



Mitigating the Impact of Violence on Young Children In El Salvador

Comic Relief

August 2019, Endline report



Save the Children®

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Executive Summary

This report is the endline evaluation of the Toxic Stress Mitigation Model, an intervention to address how caregivers and children manage stress and develop resilience, implemented by Save the Children in El Salvador from March 2018 to August 2019, with funding from Comic Relief. The Toxic Stress Mitigation Model enhances the Early Childhood Development (ECD) strategy with three components the Resilience Kit, the positive discipline package, and the male caregiver strategy. This model was launched in 2018 and has been implemented in the following departments: Ahuachapan (San Francisco Menendez and Jujutla), Sonsonate (Nahuizalco, Santa Isabel Ishuatán, Santo Domingo and Santa Catarina Masahuat) and San Miguel (El Transito, San Jorge and San Rafael Oriente).

The main objective of this endline report is to investigate the impact of the Toxic Stress Mitigation Model on child developmental outcomes and caregiver behaviors. The endline evaluation consists of data from 388 caregivers and children surveyed at baseline (2018) and endline (2019). These data are used to explore changes in caregiving knowledge, attitudes and practices, and early childhood development.

The evaluation found the following key project achievements:

- From baseline to endline, there has been a significant decrease in the number of caregivers in the treatment group that felt depressed or sad. Also, there was a significant decrease in the number of caregivers that reported negative child practices.
- The program might have contributed to a significant increase in the number of caregivers that were able to identify their body signs when they felt stressed or sad and in a decrease in the number of caregivers feeling resentment.
- Among younger children (0-3y.o), those whose caregivers reported engaging in more home learning activities displayed stronger cognitive, social-emotional, and overall CREDI scores.
- Among older children (4-6y.o), those whose caregivers have access to more reading materials displayed stronger skills in all IDELA domains, including the overall score.
- Among older children (4-6y.o), those whose caregivers experienced domestic violence showed lower scores in the motor domain, literacy domain, and overall IDELA. And those whose caregivers reported experienced community violence had lower scores in the numeracy domain.

The key recommendations following the endline are presented in the 'Conclusion' section, and are presented in summary below:

- Improve the caregiver's ability to understand how to identify children's emotions and how to respond appropriately to children's needs. Make sure caregivers are fully involved during caregiver session time
- Explore how male caregivers interact with children and their roles within family structures. Because women tend to have a higher attendance rate in interventions in strategies.
- Strengthen work guides with men by defining strategies focused exclusively for this group, also facilitated by their peers (ideally health promoters, community leaders, and volunteers) to improve participation and parents' involvement in their parents' positive education.
- Taking into account the scope and achievements they have had with the strategies of this project, it is recommended to make efforts to incorporate some elements of it into preschool curricula at the national level.

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Introduction

El Salvador has one of the highest murder rates in the world.¹ Young children who experience extreme violence and other types of adversity are less likely to succeed in school, will have fewer years of education, have lower-incomes, and are more likely to engage in crime or violence in adulthood. Violence against children begins before birth, and the impact of this violence can last a lifetime. Up to 1 in 10 babies will experience in utero violence when an intimate partner abuses their mothers during pregnancy.² This earliest exposure to violence means children are born disadvantaged and with weak foundations for their development.

In El Salvador, the Early Childhood Development Circles are working since 2012 with integrated programming. The core elements that comprise the essential package in early childhood are related to health, nutrition, education, and child protection. Save the Children identified the need to improve this ECD strategy by developing a Toxic Stress Mitigation Model to address how children and caregivers manage stress and develop resilience.

This project has been implemented in the following departments: Ahuachapán (San Francisco Menendez and Jujutla), Sonsonate (Nahuizalco, Santa Isabel Ishuatán, Santo Domingo and Santa Catarina Masahuat) and San Miguel (El Transito, San Jorge and San Rafael Oriente) (see Appendix 1 for program implementation timeline). The three main components of this intervention have been integrated into the ECD Parenting Circles, Rotating Book Club strategy, preschools participating in the program, and male-only group sessions individually-led by male community leaders.

These three components consist of the following:

- Positive Discipline Manual: a manual that provides caregivers with positive parenting strategies that focus on nurturing and non-violent practices.
- Resilience Building Kit: a kit that includes a primary caregiver session guide that focuses on enhancing adult-child bonding relationships. The sessions aim to build resilience in young children by enhancing the caregiver's ability to be an anchor and serve as positive emotional support for the child, particularly in adverse situations. These sessions cover topics such as primary caregiver's self-care, managing actions, and emotions when in the presence of children, bonding and playing with children, and providing safe and secure environments for children. The kit also includes an activity bank for children ages 4-6 and their primary and secondary caregivers that aims to build children's resilience across seven core competencies. These activities call for the participation of both caregivers and children together and focus on enhancing children's emotional awareness, management of emotions, mitigation of crises, and stress responses.
- Male Caregiver Manual: a manual that provides simple, actionable, and easy-to-understand information and key messages to male caregivers on how they can be a driver of positive change in parenting practices. This manual also focuses on their role in the positive development of their young children or the children in their care as well as within their family structures, particularly in the pre-, post-natal period, and as children develop in the early years.

With the implementation of these strategies we are contributing to 1) Improving children's learning and development, and access to essential services, 2) Improving the home environment by increasing nurturing care and decreasing violence and abusive, and 3) developing evidence-based models to buffer the effect of violence on young children.

The main objective of this endline report is to investigate the impact of the Toxic Stress Mitigation Model on child developmental outcomes and caregiver behaviors. Our research questions are:

1. Does the intervention exhibit an impact on child developmental outcomes?
2. How has children's exposure to adverse factors (e.g., parenting factors, maternal depression, and exposure to violence) changed?
3. What relationships do we find between child development, caregiver interactions, and adversity factors?

¹ UNODC Estudio Mundial de Homicidio 2013, consultado en <https://www.rcinet.ca/es/2014/04/10/segun-la-onu-5-paises-de-america-encabezan-lista-de-paises-con-mas-homicidios-en-el-mundo/>

² Know Violence in Childhood. 2017. Ending Violence in Childhood. Global Report 2017. Know Violence in Childhood. New Delhi, India. https://resourcecentre.savethechildren.net/node/12380/pdf/global_report_2017_ending_violence_in_childhood.pdf

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Methodology

Assessment tools

The International Development and Early Learning Assessment (IDELA) and the Caregiver Reported Early Development Index (CREDI) tools were used to measure child development and learning, and the Caregiver Questionnaire was used to interview parents/caregivers. IDELA is an international assessment tool developed by Save the Children, which has been used in over 50 countries to measure child development and learning and is used to assess children aged 3-6 years old. CREDI is a child development instrument developed by Harvard University that measures early childhood development for children from birth to three years old. Both tools will be used to answer the first and fourth research questions: What is the baseline status of early learning and development of children in our intervention areas? And what is the relationship between adverse factors/resilience knowledge and practices and child developmental outcomes?

The IDELA child assessment contains 22 direct assessment items covering four domains: motor development, emergent literacy, emergent numeracy, and socio-emotional development (see Table 1). Also, 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 CREDI Long Form contains 117 items that are administered by age covering five domains: motor, language, cognition, social-emotional, and mental health. These items are addressed to the primary caregiver; additionally, to this, we include items that are based on direct interactions with the child.

The Caregiver Questionnaire contains questions about the child's family and household environments. Specifically, caregivers are asked about their educational background, daily play and learning interactions with their child, feeding, and health practices. Additionally, they are also asked about adversity and protective factors and positive discipline knowledge and practices.

Table 1. IDELA domains and subdomains

| Gross and Fine Motor Development | Emergent Literacy and Language | Emergent Numeracy | Socio-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

Sampling

The sample for this study was taken in 9 municipalities in La Paz, Ahuachapán, and Sonsonate. The treatment areas had been identified prior to the research design, so the assignment to treatment and comparison groups was not random. The study sample size was statistically specified using the power calculations to determine the appropriate number of children needed to compare learning gains over time between groups.³ The original sample aimed to include 500 children aged 0-6, divided between the study groups. In reality, logistical issues caused a final baseline sample of 388 children, 137 children between 0 to 3 years old and 251 children between 4 and 6 years old (Table 2).

