



Save the Children

# FIRST READ SOUTHERN THAILAND ENDLINE REPORT

February 2018

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**First Read Southern Thailand**

**Endline Report** (February 2018)

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**With special thanks to:**

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We would also like to acknowledge the Save the Children Thailand team: Amran Vani, Majdun Maso, and Uchukorn Lysittikool (Gear).

List of Acronyms

ECCD	Early Childhood Care and Development
ECD	Early Childhood Development
IDELA	International Development and Early Learning Assessment
HLE	Home Learning Environment
PES	Parent Education Sessions
RU Yala	Rajabhat University Yala
SCUK	Save the Children United Kingdom
SCI Thailand	Save the Children International Thailand

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## EXECUTIVE SUMMARY

Save the Children Thailand has been implementing the First Read Southern Thailand project since 2016 which aims to strengthen the learning and development of children aged 3 to 6 in Si Sakhon district, Narithawat province, through improved parenting and access to quality, age appropriate, Patani-Malay reading materials. The project supports families with children aged 3 to 6 in the six sub-districts of Si Sakhon: (1) Sisakhon – ศรีสาคร, (2) Tamayong – ตะมะยง, (3) ChengKiri – ชะงคีรี, (4) Sako – ซากอ, (5) Kalong – กาลอง, and (6) Sibanphot – ศรีบันพด.

The main goal of the project is to strengthen emergent early childhood development outcomes with a specific focus on emergent literacy for ethnic minority children aged 3 to 6 in the Deep South of Thailand through improved parenting practice and access to quality, age-appropriate reading materials in local languages. The direct beneficiaries of the project include at least 414 caregivers, over 500 children aged 3 to 6, 21 enumerators (4 M, 17 F), 12 university volunteers, and 17 community trainers (8 M, 9F). The project has also contributed to five of the first commercially produced, quality, age-appropriate children's books in the Patani-Malay language. Key partners to the project

“

I've always felt like I didn't have the time to read to my daughter before—at most, I will help her with her homework.

After joining this program, I've learned to allocate time to read with her, just a chapter a day. She will look at the pictures and when I read to her she will repeat what I have said.

”

-- Mr Karim Yamalae



include the Thai Health Promotion Foundation, Reading Culture Promotion Unit; Rajabhat University Yala, and the Perkasa Foundation

The results of the First Read end line study revealed that in the first year of implementation 261 caregivers (29 M/232 F) had sustained participation in the full series of eight Parent Education Sessions and the community celebration ceremony. The joint monitoring team noted that male caregivers attending the predominantly female caregiver session with a female community trainer tended to drop out after attending only one or two sessions whereas male caregivers attending the predominantly male caregiver session with a male community trainer were able to sustain their attendance and participation to complete the series of PES sessions.

The End-Line results reveal on average caregivers report applying 6.5 out of 9 home learning practices. For example, 79% of caregivers report that they tell stories at home, 97% of caregivers report that they teach letters at home, 93% read books at home, and 99% of caregivers report hugging their children. Female caregivers report applying on average 6.9 out of 9 home learning activities per week. The overall increase in self-reported caregiver ECCD practices was 11.5%. By type of caregiver this includes an average increase in self-reported ECCD practices of 6% by mothers, 1.5% increase reported by fathers, and 4% self-reported increase in ECCD practices by other caregivers (i.e. grandparents, aunts, uncles, older siblings).

Child development results are a bit lower than those seen from similar populations in other countries or within Thailand – highlighting the equity issues in early learning for Patani-Malay populations. As expected, older children were more likely to have a higher overall IDELA score than younger children at a statistically significant level. Interestingly there was no association between the child's age and their score in the

Social-Emotional-Learning sub-set of the IDELA assessment. There was a positive and statistically significant relationship between the number of books in the household and the overall IDELA assessment score. An increased number of books in the household was also associated with higher outcomes in SEL. This indicates a potential link between books, learning, and parental affection which is the essence of the First Read intervention.

The end-line results revealed some equity dimensions by gender. Girls demonstrated slightly lower results in emergent numeracy at a statistically significant level. In the baseline study girls development results in emergent literacy in Patani-Malay were slightly lower; this trend did not appear in the end-line results. There was no significant differences in IDELA outcomes by gender in other sub-sections of the IDELA assessment.

The end-line results also revealed some equity dimensions by socio-economic status. Children from higher socio-economic households were more likely to have a higher score in emergent literacy in Patani-Malay. There was no significant difference in other IDELA outcomes linked to socio-economic status.

A significant achievement of the First Read project is the production of five quality, age appropriate, commercially produced, Patani-Malay children's books – designed for adult led reading to children aged 3 to 6. At the start of the project, in Si Sakhon district, 50% of intervention area households and 44% of control area households possessed storybooks. The majority of these storybooks (65%) were in the Thai language and for children older than 6 years of age. In the intervention area, parents and caregivers participating in the series of Parent Education Sessions received three children's books. The project also set up community book banks in partnership with the local administrative office to further increase access to home reading materials. The end-line

results revealed that in the intervention areas **92% of households** possessed storybooks, and **77% of households** in the control areas possessed storybooks. It is a bit puzzling why the control areas markedly increased their ownership of storybooks. This means that within one year there was **a 42% increase in the number of households in the intervention area that had acquired a children's storybook**; coupled with our evidence of a predictive relationship between the existence of books in the home environment and child development outcomes it is clear that this is a positive development for children in Si Sakhon.

Another interesting change in the home learning environment was the number of households reporting ownership of homemade toys. In the baseline assessment, 37% of intervention area households and 36% of control area households reported having homemade toys. Rajabhat University Yala included in their implementation of Parent Education Sessions – special workshops focused on creating learning toys from local materials and initiated some community level competitions for the most creative homemade toys. In the end-line analysis 62% of households in the intervention areas and 62% of households in the control areas reported that they had homemade toys. This is **an increase of 25–26% within one year** of implementation.



It is an act of love to read to your child, and it is a token of love to create a toy for your child – and we are thrilled that the greatest change in the home learning environment noted in the end-line results is the incidence of children's storybooks and homemade toys. Follow up focus group discussions led us to understand that contamination and word of mouth led to parallel increases in story books and handmade toys in both treatment and control localities of the district.

Qualitative analysis of the project's impact revealed that the greatest benefit was parent's seeing a change in their children by practicing the recommended home learning activities. Many parents reported that they felt a closer bond with their child, that their time with their children was used in a more beneficial way, or that they felt hopeful that there are tangible steps they could take so their child will have a more positive future trajectory. Some parents were astonished to find their child preferred to play with a handmade toy rather than the mobile phone. A few parents reported a change toward more positive parenting linked to the information gained in the workshops and a greater understanding of their child's development.

“

Positive discipline technique changes the way I raise my children. I started to talk to my sons with care and love. Reward them whenever they do a good thing.

”

— Ms Naemah Maming

## 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<sup>1</sup>. 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<sup>2</sup>. 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<sup>3</sup>. 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<sup>4</sup>. 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<sup>5</sup>. The systemic socio-economic disparity challenges children's health, education, and well-being from the start.

## 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 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-Malay reading materials.
- 2 To generate evidence on the impact of a home based ECCD intervention in a conflict setting.

<sup>1</sup> 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

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

<sup>3</sup> Heckman, J.J. (2008). *Schools, Skills and Synapses*. IZA Discussion Paper No. 3515

<sup>4</sup> OECD-UNESCO (2016) *Education in Thailand: an OECD-UNESCO Perspective*. OECD publishing - Page 64.

