76%	78%	
Show or teach	78%	76%	80%	
Teach letters	86%	88%	84%	
Teach numbers	83%	81%	84%	
Hug	97%	96%	98%	
Spank	65%	64%	67%	
Hit	65%	65%	65%	
Yell	74%	77%	72%	

Note: * $p < .05$, ** $p < .01$, *** $p < .001$

Figure 1a. Home learning and discipline activities with mothers

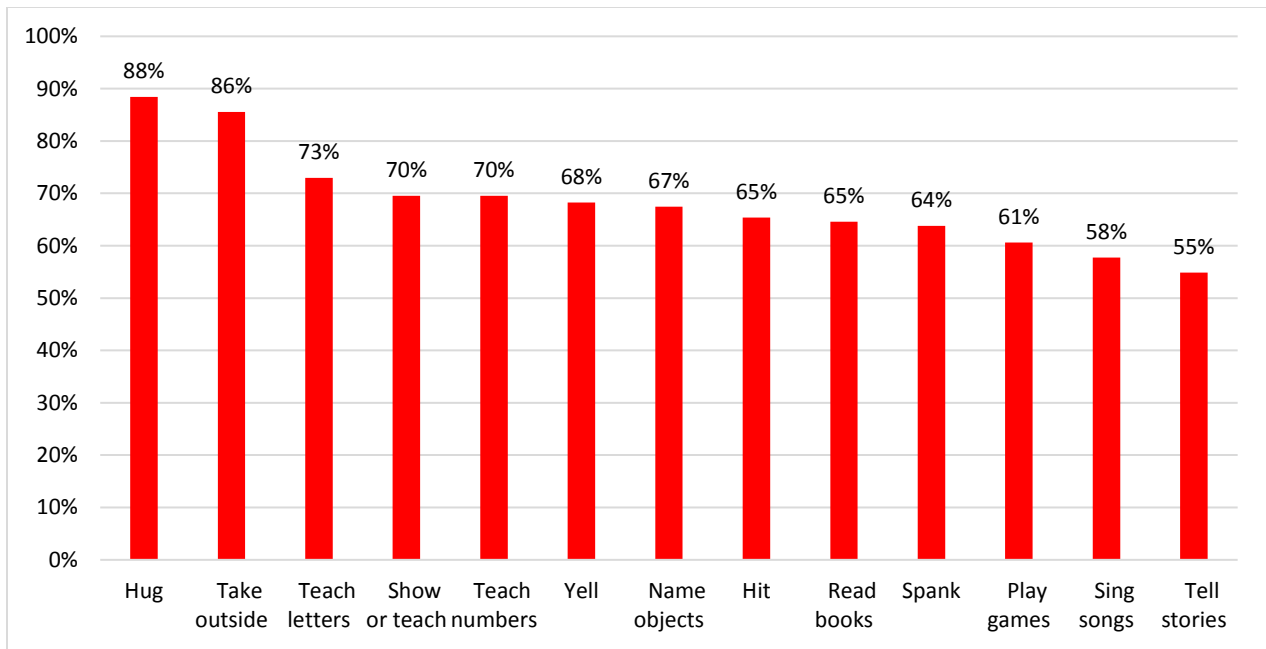
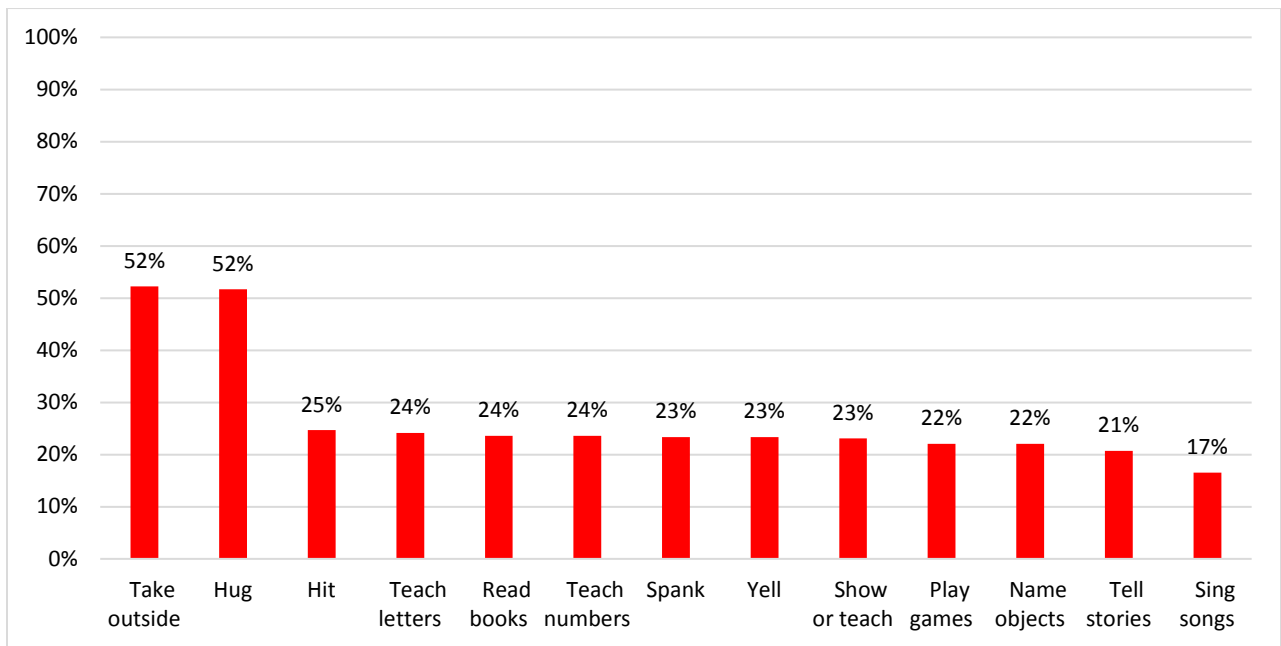


Figure 1b. Home learning and discipline activities with fathers



4.3 ECCD participation and expectations

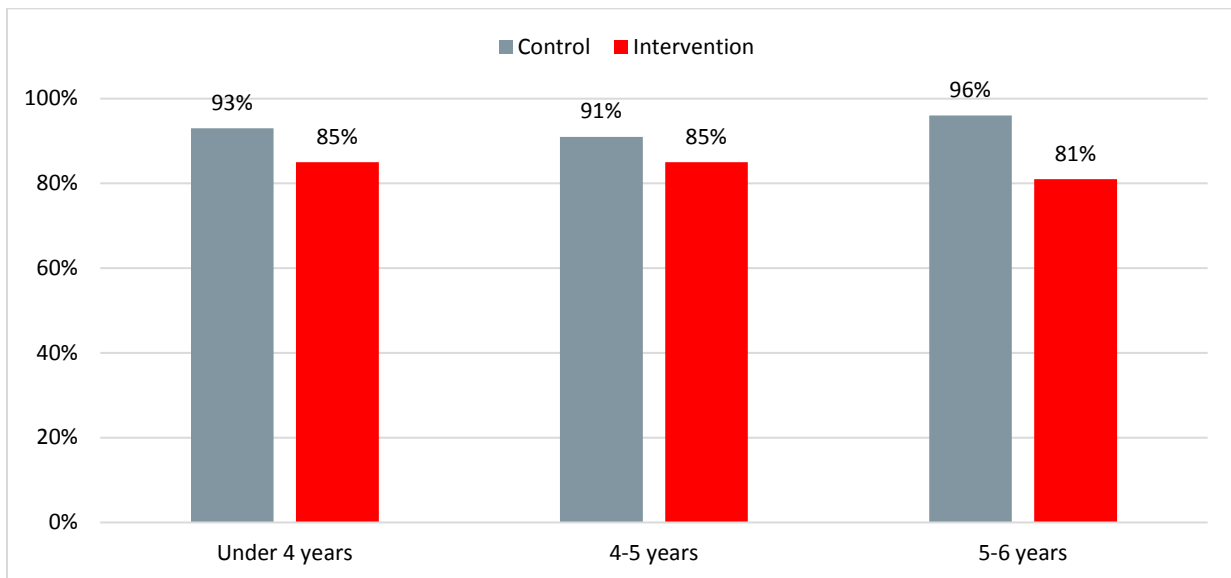
Data collected on frequency of attendance to ECCD services, shows that on average 89 percent of children were enrolled in an ECCD program, have attended for 1.2 years on average, and spend about 6.6 hours in ECCD centers per day. **On average, children from households in control areas reported a significantly higher ECCD participation rate compared to children from households in intervention sites.** It should be noted that children were contacted about the study by ECCD facilitators because they were seen as the people who were in closest contact with families with young children in target communities. However, this may bias the sample toward children who are enrolled in ECCD centers.

