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1. INTRODUCTION

Children’s development is significantly attributed to their experiences at home, from birth through the early years of schooling, and responsive caregiving from early on has a significant impact on later learning outcomes. Interventions aimed at increasing parental engagement in children’s early learning can be expensive, however, and there is limited evidence as to what works best for parenting programs in low- and middle-income countries. This report presents the findings from a parent engagement pilot intervention conducted by the Tayari program in three counties in Kenya that tested two methods of providing parents with home-based responsive play activities to promote children’s holistic development.

2. LITERATURE REVIEW

The first five years of a child’s life are a particularly important time, representing a critical period for physical-motor, cognitive-language and social-emotional development (Heckman & Mosso, 2014). A wide body of research suggests that the quality of parent-child interactions during this time is strongly associated with long term gains in the development of emergent reading skills including oral language development, vocabulary, and letter-word knowledge (Weber et al, 2014; Senechal, 2006), as well as emotional regulation skills (Chazan-Cohen et al. 2009). Findings on the effectiveness of parenting programs in Ethiopia and Jordan showed that flexibly scheduled parenting programs significantly increase caregivers’ knowledge of child development and activity engagement (Al-Hassan and Lansford, 2011) and improved children’s learning and development across emergent literacy and math domains (Borisova et al., 2017). A study examining the impact of more costly parent engagement interventions in Jamaica (Gertler et al., 2013) found that 19 and 20 years later, children of mothers receiving training on stimulating and responsive play achieved higher levels of educational attainment and earned more money than comparison groups.

Benefits of access to high quality early childhood programming and the increasing returns on early childhood education investment been well documented (Piper et al., 2018; Heckman and Mosso, 2014). Parental involvement, loosely explained as parental participation in the educational process of their children (Jeynes, 2005), is a crucial element of early childhood education (Harris, 2018; Kurtulmus, 2016). Coupling school-based and home-based interventions produced sustained effects in terms of school attainment, higher primary school grades and vocabulary scores, more favorable attitudes towards school, and better family and social adjustment than ones that did not involve parents (Harris 2018; Anderson et al 2003; Kagitcibasi et al 2001). In Turkey, a study on the long-term effects of implementing an early intervention among low-income mothers and their children found greatest gains from interventions that combined a parent-focused and school-based intervention (Kagitcibasi et al 2001). In Malawi, the incorporation of a parent support treatment condition into a quality of instruction/teacher training focused intervention led to increased play-based interactions by primary caregivers (.29 SD) and had significant positive effects on five-year-olds’ language acquisition (.18 SD) and social-emotional measures (.25 SD) over the primary treatment arm involving only the training of pre-primary teachers without parent support sessions (Ozler et al. 2016).

In this regard, concerted efforts have been put in place by various governments to encourage parents to be involved in their child’s education. In Kenya, parents have been encouraged to come together and build classes, employ casual teachers and support the
general running of the school. Parents have been given a chance to form Parents-Teachers Associations (PTAs) and have been offered slots in School Management Boards (Twaweza, 2016). However, there has not been any explicit programming to directly involve parents in the education of young children. It is in this respect that this study strives to identify efficient ways to engage parents and caregivers in the education of their children.

In Uganda, a study by Twaweza (2016) showed that parents with children of school-going age exhibited a wide variation in their level of involvement in their children’s education. An exploratory case study of primary schooling in Ghana found that while parents and community elders value education and demonstrate this by sending their children to school, their support to children’s learning is often only financial, with teachers noting that parents did not recognize the impact of the home environment on academic outcomes (Donkor et al 2010). Still, an examination of one intervention arm in an RCT conducted in South Africa showed that poverty did not have an impact on parent’s attendance at group sessions and that children from overcrowded households were slightly more likely to attend these sessions, suggesting that parent engagement is feasible in low-income settings (Shenderovich et al 2018).