<sup>5</sup> MDGs Thailand 2015 Report (2015) page 179 file:///C:/Users/k8/Desktop/\_MDGS%202015%20Eng\_Final.pdf

<sup>6</sup> 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.





# RATIONALE: SCOPE AND PURPOSE OF THE EVALUATION

The main objective of this evaluation is to gather information about the growth and change for parents, children, and communities in southern Thailand over the course of one year of programming. **Some of the research questions this study aims to answer are:**

- 1

What are the changes in learning and play practices in homes in the First Read intervention area compared to those of home in the comparison area?
- 2

What are the changes in average child development levels for children in the First Read intervention area compared to those of children in the comparison area?

## METHODOLOGY

### 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<sup>78</sup>, 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.

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.

<sup>7</sup> <http://resourcecentre.savethechildren.se/library/assessing-construct-validity-save-childrens-international-development-and-early-learning>  
<sup>8</sup> <http://resourcecentre.savethechildren.se/library/international-development-and-early-learning-assessment-technical-paper>

Table 1. IDELA domains and subdomains

Gross and Fine Motor Development	Emergent Literacy and Language	Emergent Numeracy	Social-emotional Development
Copying a shape	Print awareness	Measurement and control	Peer relations
Drawing a human figure	Expressive vocabulary	Classification/ Sorting	Emotional awareness
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	
Executive Function (short-term memory and inhibitory control)			
Approaches to learning			

### 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 Sibanphot 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 actors with experience of home visits we did not plan to include this activity in First Read Southern Thailand, but it remains under consideration for future phases. The PES sessions were offered twice per month over at least 4 months, PES sessions included parents/ caregivers and children aged 3 to 6. In 2017 we had two male trainers offering a specifically male caregiver space and the other training sites

were supported by female trainers with a majority of female caregiver participants.

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 baseline 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

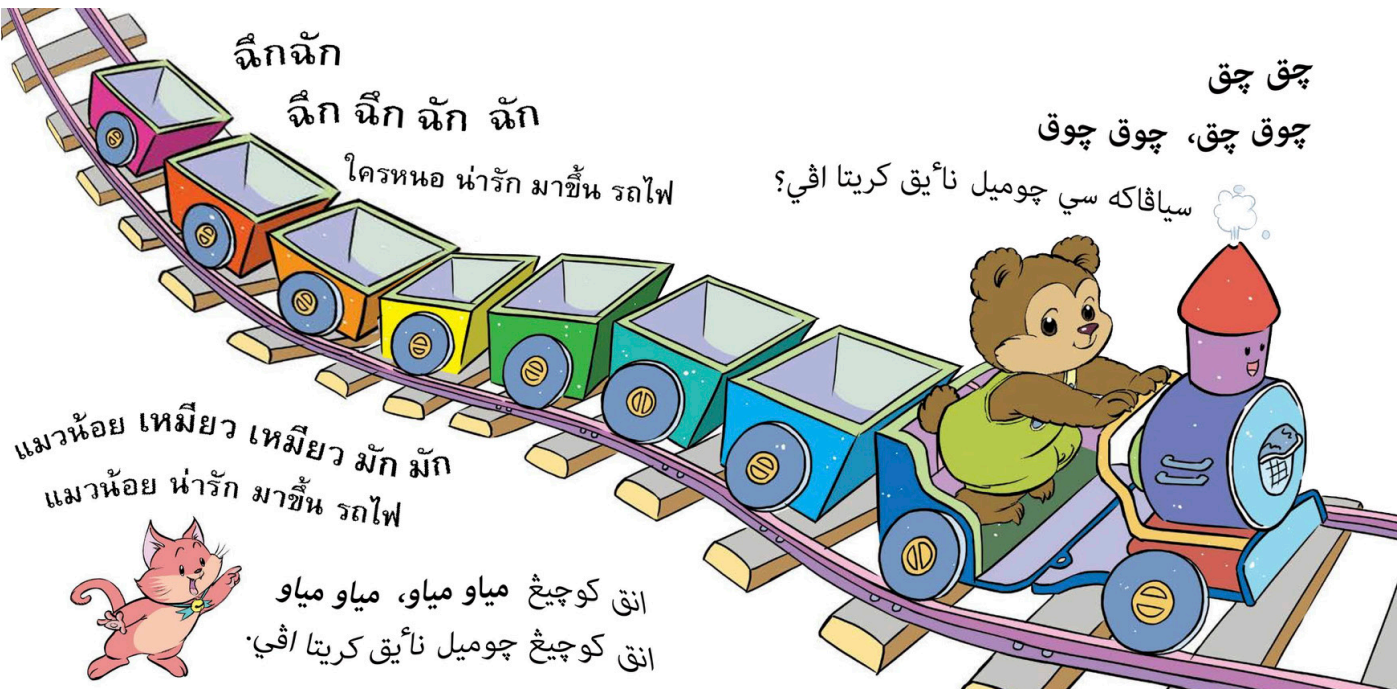
Child language	Control Average age = 4.1		Intervention Average age = 3.8	
	N	%	N	%
Patani–Malay	206	99%	184	89%
Thai	2	1%	22	11%
Total	208	100%	206	100%

### 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 30 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.



### DATA ANALYSIS

The main purpose of the quantitative analysis is to investigate changes in 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 using multivariate regression models. We will investigate differences in children’s learning and

development as well as caregiver behaviors. Finally, we will explore 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.





## 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 overt 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 of 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, some children and caregivers were not able to be matched at baseline and endline which decreased the overall sample size. Due to significant learning differences observed at baseline, we wanted to be able to control for baseline differences in the impact analyses and so decided to use the smaller, but fully matched dataset.





## CAREGIVER QUESTIONNAIRE

### FAMILY AND CAREGIVER CHARACTERISTICS

The majority of respondents to the IDELA caregiver questionnaire were children's mothers (75%) followed by children's fathers (10%), grandparents (5%) and older siblings (3%). On average, 91% of families speak Patani-Malay as their primary language at home, and smaller proportions speak Thai (7%), or Central Malayu (2%). In response to a question about which language children use when upset, caregivers reported that 89% use Patani-Malay, 6% Thai, 2% Central Malayu and 4% other languages. The language a child uses when angry or upset is a good indicator of the child's dominant language.<sup>9</sup> Respondents were asked about the parents' age and level of education, as well as the number of

children they were caring for. On average, mothers were 33 years old and fathers were 37. On average, 91 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 2.9 children on average. **There were no statistically significant differences between study groups.**

<sup>9</sup> Lust, Barbara (2009) *Child Language: acquisition and growth*. SIL International publications.