Table 10. Participation in ECCD

	All	Intervention	Control	Difference
ECCD Participation	89%	85%	93%	***
ECCD Avg. time (years))	1.2	1.2	1.1	
Less than 1 year	27%	26%	28%	
1 year	28%	26%	30%	
2 years	39%	42%	36%	
3 years	5%	5%	6%	
ECCD Avg. hours per day	6.6	6.7	6.5	

Note: * $p < .05$, ** $p < .01$, *** $p < .001$

Figure 2. ECCD enrollment by age and intervention group



Caregivers of children who were enrolled in ECCD were asked about the reasons why their children attend ECCD classes. The most commonly mentioned reason in both intervention and control households, was that the neighborhood children go to the pre-primary school, followed by preparation for primary school. Interestingly, the least common reason for ECCD attendance for both groups was that children like to go

to the center. **There were significant differences among the reasons for enrolling in ECCD between households from intervention and control sites, as caregivers in intervention sites placed a higher value on the fact that children learn religious content and Patani-Malay, as well as routine compared with caregivers in control sites.**

Table 11. Reasons for enrolling in ECCD

	All	Intervention	Control	Difference
Child gets food	27%	28%	26%	
Child keeps busy	19%	22%	17%	
Preparation for primary	45%	49%	41%	
Neighborhood children go	57%	53%	61%	
Child likes it	13%	13%	12%	
Child learns religious	37%	42%	32%	*
Child learns Thai	38%	42%	35%	
Child learns in Patani-Malay	23%	29%	18%	**
Routine	17%	22%	13%	**
Other	17%	17%	18%	

Note: * p < .05, ** p < .01, *** p < .001

As for the reasons why children do not attend an ECCD facility, the most commonly mentioned reason for both households in intervention and control sites was that children are too young. The 'Other' category was also commonly mentioned, but it is not possible to identify which might be the other reasons. Further investigation into this topic from the Thailand team would be warranted. **There was a significant difference between households in intervention and control sites on reasons for not enrolling, as households in intervention sites mentioned that there was no center nearby, while this reason was not mentioned by households in control sites.**

Table 12. Reasons for not enrolling in ECCD

	All	Intervention	Control	Difference
Child is too young	35%	41%	21%	
No center nearby	13%	19%	0%	*
Child does not want to	9%	6%	14%	
Insecurity				
No one to take the child	11%	9%	14%	
Other	41%	34%	57%	

Parents were also asked about their expectations for their children's educational attainment. On average, almost all parents expected their children to complete primary and secondary school. The majority of parents also reported expecting that their children would complete Ibtida-e, but caregivers in the control areas were significantly more likely to report expecting that their child would complete Quranic education than caregivers in the intervention area.

Table 13. Parents' educational expectations for their children

	All	Intervention	Control	Difference
Expect child will complete primary school	99%	99%	99%	
Expect child will complete secondary school	98%	98%	98%	
Expect child will complete Ibtida-e	92%	84%	99%	*

4.4 Attitudes about parenting

Caregivers were asked about their attitude regarding their roles in their children’s’ development. The questions were rated on a scale 1-4 (1=Strongly disagree, 4=Strongly agree). In general, caregivers reported feeling like their actions and attitudes were relevant for children’s development. **There were no statistically significant differences among caregivers in intervention and control sites.**

Table 14. Attitudes about parenting

	All	Intervention	Control	Difference
I play an important role in my child’s learning and development.	3.5	3.5	3.5	
Knowing how to read and write is important for my child to have a good/productive life.	3.6	3.6	3.6	
I will encourage my child to complete at least secondary school	3.5	3.5	3.5	
I think I can support my child’s educational development at home	3.4	3.4	3.4	
I think my child can learn a lot of skills by playing games	3.3	3.4	3.4	
I find ways to talk with or engage my child in games while I am doing my daily work	3.3	3.3	3.3	
I think praising children whenever he/she tries to do something new is important	3.5	3.5	3.5	
Obs.	414	208	206	

4.5 Developmental disability

Finally, caregivers were also asked about whether they know or suspect that their child has any developmental disabilities. Overall, nine percent of parents reported that they suspected that their child had a developmental disability, and the most prevalent concern was around communication issues. This proportion is in line with global averages reported on the prevalence of children with disabilities. There are some descriptive differences between the types of disabilities reported by parents across the study groups but the sample is very small and averages should be interpreted with caution. The only area of significant difference between the two study groups is that parents in the intervention group were significantly more likely to report that their child had some other type of disability that was not listed. In follow up conversations community members expressed that very minor physical differences, such as being born with six fingers on one hand they consider “Other.” Although the reported prevalence of developmental problems was low, many more parents reported being worried about their child’s cognitive, social or physical development so this could be an area to explore more during parenting sessions.

Table 15. Parent-reported development difficulties for children

	All	Intervention	Control	Difference
Do you suspect or know that your child has any disabilities?	9%	8%	9%	
Communication/language	58%	53%	63%	
Cognitive	28%	41%	16%	
Sensory integration/attention	39%	35%	42%	
Physical	14%	6%	21%	
Visual	6%	6%	5%	
Auditory	0%	0%	0%	
Other	11%	24%	0%	*
Are you worried about any aspect of your child's intellectual or social development?	30%	31%	29%	
Are you worried about any aspect of your child's physical development or growth?	23%	23%	24%	