³ Power calculations were conducted using Optimal Design software. We used a stratified random sampling, where we split the population into non-overlapping groups or strata (e.g. age groups) and then sample within each strata. The purpose is to ensure adequate representation of subjects in each stratum.

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The attrition rates were high, 48 percent out of the original families with children aged 0-42 months and 51 percent out of the families with children aged 42-60 could be found for the endline sample. There were significant differences in the attrition rates among the child’s age, caregiver’s characteristics and reading materials between the treatment and comparison groups in the 4-6 sample. Reasons for children that could be found at endline mainly include migration to the United States, migration to urban areas, lack of participation from Ahuachapan area – where Sponsorship program is in the phasing out stage.

Table 2. Quantitative Sample, by baseline child age group and treatment group

| | | Comparison | Treatment | Total | % of baseline found at endline |
|--|----------|------------|-----------|-------|--------------------------------|
| 0 – 36 months at baseline | Baseline | 76 | 82 | 137 | |
| | Endline | 30 | 36 | 66 | 48% |
| 37 – 60 months at baseline | Baseline | 116 | 135 | 251 | |
| | Endline | 51 | 76 | 127 | 51% |
| Total | Baseline | 192 | 217 | 388 | |
| | Endline | 81 | 112 | 193 | 50% |
| % of baseline sample found at endline | | 42% | 52% | 50% | |

Data Collection

Prior to the data collection, enumerators attended a four-day refresher training for quantitative data collection. The training was on how to administer the three quantitative tools. The first three days of the training consisted of reviewing the tools and one-day practicing with the tools in the field. The field testing of the tools with children and caregivers served to increase the assessor’s comfort with the instruments, refine their enumeration style with qualitative research, and also to finalize any contextual or translation modifications that were needed to the tools.

Data Analysis

The main purpose of the quantitative analysis is to understand changes in the status of children’s development since baseline, and the purpose of the caregiver survey is to investigate the change since baseline, in caregiver knowledge and behaviors related to early development, care, and learning, as well as adversity and resilience factors. Data analysis for the quantitative research was conducted using statistical software Stata. Summary statistics from the analysis are presented to display children’s performance on CREDE and IDELA. Multivariate regression models were used to explore relationships between early learning and development and caregiver’s knowledge, attitudes, and home environments. Throughout the report, statistical significance is indicated by an asterisk in the column marked ‘significantly different.’⁴

Limitations

This study has some limitations, which need to be considered when looking at the results:

- This study did not consider a cluster research design due to limited resources and the number of available pre-primary schools and parenting circles. Safety was the main reason why we could not access many of the pre-primary schools and parenting circles in the given period.
- Due to logistic issues on the field during baseline data collection, we could not be able to reach the sample size estimated for both age groups. And for endline data collection, we could not found 50 percent of the baseline sample, mainly due to

⁴ Throughout the report, statistical significance is defined as the probability of rejecting the null hypothesis due to random sampling error less than 5%. Note that, except where explicitly noted, statistical significance does not indicate a causal link between two variables, it means only that there is an observed relationship.

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migration to the United States and other communities. Endline data collection was also conducted during the rainy season, which complicated access to the communities.

- Some respondents may not always recall sensitive events or do not want to provide information about them.
- In some communities where there is no Save the Children funding from our Child Sponsorship program, the components related to Parenting Circles and Rotating Book Clubs are coming to an end, so the team is working on sustainability strategies that will make it possible for municipalities to adopt these activities.
- Where new volunteers are conducting the Parenting Circles and Rotating Books Clubs, they must first learn how the Essential Package works, and so some of the add-on strategies of this project (especially the Positive Discipline and Male Caregiver components) have been delayed. This adds to the already-difficult challenge of achieving higher participation of males in the project activities.

Caregiver questionnaire

Family and caregiver characteristics

Table 3 presents a breakdown of the caregiver characteristics by sample group. At endline, 58 percent of the treatment group were female and were five years old. Overall, the majority of the respondents were mothers at baseline and endline. The caregiver's average age was 30 years old at baseline and 35 years old at endline. In not all the cases, the same caregiver was interviewed at baseline and endline, so this could make the average results varied. However, there were no statistically significant differences between the treatment and comparison groups.

Table 3. Caregiver's characteristics by treatment group

| Variable | Baseline | | | Endline | | |
|------------------------------|------------|-----------|-----|------------|-----------|-----|
| | Comparison | Treatment | Sig | Comparison | Treatment | Sig |
| Child is female (%) | 46% | 58% | | 49% | 58% | |
| Child age (in months) | 40.1 | 43.3 | | 53.4 | 57.4 | |
| Caregiver is mother (%) | 87% | 85% | | 82% | 76% | |
| Caregiver's age (in years) | 30.7 | 29.8 | | 34.8 | 35.0 | |
| <i>Caregiver's education</i> | | | | | | |
| None (%) | 16% | 13% | | 19% | 24% | |
| Primary (%) | 56% | 61% | | 47% | 39% | |
| Secondary (%) | 27% | 25% | | 28% | 33% | |
| Higher education (%) | 1% | 1% | | 5% | 4% | |
| No. children at home | 2.2 | 2.1 | | 1.7 | 1.9 | |

Statistical significance: *** p<0.001, ** p<0.01, * p<0.05

Health and child nutrition

Additionally to the background practices, we asked the caregivers about their child's health and practices. The majority of them reported having a child's birth certification and vaccination card. At endline, more caregivers reported not having access to any of the health treatment options. A slight increase in the number of caregivers in the comparison group reported brushing their child's teeth more than twice a day. Not surprisingly, there was a decrease in the number of caregivers that reported that they were breastfeeding their children. Finally, based on the registry from the vaccination card, most of the children have the normal expected size and weight given their age. No significant differences were found between the comparison and treatment groups (Table 4).

Table 4. Child's health and practices by treatment group

| Variable | Baseline | | Sig | Endline | | Sig |
|-----------------------------------|------------|-----------|-----|------------|-----------|-----|
| | Comparison | Treatment | | Comparison | Treatment | |
| Child was premature | 5% | 5% | | 6% | 7% | |
| Had birth certificate | 90% | 94% | | 93% | 94% | |
| Had vaccination card | 95% | 92% | | 96% | 96% | |
| <i>Access to health treatment</i> | | | | | | |
| Pharmacy | 10% | 16% | | 18% | 15% | |

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|---|-----|-----|--|-----|-----|--|
| Curandero | 7% | 4% | | 1% | 7% | |
| Self-medication | 46% | 45% | | 39% | 41% | |
| None | 5% | 9% | | 17% | 12% | |
| Other | 33% | 34% | | 28% | 30% | |
| Toothbrush practice (more than twice a day) | 77% | 85% | | 83% | 86% | |
| Breastfeeding the child (0-3) | 45% | 27% | | 16% | 15% | |
| <i>Expected size</i> | | | | | | |
| Lower than expected | 10% | 10% | | 12% | 14% | |
| Normal | 84% | 79% | | 77% | 76% | |
| Greater than expected | - | - | | - | - | |
| Didn't know | 6% | 12% | | 11% | 11% | |
| <i>Expected weight</i> | | | | | | |
| Lower than expected | 16% | 18% | | 22% | 18% | |
| Normal | 78% | 68% | | 67% | 71% | |
| Greater than expected | 1% | 2% | | 1% | 1% | |
| Didn't know | 4% | 12% | | 10% | 10% | |

Statistical significance: *** p<0.001, ** p<0.01, * p<0.05

Preschool and parenting circles

On average, more than half of the caregivers reported that their child was attending preschool. Most of the children have been attending for less than a year and spent around 3.5 hours in the preschool per day. On average, half of the children in the treatment group (57%) and comparison group (48%) were attending parenting circles. Sixty percent of the children in the comparison group have been attending circles for two years, compared to 40 percent of the children in the treatment group. There were no statistically significant differences between the comparison and treatment groups (Table 5).