While home-based parental programs have proven to be particularly effective in improving later learning outcomes (Gertler et al., 2014; Attansio et al 2014), and parental involvement is encouraged by governments, these approaches are often expensive and in many countries practitioners of parent engagement programs must weigh such effectiveness against the cost, capacity and resources available to them. A comparison of findings on center-based and home-based interventions, which are typically less expensive and easier to scale (Al-Hassan and Lansford, 2011) produced mixed results. A meta-analysis of studies by Blok et al (2005) suggests that center-based and combined center-and home-based child-focused interventions have a significantly higher effect on cognitive outcomes. However, Engle’s review of interventions in LMICs found that while eight center-based parenting programs recorded substantial effects on children’s cognitive development, so did four home-based programs (Engle et al. 2007). No significant difference in social-emotional performance or overall school readiness was found between a low-cost ten session family program and one year of traditional pre-primary schooling in Ethiopia (Borisova et al 2017), suggesting that the quality of content delivery may matter as much or more than the mode of delivery.

Research has explored the characteristics of high-quality, effective parent engagement programs. Critical components noted multiple times in the existing literature include involving both caretakers and their children (Chang et al. 2015, Senechal 2006) and providing hands-on activities for parents coupled with demonstrations (Engle et al 2011). Play and reading are the most common and most impactful low-cost activities utilized in these programs to enhance parent-child interactions (Maulik and Darmstadt 2009). In Kenya, the distribution of illustrated storybooks to families increased the probability that a caregiver has “read” to his or her young child by more than 20 percentage points, with significantly larger treatment effects on reading frequency among children of illiterate caregivers. (Ozier 2018) Additional booster trainings and text message reminders in Kenya had marginal impact on caregiver behavior, suggesting that providing a simple training and materials may be more cost-effective. (Ozier 2018)

Building from this evidence on the role of parents in early childhood education and incorporating the aforementioned best practices for cost-effective parent engagement, the Tayari Program in Kenya piloted a program targeting the parents of 1,267 children in Pre-Primary (PP)1 and PP2 classes in ten schools over five weeks. A description of the Tayari Program as well as an outline of the parenting pilot intervention is outlined in the next section.
3. BACKGROUND

3.1 Tayari

Tayari was a four-year pilot project initiated by the Ministry of Education, together with four county governments in Kenya, with funding from Children Investment Fund Foundation (CIFF) and technical support from Research Triangle Institute (RTI) International. “Tayari” is a Swahili word that loosely translated means “ready”. The project, which began in 2014 and ended in 2019, aimed to provide a tested, scalable and cost-effective model of ECD that would ensure that children are ready for primary school.

A longitudinal Randomized Control Trial (RCT) testing the effectiveness of various project interventions ran concurrently in the four counties implementing Tayari: one treatment group received teacher training and coaching; a second treatment group received teacher training, coaching and instructional materials; and a third treatment group received low-cost health interventions in addition to teacher training, coaching and instructional materials.

In emphasizing school readiness skills including literacy, numeracy and socio-emotional skills, the project complemented the main RCT design with several small research studies to inform best practices for the provision of high-quality early education. The pilot parent intervention presented in this report is one such study.

3.2 Tayari Parent Engagement Pilot Intervention

The purpose of this pilot was to test two different approaches to engage parents in play-based activities at home to promote the child’s holistic development. The pilot would also be helpful to determine the feasibility of Tayari adding a parent engagement activity to its core model. This activity targeted parents of children in Tayari-supported PP1 and PP2 classes in 10 sample schools (details of the sampling framework are provided in the Methodology section).

The sample was divided into two treatment arms of five schools each. Both treatment arms received the same four activities with instruction cards and low-cost materials. An SMS response system was used for data collection with both groups. The delivery mechanism differed between the two treatment groups, with activity packs (a sheet describing the game and an envelope containing the corresponding material) given directly to parents in Treatment group 1 (T1) at weekly meetings alongside training and demonstration while the same activity packs were sent home from school weekly with the children of parents in Treatment group 2 (T2). Through this comparison, and a broader examination of both approaches, this pilot seeks to answer the following research questions:

1. Is this approach to low-cost parent engagement programming feasible in the Kenyan context?
2. Which delivery method is more effective in engaging parents in their children’s learning and development at home?