Table 5. Average parent characteristics

	Average (all)
<b>Child is female</b>	55%
<b>Child age</b>	4.3
<b>Primary language at home: Patani-Malay</b>	91%
<b>Primary language at home: Thai</b>	7%
<b>Primary language at home: Central Malayu</b>	2%
<b>Primary language at home: Other</b>	0%
<b>Mom's age</b>	33
<b>Mom can read</b>	91%
<b>Mom's education</b>	
None	9%
Primary	36%
Secondary	22%
High school	20%
Higher education	10%
IBTIDA-E	1%
Mutawasith	1%
Sanwiya	1%
<b>Dad's age</b>	37
<b>Dad can read</b>	90%
<b>Dad's education</b>	
None	14%
Primary	43%
Secondary	13%
High school	18%
High school	10%
IBTIDA-E	1%
Mutawasith	0%
Sanwiya	1%
<b>No. children at home</b>	2.9



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 5 out of 7 common possessions. **On average, there were no significant differences between the possessions owned by families in the intervention and control sites.**

Table 6. Average home possessions

	All	Intervention	Control	Difference
<b>Total possessions (7)</b>	4.8	4.7	5.0	
<b>Radio</b>	53%	64%	41%	**
<b>Television</b>	85%	89%	80%	
<b>Refrigerator</b>	77%	84%	70%	*
<b>Bicycle</b>	83%	80%	86%	
<b>Motorcycle</b>	94%	94%	93%	
<b>Mobile phone</b>	96%	99%	93%	*
<b>Electricity</b>	95%	93%	96%	

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



## 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. At endline, caregivers reported owning 4 out of 8 types of reading materials and 5 out of 10 types of toys. This was

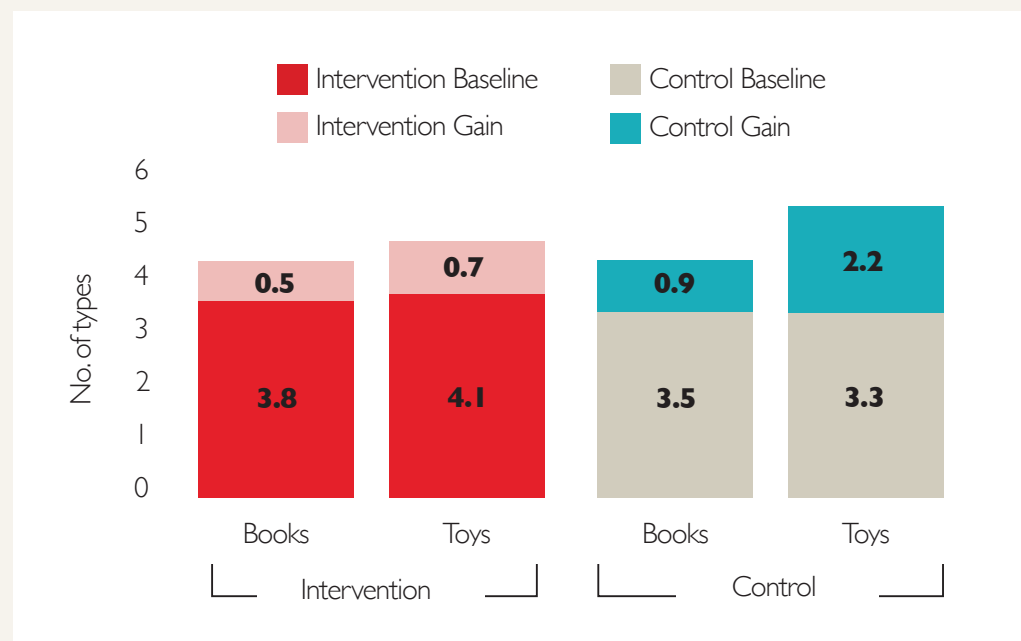
very similar to the learning materials seen at baseline. **Overall, there were no significant differences between the variety of reading materials or toys for children in the intervention and control groups at endline.**

Table 7. Average types of reading materials and toys at endline

	All	Intervention	Control	Difference
<b>Total book types (7)</b>	4.3	4.3	4.4	
<b>Storybook</b>	85%	92%	77%	
<b>Textbook</b>	82%	73%	90%	**
<b>Magazine</b>	13%	11%	15%	
<b>Newspaper</b>	20%	27%	14%	
<b>Religious</b>	66%	65%	67%	
<b>Coloring</b>	97%	95%	98%	
<b>Comic</b>	71%	65%	76%	
<b>Total toy types (10)</b>	5.2	4.8	5.5	
<b>Homemade</b>	62%	62%	61%	
<b>Shop toy</b>	72%	74%	70%	
<b>Household object</b>	60%	57%	63%	
<b>Outside object</b>	73%	74%	71%	
<b>Drawing/writing</b>	59%	46%	73%	***
<b>Puzzle</b>	45%	40%	50%	
<b>Hand-eye coordination</b>	43%	42%	45%	
<b>Color/shape</b>	53%	48%	59%	
<b>Numbers</b>	44%	35%	54%	*
<b>Other</b>	6%	6%	7%	

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

**Figure 1.**  
Reading materials  
and toys across  
study groups:  
Baseline & Endline



Regarding the types of early learning behaviors caregivers participate in with children, on average, caregivers reported engaging in 6.5 out of 9 learning and play activities with their children in the past week. Similar to baseline findings, mothers continue to report engaging in more early learning actions with children compared to other family members. The most common learning activities were teaching letters and taking children outside and the least

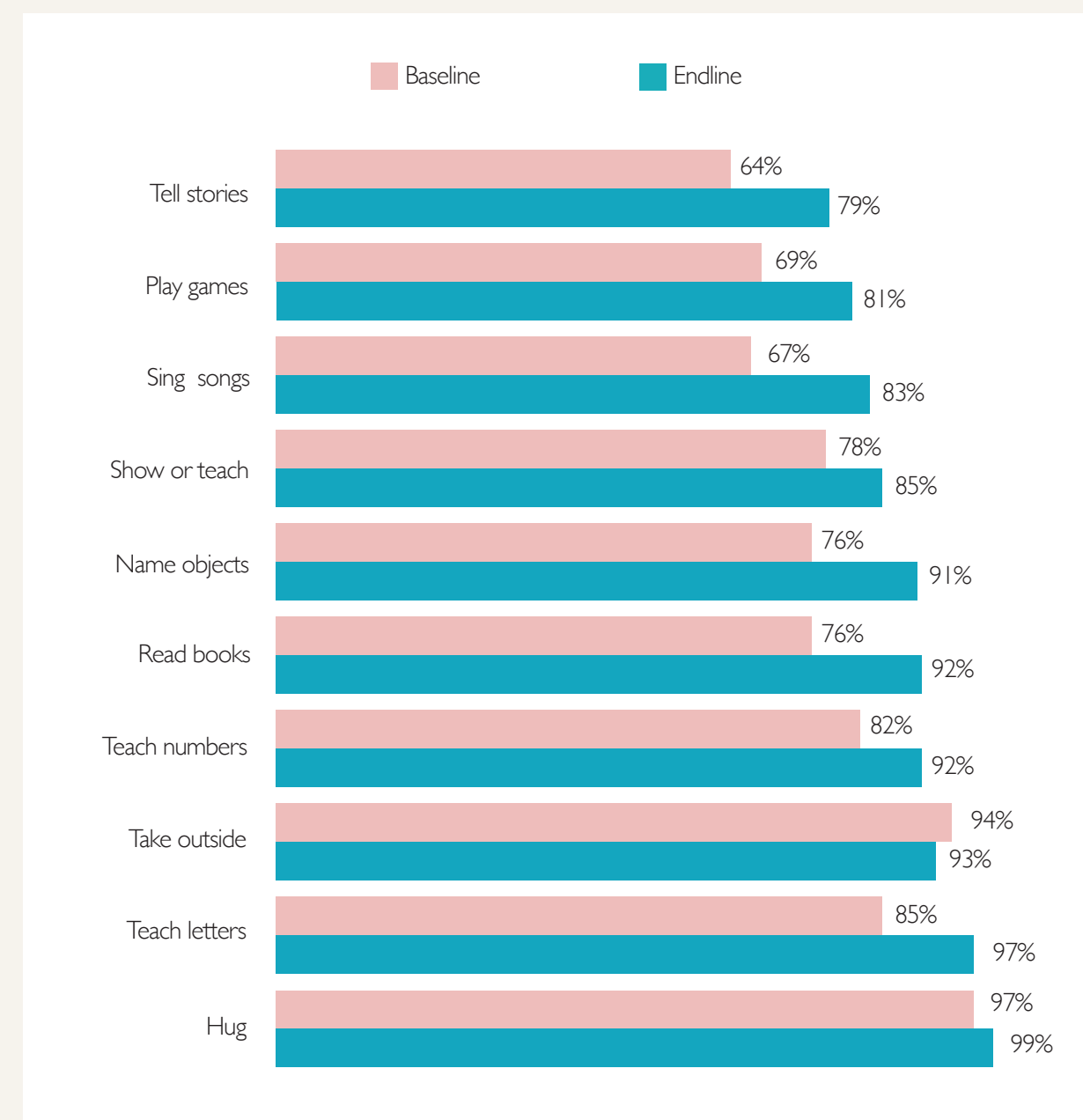
common was telling stories. Almost all caregivers reported hugging their children.

