

# Midline Report Impact Evaluation of the Roma Parenting Support Program

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# I. INTRODUCTION

### BACKGROUND

The Centre for Interactive Pedagogy (CIP Centre) and Romanipen developed the Roma Early Childhood Development and Education (ECDE) Initiative, supported by Open Society Foundations Serbia (OSF Serbia) and the Open Society Foundations Early Childhood Program (OSF ECP) to address children's physical, cognitive, social and emotional development. The ECDE Initiative aims to support children from marginalized communities, such as the Roma in Eastern Europe, who tend to be at a greater disadvantage than their non-Roma peers. Roma communities commonly face higher rates of poverty and lower access to health, sanitation, infrastructure and educational opportunities, which can negatively affect young children's development, well-being, and readiness for school.

The ECDE Initiative pilots community-based programs to improve the quality of parenting support services and early childhood education and care. Programs are culturally and contextually relevant for Roma caregivers and their young children from the prenatal period through early primary school and focus on improving the child's home and community environment, in support of child development. The programs are implemented by Romanipen and the Centre for Interactive Pedagogy (CIP Centre) in Serbia.

The main program, "*Program for Children and Families STRONG FROM THE START - DAM LEN PHAKA*" ("the program" hereafter) seeks to improve parental competencies and capacity to provide quality care for early childhood development, education and social inclusion of Roma children, aged 0 to 8. This program was piloted in three Roma communities in Serbia between 2012 and 2015. From 2016 to 2018, the program is pursuing an ambitious expansion model with multiple NGOs to deliver services to 15 previously unserved communities.

#### **OVERVIEW OF INTERVENTION**

CIP Centre, in cooperation with local Roma NGOs, created the program curriculum to facilitate the development of enabling and safe family settings for young children from Roma families living in informal settlements. The Program seeks to build Roma parents' skills and competencies, so they can support their children and give them the best start in life. These enhanced capacities should, in turn, improve children's development, health, and school readiness outcomes.

The program is a comprehensive curriculum for parents and caregivers in three thematic areas: *Family and Community Roles and Responsibilities for Raising Children; Child and Family Health Protection;* and *Encouraging Child Development*. There are multiple topics within each theme (20 topics total). The program hosts a series of community-based workshops for parents and children (ages 0 - 7) and provides additional home visits for parents of young children (age 0-1).

Starting in the spring of 2017, CIP Centre and Romanipen oversaw expansion of the program in 15 communities, engaging 30 families in each community (for a total of 450 families and approximately 750 children). A Roma NGO active in each community is responsible for implementing the Program, under the management of CIP Centre and Romanipen. Each NGO identified two Roma facilitators to carry out the workshops and home visits; all implementation costs were covered.

The program is implemented in two phases over an 18-month period. Phase 1 ran from March to December 2017 and consisted of approximately three to four parent workshops per month, with one month reserved for breaks (summer, holidays, etc.). Each community received a total of 28 workshops: 20 for parents and 20 for children that were held concurrently (often separate rooms in the same facility),

and 8 joint workshops that mark holidays or special events. Exact numbers of workshops varied slightly by community, particularly around the joint workshops. Phase 2 of the Program will commence in February 2018 and follow a similar cycle.

# II. RESEARCH METHODOLOGY

OSF ECP contracted R4D, in partnership with Deep Dive in Serbia and researchers from the University of Belgrade, to lead an impact evaluation of the program.<sup>1</sup> The evaluation is aligned to the phases of the Strong for the Start program, with the baseline conducted prior to Phase 1 (February – March 2017), the midline at the conclusion of Phase 1 (November 2017), and the endline at the conclusion of Phase 2 (November 2018). This section details the scope of the evaluation, including the research objectives, sample selection, survey tools, enumerator training, and timeline.

# KEY QUESTIONS AND STUDY DESIGN

In the short-term, as a result of the program, parents are expected to have increased knowledge, attitudes, and skills related to positive parenting and their ability to support their child's development. The intended long-term effect is improved child development, enhanced school readiness, and improved health outcomes.

This evaluation seeks to assess parent and child outcomes for those who participated in the program against a comparison group that did not participate. The key research questions for this evaluation are described below in Figure II.A<sup>2</sup>.

# Figure II.A. Research Questions

- 1. What are the impacts of the program on parent and child outcomes?
  - 1A. Do the program's impacts vary for specific sub-populations of interest?
- 2. What is the impact of workshop attendance on parent and child outcomes?

A quasi-experimental impact evaluation was designed to compare changes in parent and child outcomes for those who participated in the program with a comparison group that did not participate. Baseline data was collected on these outcomes and will be compared with midline data (the subject of this report; collected after the first year of program implementation) and endline data (which will be collected after the second year of program implementation). A difference-in-difference framework will be used to assess the impact of program participation. This framework combines temporal (baseline vs. follow-up) and programmatic (program vs. comparison) differences in a single model to determine if families have gained the skills and outcomes the program aims to achieve. The parent and child outcomes referred to in the

<sup>&</sup>lt;sup>1</sup> Descriptions of the evaluation partners are provided in the July 2017 Baseline Report.

<sup>&</sup>lt;sup>2</sup> The language of the Research Questions presented here is revised from the language used in the Inception and Baseline Reports. These revisions do not change the meaning, but articulate the goals of the research and the framing within this document more clearly. modified for this report for clarity

research questions include changes in parent attitudes, knowledge and behavior around parenting practices, and child school readiness, specifically socio-emotional development<sup>3</sup>.

The following sub-sections provide a high-level overview of the evaluation design. For detailed information on study design, please refer to the Inception Report submitted to OSF in December 2016.

#### Sample Selection

Thirty families with children aged zero to seven enrolled in the program in each of 15 Serbian communities in late 2016. The evaluation commenced after these families were enrolled, so the entire population of participants, rather than a random or purposive sample, was invited to participate in the evaluation. To establish a baseline, the evaluation team surveyed the parents (most commonly the mother) of these enrolled families and conducted a child assessment with children aged 3.5 to 5.9 years in late February and early March 2017. At the midline evaluation in November 2017, data collectors attempted to follow up with all parents and children that participated in baseline data collection, regardless of continued participation in the program. Note that children turning 3.5 years of age by the November 2017 midline were invited to participate in the child assessment for the first time and will also be assessed at endline.



#### Figure II.A. Map of 15 Study Cities

<sup>&</sup>lt;sup>3</sup> Socio-emotional development was selected as our primary impact measure after consultation with implementing partners around which child school readiness skills were prioritized in the program.

To establish a comparison group, the evaluation team consulted with implementing partners and used existing administrative data to identify communities with similar characteristics to those involved in the program. (See Figure II.A. for a map of the fifteen program cities). The matched comparison communities met several criteria: they had an active Roma NGO operating, were of similar size as program communities, and were geographically close to program communities (within the same city). The Roma NGO in these matched comparison communities helped researchers identify thirty families within the community using administrative data (such as age of child and mother's level of education) to increase the likelihood that they were similar to program families.



#### Figure II.B. Program and Comparison Group Sample Details

<sup>†</sup>The number of children assessed at midline is greater than the number assessed at baseline, because some children aged into the appropriate age range for child assessment

The family (parent-child pair) is the unit of analysis for the impact evaluation. In both the program and comparison groups, a survey tool was administered to the parent (most commonly the mother) and the child assessment was administered to one child per family in the specified age range (3.5 - 5.9 years).

#### **Evaluation Timeline**

The evaluation timeline corresponded with the phases of the program. The data collection for the baseline was carried out in February-March 2017, and the program commenced immediately after data collection. This first phase of the program ended in November 2017. The midline evaluation began with data collection in comparison communities and then moved to program communities once all program activities concluded for the year. The second phase of the program will run throughout 2018, with endline data collection mirroring midline data collection in November and December.

# TOOLS AND MEASURES

The assessment tools were both adapted from Save the Children's International Development and Early Learning Assessment, or IDELA. IDELA's child assessment is designed to give population-level information about children's school readiness. There is also an accompanying parent survey which was combined with additional survey instruments to form our parent survey.

#### Parent Survey Tool

The parent survey tool used in this evaluation is based on two sources: Save the Children's IDELA Caregiver Assessment and UNICEF's Multiple Indicator Cluster Surveys (MICS).

The IDELA Caregiver Assessment was used in full without any adjustment except for translation. The tool was previously used in a Bosnian evaluation and that version was easily translated to Serbian. It covers General Family Information, Early Childhood Care and Development Experience and Educational Aspirations; Home Environment and Parenting Practices; Socio-economic background; Parental Attitudes; and Disability. It was modeled after the MICS Survey.

To form the parent survey for this evaluation, the IDELA Caregiver Assessment was supplemented with sections and individual questions from the MICS5 that was led by UNICEF in 2014 in Roma Settlements in Serbia. For example, the assessment tool used questions on household member characteristics, educational attainment, child labor, child discipline, and handwashing. This tool was available in Serbian.