Table 5. ECCD and parenting circles characteristics by treatment group

| Variable | Endline | | Sig |
|---------------------------------------|------------|-----------|-----|
| | Comparison | Treatment | |
| Preschool attendance | 57% | 54% | |
| <i>Preschool average time</i> | | | |
| Less than 1 year | 60% | 68% | |
| 1 year | 17% | 11% | |
| 2 years | 20% | 18% | |
| 3 years | 3% | 2% | |
| Preschool average hours per day | 3.5 | 3.4 | |
| Parenting circles attendance | 48.4% | 57.3% | |
| <i>Parenting circles average time</i> | | | |
| Less than 1 year | 23% | 29% | |
| 1 year | 13% | 21% | |
| 2 years | 61% | 40% | |
| 3 years | 3% | 10% | |
| Circles average hours per day | 3.5 | 3.5 | |

Statistical significance: *** p<0.001, ** p<0.01, * p<0.05

Home learning environment

The home learning environment is a critical aspect of children's early learning and development. The caregiver survey covers questions about the types of toys and reading materials children have access to. It also covers questions related to the types of

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learning activities that caregivers and caregivers engage in with their children. There are a few differences between the treatment and comparison groups at baseline. Caregivers in the treatment areas reported having more homemade toys and engaging in more activities related to teaching new things compared to the comparison group. Overall, there were no statistically significant differences between the treatment and comparison groups in the total number of reading materials, toys, and interactions.

At endline, caregivers in the treatment and comparison groups reported having 6 types of toys for their children, more commonly shop toys, household objects, outside objects, and drawing toys (Table 7). Caregivers reported 3 types of reading materials at their homes at endline, most commonly religious books (Table 8). Additionally, caregivers in both groups reported engaging in 7 types of learning interactions with their children in the past week (Table 9). The most common activities were hugging their children, playing games with them, taking them outside, and singing to them. There were no significant changes from baseline to endline in the average number of reading materials, toys, or caregiving practices (Figure 1). On average, mothers were the ones who were more engaged in these interactions with their children (Figure 2); since they are usually the primary caregivers, therefore the ones who spend more time with their children. On the contrary, fathers only engage in one activity with their children, particularly playing habits – going outside and playing games.

Table 7. Types of toys by treatment group

| Variable | Baseline | | | Endline | | |
|------------------------|------------|-----------|--------------|------------|-----------|--------------|
| | Comparison | Treatment | Significance | Comparison | Treatment | Significance |
| Homemade toys | 29% | 51% | ** | 48% | 37% | |
| Shop toys | 98% | 93% | | 92% | 96% | |
| Household objects | 73% | 70% | | 85% | 85% | |
| Outside objects | 83% | 92% | | 95% | 96% | |
| Drawing toys | 76% | 74% | | 82% | 84% | |
| Puzzles | 37% | 31% | | 29% | 40% | |
| Toy with 2-3 pieces | 39% | 37% | | 42% | 44% | |
| Color, shape, size toy | 37% | 46% | | 45% | 49% | |
| Math toys | 38% | 30% | | 38% | 40% | |
| Other toys | 16% | 9% | | 2% | 1% | |
| No. of toys | 5.2 | 5.3 | | 5.6 | 5.7 | |

Statistical significance: *** p<0.001, ** p<0.01, * p<0.05

Table 8. Types of reading materials by treatment group

| Variable | Baseline | | | Endline | | |
|-----------------------|------------|-----------|--------------|------------|-----------|--------------|
| | Comparison | Treatment | Significance | Comparison | Treatment | Significance |
| Storybook | 44% | 51% | | 62% | 60% | |
| Textbook | 42% | 42% | | 52% | 56% | |
| Magazine | 59% | 68% | | 66% | 71% | |
| Religious book | 88% | 91% | | 88% | 87% | |
| Coloring book | 54% | 61% | | 60% | 58% | |
| No. reading materials | 2.9 | 3.1 | | 3.3 | 3.3 | |

Table 9. Types of Home Learning Environment interactions by treatment group

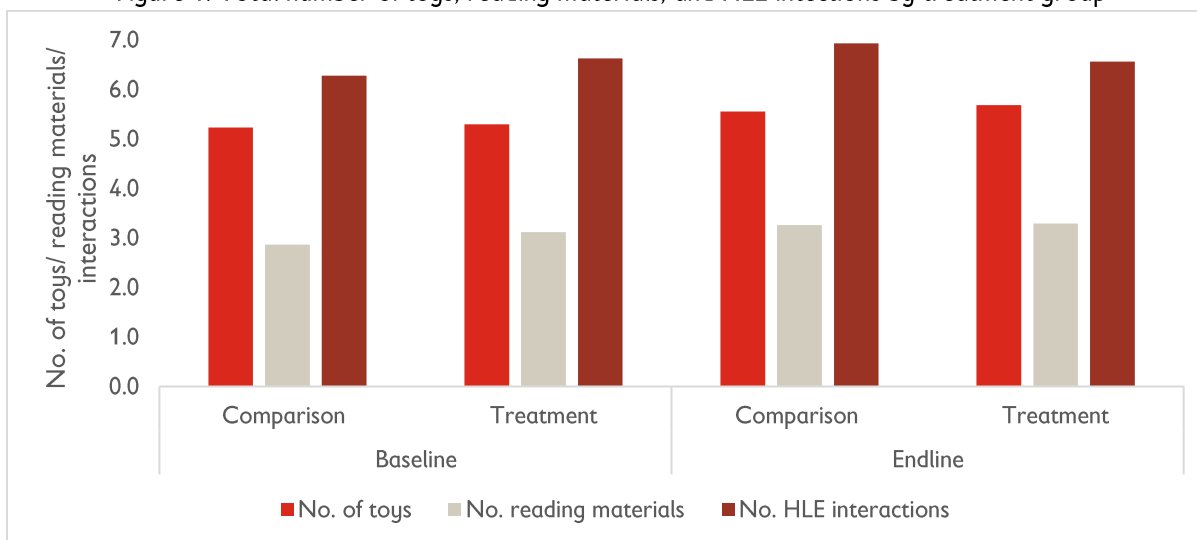
| Variable | Baseline | | | Endline | | |
|------------------|------------|-----------|--------------|------------|-----------|--------------|
| | Comparison | Treatment | Significance | Comparison | Treatment | Significance |
| Read books | 56% | 63% | | 73% | 72% | |
| Tell stories | 70% | 65% | | 67% | 66% | |
| Sing songs | 79% | 78% | | 85% | 81% | |
| Take outside | 82% | 85% | | 81% | 72% | |
| Play games | 79% | 82% | | 87% | 79% | |
| Draw | 72% | 71% | | 78% | 75% | |
| Teach new things | 60% | 76% | * | 77% | 69% | |

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|----------------------|-----|-----|--|-----|-----|--|
| Teach letters | 63% | 75% | | 72% | 70% | |
| Teach numbers | 67% | 73% | | 76% | 72% | |
| Hug | 99% | 97% | | 99% | 93% | |
| No. HLE interactions | 6.3 | 6.6 | | 6.9 | 6.6 | |