**On average, there were some increases in learning/play activities compared to what was seen at baseline, but there were no significant differences on parents' learning behaviors among households in intervention and control sites.**

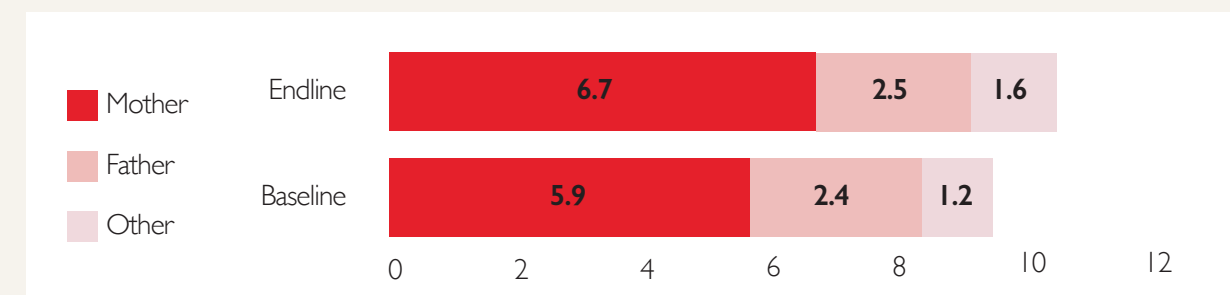
**Table 8.** Average home learning activities at endline

	All	Intervention	Control	Difference
<b>No. learning/play activities (9)</b>	6.5	6.2	6.9	
<b>Read books</b>	92%	93%	91%	
<b>Tell stories</b>	79%	84%	74%	
<b>Sing songs</b>	83%	84%	83%	
<b>Take outside</b>	93%	94%	93%	
<b>Play games</b>	81%	79%	83%	
<b>Name objects</b>	91%	92%	89%	
<b>Show or teach</b>	85%	85%	85%	
<b>Teach letters</b>	97%	99%	95%	
<b>Teach numbers</b>	92%	92%	93%	
<b>Hug</b>	99%	98%	99%	

**Figure 2.** Home learning activities: Baseline and Endline



**Figure 3.** Home learning activities by caregiver







## ECCD PARTICIPATION AND EXPECTATIONS

Similar to baseline, data collected on ECCD attendance shows that the majority of children in the sample are enrolled in an ECCD center and significantly more children in the control group are enrolled in an ECCD center than in the intervention group. On average children have been in ECCD for about 2 years and they spend about 7 hours per day in class.

**Table 9.** Participation in ECCD

	All	Intervention	Control	Difference
<b>ECCD Participation</b>	93%	86%	99%	*
<b>ECCD Avg. time (years)</b>	1.8	1.9	1.8	
<b>ECCD Avg. hours per day</b>	6.9	6.8	7	

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

## 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. **At endline we find that caregivers in the control group reported significantly more positive attitudes about parenting than caregivers in the intervention group.**

**Table 10.** Attitudes about parenting

	All	Intervention	Control	Difference
<b>I play an important role in my child's learning and development</b>	3.3	3.2	3.4	
<b>Knowing how to read and write is important for my child to have a good/productive life</b>	3.4	3.2	3.5	*
<b>I will encourage my child to complete at least secondary school</b>	3.3	3.2	3.5	*
<b>I think I can support my child's educational development at home</b>	3.3	3.2	3.5	*
<b>I think my child can learn a lot of skills by playing games</b>	3.3	3.2	3.4	*
<b>I find ways to talk with or engage my child in games while I am doing my daily work</b>	3.3	3.2	3.4	
<b>I think praising children whenever he/she tries to do something new is important</b>	3.3	3.2	3.5	*
<b>Total</b>	23.3	22.5	24.2	*

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



# DEVELOPMENTAL DISABILITY

Finally, caregivers were also asked about whether they know or suspect that their child has any developmental disabilities. Similar to baseline, 10 percent of parents reported that they suspected that their child had a developmental disability. This proportion is in line with global averages reported on the prevalence of children with disabilities.

Although the reported prevalence of developmental problems was low, many more

parents reported being worried about their child’s cognitive, social or physical development. **There were no statistically significant differences between suspected disability or development worry between parents in the two study groups.**

**Table 11.** Parent-reported development difficulties for children

	All	Intervention	Control	Difference
Do you suspect or know that your child has any disabilities?	10%	11%	9%	
Are you worried about any aspect of your child’s intellectual or social development?	40%	40%	40%	
Are you worried about any aspect of your child’s physical development or growth?	37%	32%	42%	



# CHILD DEVELOPMENT: IDELA

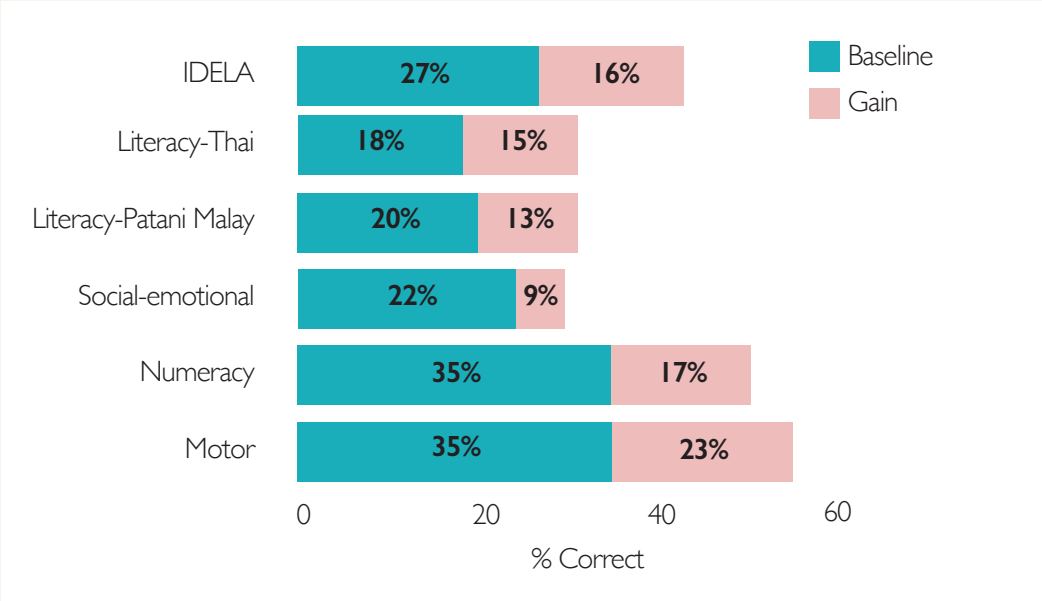
This section describes children’s performance on the IDELA assessment. Total domain scores are calculated by adding the weighted score of each item in the domain so that all items contribute equally to the domain score. The total direct child assessment score is calculated by adding the weighted total 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 except those who only reported speaking Thai. Analyses of differences between children’s skills

controlled for baseline scores as well as children’s age and gender.