The CIP/Romanipen team also suggested a set of domains, topics, and indicators to inform the parent survey tool for this evaluation. Deep Dive and the CIP/Romanipen team held a series of meetings with them to identify the most

#### IDELA

The International Development and Early Learning Assessment, or IDELA, is a holistic, rigorous, open source, direct child assessment that is easily adapted and used in different national and cultural contexts. Save the Children began developing IDELA in 2011 and released the tool for public use in 2014. Since then, IDELA has been used for evaluations by Save the Children and over two dozen partner organizations in 35 countries. IDELA is also the focus of ongoing psychometric analyses with New York University's **Global TIES (Transforming Intervention** Effectiveness and Scale) for Children research center.

relevant indicators for inclusion. Domains and topics were aligned to the Program's three thematic areas: Family and Community Roles and Responsibilities for Raising Children; Child and Family Health Protection; and Encouraging Child Development. (See Appendix B. Domains and Indicators for Parent Survey).

#### Child Assessment Tool

The child assessment portion of the IDELA tool measures school readiness across four domains (Early literacy, early numeracy, socioemotional development, and fine and gross motor skills) and three learning approaches (Persistence, Motivation, and Engagement) across all four domains. This evaluation focuses on socioemotional development of the children through the parenting program, but includes measures across the other early literacy, early numeracy, and persistence, as well. Note that IDELA was not developed as an individual diagnostic and is intended to better understand school readiness of a sample rather than an individual.<sup>4</sup>

#### Adaptations to IDELA for this Evaluation

IDELA has been used all over the world and is designed to be adaptable to social and cultural norms. The version used in this evaluation was adapted from a Bosnian draft of the assessment which had already taken most local factors into account.

The following are some examples of adaptations made for the Serbian version of IDELA:

• Alphabet considerations: Serbian children are exposed to two alphabets (Cyrillic and Latin). The alphabet item included both Cyrillic and Latin alphabets. The data collection team accepted either

<sup>&</sup>lt;sup>4</sup> For more information on IDELA, see <u>Save the Children's working paper on the tool</u>.

pronunciation for characters that existed in both sets. For example, H is pronounced "en" in the Cyrillic alphabet and "aitch" in the Latin alphabet.

- **Story modifications**: The assessment includes a story about a mouse stealing a cat's hat that the Serbian and Bosnian data collection teams found to not translate clearly, so it was modified to describe a cow chasing a dog, but with similar morals and complexity of comprehension questions.
- **Puzzle demonstration**: Roma children are unlikely to be exposed to drawings or puzzles at an early age which added complexity to the IDELA item where a puzzle of a drawing of a cow is to be solved by the child. Therefore, we modified this component, so that the enumerator first worked through a puzzle of a photographed chicken together with the child, and then asked the child to replicate the task with the official IDELA image.

Other modifications were related to translation and small word changes to ensure that the tasks would be relevant to the world in which Roma children live.

# DATA COLLECTION TRAINING

The R4D team traveled to Belgrade to conduct a joint data collection training co-led with the Deep Dive team in November 2017. The enumeration team in each community included one member of the community and one experienced Deep Dive enumerator. This pairing allowed for data integrity and a relationship with the community to ensure cultural sensitivity and accurate translation of responses, if necessary. Trainees received feedback on the baseline data collection effort, were refreshed on best practices in survey methods and child assessment and role-played both the parent survey and child assessment to regain familiarity with the tools. The research team also took advantage of this visit to Serbia to interview implementing partners and visit two program sites to better understand the successes and challenges of the first year of program implementation.

# MIDLINE DATA COLLECTION

In each community, the experienced enumerator conducted the parent survey while the communitybased enumerator conducted the child assessment. For midline data collection in both program and comparison communities, all efforts were made to follow-up with the same parents who participated in the baseline data collection. Similar efforts were made to follow-up with the same children in both communities, and include those children who had aged-in (3.5 years old at midline) for the first time.

# III. Overview of Baseline Findings

In order to understand attitudes, behaviors, and skills developed by program families, we needed to compare them to similarly situated families who did not receive any intervention. Establishing a baseline allowed us to do two things: 1) compare the program and comparison groups before any intervention occurred; and 2) determine whether or not we had successfully identified similarly situated groups for comparison, given our inability to randomize participants into program and comparison group families were statistically similar to program group families on priority measures for the evaluation, and in most other descriptive data that was collected at baseline.

For more information on the Baseline, please see the Report of Baseline Findings submitted to OSF in July 2017.

# SUMMARY OF KEY BASELINE FINDINGS

Parents in Program and Comparison Groups are Sufficiently Similar on Key Measures

Baseline survey data suggested that mothers and fathers in the program and comparison groups were similarly situated across a wide range of measures, including parent demographics, attitudes, and behaviors, with some statistically significant differences (as shown Figure III.A. below).

	Characteristic with <u>no statistically significant</u> <u>difference</u> between program and comparison group	Characteristic <u>with statistically</u> <u>significant difference</u> between program and comparison group
	<ul> <li>Number of children per family, average</li> </ul>	
Family	<ul> <li>Both parents live in household</li> </ul>	
Characteristics	<ul> <li>Language spoken at home</li> </ul>	
-	<ul> <li>Child's most comfortable language</li> </ul>	
Mother	<ul> <li>Age, average years</li> </ul>	<ul> <li>Literate</li> </ul>
Profile	<ul> <li>Highest level of education completed</li> </ul>	
	<ul> <li>Age, average years</li> </ul>	<ul> <li>Literate</li> </ul>
Father Profile	<ul> <li>Highest level of education completed</li> </ul>	
	<ul> <li>Mother's plays with child</li> </ul>	<ul> <li>Child helps with family chores</li> </ul>
-	<ul> <li>Mother establishes rules and discipline</li> </ul>	
-	<ul> <li>Father helps with babysitting</li> </ul>	
Child Rearing	Father is involved in child upbringing	
-	<ul> <li>Mother/father has responsibility for making decisions about child's education</li> </ul>	
-	<ul> <li>Parent time spent per day doing chores</li> </ul>	
	<ul> <li>Mother/father contributes money to the household</li> </ul>	<ul> <li>Use or receive any kind of financial assistance</li> </ul>
Financial	<ul> <li>Mother's sources of income</li> </ul>	
-	<ul> <li>Father's sources of income</li> </ul>	

### Figure III.A. Family and Parent Characteristics

#### Children in Program and Comparison Groups are Sufficiently Similar on Key Measures

Baseline assessment data demonstrated broad similarity between the program and comparison groups on all child assessment measures. Most important, our key impact measure (socio-emotional development) was not statistically different between the program and comparison group. Children were assessed on the following measures, all of which revealed a match between children in the program and comparison groups: Socio-emotional development, early literacy, early numeracy, and persistence.

#### Child Assessment Results Suggest Appropriate Sensitivity of Tool

The IDELA tool was selected because it had previously demonstrated a degree of sensitivity necessary to detect differences in program and comparison populations over the course of just one year of intervention. While the baseline was just a moment in time, we were satisfied that the Serbian version of the tool was able to detect differences in the population being assessed: Baseline data were analyzed to investigate a statistically significant difference between performance at age cohorts across the sample. In both the program and comparison group, children clustered at 5.5 years of age outperformed children

clustered at 4.5 years and they outperformed children clustered at 3.5 years. This should not come as a surprise, but the ability of the tool to measure these differences across age cohorts gave the research team confidence that the sensitivity of the tool would not be a limitation in measuring development growth at midline and endline.

# IV. Midline Findings: Characteristics and Development of Children

# KEY FINDINGS FROM CHILD SURVEY

- Participation in the program was correlated with an additional 5 months of development beyond what would be expected without participating.
- The gains made in <u>total school readiness score</u> by children in the program group at midline were statistically significantly higher than those made by the comparison group.
- Children who participated in more than ten workshops saw statistically significant gains in school readiness, while children participating in 10 or fewer workshops did no better than those who did not enroll in the program.
- The gains made in <u>the socio-emotional sub-domain, this evaluation's primary indicator</u>, by children who participated in the program were statistically significantly higher than those who did not.
- The gains made in the sub-domains of <u>early numeracy, early literacy, and persistence</u>, by children who participated in the program were statistically significantly higher than those who did not.

This section describes characteristics and development of children over the course of the first year of participation in the program. Data presented in this section was produced using outcome data from the direct child assessment and descriptive statistics from the parent survey.

While the program targets families with children between 0 and 7 years old, the IDELA direct child assessment is designed for children ages 3.5 to 6.5 years old, so only children in that age group were assessed. At baseline, children aged 3.5-5.9 years were assessed, so that when we followed up at midline, none of the children would have aged out of the assessment. Since none of the children aged out, but some aged in, more children were assessed at midline than at baseline.

#### Figure V.A. Program and Comparison Group Sample Details

	Evaluation Phase	Program Group (N)	Comparison Group (N)	Total (N)
Parent-Child Pairs (child is 3.5-	Baseline	273	303	576
6.5 years old at evaluation and completed the IDELA)	Midline	322	352	674

# FINDINGS FROM SURVEYS AND ADMINISTRATIVE DATA

# Overall Child Profile

As was the case in the baseline, analysis showed that the 674 children in the program and comparison groups participating in the direct child assessment were similar. The average age of children in the program group was 5 years and 1 month and the average age of children in the comparison group was 5 years. The male to female ratio at midline was 50% - 50%, slightly more balanced than it was at baseline (52% to 48%).