4. METHODOLOGY

4.1 Sampling Framework

Three counties, Uasin Gishu, Laikipia and Nairobi, were purposively selected to take part in the intervention. The fourth county where Tayari was being implemented, Siaya, was not
included, to avoid contamination with the many other NGO actors implementing community-based programs there. Ten centers were selected as follows. The sample comprised of 2 schools from each cluster. Laikipia and Uasin Gishu counties contributed 4 schools each to the sample, two in the urban and two in the rural cluster respectively. Nairobi APBET contributed 2 schools to the sample. The 10 sampled centers were split equally into two treatment groups for comparison purposes. Table 4-1 shows the two treatment group samples.

Table 4-1. Pilot Intervention School Sample by Treatment Group

<table>
<thead>
<tr>
<th>Treatment Group</th>
<th>Category</th>
<th>County</th>
<th>School</th>
<th>Total learners</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment 1 (meetings)</td>
<td>Urban</td>
<td>Uasin Gishu</td>
<td>Munyaka</td>
<td>150</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Starehe</td>
<td>194</td>
</tr>
<tr>
<td></td>
<td>Rural</td>
<td>Uasin Gishu</td>
<td>Kilima</td>
<td>132</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Laikipia</td>
<td>94</td>
</tr>
<tr>
<td></td>
<td>APBET</td>
<td>Nairobi</td>
<td>Keds Care</td>
<td>80</td>
</tr>
<tr>
<td>Treatment 2 (take-home)</td>
<td>Urban</td>
<td>Uasin Gishu</td>
<td>Uasin Gishu</td>
<td>90</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Laikipia</td>
<td>91 Municipality</td>
</tr>
<tr>
<td></td>
<td>Rural</td>
<td>Uasin Gishu</td>
<td>Natwana</td>
<td>166</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Laikipia</td>
<td>North Tetu</td>
</tr>
<tr>
<td></td>
<td>APBET</td>
<td>Nairobi</td>
<td>Mabe</td>
<td>86</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td>1,267</td>
</tr>
</tbody>
</table>

4.2 Research Design

Parents in T1 were engaged in a kick-off meeting at the start of the pilot, a conclusion meeting at the end, and four weekly meetings during the pilot, in which they brought their children to the Tayari classroom. The day of the week and time of the meeting was set in consultation with parents at each school, according to what was most convenient for them. Meetings were held every week for four weeks and parents were trained on weekly educational material packs developed by Tayari. After each meeting, they were given pictorial instructions on the activities and the material packs for that week (4 activity packets total).

Parents in T2 were reached only through pictorial instructions and material packs sent home with children from school. T2 received the same activities as T1. Parents in T2 attended the same kick-off and conclusion meetings held for parents in T1, but they did not attend weekly meetings.

4.3 Duration and Schedule of Activities

The pilot intervention was conducted during Term 3 of the 2018 school year and ran for five weeks, after an initial training of facilitators. Facilitators for each session included 1 Tayari staff and 1 DICECE officer or ECD Coordinator. Table 4-2 shows the schedule of sessions by week for parents in T1.
Kick-off Meeting

The kick-off meetings were held at all schools in the first week of implementation. Parents in T2 were informed of the purpose of the intervention and to expect materials to be sent home with their child on a weekly basis. Parents in T1 also agreed on days and times for their weekly meetings and stayed for the first week’s activity demonstration. 

Parent Meetings (Treatment 1 only)

Weekly meetings for T1 parents generally lasted 1 to 1.5 hours and included a demonstration of using the take home activity by a trained meeting facilitator. At each meeting, parents were welcomed, there was a review and feedback on the activities from the week before, and then a new activity was introduced. Parents then had the opportunity to practice the new activity in pairs or small groups before the end of the meeting.

Conclusion Meeting

At the end of the pilot, all schools held conclusion meetings to gather feedback on parents’ experiences. Informal interview and anecdotal data were also compiled at these meetings through facilitator reports.