At endline, children displayed the strongest skills in motor development and emergent numeracy, and also made the strongest gains in these areas. Children displayed the weakest skills gains in social-emotional development. Average scores and growth over time were comparable for literacy skills in Thai and Patani-Malay. **There were no statistically significant differences in children’s early learning and development across the study groups.**

**Table 12.** Total domain scores and Total IDELA score at endline

	All	Intervention	Control	Difference
Motor Development	57%	56%	58%	
Emergent Literacy: Patani-Malay	33%	32%	34%	
Emergent Literacy: Thai	33%	35%	32%	
Emergent Numeracy	52%	52%	52%	
Social-Emotional	31%	32%	30%	
IDELA	43%	44%	43%	



**Figure 4.** Changes in IDELA domain scores by study group



Figure 5a. Distribution of IDELA scores: Intervention children

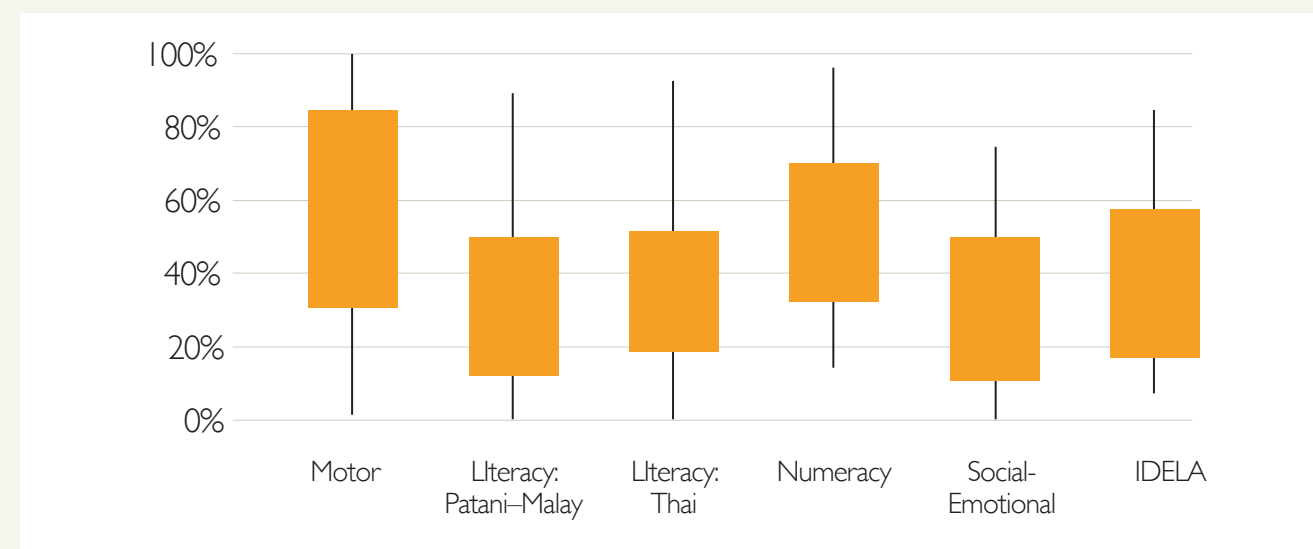
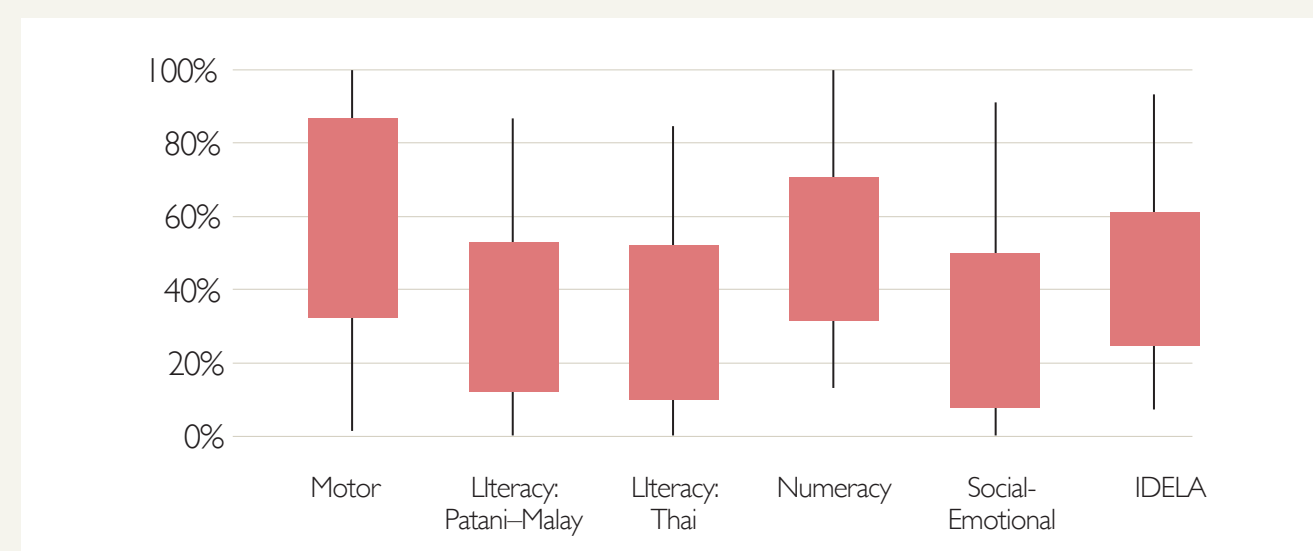


Figure 5b. Distribution of IDELA scores: Control children



Overall, we find that children in the intervention and control groups score similarly at endline in the literacy domain. Looking at skill growth over time we see interesting differences across skill areas. Children display very little growth in expressive language in Patani-Malay and Thai which is uncommon given that children tend to improve their expressive language skills naturally as they age. Children also display very little skill growth in Thai oral comprehension. This is potentially concerning as it will impact their

ability to understand lessons delivered in Thai. In contrast there is strong skill growth in letter identification in both Patani-Malay and Thai as well as writing skills in both languages. Taken together, these results suggest that ECCD teachers and parents may be spending more time on rote learning that emphasizes memorization of things like letters rather than more child-led learning activities that promote comprehension and oral expression.