There are some differences between the program and comparison communities, many of which were discussed in the earlier sections. For instance, enrollment in preschool or early learning programs for children aged 3.5 to 5.9 years old increased between the baseline and midline evaluations, and these differences in enrollment increased for the program group more than the control.

		Baseline		Midline		
Characteristic		Program Group (N=273)	Comparison Group (N = 303)	Program Group (N=322)	Comparison Group (N = 352)	
Child Engagement during IDELA	Composite variable (7 – 28):	16.9	17.4	19.2	19.0	
■ Age	Months:	54.9	56.2	61.0	60.1	
■ Gender	Female:	48%	47%	50%	47%	
	Male:	52%	53%	50%	53%	

### Figure V.B. Child Characteristics

Note: An asterisk (\*) indicates statistically significant difference between program and comparison group

### Attendance in Workshops

**Children from the program group also attended fewer than half of the available workshops, far fewer than anticipated.** In Phase 1 of the program, there were 20 parent workshops (and 20 concurrent children's workshops, and as many as 8 joint workshops for special events or holidays. As anticipated, children's attendance was strongly correlated with that of their parents, yet the data indicated that children average one workshop more, for a total of 12 workshops in Phase 1. This difference between the parents' average attendance (11 workshops) could just be due to inconsistent tracking. Approximately 69% of children attended 11 or more workshops, a third (33%) attended 15 or more, and only 6% attended 20 or more. Importantly, attendance is correlated with increased scores on the direct child assessment, and these findings will be discussed in the following section.

# FINDINGS FROM DIRECT CHILD ASSESSMENT

# Total IDELA Score

The gains made in <u>total school readiness score</u> by children in the program group at midline were statistically significantly higher than those made by the comparison group. Scores for both the program and comparison group increased over the course of the first year of implementation, and while this, in and of itself, is not surprising given that children's scores will normally increase as they age, what is important is that the scores of program children increased at a statistically significant higher rate than those of the comparison group. As seen in Figure V.B. and the accompanying bar graph, the program group's total IDELA scores increased from 26.2 to 34.2 (31% increase in score) whereas the comparison group's total IDELA scores increased from 24.7 to 30.6 (24% increase in score). These analyses were conducted again controlling for the following variables and still were found to be significant:

 socio-demographic differences like age, gender, mother age, mother education level, potential disability, child and home characteristics, regular meal times, years of ECEC experience.<sup>5</sup>

<sup>&</sup>lt;sup>5</sup> Factors include: child characteristics (IDELA total score in the baseline, Number of missing items in the IDELA testing in the baseline and midterm, Child age, Child gender, and Potential disability of the child), Home characteristics (Living conditions, and Safety of household), Regular time for meal, mother characteristics (age, education level, involvement in upbringing of the child, mothers has some earnings), ECEC participation (in terms of years), and participation in other ECD projects. Finally, analyses were performed to test enumerator bias, and concluded that the enumerator effect could not explain the group score differences.

 participation in preschool and other early learning programs and participation in other ECD projects (and socio-economic differences)

			Bas	eline	Midline		
	IDELA Domain	Maximum Value Possible	Program Group (N=273)	Comparison Group (N = 303)	Program Group (N = 322)	Comparison Group (N = 352)	
	<ul> <li>Socio-emotional Development</li> </ul>	17	7.51   44%	7.29   43%	9.54   56%*	8.76   52%*	
s	<ul> <li>Early Numeracy</li> </ul>	16	7.21   45%	6.49   41%	9.32   58%*	7.60   48%*	
Scores	<ul> <li>Early Literacy</li> </ul>	16	5.24   33%	4.70   29%	7.32   46%*	6.34   40%*	
	<ul> <li>Fine Motor</li> </ul>	6	2.25   38%	2.14   36%	4.24   71%*	3.91   65%*	
IDELA	<ul> <li>Gross Motor</li> </ul>	1	0.44   44%	0.40   40%	0.69   69%*	0.72   72%*	
≙	<ul> <li>Persistence (Numeracy and Literacy)</li> </ul>	6	3.51   59%	3.66   61%	3.11   52%*	2.82   47%*	
	<ul> <li>Total Score</li> </ul>	62	26.2   42%	24.7   40%	34.22   55%*	30.16   49%*	

#### Figure V.B. IDELA Scores at Baseline and Midline

Note: An asterisk (\*) indicates statistically significant difference between program and comparison group



**Participation in the program was correlated with an additional 5 months of development beyond what would be expected without participating.** As noted above, children's age is directly related to IDELA score. At baseline, and at midline, the effect of age was .75, meaning that each year is approximately equivalent to a 9-point increase in IDELA total score. However, when analyzing the score progression of the program and comparison group at midline compared to baseline, we can estimate that the impact of the program is equivalent to an additional 5 months of development. In other words, children participating in 8 months of the program gained the equivalent of 13 months of development.

Children who participated in more than ten workshops saw statistically significant gains in school readiness, while children participating in 10 or fewer workshops did no better than those who did not enroll in the program. The analysis sought to control for attendance in the program, so scores were regressed against attendance, dividing children into a high attendance group (more than 10 workshops) and a low attendance group (10 or fewer workshops). The analysis showed that higher attendance did, in

fact, have a significant impact on total IDELA score. For the program children who attended 10 or fewer workshops, there was no statistically significant difference in their total score versus the comparison group. Note that parent attendance did not have a significant effect on child development outcomes

The benefits of the program have little effect when we compare only children whose parents reported developmentally supportive activities. Of all the descriptive and behavioral characteristics we considered when investigating alternate reasons for school readiness gains, only developmentally supportive activities, or positive parenting, diminished the effect of the program. In other words, if a parent learns positive parenting skills from her own mother, a neighbor, or some other place, we would expect her child to perform as well on IDELA as a similarly situated child whose mother learned those skills through the program. This result is an encouraging reminder of why the implementing partners chose to highlight positive parenting in their workshops when the program was designed.

Some children participated in preschool in addition to the program, and those students saw additional gains beyond just preschool or the workshops. While the effect of preschool enrollment experiences was positive, the analysis showed that attendance in the program (children attending over 10 workshops) from baseline accounted for a larger impact on the IDELA total score. Roughly 4.3 points of the total IDELA score can be attributed to participation in the project, double the amount that can be attributed to participation in a preschool or other early learning program, 2.1 points. Note that these are complementary activities and children's performance on the IDELA assessment benefitted from exposure to both.

#### Social-emotional Development

The gains made in <u>the socio-emotional sub-domain, this evaluation's primary indicator</u>, by children who participated in the program were statistically significantly higher than those who did not. The analysis shows that the gains made by the program group are greater than those made by the comparison group in the socio-emotional sub-domain. The statistical significance of these findings holds even when the scores are controlled for socio-demographic differences and participation in an early learning or preschool program, or another ECD project.

Socio-emotional development was the target indicator identified since inception to demonstrate program impact. Children's scores in the program group increased approximately 27%. And while the comparison group's scores increased as well, from 7.29 to 8.76 (a 20% increase), the rate of change in the program group's scores yields a statistically significant difference in socio-emotional development.



Figure V.C. Socio-emotional IDELA Sub-scores at Baseline and Midline

Note: An asterisk (\*) indicates statistically significant difference between program and comparison group

The analysis showed that higher attendance did, in fact, have a significant impact on the socio-emotional score, just as it did on total score. Once again, for the children who participated in 10 or fewer workshops, there was no statistically significant difference in their socio-emotional score versus the comparison group. Parent attendance did not have a significant effect on child development outcomes

The same regression model described above was applied to the socio-emotional sub-domain, and it found that variables such as parent characteristics, child characteristics, home characteristics and participation in preschool or other early learning programs did not have an effect on outcomes.

#### Numeracy, Literacy, and Persistence<sup>6</sup>

The gains made in the sub-domains of <u>early numeracy, early literacy, and persistence</u>, by children in the program group at midline were statistically significantly higher than those made by the comparison group. The analysis shows that the gains made by the program group are greater than those made by the comparison group in all three of the sub-domains tested (early numeracy, early literacy, and persistence). See Figure V.D. for the change in these remaining IDELA sub-scores from baseline to midline.

<sup>&</sup>lt;sup>6</sup> The standard IDELA tool also includes fine and gross motor skills. We dropped fine motor from modified assessment, and did not include gross motor results here, as that analysis was deprioritized by the study team.



#### Figure V.D. Remaining IDELA Sub-scores at Baseline and Midline

For each sub-domain except persistence, higher attendance did, in fact, have a significant impact on the sub-domain score. For the children who participated in 10 or fewer workshops, there was no statistically significant difference in their sub-domain score versus the comparison group. As discussed further in the section below, parent attendance did not have a significant effect on child development outcomes.

The same regression model described above was applied to the socio-emotional sub-domain, and it found that variables such as parent characteristics, child characteristics, home characteristics and participation in preschool or other early learning programs did not have an effect on child outcomes.