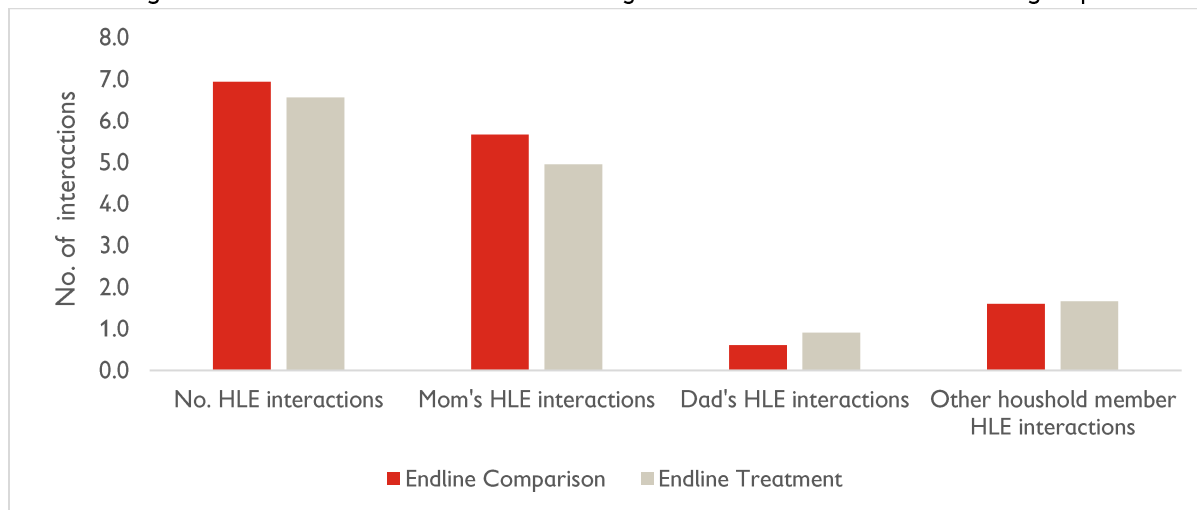
Statistical significance: *** p<0.001, ** p<0.01, * p<0.05

Figure 1. Total number of toys, reading materials, and HLE interactions by treatment group



Statistical significance: *** p<0.001, ** p<0.01, * p<0.05

Figure 2. Total number of HLE interactions by household member and treatment group



Statistical significance: *** p<0.001, ** p<0.01, * p<0.05

Adversity and Resilience

We asked the caregivers about some external (e.g., natural disasters, economic difficulties, displacement, and community violence) and domestic adversity factors (e.g., caregiver's depression, domestic violence, and negative child practices) based on existing Adverse Childhood Experience questions (WHO ACE-IQ). On average, at endline caregivers in the treatment group reported 3 adversity factors compared to caregivers in the comparison group who reported 4 adversity factors (Figure 4). Caregivers in both groups reported between 2 and 3 external adversity factors, caregivers more commonly reported having economic difficulties, experienced a serious illness on a household member, and heard about other families being displaced. At endline, while 20 percent

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of the caregivers reported not having experienced any of these external adversity factors, 40 percent of the caregivers reported having experienced 3 or more external adversity factors.

Figure 3. Total number of adversity factors by treatment group

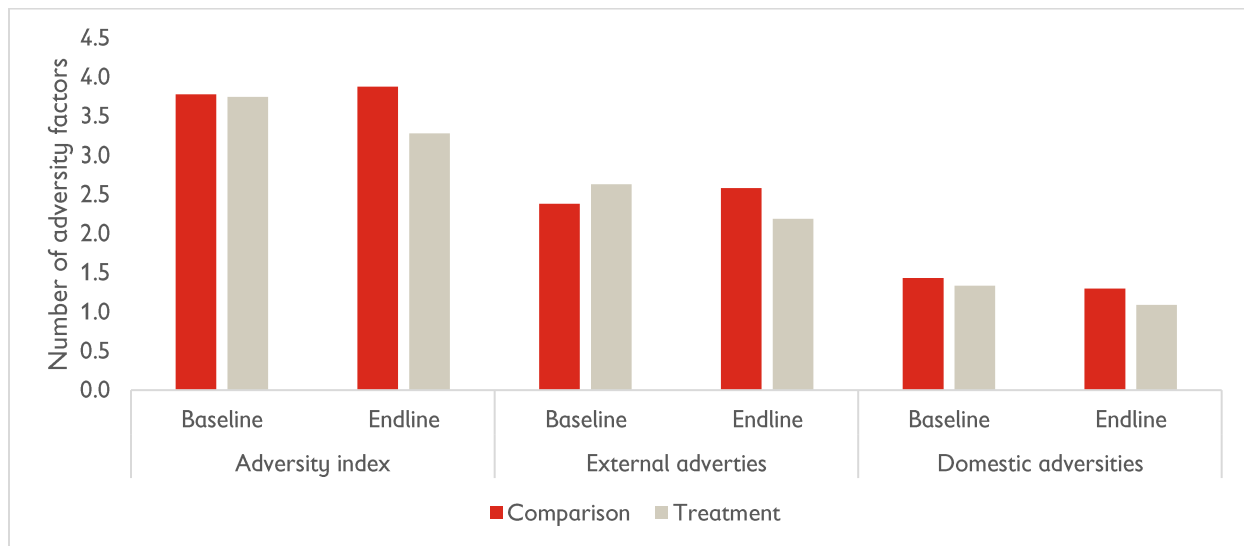


Table 10. External adversity factors by treatment group

| External factors | Baseline | | | Endline | | |
|--|------------|-----------|--------------|------------|-----------|--------------|
| | Comparison | Treatment | Significance | Comparison | Treatment | Significance |
| Total of external factors (out of 9) | 2.4 | 2.6 | | 2.6 | 2.2 | |
| % of families that faced natural disasters | 21% | 15% | | 28% | 24% | |
| % of families that have experienced serious illness on one household member | 27% | 37% | | 35% | 33% | |
| % of families that have experienced a family separation | 22% | 30% | * | 26% | 14% | |
| % of families that have at least one household member with drugs or alcohol problems | 15% | 14% | | 9% | 11% | |
| % of families that have had economic difficulties | 60% | 57% | | 65% | 58% | |
| % of families that have been displaced | 16% | 9% | | 7% | 8% | |
| % of families that have heard about other families being displaced | 34% | 44% | * | 44% | 27% | |
| % of families that have experienced any kind of violence | 27% | 29% | | 25% | 24% | |
| % of families that have heard about other families experiencing any kind of violence | 19% | 30% | | 21% | 21% | |

Statistical significance: *** p<0.001, ** p<0.01, * p<0.05

Additionally to the external adversity factors, we asked the caregivers about particular domestic factors such as the caregiver feeling overwhelmed, caregiver's depression, and exposure to domestic violence, and negative child practices (see Table 11). On average, caregivers reported one domestic adversity factor, particularly related to caregivers feeling stressed or sad. There was a significant decrease in the number of caregivers in the treatment group that felt depressed or sad; this result suggests that caregivers might be learning coping mechanisms through caregiver session content and key messages from the Resilience Building Kit. Additionally, there was a significant decrease in the number of caregivers that reported negative child practices, which might be

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driven by the positive discipline messages or adult-child bonding-focused session content and activities in the Resilience Building Kit delivered in the circles, Rotating Book Clubs, or preschool classrooms.

Table 11. Domestic adversity factors by treatment group

| Domestic adversity factors | Baseline | | | Endline | | |
|--|------------|-----------|--------------|------------|-----------|--------------|
| | Comparison | Treatment | Significance | Comparison | Treatment | Significance |
| Total of domestic adversity factors (out of 4) | 1.4 | 1.3 | | 1.3 | 1.1 | |
| Caregiver felt overwhelmed | 32% | 16% | ** | 23% | 18% | |
| Caregiver felt depressed/sad | 68% | 59% | | 67% | 51% | * |
| Exposure to domestic violence | 25% | 33% | | 27% | 20% | |
| Negative child practices | 21% | 28% | | 14% | 21% | |

Statistical significance: *** p<0.001, ** p<0.01, * p<0.05

Note: We consider that caregiver feels overwhelmed or depressed/sad at least one time in a month

Resilience

Within the resilience questions, caregivers were asked about the knowledge and practices they used to mitigate and recover from a crisis. From baseline to endline, more caregivers in the treatment group were able to identify their body signs when they felt stressed or sad. Also, more caregivers in the treatment group reported taking time to do things they like (Table 11). Finally, these results suggest that the Resilience Building Kit programmatic elements, such as “Taking charge of my feelings and emotions” and “Taking care of myself,” might have had an impact on helping caregivers identifying their body signs when they were feeling stressed or sad and feeling less resentment.

Additionally, caregivers were asked about their child’s emotional awareness and resilient practices. While most of the caregivers reported that they were able to identify their body and emotions signs when they were feeling stressed, 20 percent of the caregivers in the treatment group did not know to identify any of the signs. Almost all the caregivers reported that their children slept 8 hours and that they did activities to help their children feel better when they were sad or upset. Physical activities, sleeping, and talking about the situation were the most frequent activities that caregivers mentioned, and the ones that showed an increase from baseline to endline. The latter one is a key element of the Resilience Kit, helping caregivers understand how they can “listen with more intent” and dialogue with children about situations with activities such as “Helping Others and Looking for Help,” “I am scared,” etc.