Table 13. Average literacy skills, IDELA

	Intervention	Control	Difference
<b>Patani-Malay Emergent Literacy Domain Score</b>	32%	34%	
Expressive vocabulary	18%	22%	
Letter ID	34%	30%	
Word Pair	11%	14%	
Oral comprehension	48%	50%	
<b>Thai Emergent Literacy Domain Score</b>	35%	32%	
Expressive vocabulary	10%	9%	
<b>Letter ID</b>	<b>41%</b>	<b>37%</b>	<b>*</b>
Word Pair	15%	13%	
Oral comprehension	16%	15%	
<b>Writing</b>	75%	64%	
<b>Print Awareness</b>	50%	54%	

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

Figure 6. Average literacy skills Patani-Malay, IDELA

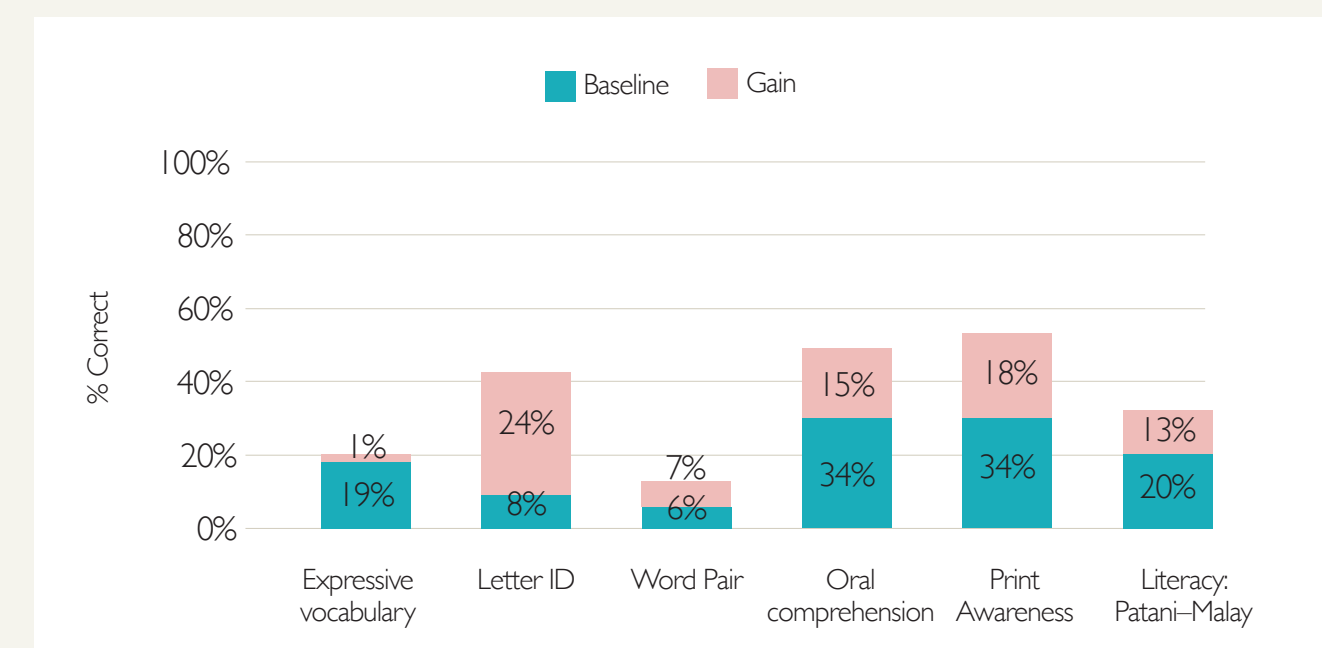
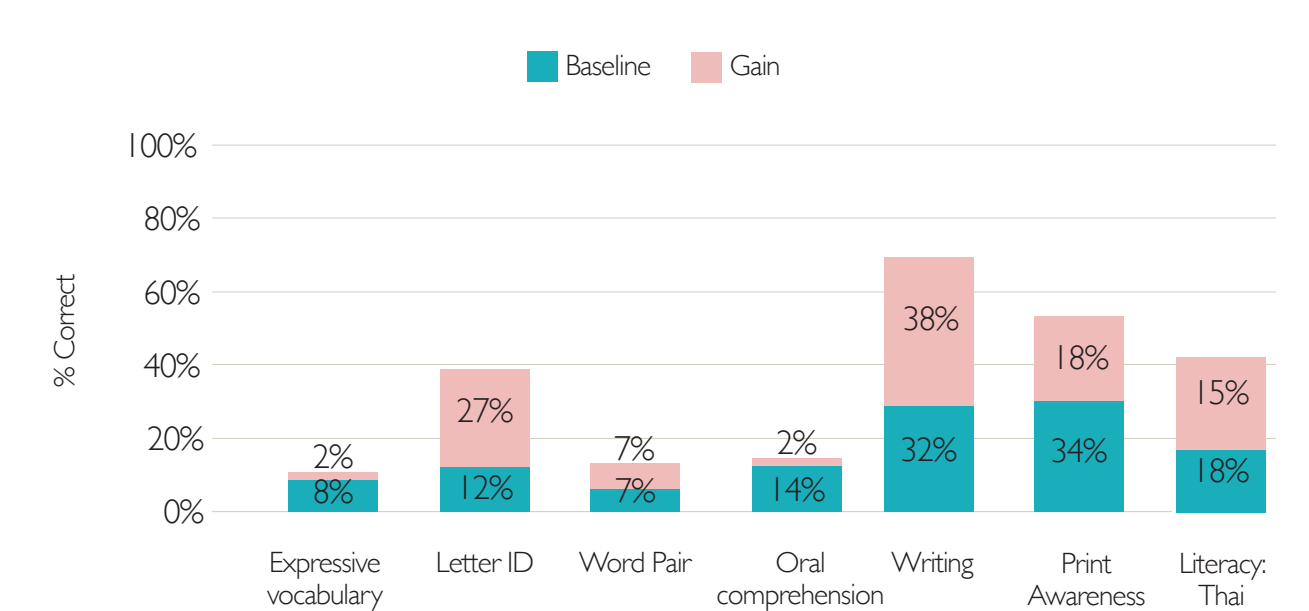


Figure 7. Average literacy skills Thai, IDELA



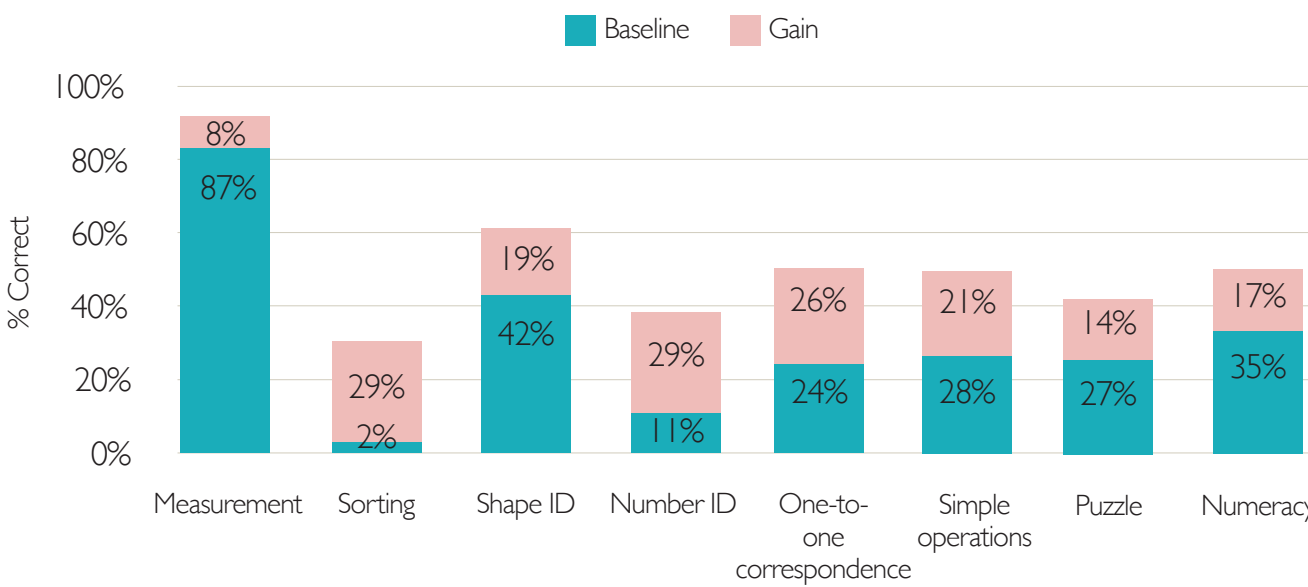
Overall, we find that children in the intervention and control groups score similarly at endline in the numeracy domain. Children display the least growth in sorting objects by shape and color, and the largest in number identification and one-to-one correspondence.