# v. Midline Findings: Characteristics and Changing Knowledge, Attitudes, and Behaviors of Parents

#### KEY FINDINGS FROM PARENT SURVEY

- Parents attitudes about some parenting practices and their own parenting skills improved over the course of the program.
- On average, parents attended fewer than half of the available program workshops.
- Program parents were less likely to report using developmentally supportive activities after one year in the program.
- Parents decreased their use of negative discipline techniques (e.g. hitting, spanking, and criticizing) after one year in the program.

This section includes findings on the parent knowledge, attitudes, and behaviors captured in the midline survey. The majority of parents and caregivers who were administered the baseline survey were also administered the midline survey: 879 parents took part in the baseline survey (430 program and 449 comparison group) and 834 took part in the midline survey (402 program and 432 comparison group). The high follow-up rate ensured that many of the household and person-level characteristics (e.g. level of

education, literacy, etc.) remained the same from the baseline to the midline survey. There are important differences, however, in parents' attitudes and practice and these are described below.

#### Attendance in Workshops

**On average, parents attended fewer than half of the available program workshops.** In Phase 1, there were 20 parent workshops (and 20 concurrent children's workshops), and as many as 8 joint workshops for special events or holidays. However, on average, parents only attended 11 workshops. Just over a quarter (28%) attended 15 or more workshops, and only 5.7% attended 20 or more. Workshop attendance was evaluated against program impact in some of the regression analyses conducted and will be described later.

**Parent attendance in workshops did not have a significant effect on child outcomes.** When parent attendance was control for in child development analysis, we see no significant change in outcomes. In the previous section, we learned that child attendance *does* have a significant effect on their own outcomes, but critically, parent workshops do not necessarily correlate with great child development. Information from implementing partners suggests some parents send their children to the child workshops and decline to attend the parenting workshops which helps us understand the discrepancy in parent and child attendance rates for the same family.

#### Participation in Early Childhood Care and Development

**Enrollment in preschool programs or other early learning programs for children aged 3.5 to 6 years old increased for both the program and comparison groups.** At baseline, only 16% of children in the program group were enrolled in such a program and enrollment doubled by midline to 32.1% The comparison group had better participation at both points, 19.8% at baseline and 33.8% at midline, however, this is also a notable increase.

Not only did enrollment increase, but it appears that some of these children now access these services in a different setting. At baseline, program group children were almost exclusively enrolled in a public kindergarten (95.7%) but dropped to 81.4% at midline, whereas more children from the comparison group enrolled in this setting, from 82% to 86.3%. Enrollment in school-based programs increased for both groups since baseline, for program children from 2.9% to 13.2% and for comparison group children from 0% to 8.2%. Approximately 17% of comparison group children attended a Roma NGO-provided community kindergarten at baseline, but 0% reported doing so at midline. Parents in both groups rate the opportunity to learn something and prepare for primary school as factors in their decision to enroll their child in these services.

Seemingly in step with increased participation in early childhood programs is the decrease in hours the mother spends with the child each day. For a subset of parents (for whom data is available), the number of hours spent with children dropped from 4.31 and 2.97 for the program group (N = 211) and from 5.03 to 2.48 for the comparison group (N = 317)

As in the baseline, the majority of families not enrolling a child in a preschool or other early learning opportunity cite that children could be cared for by another family member, other common reasons for non-enrollment include the costs of such programs (fees, transport, food, clothes, etc.) or that the kindergarten cannot accept the child.

**Parents' aspirations for their child's education were unchanged after one year in the program**. Approximately 91% of the program group expect primary school completion versus 83.5% of the comparison group, and 53.7% expect secondary school completion versus 43.5% of the comparison group.

		Baseline		Midline	
Characteristic		Program Group (N=430)	Comparison Group (N = 449)	Program Group (N= 402)	Comparison Group (N = 432)
<ul> <li>Enrollment in preschool or other early learning program (3.5 year &lt; child &lt; 5.9 year)</li> </ul>	Currently enrolled:	16.0%	19.8%	32.1%	33.8%
<ul> <li>Type of kindergarten or PPP</li> </ul>	Public kindergarten: School-based: Roma NGO kindergarten <sup>†</sup> : Other:	N = 69 95.7%* 2.9% 1.4%* 0%	N = 89 82%* 0% 16.9%* .6%	N=129 81.4% 13.2% 0.8% 4.7%	N=146 86.3% 8.2% 0% 5.5%
<ul> <li>Reason for sending child to preschool (Participants could select more than one)</li> </ul>	Child gets food to eat: Child is kept occupied and out of mischief: Child learns something: Child learns to sit and listen: Child gets prepared for primary school: Neighborhood children go to the center: Child likes to go to the center:	N = 69 27.1% 11.6% 82.6% 42.0%* 47.8% 14.5% 13.0%	N = 89 20.2% 10.1% 79.9% 27.0%* 32.6% 19.1% 23.6% 7.0%	N = 129 16.3%* 3.9% 69.8% 35.7% 62.8% 19.4% 22.5%	N = 125 6.4%* 10.4% 62.4% 37.6% 50.4% 24.8% 31.2% 7.2%
<ul> <li>Parents tried to enroll the child in an ECEC program, but is not attending</li> </ul>	Other: Tried to enroll but not successful:	14.5% 11.2%*	7.9% 3.3%*	10.1% 7.9%*	7.2%       4.5%*
	Child will not learn anything important:	N = 349 .9%	N = 343 0%	N=234 0.4%	N=264 0.4%
	The child is disabled	0%	.6%	0.0%	0.8%
	The quality of the kindergarten is low (class size, school conditions, staff)	.6%	.3%	0.0%	0.8%
<ul> <li>Reason for non- enrollment in preschool or other early learning</li> </ul>	The child will be treated badly (ethnicity, language concerns, etc.)	1.4%	.9%	0.4%	0.4%
program (Participants could select	A family member could take care of the child	57.1%*	67.1%*	57.3%*	67.0%*
more than one)	Could not be enrolled in the kindergarten because both parents are unemployed	1.1%	1.2%	3.0%	2.7%
	Kindergarten cannot accept the child for some other reason	6.3%	3.8%	15.8%*	8.7%*
	Kindergarten fee is too expensive	19.9%	19.5%	22.6%*	13.6%*

#### Figure IV.A. Child Early Learning Experience

		Other costs (transport., food, clothes) are too expensive	8.8%	6.1%	2.6%*	6.8%*
		It's too far; no organized transport	14.8%*	8.5%*	6.8%	8.3%
		Other	28.1%	23.9%	22.6%	26.1%
Edu. Aspr.	<ul> <li>Expect child to completeeducation level in the future</li> </ul>	Not sure if child will complete primary school: Complete primary school: Complete secondary school:	9.8%* 90.3%* 53.3%*	14.5%* 85.5%* 43.0%*	9.0%* 91%* 53.7%*	16.4%* 83.5%* 43.5%*

Note: An asterisk (\*) indicates statistically significant difference between program and comparison group <sup>†</sup>Implementing partners expressed confusion regarding the baseline result, as the Roma NGOs do not provide kindergarten to their knowledge. At midline, the number of responses drops to the expected level, and this option will be removed at endline.

#### Home Environment / Parenting Practices

As in the baseline evaluation, the parent assessment asked about the home environment, including the availability of child-friendly books and toys, and as well as parents' use of developmentally supportive practices and disciplinary techniques.

In the home environment, both the program and comparison group report greater numbers of children's books at midline, which is expected as families were given a children's book for participating in the baseline and midline.<sup>7</sup> However, both program and comparison group parents report having slightly fewer coloring books or various children's toys at midline than they did at baseline.

**Program parents were less likely to report using developmentally supportive activities after one year in the program.** This surprising finding is a bit difficult to understand, but the data clearly show an increase in use of developmentally supportive activities for the comparison group and a decrease for the program group. To assess the extent of developmentally supportive activities, parents were asked if they engaged in 10 different activities with their children, such as reading books, singing songs, going outside, teaching the child something new, showing affection, and so forth. Critically, the parents in the program group



<sup>&</sup>lt;sup>7</sup> Families were given a children's book for participating in the baseline and midline which could be a reason for reporting more books.

report engaging in fewer developmentally supportive activities with their children, dropping from 5.73 to 5.35. At baseline, parents in the program group reported statistically significantly more activities than the comparison group (5.73 vs. 4.67) and they continued to engage in more at midline (5.35 vs. 4.81), but the difference between the two narrowed.

While it is surprising to see the overall number of engagement activities decrease, especially in the program group, it does appear that some of the mothers' participation has been offset by the fathers'. For a subset of program group parents (baseline N = 241, midline N = 211), mothers report engaging in 6.1 activities at midline down from 6.84 at baseline, and fathers report engaging in 3.44 activities at midline, up from 2.84 at baseline. While the net effect seems somewhat negative, this could be a positive impact in terms of paternal engagement that should be explored more.