5. Child development: IDELA

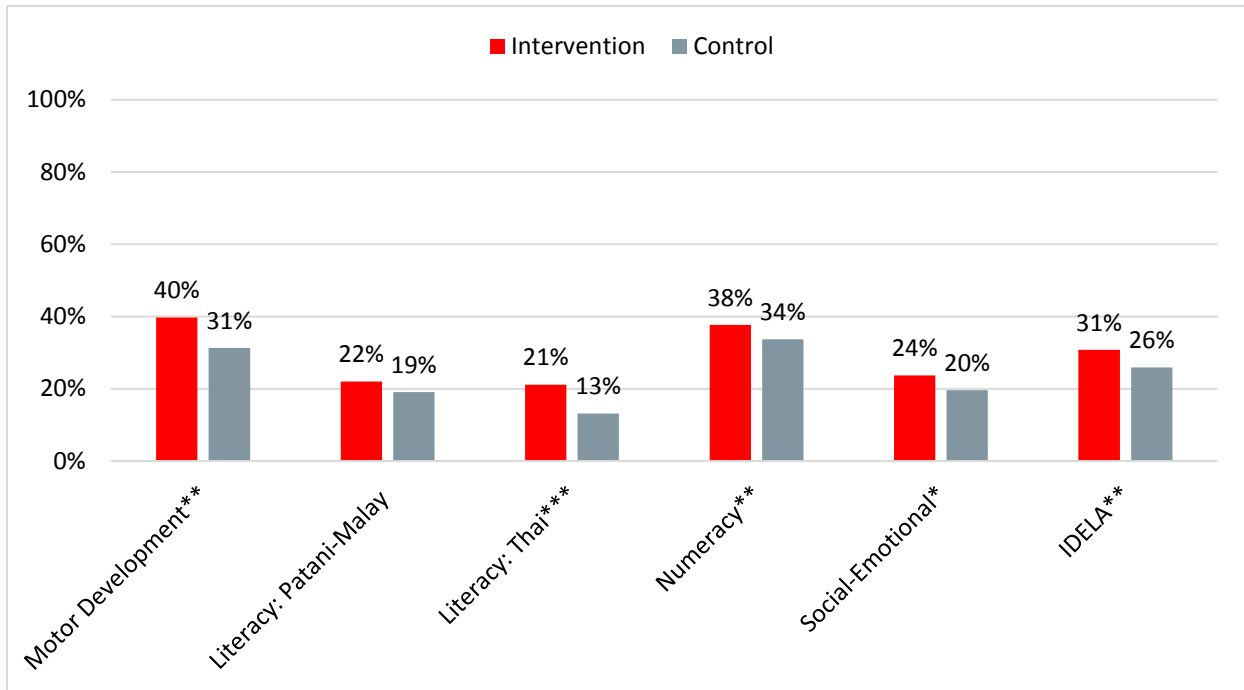
This section describes children's performance on the IDELA assessment. Total domain scores are calculated by adding the weighted score of each item in the domain so that all items contribute equally to the domain score. The total direct child assessment score is calculated by adding the weighted total scores from the core domains (motor, literacy, numeracy and social-emotional) so that all domains contribute equally to the total score. Emergent literacy was assessed in Patani-Malay and Thai for all children, and children who reported also speaking Thai were also assessed in this language.

Children displayed the strongest skills in motor development and emergent numeracy, followed by socio-emotional development and emergent literacy. Analysis of caregiver information found that children in the control group were older on average than children in the intervention group so analysis of differences between children's skills will control for children's age. Although descriptive results do not display differences between study arms, after controlling for age, analyses find that children in the intervention group have significantly stronger skills than children in control communities in all areas except Patani-Malay literacy.

Table 16. Total domain scores and Total IDELA score

	Intervention	Control	Difference
Motor Development	40%	31%	**
Emergent Literacy: Patani-Malay	22%	19%	
Emergent Literacy: Thai	21%	13%	***
Emergent Numeracy	38%	34%	**
Social-Emotional	24%	20%	*
IDELA	31%	26%	**

Figure 3. Total domain scores and Total IDELA scores



Note: Figure controls for child age. *p < .05, **p < .01, ***p < .001

Figure 4a. Distribution of IDELA scores: Intervention children

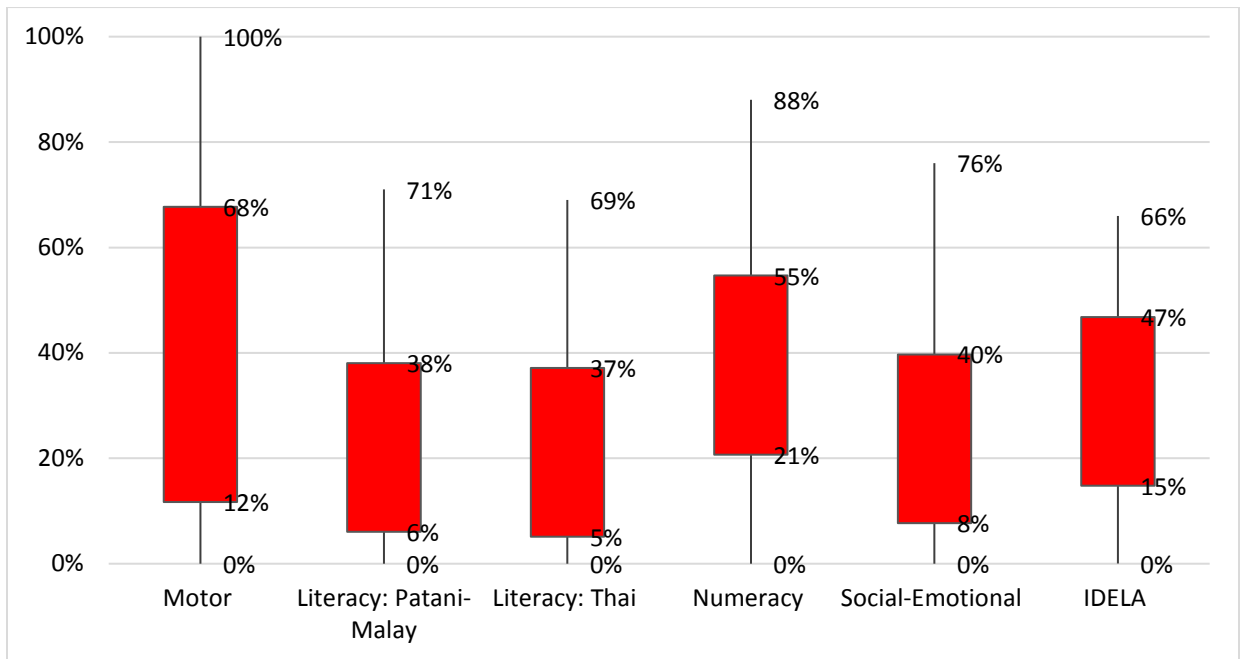
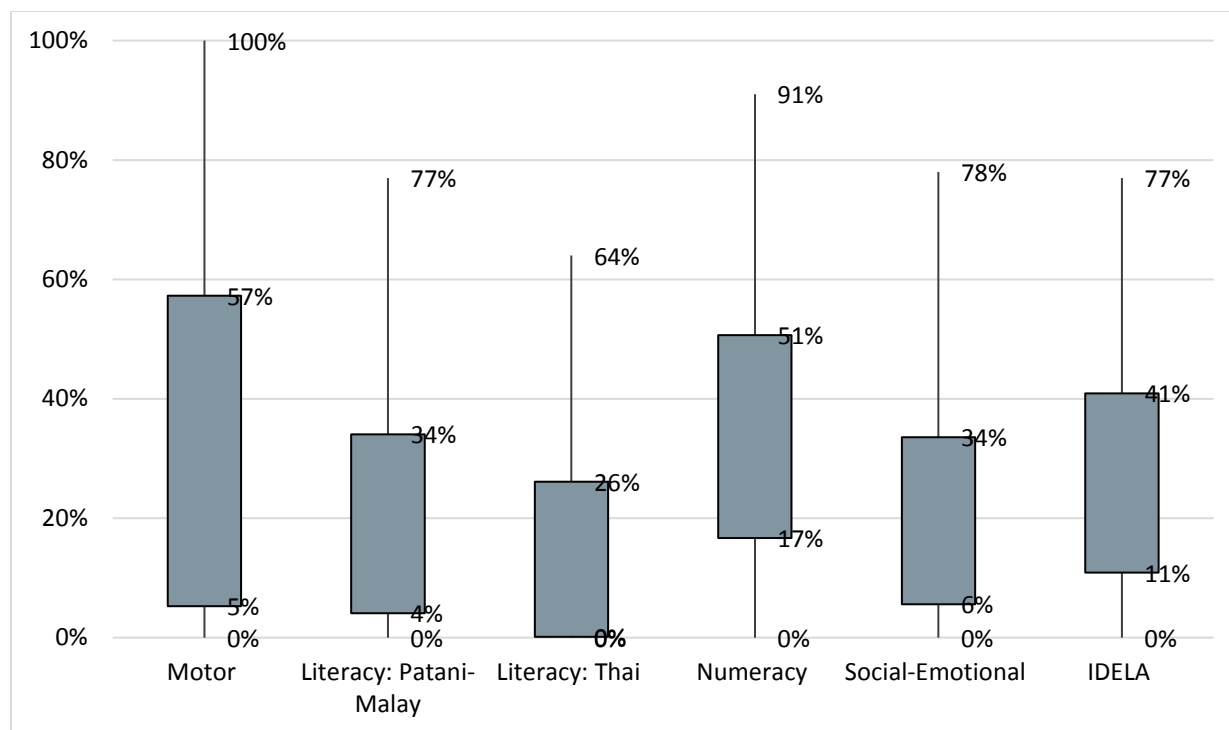