Table 14. Average numeracy skills, IDELA

	Intervention	Control	Difference
Emergent Numeracy Domain Score	52%	52%	
Measurement	94%	97%	
Sorting	29%	26%	
Shape ID	57%	64%	
Number ID	42%	39%	
One-to-one correspondence	47%	53%	
Simple operations	50%	49%	
Puzzle	42%	40%	

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

Figure 8. Average numeracy skills, IDELA



Overall, we find that children in the intervention and control groups score similarly at endline in the social-emotional domain. Children display very little growth in social connections and emotional awareness, and the strongest growth in self-awareness.

Table 15. Average social-emotional skills, IDELA

	Intervention	Control	Difference
Social-Emotional Index Score	32%	30%	
Self-awareness	60%	59%	
Social connections	26%	30%	
Emotional awareness	16%	12%	
Empathy	21%	17%	
Conflict resolution	42%	30%	

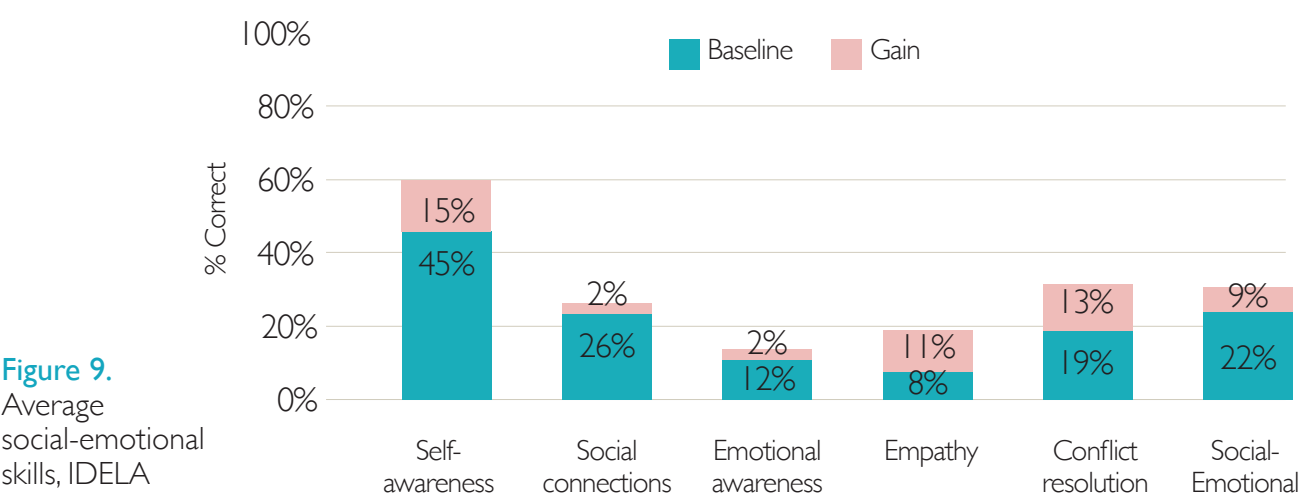


Figure 9. Average social-emotional skills, IDELA



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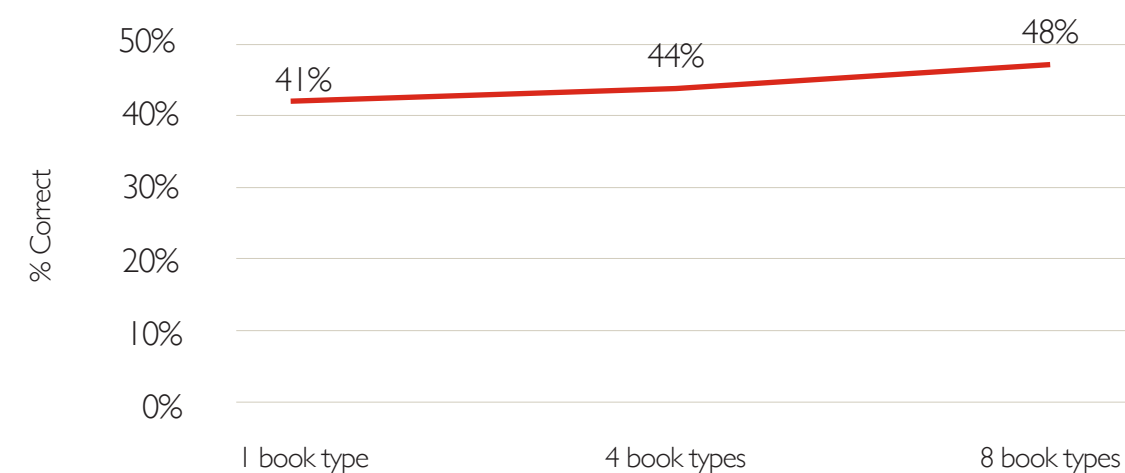


## PREDICTORS OF CHILD DEVELOPMENT

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, the strongest predictor of children's learning and development between baseline and endline was age and reading materials in the home. Older children and those with more reading materials in their homes at the time of the endline were associated with stronger IDELA scores. Neither socioeconomic status

nor home learning activities were significantly related to changes in learning and development. Girls and children with whose parents reported that they had a developmental disabilities displayed weaker gains in emergent numeracy compared to boys and children without disabilities.

Figure 11. Predicted relationship between reading materials at endline and overall IDELA score



Overall, we find that children in the intervention and control groups score similarly at endline in the motor domain. Children display the weakest skill growth in folding paper, and the strongest growth in copying a shape.