**Parents decreased their use of negative discipline techniques (e.g. hitting, spanking, and criticizing) after one year in the program.** At baseline, the program group reported more frequently using harsh disciplinary techniques than the comparison group, however, at midline, this relationship has reversed. The program group lowered its use of negative discipline techniques, from 1.5 to 1.05 techniques. The comparison group's use remained fairly constant, from 1.23 to 1.21 techniques.



Mothers remain the primary disciplinarians and a subset of program parents (baseline N = 241, midline N = 211) reported that mothers used 1.57 disciplinary techniques at baseline compared with 1.1 at midline. Fathers in the program group remained steady using approximately .53 techniques. The difference between mothers and fathers may be related to the fact that mother spends significantly more time with the child than the father. More detail is provided in Figure IV.B.

			Base	eline	Midline	
	Characteristic		Program Group (N=430)	Comparison Group (N = 449)	Program Group (N= 402)	Comparison Group (N = 432)
als and hings	<ul> <li>Reading materials in the home</li> </ul>	Story/picture books for young children: Coloring books:	46.1%* 52.6%*	23.8%* 37.2%*	53.7% 41.2%*	51% 34.1%*
Materials and Playthings	<ul> <li>Child-friendly playthings</li> </ul>	No. kinds of children's toys in home Composite variable: <sup>8</sup>	5.84*	5.04*	5.26	4.94
		Read books or look at pictures books:	39.3%*	16.7%*	30.2%	24.9%
		Tell stories to the child:	60.5%*	43.9%*	46.7%	43.4%
		Sing songs to/with the child, incl. Iullabies:	67.2%*	48.8%*	48.4%	48.6%
		Take the child outside the home (i.e. to the market, to visit relatives)	81.4%*	73.1%*	74.4%	72.4%
		Play simple games:	68.6%*	59.0%*	62.8%	57.0%
vities	<ul> <li>Family member engaged in supportive activities with child</li> </ul>	Name objects or draw things:	40.7%	34.5%	62.8%	57.0%
Supportive Activities		Show or teach something new (i.e. teach a new word, how to do something):	45.6%*	36.5%*	42.3%	34.1%
Idns		Teach alphabet or encourage letter awareness:	28.4%*	20.7%*	30.0%*	23.4%*
		Play a counting game or teach numbers:	47.2%	43.4%	42.3%	40.1%
		Hug or show affection:	93.7%*	90.0%*	87.2%	89.3%
	<ul> <li>Number of</li> </ul>	All caregivers:	5.73*	4.67*	5.35	4.81
	developmentally supportive	Mother:	6.50*	5.33*	6.10	5.77
	activities the child is involved with caregivers (min=0 and max=10)	Father:	2.74	2.42	3.74	3.25
	<ul> <li>Family member engaged in</li> </ul>	Spank child for misbehaving:	57.7%*	48.6%*	40.2%	44.5%
S	disciplinary activities with child	Hit child for misbehaving:	19.1%*	5.6%*	5.3%	6.5%
_ viti		Criticize or yell at child:	73.3%	68.6%	59.5%*	69.9%*
Acti	<ul> <li>No. different disciplining</li> </ul>	All caregivers:	1.50*	1.23*	1.05	1.21
Disciplinary Activities	techniques (Spanking, Hitting and Criticizing) (min=0 and max=3)	Mother: Father:	1.39* 0.45	1.15* 0.39	1.10 .53	1.23 .57
	<ul> <li>In order to bring up, raise, or educate a child properly, the child needs to be physically punished</li> <li>n asterisk (*) indicates statistically</li> </ul>	Yes:	34.0%*	21.4%*	25.6%	23.8%

# Figure IV.B. Home Environment and Parenting Practices

<sup>&</sup>lt;sup>8</sup> Includes Homemade and purchased toys, objects found outside, drawing or writing materials, puzzles, sports toys, etc.

#### Parent Attitudes

Parents in the baseline and midline surveys were asked whether they agree or disagree with nine statements about their parenting and its impact on child development. Responses were collected in a Likert scale and each statement valued between zero and four points. A detailed list of findings from baseline and midline can be found in Figure IV.C.

Parents attitudes about some parenting practices and their own parenting skills improved over the course of the program. Program parents reported greater satisfaction in their relationship with their child and greater confidence in their parenting than the comparison group, something that was not the case at baseline. Program parents were more skeptical of the benefits of games at baseline, but more open to the idea at endline. Similarly, a statistically significant difference emerged at midline on program parents' knowledge about their agency in their child's development at home and on the importance of reading and writing. Note that there was no difference between the program and comparison groups on the composite indicator of parent attitudes.

			Baseline		Midline	
	Characteristic		Program Group (N=430)	Comparison Group (N = 449)	Program Group (N= 402)	Comparison Group (N = 432)
		I play an important role in my child's learning and development:	3.46*	3.28*	3.45*	3.29*
		Knowing how to read and write is important for my child to have a				
		good/productive life:	3.57	3.52	3.64*	3.54*
		I will encourage my child to complete at least secondary school:	3.38	3.44	3.46	3.39
	<ul> <li>Attitudes towards parenting (Strongly agree = 4pts.; Strongly disagree = 1pt.)</li> </ul>	I think I can support my child's educational development at home:	3.12	3.19	3.16*	2.95*
itudes		I think my child can learn a lot of skills by playing games:	3.23*	3.31*	3.29*	3.12*
Parental Attitudes		I find ways to talk with or engage my child in games while I am doing my daily work:	3.37	3.35	3.34*	3.18*
Pare		I think praising children whenever	5.57	5.55	5.54	5.10
_		he/she tries to do something new is				
		important:	3.46	3.43	3.43*	3.30*
		I think I'm raising my children properly:	3.45	3.40	3.41*	3.30*
		I'm satisfied with the relationship I have with my children:	3.43	3.42	3.43*	3.31*
-	<ul> <li>Attitudes towards parenting, composite</li> </ul>	Composite score of parental attitudes and beliefs (min 9, max 36):	30.68	30.22	30.61	29.39

#### Figure IV.C. Parent Attitudes

Note: An asterisk (\*) indicates statistically significant difference between program and comparison group

#### **Disability Awareness**

**Parents reported fewer known or suspected disabilities after participating in the program.** Parents in the program group reported fewer known or suspected disabilities among their children, potentially suggesting that they became more familiar with the wide range of normal growth and development patterns. While the sample size is very small, only 17 children at baseline and 9 at midline for the program group, parents increasingly suspected the disability was cognitive or physical. Parents in the comparison group reported the same incidence levels over the interval. Figure IV.D. details the disability awareness findings from baseline and midline.

			Ba	seline	Midline	
	Characteristic		Program Group (N=430)	Comparison Group (N = 449)	Program Group (N= 402)	Comparison Group (N = 432)
	<ul> <li>Child known or suspected to have a disability:</li> </ul>	Yes:	4.0%	4.0%	2.1%	4.0%
ility		Communication/language: Cognitive:	N= 17 35.3% 5.9%	N = 18 22.2% 9.0%	N=9 33.3% 22.2%	N=18 38.9% 5.6%
Disability	<ul> <li>Type of disability (Participants could)</li> </ul>	Sensory integration/attention:	17.6%	11.1%	0.0%	5.6%
	select more than	Physical:	23.5%	27.8%	55.6%	22.2%
	one)	Visual:	11.8%	5.6%	0.0%	16.7%
		Auditory:	5.9%	16.7%	0.0%	22.2%
		Other:	23.5%	27.8%	11.1%	16.7%

#### Figure IV.D. Disability Awareness

Note: An asterisk (\*) indicates statistically significant difference between program and comparison group

#### **Health Practices**

Statistically significant differences in health practices between the program and comparison groups observed at baseline disappeared at midline. The program group reports that fewer children at midline have toothbrushes or know appropriate handwashing, whereas the comparison groups report increases since baseline. While other data is needed, this could further suggest that there are other interventions operating in the program and comparison communities. See Figure IV.E. for more detail on Health Practices at baseline and midline.

#### **Figure IV.E. Health Practices**

	Baseline		Midline			
	Characteristic		Program Group (N=430)	Comparison Group (N = 449)	Program Group (N= 402)	Comparison Group (N = 432)
	<ul> <li>Child has their own toothbrush</li> </ul>	Yes:	74.0%*	63.3%*	70.5%	69.9%
Health	<ul> <li>Child knows to wash hands after coming from outside and before a meal</li> </ul>	Yes:	84.2%*	76.4%*	73.7%	76.8%

Note: An asterisk (\*) indicates statistically significant difference between program and comparison group

#### Nutrition

**Behavior around nutrition changed very little after one year in the program.** We see very little change in behavior across the nutrition dimensions for the program group while the comparison group saw a significant decrease in set meal times from March to November 2017. The comparison group reported little change in 2017 on sharing meal time or providing candy and snacks to children. Figure IV.F. reports changes in family nutrition from baseline to midline.