Figure 4b. Distribution of IDELA scores: Control children



Within the literacy items, children displayed the strongest skills in the area of print awareness, Patani-Malay oral comprehension, and writing (in Thai). Children had the weakest skills in phoneme/morpheme-sound awareness in Patani-Malay and Thai, and Thai expressive vocabulary. Results from other contexts have also shown that children struggle with letter or morpheme-sound identification as well as letter/character identification as both skills need to be explicitly taught in order for children to learn in these areas. However, expressive vocabulary and oral comprehension tend to develop somewhat more naturally if children are in stimulating environments. These are two important areas for a parenting program such as First Read to focus.

Within this domain, children in the intervention group scored significantly higher than children in the control group in letter identification, phoneme/morpheme-sound awareness, oral comprehension and writing in Thai. There were no significant differences between children's Patani-Malay language skills. There were no significant gender differences between boys and girls in any skill area.

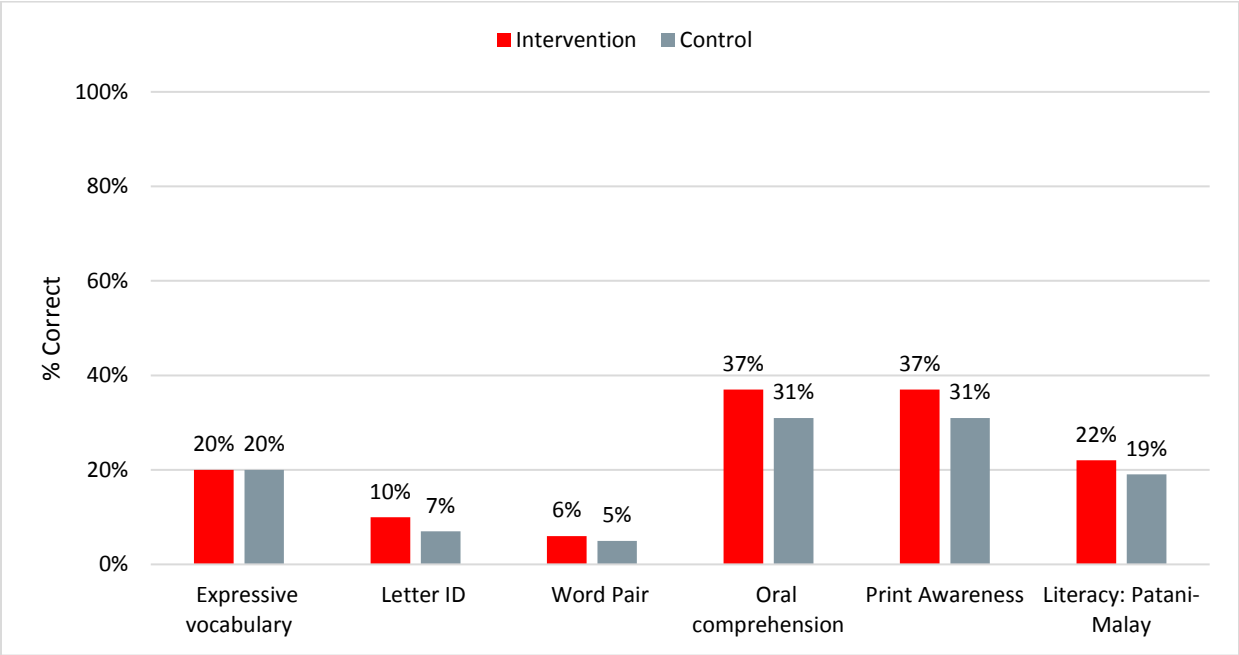
Early childhood is the most important developmental phase. Young children, at this stage, learn best in a language they already know. Children who acquire strong academic skills in their Mother Tongue and then systematically acquire skills in the national or other language advance more quickly than those forced to study in languages they do not speak. Early learning activities – both in and out of school – should be conducted in a language children understand. Patani-Malay communities face both economic marginalization and are linguistic minorities who are doubly disadvantaged by the difficulties faced in accessing education. It is hoped that the First Read program by promoting home-based ECCD in the Mother Tongue will make a positive impact on early learning reflected in the end-line IDELA.

Table 15. Average literacy skills, IDELA

	Intervention	Control	Difference
Patani-Malay Emergent Literacy			
Expressive vocabulary	20%	20%	
Letter ID	10%	7%	
Word Pair	6%	5%	
Oral comprehension	37%	31%	
Thai Emergent Literacy			
Expressive vocabulary	8%	6%	
Letter ID	16%	7%	*
Word Pair	10%	4%	**
Oral comprehension	16%	8%	**
Writing	40%	22%	***
Print Awareness	37%	31%	