Table 11. Caregiver’s knowledge and practices regarding resilience by treatment group

| Caregiver’s knowledge and practices | Baseline | | | Endline | | |
|--|------------|-----------|-----|------------|-----------|-----|
| | Comparison | Treatment | Sig | Comparison | Treatment | Sig |
| % who were able to identify body signs when feeling stressed | 53% | 41% | | 54% | 48% | |
| % who were able to name two or more body signs | 37% | 29% | | 35% | 46% | |
| % who used positive phrases when they felt sad or stressed | 59% | 55% | | 67% | 61% | |
| % who tried to understand the stressful situation | 58% | 57% | | 54% | 48% | |
| % who showed affection to their family | 95% | 93% | | 96% | 94% | |
| % who had a support group | 83% | 85% | | 75% | 81% | |
| % who were not resentful | 25% | 19% | | 13% | 29% | * |
| % who took time to do things they like | 78% | 78% | | 86% | 86% | |
| % who asked for help when they were in trouble | 64% | 67% | | 68% | 62% | |
| Body signs that caregivers identified in their child | | | | | | |

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| | | | | | | |
|--|-----|-----|---|-----|-----|-----|
| Headache | 10% | 9% | | 11% | 15% | |
| Anxiety | 12% | 13% | | 14% | 23% | |
| Anger | 27% | 29% | | 58% | 33% | *** |
| % who reported that their child sleeps 8 hours | 84% | 90% | | 98% | 93% | |
| % who shared positive phrases to their children | 88% | 94% | | 81% | 85% | |
| % who taught their children to appreciate and value things | 75% | 87% | * | 84% | 80% | |

Statistical significance: *** p<0.001, ** p<0.01, * p<0.05

Changes Observed in Children

CREDI: Young Children 0-36 months old at baseline

The CREDI tool was used to assess young children’s learning and development across four domains: motor, cognitive, language, and social-emotional development. The new scoring guide provides two scores: 1) Raw scores: CREDI does not range between 0 and 100, the scoring scale used in this report is specific to CREDI and do not correspond to any other known metric, and 2) Norm-referenced standardized scores, which compared raw scores in each domain to the average score in the CREDI reference population of a particular age with an ‘ideal’ home environment.⁵ Additionally, the CREDI team recommends using norm-referenced standardized scores for comparisons across different domains.

The longitudinal analysis found there were no statistically significant differences between the treatment and comparison groups. However, these results should be carefully interpreted due to the small sample size. Table 12 shows that at baseline, children from the comparison group presented lower scores compared to the average same-child in the CREDI ‘ideal’ reference population in the motor domain and overall CREDI score. At endline, children scored between 0.2 and 0.7 standard deviations above the same-age average of the reference population.

At endline, children from both groups have stronger skills in the social-emotional and motor domains compared to the reference group. Within the treatment group, the effect sizes are small (Cohen’s d between 0.1 and 0.3). While this is an important finding because children had increased their knowledge, this improvement cannot be attributed to the intervention.

Table 12. Average norm-referenced standardized CREDI scores over time

| CREDI | Baseline | | | Endline | | |
|------------------|------------|-----------|-----|------------|-----------|-----|
| | Comparison | Treatment | Sig | Comparison | Treatment | Sig |
| Motor | -0.06 | 0.19 | | 0.34 | 0.44 | |
| Cognition | 0.05 | 0.19 | | 0.08 | 0.32 | |
| Language | 0.01 | 0.08 | | 0.18 | 0.26 | |
| Social-emotional | 0.10 | 0.44 | | 0.34 | 0.67 | |
| CREDI | -0.06 | 0.08 | | 0.18 | 0.34 | |

In summary, Table 13 shows that there have been developmental progressions in all the domains for children in the treatment and comparison groups since baseline. The social-emotional domain presented a significant change over time; this result suggests that the intervention might have somehow benefitted children in the treatment more in the social-emotional domain.⁶ Finally, endline

⁵ According to the CREDI Scoring Manual 2018, the CREDI reference population comprises all children in the original CREDI database with an “ideal” home environment. Ideal home environments were defined through maternal educational attainment (college or higher), as well as through the number of activities done by adults with the child in the last three days (at least 4 out of the 6 MICS home stimulation activities). <https://cdn2.sph.harvard.edu/wp-content/uploads/sites/74/2016/05/CREDI-Scoring-Manual-8-Jun-2018.pdf>

⁶ See regressions in Appendix 2.

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results show that had stronger development in all of the domains compared to the reference population, as well as on the overall CREDI scores (Figure 18). There were no statistically significant differences between girls and boys at endline

Table 13. Child developmental gains over time

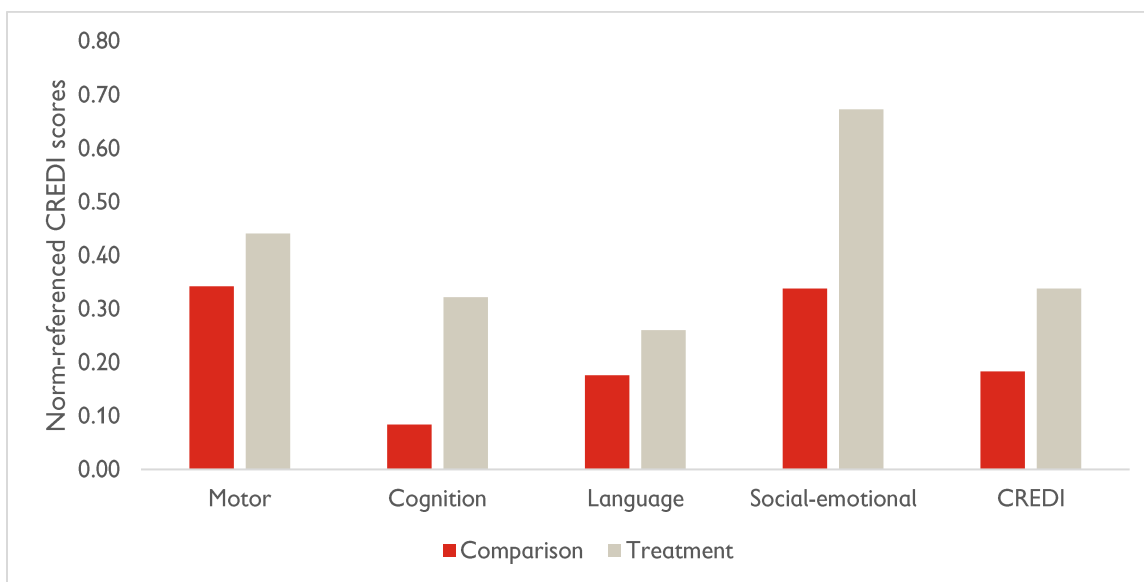
| CREDI | Baseline | | Endline | | Sig. dif. in gains (endline-baseline) ^a |
|-------------------------|------------|-----------|------------|-----------|--|
| | Comparison | Treatment | Comparison | Treatment | |
| Motor | 50.6 | 50.9 | 52.6 | 52.6 | |
| Cognition | 50.6 | 50.8 | 51.6 | 51.9 | |
| Language | 50.8 | 51.2 | 52.8 | 52.9 | |
| Social-emotional | 50.8 | 51.2 | 52.4 | 52.7 | * |
| CREDI | 50.8 | 51.2 | 52.3 | 52.5 | |

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

These raw scores should not be compared across domains; each domain has an age-specific mean and standard deviation.

a. Calculated through multivariate regression analysis that controls for factors such as child's age, age squared, sex, socioeconomic status, parent's education, number of toys, reading materials, caregiving practices, number of children in the household.