			Baseline		Midline	
	Cł	naracteristic	Program Group (N=430)	Comparison Group (N = 449)	Program Group (N= 402)	Comparison Group (N = 432)
Nutrition	•	Family members eat one or more meal together per day	84.4%	81.5%	82.1%	81.0%
	•	Set meal times for child's breakfast, lunch, and dinner	54.4%*	65.0%*	55.3%	47.0%
Z	•	Candy and snacks allowed whenever available	76.0%*	82.4%*	79.4%*	84.7%*

#### Figure IV.F. Family Nutrition

Note: An asterisk (\*) indicates statistically significant difference between program and comparison group

#### Reflections on Participation in Projects Related to Early Childhood Development

Few parents participated in additional Early Childhood Development (ECD) programs, but those who did found them very useful. Only about one in eight program participants was also registered in another program. On average, those parents reported that a) those activities led them to think about parenting in new ways, b) that they learned how to be better parents, and c) that they were easily able to apply what they learned to their own parenting. Findings from the comparison group were similar, but only two percent of comparison group members participated in ECD programs, so the numbers are not significant. It seems parents who seek out additional ECD programming overwhelmingly find it to be useful.

#### VI. Discussion

#### IMPACT OF THE PROGRAM ON CHILD DEVELOPMENT

#### **Overview of Findings**

The midline evaluation demonstrated a statistically significant correlation between participation in the program and improved child development overall. The same held true within sub-domains of the child assessment tool, including socio-emotional development, our primary indicator since the beginning of this evaluation. These gains were demonstrated to be statistically significant even when controlling for other variables, such as age of child, education level of the mother, and many others.

#### Making Sense of the Data

Overall, the child assessment provided a positive picture of progress for those children who participated in the program in 2017. However, it is not possible to confirm that the increase in child school readiness was *caused* by participation in the program. Our strongest argument that participation in the program caused gains in child school readiness is that those with high attendance rates saw significant gains while those with low attendance rates saw gains akin to the comparison group. The analysis that follows provides some caution, including potential explanations for correlation that would not rise to the level of causation. It is difficult to determine if participants benefit from the program directly or the overall engagement with the Roma NGO that results from participation in the program. For mothers and children alike, participation in workshops then engender a habit of visiting the local Roma NGO and build trust between the family and staff. Simply being around Roma NGOs more often may increase the families access to resources, such as referrals to preschool programs that help build child school readiness. Child participation in the program appeared to have greater impact outcomes than parent participation, which could suggest that children benefit from activities peripherally connected to the program, such as the chance to play with educational toys and books or more frequent interaction with mixed age groups at the Roma NGO.

Furthermore, it is likely that enrollment in an ECE program would contribute to greater school readiness, and participation in the program is correlated with ECE enrollment. An interaction effect could exist whereby we see greater increases as a result of both programs. Additional analyses could be conducted to provide more information on this relationship and it should also be revisited in the endline evaluation.

# IMPACT OF THE PROGRAM ON PARENT KNOWLEDGE, ATTITUDES, AND BEHAVIOR

### Overview of Findings

The overall impact of the program on parent knowledge, attitudes, and behaviors is inconclusive at this point. While there were some positives, namely that program parents significantly reduced their use of negative disciplinary techniques, the vast majority of parenting outcomes showed no impact or negative impact. While these were not our primary indicators, the inability to detect impact invites further exploration of the way workshops are presented to parents.

### Making Sense of the Data

This section looks behind the numbers to begin exploring why the data might not show impact on parent knowledge, behavior and attitudes, and why the correlation is negative in one instance. It is not uncommon for impact evaluations to show no impact, even when program staff are working hard to deliver the curriculum. Changes in attitudes and behaviors are difficult to achieve, particularly in weekly sessions over the course of less than a year.

What is a bit more surprising, is that program participation is correlated with *fewer* developmentally supportive activities and that those program participants remained neutral in their parental supportive capabilities, there are some hypotheses to explain these responses. These include:

- Parents might have reported commitment to developmentally supportive activities at baseline, but reported few of these activities after learning fully what these activities entail.
- Parents felt that by attending program workshops with their children they didn't need to directly engage in as many supportive activities, feeling that children were already receiving the benefit. Similarly, children are now attending preschool more, so maybe parents get less time with their child as a result of participation in the program.
- Fathers engaged more with children as a result of increased knowledge from the program and their participation in supportive activities offset the mothers' just enough to be lower across all caregivers. There is some evidence to support this and more attention should be paid to it in the next phase.
- Use of developmentally supportive relationships is tied to the quality of implementation of the program in each region/settlement. There is some evidence to suggest the settlements with poor outcomes align with those that faced implementation challenges and more attention should be

paid to it in the next phase. We do not have a large enough survey to calculate correlation between quality of implementation and parent outcomes, but we encourage further exploration.

Separately, gains seen in the comparison group on these metrics are surprising. The fact that the comparison group increased their supportive activities raises questions about the services or information they may be receiving. In addition to increased supportive activities, the comparison group also reported more child support or financial assistance, greater access to dental hygiene, and most notably, enrollment in ECEC services, where parents could also be receiving supportive and developmental messages. Despite all these positive trends, parents in the comparison group reported less confidence in their ability to support their child's development. This evaluation tracks a large number of indicators, so this could just be noise in the data, but these changes are worth further exploration, as well.

#### LIMITATIONS OF RESEARCH

Every program evaluation has limitations, and this section seeks to present some of the key limitations to our research design.

### Quasi-Experimental Design

The findings presented in this report are encouraging for program scale up, but they are limited by the inability to randomly assign study participants to the program and comparison group. Ideally, the evaluation would have begun before families enrolled in the program, so that we could encourage implementing partners to recruit 60 families at each program site. This would have allowed for a random selection of 30 families for the funded slots available and then we could follow up with the 30 families that did not participate in the program as a true comparison.

We are satisfied with the matched comparison that we were able to achieve for two primary reasons:

- Baseline data gave us confidence that program and comparison families were statistically similar on all primary indicators and the vast majority of secondary indicators. Further, deep engagement with Roma leaders in Serbia to identify similarly situated communities gives us confidence that comparison families experience a culturally and geographically similar environment to their program group counterparts.
- 2. Including families in comparison communities that are physically separate from the program communities provides protection against spillover effects. Had we randomized 60 members of the same very small community, we would have run a greater risk of introducing spillover effects into our comparison sample.

# Data Collection Team from Community

Early in the design of this study, an important decision was made to include members of the program and comparison communities in the research team. Community members are not fully independent enumerators and may introduce bias in survey respondents' answers. For example, a mother might be encouraged to report culturally appropriate answers rather than truthful answers if she is speaking with someone she knows rather than a researcher whom she does not expect to ever see again. Similarly, the child assessment requires some interpretation from the assessor, and an assessor from the community may be inclined to give the child a higher score if they know the child.

We are satisfied with inclusion of community members on the data collection team for two primary reasons:

- Community members give us access to communities that are highly skeptical of researchers. R4D is committed to ethical, quality research, and we were warned early that the Roma community has decades of negative experiences with researchers and their findings. Including community members in our team helped gain trust, and also helped R4D and Deep Dive develop tools that were culturally sensitive and appropriate.
- 2. Enumerators were trained at both baseline and midline, and those trainings included discussions of research ethics and role playing around how to address the concerns raised here. Enumerators were able to practice building rapport and encouraging truthful responses from parents, and accurately scoring children on the child assessment.

#### IMPLICATIONS FOR PROGRAM IMPLEMENTATION

This section reflects on learnings from the data presented above and learnings from light qualitative work done at midline, to provide a series of recommendations and considerations for the second year of implementation.

# Learnings from the Quantitative Data

This section seeks to summarize what we can and cannot say about the program given the evidence presented here, and to provide recommendations for consideration as implementation continues.

**Correlation between program participation and child school readiness gains suggest the program should not be altered dramatically.** It is important to note that correlation does not equate to causation (i.e. we cannot conclusively say that program participation *caused* higher child school readiness outcomes) and the limitations of the study described above mean that we cannot extrapolate too far, but these midline results are certainly encouraging.

**Program designers might consider renewed emphasis on developmentally supportive activities in year two.** The evidence presents a negative correlation between program participation and reporting use of developmentally supportive activities. This statistically significant finding suggests program designers should revisit curricula specific to developmentally supportive activities and solicit feedback on those workshops from facilitators. It is important to note that there could be alternative explanations for this finding. For example, parents might have reported commitment to developmentally supportive activities at baseline, but reported few of these activities after learning fully what these activities entail. We encourage designers to at least take a look at this component of the intervention.

# Learnings from the Field

In addition to the quantitative data collection and analysis presented in this report, the research team conducted qualitative interviews with program designers and implementers. The following findings and recommendations come from these interviews.

**Program participants displayed strengthened mother-child relationships and were engaged, happy participants.** Program designers described happy, joyful scenes as they traveled the country to monitor program implementation. In particular, program designers observed positive relationships developing between mother and child, but also mother-to-mother, and child-to-child as a result of their time spent

together. Program designers also noted a "sense of belonging" among participants in all sites which truly gets to the heart of the goals of the intervention.

Some facilitators lacked the pedagogical skills to manage large age ranges in workshops. Workshops were designed to limit participation to specific age cohorts, but in reality, babies cannot be left unattended, and older siblings want to see what the program is all about. Thus, facilitators often found themselves leading a room that included participants for whom the workshop was not designed. Similarly, some workshops are designed for parents without children (or where children are meant to be in an adjacent room), but space and childcare limitations meant children were present even for a workshop designed for adults.