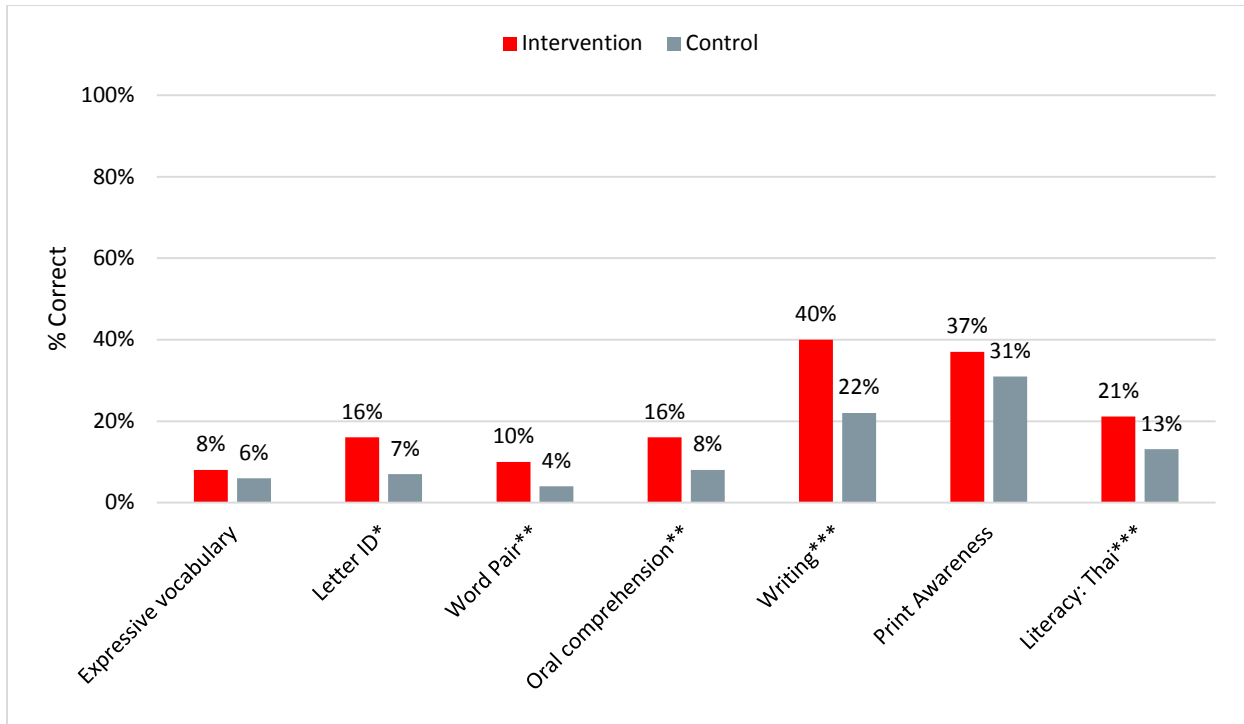
Note: * p < .05, ** p < .01, *** p < .001

Figure 5. Average literacy skills Patani-Malay, IDELA



Note: Figure controls for child age. *p < .05, **p < .01, ***p < .001

Figure 6. Average literacy skills Thai, IDELA



Note: Figure controls for child age. *p < .05, **p < .01, ***p < .001

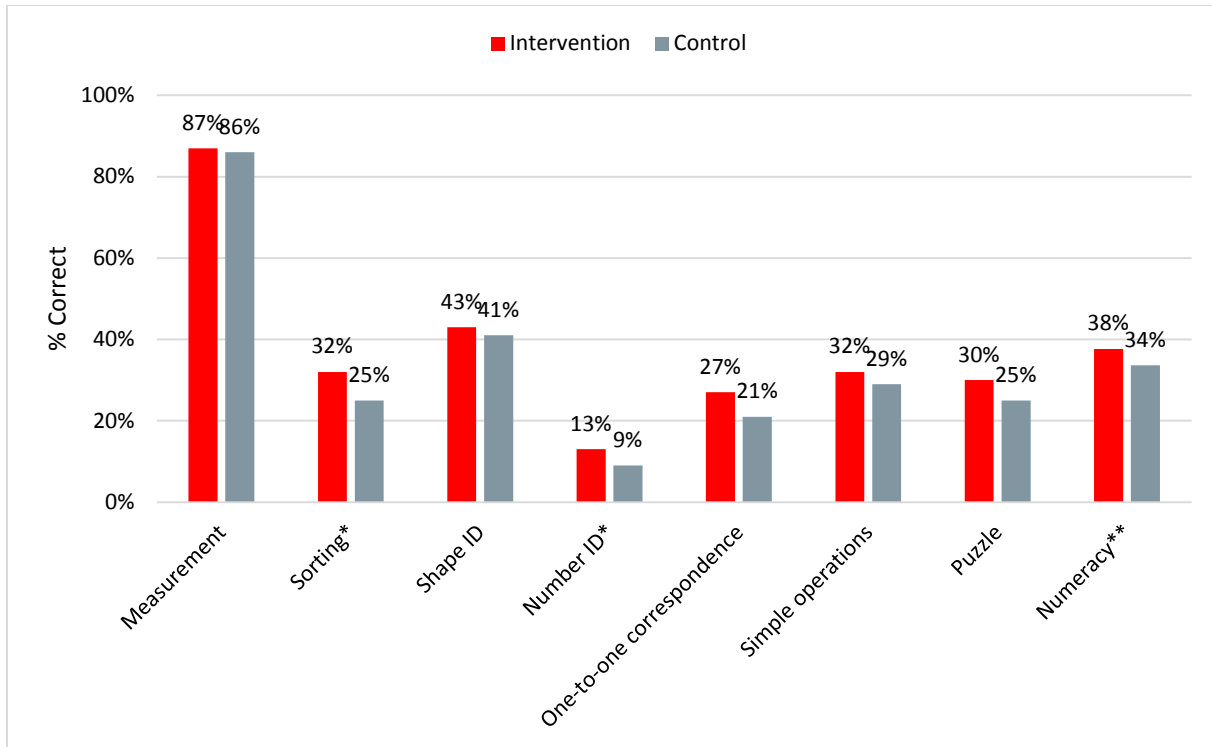
Within the numeracy domain, children have the strongest skills in the area of measurement/comparison and the weakest in number identification. This follows a similar pattern as seen in other countries: the measurement items are relatively easier for children and the number identification and puzzle items are more difficult. Children in intervention sites scored significantly higher than children in control sites in the areas of sorting and number identification. There were no significant gender differences between boys and girls in any skill area.

Table 16. Average numeracy skills, IDELA

	Intervention	Control	Difference
Measurement	87%	86%	
Sorting	32%	25%	*
Shape ID	43%	41%	
Number ID	13%	9%	*
One-to-one correspondence	27%	21%	
Simple operations	32%	29%	
Puzzle	30%	25%	

Note: * p < .05, ** p < .01, *** p < .001

Figure 7. Average numeracy skills, IDELA



Note: Figure controls for child age. *p < .05, **p < .01, ***p < .001

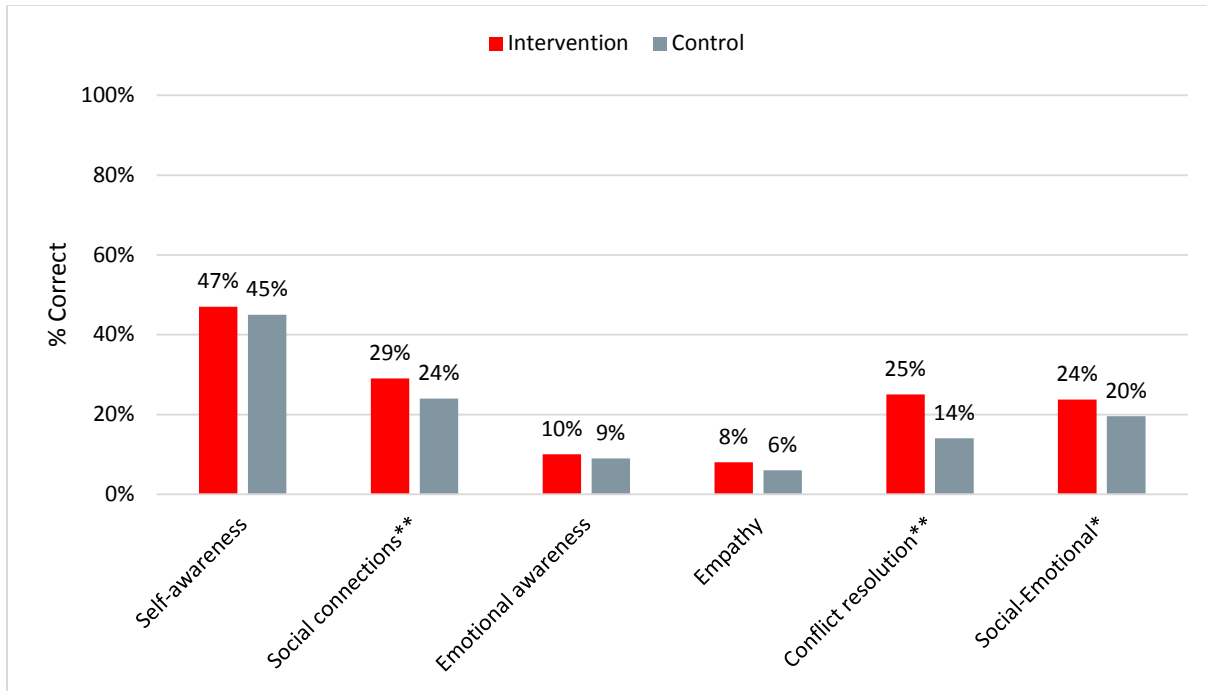
Within the social-emotional items, children had the strongest skills in the area of self-awareness and the weakest in empathy. This aligns with typical developmental trajectories where children first gain awareness of things relating directly to themselves, and then gradually learn to interpret the actions and feelings of others. Given the environment of conflict and violence in the Deep South, focus in this area within ECCD classrooms and homes would be beneficial. Children in intervention sites displayed higher conflict resolution and social connection scores compared to children in control sites. There were no significant gender differences between boys and girls in any skill area.