Figure 4. Norm-referenced CREDI scores at endline, by treatment group



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

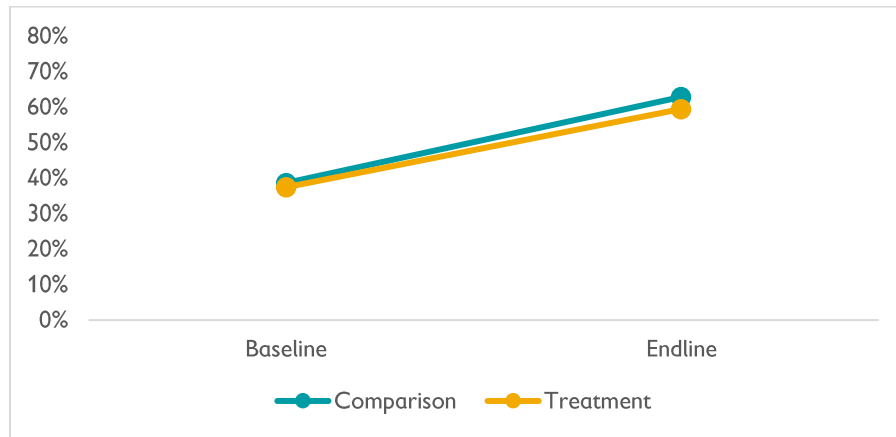
IDELA: Young Children 37-60 months old at baseline

This section details children's performance on the IDELA assessment. Total domain scores are calculated by adding the weighted score for each core domain (social-emotional development, emergent numeracy, emergent literacy, and motor development) so that all domains contribute equally to the total score. At endline, children showed the strongest skills in the motor development domain and lowest in the emergent literacy domain. Similar to the CREDI results, children displayed stronger skills with age and there were no significant differences between skills displayed by children in the treatment and comparison groups in any domain, as well as on the overall IDELA score.

Additionally, we used multivariate regressions to estimate the effect of the program, but we could not find any significant impact in any of the IDELA domains. Despite this result, the observed changes from baseline to endline are large, around 20-25 percentage points in all the domains, which indicate an important growth in children's learning and development in both treatment and comparison groups. Endline results show that girls and boys from the treatment and comparison groups had stronger development in all of the domains compared to baseline. There were no significant differences between girls and boys in the treatment group.

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Figure 5: IDELA scores over time by treatment group



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

Table 14. Average IDELA scores over time by treatment group

| IDELA domain | Baseline | | | Endline | | | Sig. dif. in gains (endline-baseline) ^a |
|------------------------------|------------|-----------|-----|------------|-----------|-----|--|
| | Comparison | Treatment | Sig | Comparison | Treatment | Sig | |
| Motor development | 40% | 39% | | 67% | 64% | | |
| Emergent literacy | 33% | 35% | | 58% | 55% | | |
| Emergent numeracy | 37% | 35% | | 62% | 60% | | |
| Social-emotional development | 46% | 42% | | 64% | 60% | | |
| IDELA | 39% | 37% | | 63% | 59% | | |

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

No significant differences between comparison and treatment groups in any of the domains.

a. Calculated through multivariate regression analysis that controls for factors such as child's age, age squared, sex, socioeconomic status, parent's education, number of toys, reading materials, caregiving practices, number of children in the household.

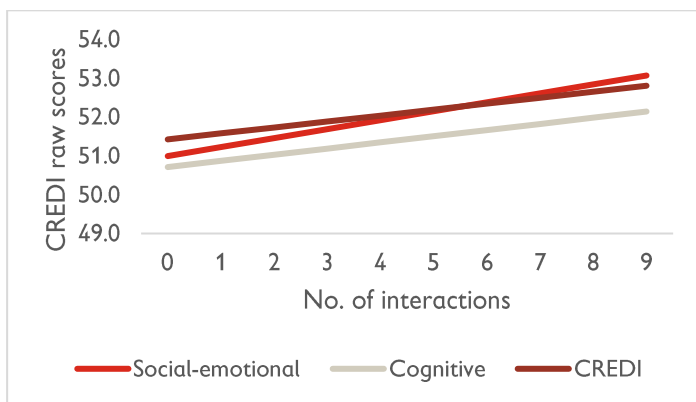
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Predictors of child development

Taken together, information from the caregiver questionnaire and child development assessments can provide information on important predictors of child development for children in the treatment area. Multivariate regression models were used to explore relationships between early learning and development and caregiver's knowledge, attitudes, and home environments.

For younger children (0-3 y.o), we found that caregivers who reported engaging in more home learning activities displayed stronger development in the overall CREDI scale and the cognitive and social-emotional domains (Figure 7). Given the small longitudinal sample over time, we decided to impute CREDI scores, but we did not find any significant relationships.

Figure 7. Predicted scores by HLE interactions



Regarding equity factors for older children (4-6y.o), we found that children whose caregivers reported a higher educational level displayed stronger motor, literacy, and numeracy scores. Children whose caregivers reported more reading materials displayed stronger skills in all domains, including the overall IDELA score. Additionally, adversity factors – aggregated or separating external and domestic adversity factors – do not predict IDELA or CREDI scores. However, if we disaggregate these adversity factors, we found among 4-5 y.o children, those whose caregivers reported any exposure to domestic violence showed significantly lower scores in the motor domain, literacy domain, and overall IDELA. Those children whose caregivers reported community violence displayed lower scores in the numeracy domain. Finally, caregiver's knowledge and practices about building resilience were significantly associated with the social-emotional domain.

Figure 8. Predicted scores by exposure to domestic violence

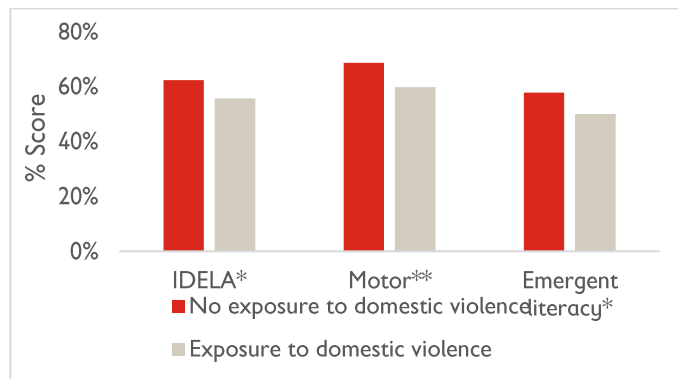


Figure 9. Predicted scores by exposure to community violence



In summary, we found four key findings following the multivariate regression analysis (see Appendix 3):

- 1) Among younger children (0-3y.o), those whose caregivers reported engaging in more home learning activities displayed stronger cognitive, social-emotional, and overall CREDI scores.
- 2) Among older children (4-6y.o), those whose caregivers reported a higher education level displayed stronger motor, literacy, and numeracy scores.
- 3) Among older children (4-6y.o), those whose caregivers have access to more reading materials displayed stronger skills in all IDELA domains, including the overall score.
- 4) Among older children (4-6y.o), those whose caregivers experienced domestic violence showed lower scores in the motor domain, literacy domain, and overall IDELA. And those whose caregivers reported experienced community violence had lower scores in the numeracy domain.

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Conclusion

This report has presented an overview of the endline findings from the Toxic Stress Mitigation Model evaluation in El Salvador. The report looks at changes in caregivers' practices and changes in child development outcomes. The analysis also looked at the relationship between children's skills, home learning environment, and adversity factors.

This report had three main purposes:

1. Does the intervention exhibit an impact on child developmental outcomes?

We observed a significant change in the social-emotional domain for younger children (0-3 y.o) that might be attributed to the program. Given the high attrition rate and small sample for this age group, this result should be interpreted carefully.

2. To what extent have caregivers adopted KAP (knowledge, attitudes, practices) and behavior change as a result of the intervention?

On average, caregivers reported one domestic adversity factor, particularly related to caregivers feeling stressed or sad. There was a significant decrease in the number of caregivers in the treatment group that felt depressed or sad; this result suggests that caregivers might be learning coping mechanisms from session content outlined in the Resilience Building Kit. Additionally, there was a significant decrease in the number of caregivers that reported negative child practices, which might be driven by the positive discipline messages and adult-child bonding, resilience-building activities from the delivered in the parenting circles, rotating book clubs, and preschool classrooms.