Additional monitoring resources may be necessary to maintain fidelity across program sites. Discussions at the national and local level suggest that implementation of the workshops was not consistent across communities. Eager program facilitators created new activities beyond those that were not included in the workshop while others might have simplified a workshop by dropping certain components. Interview respondents mentioned other inherently variable traits of facilitators, such as age, experience, extroversion, and ability to keep participants engaged. Our dataset does not include these process questions, but the reporting from partners combined with the high degree of variation in quantitative results across program sites suggests that while learning is happening, it looks quite different across the country. We encourage funders and implementing partners to consider additional time and resources for monitoring, and perhaps refresher training, of community-based program implementers.

The research team encourages implementing partners to review the evidence generated from this midline evaluation to inform the second year of implementation. It is our understanding that the design of year two is still underway, and we encourage implementing partners to consider the findings here in that design. Respondents at the national and local level indicated a willingness to use these findings to prioritize or refine workshops moving forward. While this might affect our endline results (as discussed in the following section), we encourage partners to include this information in the design.

#### **IMPLICATIONS FOR THE ENDLINE**

Learnings from the baseline and midline will be shared with implementers ahead of Year 2 of the program. The research team believes in using evidence generated from reports to improve program implementation, but this can complicate analysis at endline. In part, the endline will be a measure of the impact of the changes made based on midline findings on program delivery rather than a clean follow-up measuring the impact of two years of the same intervention. The evaluation team has discussed these implications with OSF and implementing partners and all parties agreed that using evidence from the midline to improve program delivery is worth any potential bias it introduces to the endline results. The research team will transparently describe the programmatic changes that were made for Year 2 in the endline report.

### APPENDIX A – MIDLINE FIELD WORK REPORT Drafted by Deep Dive Data Collection Team

Length of fieldwork: November 13. – December 10.2017.

30 settlements have been visited, 15 program beneficiaries within two weeks and 15 comparison settlements, also within two weeks, with the difference that we have now started with comparison settlements, because they still held workshops in the beneficiary settlements.

36 enumerators have been engaged in the project, one enumerators wasn't in the country during the fieldwork, she was replaced by one of the enumerators who was working on the project and was engaged in one of the beneficiary settlement. Also we included only two new interviewers, who, without any problems, fit in and work in the field, of course with the help of interviewers from the pair. 28 enumerators who are the representatives of the communities – settlements and 8 Deep Dive enumerators. All enumerators were overwhelmed with the experience from the past wave and eagerly waited for the start of the new one.

The fieldwork went without any major problems, the interviewers were now returning to the houses they were already in, and people remembered and gladly accepted to do the survey. The research that was conducted confirmed that preparations made by associates from Roma organizations and their activists were really done in the best possible way, and it was half of the job done. The frequent comments from the field from enumerators were that gifts that we left in the First wave (book), meant a lot to the children, because they showed it during second contact, and they were barely waiting to meet them again. Also, the impression is that now parents have given much more honest answers, because they already knew the enumerators and knew for what reason they came.

The difficulties that they now encountered were a power failure in some settlements, or its complete absence in those few weeks, so the work was limited for up to 15 hours while there was daylight (Novi Sad-Rit). We also had an epidemic of the measles in the settlements in Valjevo, which affected the number of respondents. But mainly the reason for the fewer surveys were that the families have moved abroad, for example, in a settlement in Kragujevac, where we had as many as 8 families who had moved.

### <u>The beneficiary settlements were visited in the third and fourth week of the fieldwork, in the period</u> <u>from November 27. – December 10.2017.</u>

#### 1. Belgrade - Zvezdara- Mali Mokri Lug - Mirjevo - Orlovsko

The enumerators had been announced in advance, they were well received, without encountering any difficulties.

#### First wave: 18 IDELA and 30 parent questionnaires have been administered.

**Midline:** 17 IDELA (with children who were interviewed in first wave) and 5 more IDELA (with children who have grown to do IDELA in the midline), in total 22 IDELA.

29 parents questionnaires, from that two surveys were done with grandmas instead of mothers, for justified reasons (moving abroad and mother at the hospital). One family moved abroad.

### 2. Zabalj- Curug/ Plekano selo/ Ciganski sor

There haven't been any problems, nor difficulties encountered during fieldwork.

First wave: 18 IDELA and 29 parent questionnaires have been administered

**Midline:** 18 IDELA and 27 parent questionnaires have been administered. Two families were temporarily away and could not be reached during the whole fieldwork.

#### 3. Kostolac- Didino naselje/ Koliste/ Kanal (4 families)

There haven't been any problems, nor difficulties encountered during fieldwork.

*First wave* :18 IDELA and 30 parent questionnaires have been administered.

**Midline:** 23 IDELA and 30 parent questionnaires have been administered (including children who have grown to do IDELA)

#### 4. Bor

First wave: 18 IDELA and 26 parent questionnaires have been administered.

Midline: 20 IDELA and 24 parent questionnaires have been administered. Two families have moved away.

#### 5. Lebane- Jablanicka Street

*First wave:* 9 IDELA and 28 parent questionnaires have been administered.

**Midline:** 16 IDELA and 25 parent questionnaires have been administered. Two families were temporarily moved abroad, and we have one child in foster family. As many as 7 children have reached the right age for IDELA. One of the new enumerators were from this settlement.

#### 6. Valjevo Koceljeva - Draginje and Brdarica

*First wave:* 24 IDELA and 30 parent questionnaires have been administered.

**Midline:** 21 IDELA and 22 parent questionnaires have been administered. Five of the children who worked IDELA in the first round were infected with the measles and until the end of the field, it wasn't possible to conduct an interview with them. The three families, who also worked in the first round, have moved abroad. But as a result, as many as five children grew up in this wave for right age for IDELA.

#### 7. Vranje – Gornja carsija

First wave: 21 IDELA and 30 parent questionnaires have been administered.

**Midline:** 22 IDELA and 28 parent questionnaires have been administered. Two families moved abroad, both children and parents were involved in the research. But we have three children who have reached the right age for IDELA.

#### 8. Kragujevac - Kolonija, Mala Vaga and Bagremar

*First wave:* 18 IDELA and 30 parent questionnaires have been administered.

**Midline:** 17 IDELA and 25 parent questionnaires have been administered. Regarding the territory of Kragujevac, they had a total of 5 unsuccessful contacts, all because of the departure of families abroad, as well as one refused to do the survey.

#### 9. Novi Becej - Cere

First wave: 13 IDELA and 30 parent questionnaires have been administered.

**Midline:** 16 IDELA and 30 parent questionnaires have been administered. All the children who participated in the first wave, worked IDELA in midline, and we have three children, who in the meantime stood for IDELA. Only one parent was replaced with child grandmother, because mother, who is currently abroad.

### 10. Valjevo- Gornja Grabovica

*First wave*: 17 IDELA and 24 parent questionnaires have been administered.

**Midline:** 24 IDELA and 24 parent questionnaires have been administered. Seven children who have reached the right age for IDELA, one refused to cooperate. All the children who did IDELA in the first round, have been interviewed now.

### 11. Pirot- Rasadnik

Fieldwork has been completed without any problems. The visits were well organized and announced in advance.

*First wave*: 20 IDELA and 30 parent questionnaires have been administered.

**Midline:** 24 IDELA and 30 parent questionnaires have been administered. All the children who did IDELA in the first round, have been interviewed in the midline and 4 who were younger in the first wave.

#### 12. Novi Sad- Rit

*First wave*: 17 IDELA and 27 parent questionnaires have been administered.

**Midline:** 19 IDELA and 24 parent questionnaires have been administered. The settlement has a problem with electricity, so a certain number of families have been temporarily relocated to us at an unknown location

#### 13. Smederevska Palanka - Karadjordjevo naselje, Karadjordjeva Street, Kolonija

First wave: 15 IDELA and 26 parent questionnaires have been administered.

**Midline:** 21 IDELA and 26 parent questionnaires have been administered. One family moved to the other part of the city, but they were located and a survey was made with them. We have six more children who have reached the right age for IDELA.

#### 14. Surdulica- Novo naselje / Donja romska mahala

*First wave*: 21 IDELA and 30 parent questionnaires have been administered.

**Midline:** 26 IDELA and 29 parent questionnaires have been administered. One child who did IDELA in first wave and lived with his grandmother, now he moved abroad with his mother. Six new children, who have reached the right age.

### 15. Krusevac - Marko Orlovic

The fieldwork was well organized and announced in advance. Most of the children were of the appropriate age for the questionnaire.

*First wave*: 26 IDELA and 30 parent questionnaires have been administered.

**Midline:** 28 IDELA and 29 parent questionnaires have been administered. One chiled went broad to live with his father, and thre more children who have reached the right age for IDELA.

A total of 402 parent and 317 IDELA questionnaires were administered in the beneficiary settlements.