Table 17. Average social-emotional skills, IDELA

	Intervention	Control	Difference
Self-awareness	45%	47%	
Social connections	29%	24%	**
Emotional awareness	10%	9%	
Empathy	8%	6%	
Conflict resolution	25%	14%	**

Note: * p < .05, ** p < .01, *** p < .001

Figure 8. Average social-emotional skills, IDELA



Note: Figure controls for child age. *p < .05, **p < .01, ***p < .001

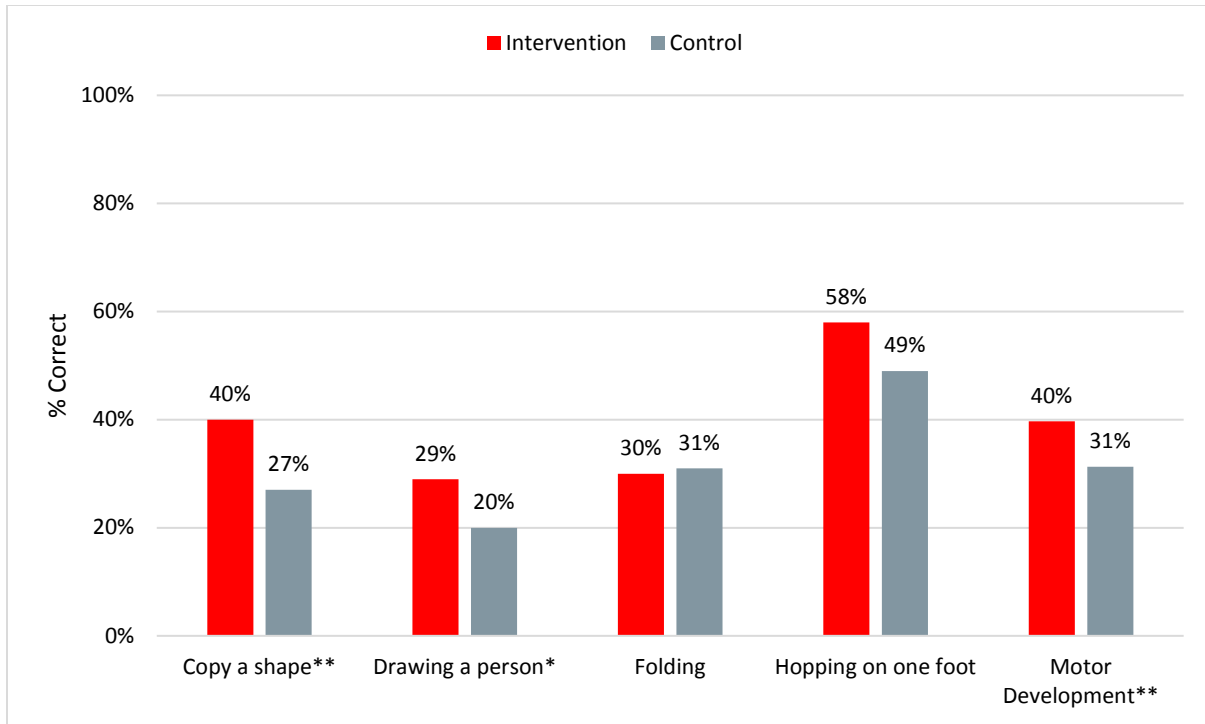
Within motor development, children had the strongest skills in the area of hopping and the weakest in drawing. This pattern is observed in other contexts and also follows typical development patterns. Children generally have more opportunity to develop gross motor skills such as running and jumping, as opposed to fine motor skills like drawing and folding with require access to materials to work with like pencils and paper. However, the gross motor development in this sample is relatively lower than typically observed in other areas. Children in the intervention group displayed significantly stronger skills in the areas of copying a shape and drawing than children in the control area. There were no significant gender differences between boys and girls in any skill area.

Table 18. Average motor skills, IDELA

	Intervention	Control	Difference
Copy a shape	40%	27%	**
Drawing a person	29%	20%	*
Folding	30%	31%	
Hopping on one foot	58%	49%	