Table 16. Average motor skills, IDELA

	Intervention	Control	Difference
<b>Motor Domain Score</b>	56%	58%	
<b>Copy a shape</b>	63%	66%	
<b>Drawing a person</b>	48%	43%	
<b>Folding</b>	41%	41%	
<b>Hopping on one foot</b>	74%	83%	

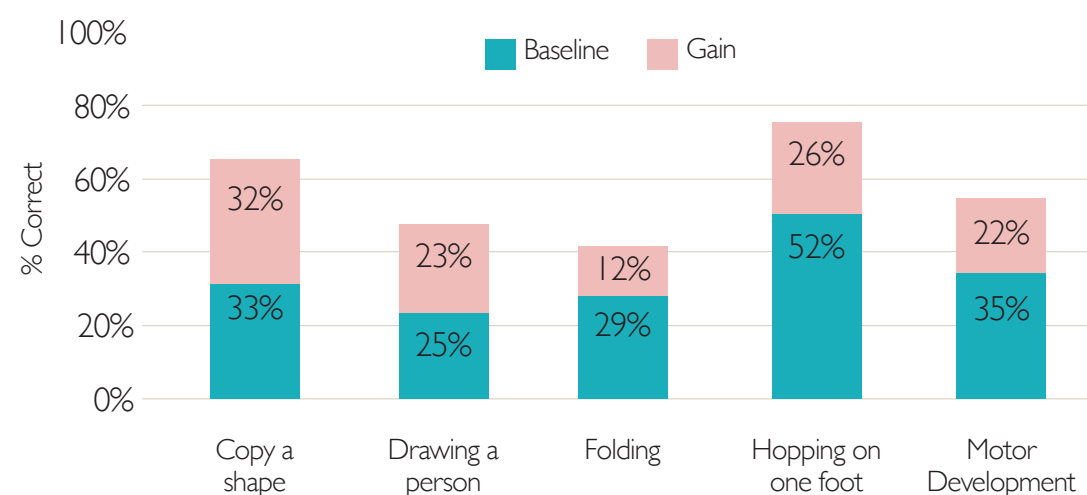
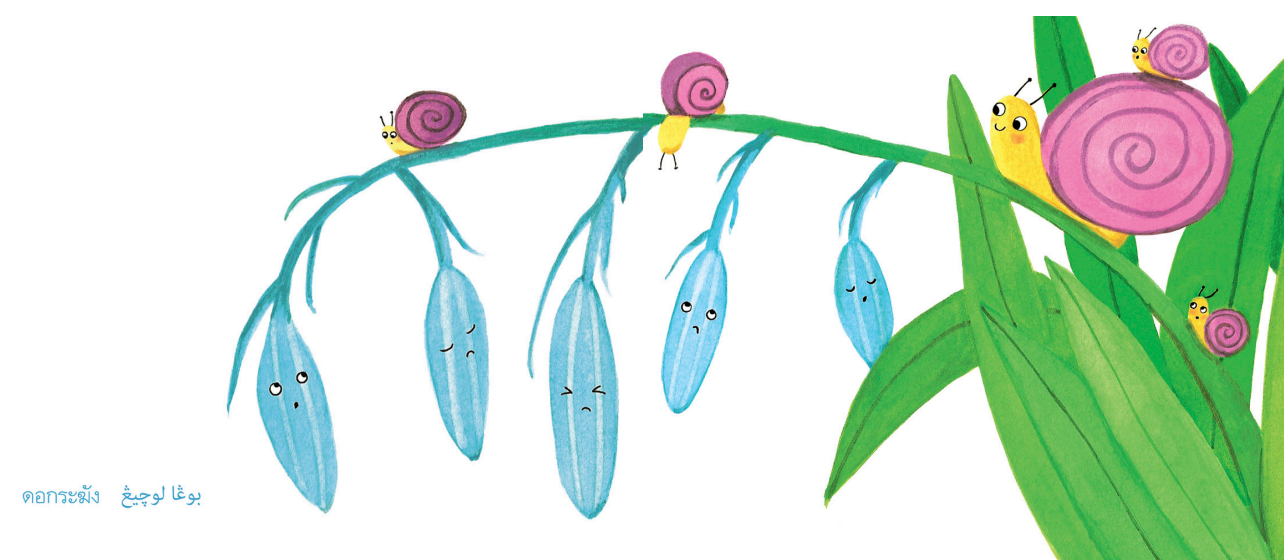


Figure 10. Average motor skills, IDELA



بوغا لوجیخ دواکولان





## CONCLUSIONS

This report analyzed the changes in children and caregivers in southern Thailand during implementation of the First Read program.

- Overall, analyses of longitudinal data from children and their families in intervention and control communities do not display evidence of significant impact of the First Read program on parental behaviors or child development.
- The intervention areas increased ownership of children's storybooks by 42% within one year of implementation.
- The intervention areas increased ownership of handmade toys by 25% within one year of implementation.
- Some increases in learning and play behaviors were displayed but there were no differences between changes in behaviors for caregivers in the intervention and control groups.
- Strongest skill growth in motor development and numeracy; weakest in social-emotional development.
- Pattern of children's skill growth suggests greater emphasis on rote learning than play-based learning (e.g., stronger gains in letter identification that expressive language, stronger gains in copying a shape over other motor items).
- Reading materials are significantly related to learning gains.
- Reading materials are significantly related to SEL gains which may indicate a link between books and learning and parental/caregiver affection.



# APPENDIX A. MULTIVARIATE REGRESSION RESULTS

Table A.I. Multivariate equity analysis with IDELA outcomes

VARIABLES	(1) Motor	(2) Numeracy	(3) SEL	(4) Literacy-Patani Malay	(6) Literacy-Thai	(7) IDELA
Child age	0.105** (0.0292)	0.0748*** (0.0164)	0.0392 (0.0241)	0.0645** (0.0215)	0.0580* (0.0226)	0.0568** (0.0179)
Child is female	-0.0507 (0.0550)	-0.0477* (0.0172)	-0.0112 (0.0206)	0.00419 (0.0238)	0.0391 (0.0232)	-0.0137 (0.0183)
Enrolled in ECD	0.0421 (0.0708)	-0.0192 (0.0192)	-0.0316 (0.0494)	-0.0634 (0.0464)	-0.0718 (0.0529)	-0.0208 (0.0377)
Disability (parent-report)	-0.107 (0.0831)	-0.131* (0.0486)	-0.0728 (0.0689)	-0.0860 (0.0422)	-0.0494 (0.0413)	-0.0764 (0.0488)
Father is literate	0.0127 (0.0467)	0.0267 (0.0452)	0.0324 (0.0348)	0.0174 (0.0392)	0.0558 (0.0418)	0.0221 (0.0354)
No. home possessions	-0.00786 (0.0160)	-0.00311 (0.00934)	0.00535 (0.00849)	0.0147* (0.00669)	0.0216 (0.0105)	0.00102 (0.00728)
No. learning-play activities	0.00590 (0.0108)	-0.00209 (0.00597)	0.00437 (0.00749)	-0.00850 (0.00643)	0.00152 (0.00576)	0.00298 (0.00482)
No. reading materials	0.0305* (0.0127)	0.00755 (0.0120)	0.0216** (0.00687)	-0.00852 (0.0153)	-0.00162 (0.0134)	0.0148* (0.00606)
Motor	0.327*** (0.0804)					
Numeracy		0.613*** (0.0533)				
SEL			0.293* (0.109)			
Literacy- Patani Malay				0.516*** (0.117)		
Literacy-Thai					0.504*** (0.114)	
IDELA						0.572*** (0.0766)
Constant	-0.106 (0.194)	0.0473 (0.0966)	-0.0651 (0.152)	0.0432 (0.131)	-0.111 (0.154)	-0.0283 (0.112)
Observations	164	164	164	164	164	164
R-squared	0.291	0.502	0.171	0.313	0.347	0.494
r2_a	0.249	0.473	0.123	0.272	0.309	0.465

Robust standard errors in parentheses  
\*\*\*  $p < 0.001$ , \*\*  $p < 0.01$ , \*  $p < 0.05$

The **First Read Project** is an innovative program curated by Save the Children, designed to improve literacy in young children and help them get ready to begin school. Save the Children hopes to contribute to global learning on ECCD for ethnic and linguistic minority and conflict-affected communities.

The program will strive to strengthen learning and development of ethnic minority children aged 3–6 in Thailand's southern border provinces through improved parenting practice and access to quality reading materials.



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