# <u>The comparison settlements were visited in first and secound week of the fieldwork, in the period from November 13. – November 27.2017.</u>

The enumerators from these settlements also did their best and announced our arrival, which significantly affected the performance and efficiency. They have been prepared and well organized.

### 1. Beograd - Rakovica and Deponija

*First wave*: 18 IDELA and 30 parent questionnaires have been administered.

**Midline:** 23 IDELA and 30 parent questionnaires have been administered. All the children who did IDELA in the first round, have been interviewed in the midline and 5 who were younger in the first wave.

# 2. Zabalj - Djurdjevo/ Zemun/ Bozej

First wave: 22 IDELA and 30 parent questionnaires have been administered.

**Midline:** 25 IDELA and 29 parent questionnaires have been administered. In one family we have a survey done with a grandmother instead of a mother, who left home. And one where the mother and the child left home and we do not know the new address. We have now four children, who were too young in the first wave, but in the mean time they grew older.

#### 3. Kostolac - Kanal

*First wave*: 14 IDELA and 30 parent questionnaires have been administered.

**Midline:** 18 IDELA and 28 parent questionnaires have been administered. Two families moved abroad, and three kids who grew up to do an IDELA.

#### 4. Bor

Organized and announced. The settlement is close to the mine excavations and it is an extremely poor area.

*First wave*: 24 IDELA and 30 parent questionnaires have been administered.

**Midline:** 24 IDELA and 27 parent questionnaires have been administered. Three families moved to Germany, a survey was conducted with a new child (right age for IDELA) and one child who worked in the first wave refused to work now.

#### 5. Lebane- Bojnik

The visits were well organized and announced in advance. No difficulties have been encountered. Increased number of IDELA's, because six children in the meantime grew up.

*First wave*: 19 IDELA and 30 parent questionnaires have been administered.

Midline: 25 IDELA and 30 parent questionnaires have been administered.

#### 6. Valjevo Koceljeva- Koceljeva / Ub/ Valjevo

3 settlements have been visited - Koceljeva, Ub and the town of Valjevo. Thanks to great effort made by the enumerators from Valjevo, additional families have been contacted and included in the research.

*First wave*: 16 IDELA and 30 parent questionnaires have been administered.

**Midline:** 13 IDELA and 26 parent questionnaires have been administered. Two families moved, to an unknown address. One child had major problems to do a survey for hearing and speech problems and gave up.

#### 7. Vranje – Saraina/ Raska

An extremely poor area.

*First wave*: 24 IDELA and 30 parent questionnaires have been administered.

Midline: 28 IDELA and 30 parent questionnaires have been administered.

#### 8. Kragujevac- Palilile/ Licika/ Bresnica

*First wave*: 20 IDELA and 30 parent questionnaires have been administered.

Midline: 24 IDELA and 27 parent questionnaires have been administered.

#### 9. Novi Becej- Novo Milesevo/ Karlova/ Beodra

Visits were well organized and announced in advance. No difficulties have been encountered.

*First wave*: 13 IDELA and 30 parent questionnaires have been administered.

**Midline:** 18 IDELA and 30 parent questionnaires have been administered. All the children who did IDELA in the first round, have been interviewed in the midline and 5 who were younger in the first wave.

#### 10. Valjevo- Lajkovac/ Dubrava

*First wave*: 24 IDELA and 30 parent questionnaires have been administered.

**Midline:** 25 IDELA and 29 parent questionnaires have been administered. One familie moved abroad. Two children grew up for an IDELA.

#### 11. Pirot- Berilovac / Izvor/ Poljska Rzana

Visits were well organized and announced in advance.

*First wave*: 19 IDELA and 29 parent questionnaires have been administered.

**Midline:** 23 IDELA and 29 parent questionnaires have been administered. In two families the mother left home and a survey was done with grandmas, who take care of the child. One family moved to the city, located and made a survey. The four children who were too young in the first wave, now they did IDELA.

#### 12. Novi Sad - Banglades / Sangaj/

*First wave*: 27 IDELA and 30 parent questionnaires have been administered.

**Midline:** 25 IDELA and 27 parent questionnaires have been administered. In one family we have a survey done with a grandmother instead of a mother, who is temporarily abroad. Ona family moved out, and we have two rejections.

#### 13. Smederevska Palanka - Krivak

Visits were well organized and announced in advance.

*First wave*: 22 IDELA and 30 parent questionnaires have been administered.

Midline: 29 IDELA and 30 parent questionnaires have been administered.

#### 14. Surdulica- Prekodolce / Binovce

*First wave*: 18 IDELA and 30 parent questionnaires have been administered.

**Midline:** 19 IDELA and 30 parent questionnaires have been administered. One child grew up for an IDELA, a very poor environment, a common case that the entire family lives in only one room or in temporary shack made of tin.

#### 15. Krusevac- Kraljevo

No difficulties have been encountered during fieldwork. Visits were well organized and announced in advance.

First wave: 21 IDELA and 30 parent questionnaires have been administered.

Midline: 30 IDELA and 30 parent questionnaires have been administered.

#### A total of 432 parent and 349 IDELA questionnaires were administered in the comparison settlements.

APPENDIX B: Domains and Indicators for Parent Survey					
Knowledge	Indicators (based on program targets)				
<ul> <li>Knowledge on child rights</li> </ul>	70% of parents has been informed on the Children's rights convention and they are able to list and describe at least two rights that are violated in their environments.				
<ul> <li>Awareness of obligation for mandatory preschool program, responsibility of parents to enroll and take care of regular attendance</li> </ul>	70% of parents describe their role / responsibility in the process of inclusion of children in the education system depending on the age (pre-school, primary school, secondary school).				
<ul> <li>How to combat stereotypes, prejudice and discrimination</li> </ul>	Secondary reports of use of services (see also, behaviour) and self-report of knowledge Know/ cite where they can turn for help in the local community if their children are discriminated against or were victims of violence.				
<ul> <li>Hand hygiene</li> </ul>	100% of parents can list at least one of the hygiene practices that their child conducts/respects				
Psychosocial Wellbeing	Indicators (based on program targets)				
<ul> <li>Self esteem</li> </ul>	Modified, adapted Rosenberg self-esteem scale (self- esteem of parents increased				
<ul> <li>Self-concept</li> </ul>	90% of parents enlist three characteristics that they praise of themselves, what they gained through the program and what are they particularly proud of				
<ul> <li>Managing stress</li> </ul>	70% of parents enlist one activity they do regularly to relax when feel stressed				
<ul> <li>Involvement in adult education</li> </ul>	20-30% of parents who are not functionally literate are involved in the adult education;				
Skills	Indicators (based on program targets)				
<ul> <li>Know how to prepare healthy meals for children and babies</li> </ul>	Parents can describe a healthy meal and the differences between a healthy and an unhealthy meal				
<ul> <li>How to stimulate psychosocial development</li> </ul>	Observations during workshops [Comment on posters of psychomotor development, discuss what they are familiar with, what is new, and how they stimulate their children; answering question (using cards)]				
Behavior	Indicators (based on program targets)				
<ul> <li>Parents have actively created healthy settings for children and babies</li> </ul>	Observed behavior in visits or self-report In 70% of families, children do not stay in the room / house without supervision of adults				
<ul> <li>Parents have created a safe environment for children and babies</li> </ul>	Observed outcome of behavior (e.g. clean homes and yards, toys in home) or self-report In 70% of households, secondary raw materials, tools, etc. are removed from the courtyard where children use to play In 70% of households, items dangerous for children (detergents, chemicals, medicines) were removed or were not accessible to children				

# APPENDIX B: Domains and Indicators for Parent Survey

	In 70% of households the place for hand washing is provided (sink with running water, or improvised place with stored water)
<ul> <li>Parents have created and are practicing a set of positive practices and regular rhythm of meals and bedtime for child</li> </ul>	Children in the family have a regular rhythm for meals The family has at least one meal together (children and adults) during the day Both parents read / tell stories to children before bedtime and help one another to prepare younger children for bed. Parent kisses each child before sleeping
<ul> <li>Parents are preparing healthy meals for children and babies</li> </ul>	Observed behavior during visits or self-report In 70% of households, children get fruits / vegetables each day
	70% of family is planning meals for children for the next day
<ul> <li>Parents treat their children as individuals</li> </ul>	60% of parents are able to describe situations where parents listen to their children and allow them to say their opinions, decide on matters that are important to them (play, peers)
	Parents can describe how similar/different parents and their children are; how similar siblings are; how each of their child is unique
<ul> <li>Parents create and enforce appropriate</li> </ul>	70% of parents can enlist at least 3 alternative ways of
rules and boundaries, accepting positive	behaviour that can be expressed instead of punishment.
parenting approach and setting rules	60% of parents has established new rules regarding
with children instead of punishment	sanctioning children's inappropriate behaviour. Monitoring implementation and consistency.
<ul> <li>Parents practice playing and reading to</li> </ul>	70% of mothers / fathers of one family share their
their children as discussed in workshops	experiences from the workshops – they know how to describe the activities form the workshops, they exchange information I conduct the given tasks; They play with their
	children;
<ul> <li>Parents enroll their children in school as</li> </ul>	Enrolment (from administrative records)