Note: * p < .05, ** p < .01, *** p < .001

Figure 9. Average motor skills, IDELA

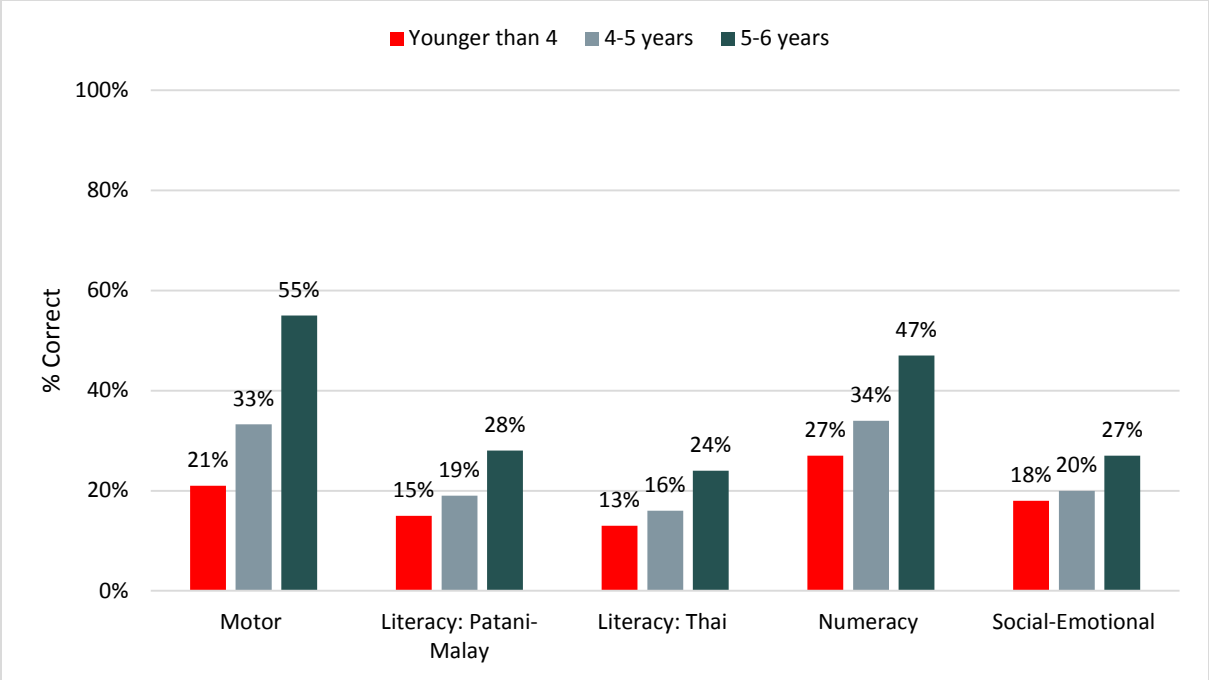


Note: Figure controls for child age. *p < .05, **p < .01, ***p < .001

5.1 Predictors of child development

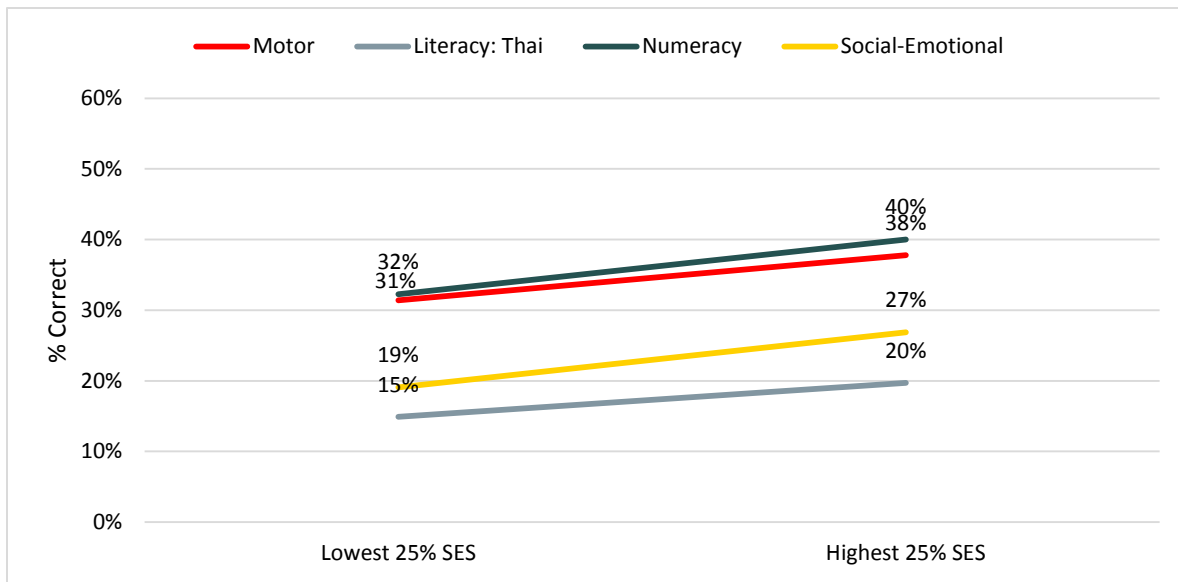
Using both the caregiver and the child development questionnaires we can analyze the relationship between children’s early development and their home environments. In this study, **age and socio-economic background are the strongest predictors of development and learning: older children show stronger total IDELA scores and for all subdomains, and those from households with more possessions display stronger skills in all areas except Patani-Malay literacy. Relevant to the First read project, the number of reading materials at home also has a significant and positive relationship with early literacy (Patani-Malay and Thai), numeracy and the overall IDELA score.** Each additional type of reading material was associated with an increase of about 1.5 percentage points on the assessment. Regarding parental education, having a father who can read has a positive and significant relationship with motor development, numeracy and the overall IDELA score. Having a disability (as reported by caregivers) was a predictor of significantly lower scores in all domains. Interestingly, enrollment in an ECCD center is not significantly related to development in any domain.

Figure 10. Average IDELA scores by age group



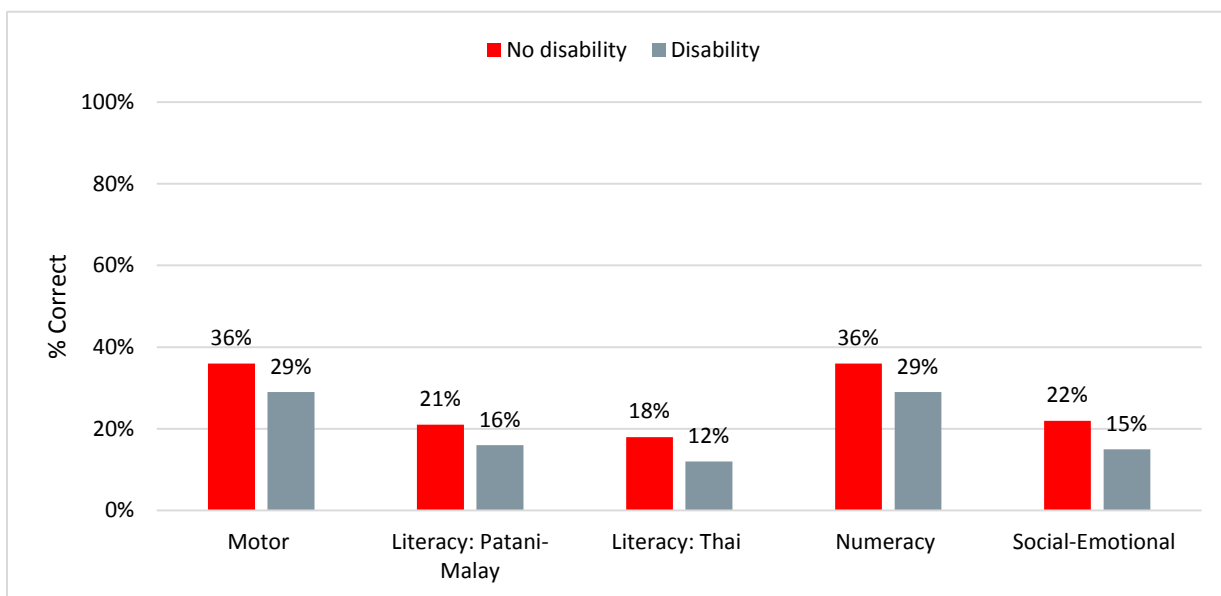
Note: Figures controls for child sex, ECD enrollment, parent-reported disability status, home learning activities, reading materials at home, paternal literacy and socioeconomic status.

Figure 11. Average IDELA scores by family socioeconomic status (SES)



Note: Figures controls for child age, sex, ECD enrollment, parent-reported disability status, home learning activities, reading materials at home, and paternal literacy.

Figure 12. Average IDELA scores by parent-reported disability status



Note: Disability status is parent-reported only. Figures controls for child age, sex, ECD enrollment, home learning activities, reading materials at home, paternal literacy and socioeconomic status.

6. Conclusions

This report analyzed the skills of children in southern Thailand prior to the implementation of the First Read program, as well as the relationship between children's skills and home learning environment. This report has two main purposes: 1) to establish equivalence between areas designated as intervention and control for First Read implementation and 2) learn more about children's learning and development skills and their home learning resources.