From baseline to endline, more caregivers in the treatment group were able to identify their body signs when they felt stressed or sad. Also, more caregivers in the treatment group reported have taken time to do things they like. Finally, these results suggest that the program, specifically the Resilience Building Kit elements, might have had an impact on helping caregivers identifying their body signs when they were feeling stressed or sad and feeling less resentment. Physical activities, talking about the situation and sleeping were the most frequent activities that caregivers mentioned, and the ones that showed an increase from baseline to endline. However, we cannot attribute these changes in activities that caregivers did with their child to the program.

3. What relationships do we find between child development, caregiver interactions, and adversity factors?

Among younger children (0-3y.o), those whose caregivers reported engaging in more home learning activities displayed stronger cognitive, social-emotional, and overall CREDI scores.

Among older children (4-6y.o), those whose caregivers reported a higher education level displayed stronger motor, literacy, and numeracy scores. Among older children (4-6y.o), those whose caregivers have access to more reading materials displayed stronger skills in all IDELA domains, including the overall score. Among older children (4-6y.o), those whose caregivers experienced domestic violence showed lower scores in the motor domain, literacy domain, and overall IDELA. And those whose caregivers reported experienced community violence had lower scores in the numeracy domain.

This report has presented recommendations in light of the findings that may help in strengthening children's learning outcomes and increased behavior change in caregivers. Some of the recommendations are presented in summary below:

- Enhance the caregiver's ability to understand how to identify children's emotions and how to respond to children's needs adequately. Ensure that caregivers are fully engaged during caregiver session time and Resilience Building Kit activities with children during ECD Family Circles, Rotating Book Clubs, and preschool times. Follow-up with parents in the next session or meeting time and inquire about how they are replicating activities at home with children to understand whether they are applying knowledge at home.
- Explore how male caregivers engage with children and their roles within family structures. Since women tend to have a higher attendance rate in interventions such as ECD Family Circles and Rotating Book Clubs, and engaged more in children attending preschool, examine how men positively engage with children according to the context and how this is impacted through their participation in male-only group sessions. Based on results, include group session content for men that also focuses on related themes covered in ECD Family Circles and Rotating Book Club so that both male and female caregivers can complement each other.

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Appendix 1. Program Implementation timeline

| Theme | Date | Communities |
|---|-------------|---|
| Taller de Rotación de Libros a Voluntarios | March 2018 | San Rafael Oriente , El Tránsito, San Jorge , Santa Catarina Masahuat y Santo Domingo de Guzmán |
| Taller de Círculos de Desarrollo Infantil Temprano | March 2018 | San Rafael Oriente , El Tránsito, San Jorge , Santa Catarina Masahuat y Santo Domingo de Guzmán |
| Taller de Monitoreo y Evaluación a Voluntarios | March 2018 | San Rafael Oriente , El Tránsito, San Jorge , Santa Catarina Masahuat y Santo Domingo de Guzmán |
| Taller de Salvaguarda | April 2018 | San Rafael Oriente , El Tránsito, San Jorge , Santa Catarina Masahuat y Santo Domingo de Guzmán |
| Taller de Disciplina Positiva | May 2018 | San Rafael Oriente , El Tránsito, San Jorge , Santa Catarina Masahuat y Santo Domingo de Guzmán, San Francisco Menéndez ,Jujutla, Nahuizalco, ente |
| Pasos con Alegría, Educación para la Transición con enfoque de mitigación de estrés Tóxico (Resiliencia). | May 2018 | San Rafael Oriente , El Tránsito, San Jorge , Santa Catarina Masahuat y Santo Domingo de Guzmán, San Francisco Menéndez ,Jujutla, Nahuizalco, Santa Isabel Ishuatán |
| Taller de Mitigación sobre Estrés Tóxico | June 2018 | San Rafael Oriente , El Tránsito, San Jorge , Santa Catarina Masahuat y Santo Domingo de Guzmán, San Francisco Menéndez ,Jujutla, Nahuizalco, Santa Isabel Ishuatán |
| Taller con el CONNA ¿Qué es la LEPINA? | July 2018 | San Rafael Oriente , El Tránsito, San Jorge , Santa Catarina Masahuat y Santo Domingo de Guzmán |
| Taller DIT para nuevo Voluntariado | July 2018 | Nahuizalco |
| Taller de Ruta de Protección y Denuncia | July 2018 | San Rafael Oriente , El Tránsito, San Jorge , Santa Catarina Masahuat y Santo Domingo de Guzmán |
| Taller de Nutrición | July 2018 | San Rafael Oriente , El Tránsito, San Jorge , Santa Catarina Masahuat y Santo Domingo de Guzmán San Miguel |
| Taller a Voluntarios e Salud Materno Infantil | August 2018 | San Rafael Oriente , El Tránsito, San Jorge , Santa Catarina Masahuat y Santo Domingo de Guzmán San Miguel |

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| | | |
|---|----------------------|--|
| Taller de Disciplina Positiva parte II | April 2019 | San Rafael Oriente, San Jorge, El Tránsito, Santa Catarina, Santo Domingo de Guzmán, Jujutla, San Francisco Menéndez, Nahuizalco y Santa Isabel Ishuatán |
| Taller para docentes de parvularia estrategias de lenguaje | April 2019 | San Rafael Oriente , San Jorge y El Tránsito |
| Taller con docente de parvularia y voluntariado de PI en resiliencia parte II | May 2019 | San Rafael Oriente, San Jorge, El Tránsito, Santa Catarina, Santo Domingo de Guzmán, Jujutla, San Francisco Menéndez, Nahuizalco y Santa Isabel Ishuatán |
| Taller de paternidad Activa | July and August 2019 | San Rafael Oriente, San Jorge, El Tránsito, Santa Catarina, Santo Domingo de Guzmán, Jujutla, San Francisco Menéndez, Nahuizalco y Santa Isabel Ishuatán |

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Appendix 2. Impact

Table 2.1. CREDI and domains gains

| Dependent variable | Motor | Cognitive | Language | Social-emotional | CREDI | Mental health |
|--------------------|--------|-----------|----------|------------------|--------|---------------|
| Treatment | 0.1073 | 0.4079 | 0.1737 | 0.5706* | 0.3201 | 0.0627 |
| Control variables | X | X | X | X | X | X |
| R-sq | 0.344 | 0.318 | 0.419 | 0.348 | 0.364 | 0.257 |
| N | 55 | 55 | 55 | 55 | 55 | 133 |

Table 2.2. IDELA and domains gains

| Dependent variable | Motor | Emergent literacy | Emergent numeracy | Social-emotional | IDELA |
|--------------------|---------|-------------------|-------------------|------------------|---------|
| Treatment | -0.0391 | -0.0396 | -0.0151 | -0.0245 | -0.0220 |
| Control variables | X | X | X | X | X |
| R-sq | 0.385 | 0.276 | 0.086 | 0.259 | 0.186 |
| N | 121 | 121 | 121 | 116 | 116 |

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Appendix 3. Predictors of Child development