In terms of the comparability between intervention and control communities, this analysis finds that there are few significant differences between family characteristics, resources, or home learning environments (activities and materials). Notably, parents in the intervention area reported owning more types of toys than parents in control areas, and parents in the control areas were more likely to report that their child attended an ECCD center than parents in the intervention area. However, the most substantial differences found between study groups is that children the control area are significantly older than children in the intervention area, and that children in the intervention area have significantly stronger skills than children living in control areas in all development areas except Patani-Malay literacy. Because Patani-Malay literacy is the main outcome of interest in this study, these other skill differences are somewhat less problematic, but the consistency of the differences across learning domains suggests that age and baseline score must be controlled for in any future analyses of learning growth.

Analysis of family characteristics and resources suggest a number of areas of existing strengths and deficits. Only a small proportion of mothers and fathers report having completed higher education (10%) but the majority of parents report being able to read (92% mothers and 90% fathers). Parents reported owning 7 out of 9 common household objects. Relevant to future programming, 97 percent reported having a mobile phone and only 38 percent reported owning a radio.

About half of families reported having storybooks at home, more commonly in Thai (65%) than in Jawi (32%). On average, parents reported engaging in many learning activities with their children (6.9 out of 9). However, they also reported engaging negative discipline activities often. For example, 77 percent of parents reported reading with their children, and 74 percent reported yelling at their children; 64 percent of parents reported singing songs with their children and also hitting them. For both mothers and fathers, hugging children and taking them outside were the two most commonly reported activities. Mothers were more likely to report engaging in all activities than father, including negative discipline behaviors. This suggests that parenting sessions should focus on promoting child-friendly activities at home as well discouraging negative discipline behaviors, and that more father-child engagement should be encouraged.

Interestingly, most children are enrolled in ECD services (85% intervention and 93% control), but enrollment did not differ by age and is not significantly related to children's learning and development. Further investigation into how often children actually attend the ECD centers, and the quality of the learning environments is warranted.

Results of the IDELA find that children have the weakest skills in literacy (Thai and Patani-Malay) and social-emotional development, and the highest in motor development and numeracy. Thus the focus of the First Read project on Patani-Malay literacy development is highlighted as a need in these communities.

These results also suggest continuing to monitor the possible effects of more positive parenting engagement fostered through the program on children's social-emotional development. In addition, given that children will have Thai or Central Malayu integrated into their primary schooling, it will be important to study how improvements in mother tongue literacy support L2 learning as well.

Finally, the results of this study related to equity have potential implications for programming. Poverty was seen to be consistently negatively related to children's skills and therefore actively involving these families will be important to the success of the program. In addition, the significant positive relationships of having reading materials at home with children's literacy and numeracy skills highlight the importance of this component of the project. Finally, the results of this study highlighted the range of skills children in target communities possess. Some children may have weaker skills due to their younger age or potentially having a learning disability, and it will be important for curriculum and parent session development to take a wide range of children's skills into consideration.

Action points linked to the Baseline results:

- Removing the radio outreach – in the Situation Analysis consultations radio was recommended as a good complimentary initiative for First Read. This was based on the understanding that young children are absent from school if there is 'trouble' in their community – so they spend more time at home due to the on-going conflict. Families have radio in the home and listen to local stations during the day. The baseline results revealed that actually in Si Sakhon district about 38% of families have access to a radio; however 96% of respondents have a mobile phone. We propose using less radio and more mobile phone adaptation to complement First Read activities. We will invite participating parents/caregivers to join a LINE group. The PES trainer will send out reminders of the activity to complete/practice at home following the session; and reminders about the time and location for the next PES session.
- Positive Discipline – in the Parent Education Session Technical Work Group Session in early February we shared the initial baseline results. The work group participants decided that they felt it was very important to include positive discipline in the Parent Education Session curriculum. The SCI Thailand Child Protection specialist has drafted an additional module on this topic for the PES Technical Work Group to review in their next meeting. We have also liaised with local NGO FCD and been granted permission to reprint and distribute their Positive Discipline cartoon book that was specially created for the context in the Southern Border Provinces.
- Gender dimension – a gender analysis in Si Sakhon district is planned for early April. The consultant plans to share the baseline results – specifically that female children aged three to six have lower emergent literacy in the Patani-Malay language. The consultant will ask respondents to share why they think this is the case and what are potential solutions. First Read Southern Thailand plans to conduct separate PES sessions for male and female caregivers. We are actively engaging support from Community Imam and local bird singing champions to encourage male participation. The gender analysis will also explore more deeply social norms around fathers and early childhood.
- Social-Emotional-Learning – the baseline results revealed fairly low scores in emotional awareness and empathy. We learned that the Emergent Literacy and Numeracy at home materials do not include SEL. So far in the review of existing children's books we have not identified a quality age appropriate book on this topic. We plan to explore creation of a book focused on the theme of emotions or empathy.

7. Appendix A. Multivariate regression results

Table A1. Multivariate equity analysis with IDELA outcomes

VARIABLES	(1) Motor	(2) Literacy (Patani- Malay)	(3) Literacy (Thai)	(4) Numeracy	(5) Social- emotional	(6) IDELA
Child is female	-0.0434 (0.0282)	-0.0308* (0.0131)	-0.00560 (0.0121)	0.00344 (0.0187)	-0.0150 (0.0110)	-0.0214 (0.0134)
Child age < 4 year	Reference	Reference	Reference	Reference	Reference	Reference
Child age 4-5 years	0.120** (0.0379)	0.0494* (0.0213)	0.0261 (0.0162)	0.0720*** (0.0183)	0.0225 (0.0168)	0.0660** (0.0208)
Child age 5-6 years	0.340*** (0.0373)	0.137*** (0.0225)	0.112** (0.0293)	0.200*** (0.0212)	0.0926*** (0.0233)	0.192*** (0.0217)
Child enrolled in ECD	0.0105 (0.0320)	0.0129 (0.0259)	-0.00519 (0.0276)	0.0262 (0.0215)	0.0192 (0.0234)	0.0172 (0.0196)
Child has disability	-0.0764* (0.0352)	-0.0461* (0.0200)	-0.0593* (0.0241)	-0.0709** (0.0222)	-0.0758*** (0.0181)	-0.0673** (0.0175)
No. home learning activities	-0.00185 (0.00754)	-0.00345 (0.00312)	-0.00105 (0.00259)	-0.00199 (0.00313)	0.00116 (0.00347)	-0.00153 (0.00315)
No. home possessions	0.0361** (0.0127)	0.0133 (0.00799)	0.0197** (0.00583)	0.0337*** (0.00830)	0.0257** (0.00724)	0.0272** (0.00724)
No. reading materials	0.00490 (0.00882)	0.0132*** (0.00311)	0.0134** (0.00379)	0.0138** (0.00456)	0.00622 (0.00478)	0.00952* (0.00434)
Father is literate	0.0873** (0.0281)	0.0425 (0.0209)	0.0372 (0.0190)	0.0520* (0.0224)	0.0175 (0.0243)	0.0498* (0.0183)
Constant	0.146 (0.0707)	0.0920* (0.0349)	0.0669* (0.0302)	0.168*** (0.0389)	0.131* (0.0590)	0.134** (0.0372)
Observations	368	368	368	368	368	368
R-squared	0.262	0.161	0.155	0.287	0.113	0.296
Adjusted R-squared	0.244	0.140	0.134	0.269	0.0907	0.279

Robust standard errors in parentheses

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