Table 3.1. CREDI and domains multivariate regressions

| | Motor | Cognitive | Language | Social-emotional | CREDI | Mental health |
|----------------------------|------------|------------|------------|------------------|------------|---------------|
| Treatment | 0.0207 | 0.3198 | 0.1891 | 0.4816* | 0.2586 | 0.0458 |
| Child's age | -0.1964 | -0.1483 | 0.0248 | -0.1075 | -0.1034 | -0.0148 |
| Child's age (squared) | 0.0127 | 0.0083 | 0.0040 | 0.0055 | 0.0073 | 0.0007 |
| Child's age (cubic) | -0.0002 | -0.0001 | -0.0001 | -0.0001 | -0.0001 | -0.0000 |
| Child is female | -0.2700 | -0.2311 | -0.2656 | -0.2914 | -0.2568 | -0.0054 |
| Primary education | -0.2837 | -0.1323 | -0.0108 | 0.1522 | -0.0256 | 0.0510 |
| Secondary education | -0.4430 | -0.1314 | -0.0524 | -0.0334 | -0.1225 | 0.0830 |
| Higher education | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Number of children | -0.0552 | -0.0335 | -0.0324 | 0.0025 | -0.0272 | -0.0116 |
| Attended parenting circles | -0.0462 | 0.2238 | 0.0285 | 0.1275 | 0.0961 | 0.0380 |
| Toys | 0.1455 | 0.0776 | 0.1237 | 0.0734 | 0.1016 | 0.0027 |
| Reading materials | -0.1361 | -0.1704 | -0.0349 | -0.2424* | -0.1447 | 0.0350 |
| HLE interactions | 0.1458 | 0.1927** | 0.1019 | 0.2601*** | 0.1750* | 0.0172 |
| Home possessions | -0.0325 | -0.0504 | -0.0514 | -0.0779 | -0.0523 | 0.0057 |
| Lagged outcome variable | X | X | X | X | X | X |
| Constant | 45.4047*** | 44.3373*** | 43.8796*** | 42.6985*** | 46.9791*** | 0.0992 |
| R-sq | 0.470 | 0.443 | 0.487 | 0.509 | 0.497 | 0.303 |
| N | 55 | 55 | 55 | 55 | 55 | 65 |

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Table 3.2. IDELA and domains multivariate regressions (domestic adversity factors)

| | IDELA | Motor | Emergent literacy | Emergent numeracy | Social-emotional |
|-------------------------------|-----------|-----------|-------------------|-------------------|------------------|
| Treatment | -0.0504 | -0.0929* | -0.0509 | -0.0313 | -0.0493 |
| Child's age | 0.0076*** | 0.0167*** | 0.0097*** | 0.0068** | 0.0063* |
| Child is female | -0.0134 | -0.0041 | -0.0095 | 0.0045 | -0.0097 |
| Primary education | 0.0452 | 0.0602 | 0.0276 | 0.0677 | 0.0267 |
| Secondary education | 0.0371 | 0.0859 | -0.0121 | 0.0643 | 0.0039 |
| Higher education | 0.3915*** | 0.4363*** | 0.1918* | 0.5114*** | 0.4818*** |
| Number of children | 0.0044 | 0.0076 | -0.0020 | 0.0008 | 0.0033 |
| Attended parenting circles | 0.0203 | 0.0205 | 0.0294 | 0.0173 | 0.0033 |
| Toys | -0.0172 | 0.0014 | -0.0269* | -0.0228* | -0.0336* |
| Reading materials | 0.0496*** | 0.0518* | 0.0374** | 0.0550*** | 0.0623** |
| Home literacy interactions | -0.0001 | -0.0083 | 0.0087 | 0.0028 | 0.0121 |
| Home possessions | -0.0016 | 0.0000 | -0.0134 | 0.0041 | -0.0048 |
| Caregiver was depressed/sad | 0.0757* | 0.1132 | 0.0504 | 0.0648 | 0.0275 |
| Exposure to domestic violence | 0.0005 | 0.0337 | -0.0329 | 0.0240 | -0.0018 |
| Lagged outcome variable | X | X | X | X | X |
| Constant | 0.0710 | -0.2732 | 0.0791 | 0.1006 | 0.2079 |
| R-sq | 0.563 | 0.459 | 0.475 | 0.492 | 0.372 |
| N | 113 | 118 | 118 | 118 | 113 |

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Table 3.3. IDELA and domains multivariate regressions (external adversity factors)

| | IDELA | Motor | Emergent literacy | Emergent numeracy | Social-emotional |
|---|-----------|-----------|-------------------|-------------------|------------------|
| Treatment | -0.0270 | -0.0497 | -0.0488 | -0.0303 | -0.0205 |
| Child's age | 0.0064* | 0.0126*** | 0.0089*** | 0.0051* | 0.0048 |
| Child is female | -0.0203 | -0.0425 | -0.0128 | 0.0135 | -0.0100 |
| Primary education | 0.0417 | 0.0636 | 0.0356 | 0.0568 | 0.0327 |
| Secondary education | 0.0092 | 0.0338 | -0.0162 | 0.0490 | -0.0205 |
| Higher education | 0.3063*** | 0.2828** | 0.0724 | 0.4403*** | 0.3754*** |
| Number of children | 0.0102 | 0.0165 | 0.0011 | -0.0009 | 0.0043 |
| Attended parenting circles | 0.0016 | -0.0035 | 0.0361 | 0.0065 | -0.0188 |
| Reading materials | 0.0496*** | 0.0466* | 0.0341* | 0.0527*** | 0.0671** |
| Home literacy interactions | -0.0005 | -0.0149 | 0.0091 | 0.0029 | 0.0088 |
| Home possessions | 0.0021 | 0.0034 | -0.0091 | 0.0025 | -0.0042 |
| Faced a natural disasters | 0.0356 | 0.0444 | 0.0053 | 0.0434 | 0.0535 |
| Have experienced serious illness on one household member | 0.0064 | -0.0020 | 0.0263 | -0.0454 | -0.0018 |
| Have experienced a family separation | 0.0107 | 0.0410 | -0.0313 | 0.0525 | -0.0054 |
| Have at least one household member with drugs or alcohol problems | -0.0392 | -0.0312 | 0.0035 | -0.0436 | -0.0699 |
| Have had economic difficulties | 0.0046 | 0.0325 | -0.0379 | -0.0175 | 0.0008 |
| Have been displaced | -0.0486 | -0.0501 | -0.0774 | 0.0561 | 0.0648 |
| Have heard about other families being displaced | -0.0327 | -0.0307 | -0.0463 | -0.0337 | 0.0159 |
| Have experienced any kind of violence | -0.0924 | -0.0680 | -0.0945 | -0.1303* | -0.1189 |
| Have heard about other families experiencing any kind of violence | 0.0730 | 0.0119 | 0.1167 | 0.1202* | 0.0269 |
| Lagged outcome scores | X | X | X | X | X |
| Constant | -0.0317 | -0.2622 | 0.0007 | 0.0246 | 0.1043 |
| R-sq | 0.564 | 0.408 | 0.497 | 0.541 | 0.391 |
| N | 109 | 115 | 115 | 115 | 109 |

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Table 3.4. IDELA and domains multivariate regressions (caregiver's resilience practices)

| | IDELA | Motor | Emergent literacy | Emergent numeracy | Social-emotional |
|----------------------------|-----------|-----------|-------------------|-------------------|------------------|
| Treatment | -0.0395 | -0.0691 | -0.0457 | -0.0306 | -0.0341 |
| Child's age | 0.0076*** | 0.0145*** | 0.0084*** | 0.0063** | 0.0065* |
| Child is female | 0.0162 | 0.0204 | 0.0052 | 0.0264 | 0.0270 |
| Primary education | 0.0421 | 0.0525 | 0.0352 | 0.0647 | 0.0318 |
| Secondary education | 0.0152 | 0.0424 | -0.0236 | 0.0443 | -0.0047 |
| Higher education completed | 0.3461*** | 0.3257*** | 0.1213 | 0.4897*** | 0.4278*** |
| Number of children | 0.0032 | 0.0056 | -0.0037 | -0.0016 | 0.0007 |
| Attended parenting circles | 0.0320 | 0.0366 | 0.0402 | 0.0280 | 0.0235 |
| Toys | -0.0132 | 0.0074 | -0.0221 | -0.0184 | -0.0249 |
| Reading materials | 0.0467*** | 0.0469* | 0.0323* | 0.0498** | 0.0613*** |
| HLE interactions | -0.0007 | -0.0127 | 0.0062 | 0.0041 | 0.0073 |
| Home possessions | -0.0051 | -0.0026 | -0.0150 | -0.0006 | -0.0080 |
| Resilient practices | 0.0280 | 0.0345 | 0.0188 | 0.0281 | 0.0415* |
| Lagged outcome scores | X | X | X | X | X |
| Constant | -0.1581 | -0.4590* | -0.0448 | -0.1651 | -0.1278 |
| R-sq | 0.542 | 0.394 | 0.458 | 0.490 | 0.373 |
| N | 114 | 120 | 120 | 120 | 114 |