<table>
<thead>
<tr>
<th>Table 4-2. Timeline of Activities for T1: Parent Meetings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 1</td>
</tr>
<tr>
<td>24-Sep</td>
</tr>
<tr>
<td>Kick off Meeting</td>
</tr>
<tr>
<td>Parent Meeting 1: Read Aloud</td>
</tr>
<tr>
<td>Parent Meeting 2: Number Game</td>
</tr>
<tr>
<td>Parent Meeting 3: Letter Hunt</td>
</tr>
<tr>
<td>Parent Meeting 4: Memory Game</td>
</tr>
<tr>
<td>Conclusion Meeting</td>
</tr>
</tbody>
</table>

4.4 Description of Activities and Materials

The main principle guiding the development of the four activities was that parents can be effective in supporting their children’s learning and development if provided fun and easy activities to build into daily routines. The content of the activities aligned with Tayari curricular content and support to promote early numeracy, literacy, and executive function skills. When appropriate, activities also provided ways to extend or modify the activities to meet the needs of all children. A description of each activity can be found below. The activity sheets that were distributed to parents of both treatment groups can also be found in Annex A.

Activity 1: Read Aloud

Each parent was provided a Kiswahili book (a Tusome leveled reader) and instructed on how to engage children in read aloud activities at home. This activity targeted oral language development and book appreciation.
Activity 2: Counting Game
Using number cards and bottle top counters (provided in a small envelope), parents were instructed on how to play a counting game with their children. Similar to a common Tayari math activity which promotes number sense, parents (or children) flip a number card at random and work with their child to count bottle caps to match the number. Extension activities included flipping two cards at once and working on producing the sum or difference with counters.

Activity 3: Alphabet Hunt
Using the same book provided in Activity 1, parents were provided with an Alphabet Wheel for children to practice hunting for letters on pages of the storybook. This activity promotes letter recognition, a critical early literacy skill. Parents were also encouraged to extend this activity beyond the storybook, and to look for and identify letters elsewhere within their environment.

Activity 4: Memory Game
Using the laminated picture cards (6 pairs of animals), parents were instructed on how to play a memory game with their children, targeting working memory, a critical executive function skill. First parents and children place all of the cards face down, then take turns flipping two cards to find a matching pair. If they match, the player keeps the cards. If they don’t match, they play flips them back over in the same spot. The game is over when all pairs have been matched.

4.5 Cost
The direct service-related costs were estimated between 348 and 437 Kshs ($3.45 to $4.32 USD) per child for the four-week program. Direct service-related costs are defined as those that were specifically related to the implementation of the intervention (as opposed to costs incurring as part of the general operation of Tayari, the larger program within which this pilot was conducted). Direct service-related costs included printing materials, stationery, trainings, and consultant fees for illustration services, among others. We were not able to determine the difference in cost between the two treatment groups because the parent meetings were facilitated by Tayari staff as part of routine visits to schools and their time for the meetings was not tracked separately. There were no additional direct service costs for the parent meetings in T1. Meetings were held in schools which were free to use so there was no cost of the venue, and no refreshments or travel stipends were provided to parents or DICECEs.

5. DATA COLLECTION METHODS
Data on parent attendance, use of activities, and satisfaction were collected three ways, though Gooseberry (SMS platform), registration records at the conclusion and kick-off meetings, and informal interviews at the conclusion meeting.

5.1 Gooseberry
Gooseberry is a platform that sends multiple SMS prompts to a pre-loaded list of phone numbers and stores responses to each SMS in a cloud-based database. Parents registered
their SMS number at the kick-off meeting and were given an option to receive messaging in English or Kiswahili.

A simple set of questions, listed in Annex B, were sent to parents at the end of each week, after they had received and had sufficient time to try out the activity with their child. These questions included the frequency with which parents used the activity with their children and their level of satisfaction with the activity. Similar questions were sent to parents in both groups, with one difference: instead of asking parents in T2 if they attended the weekly session, the Gooseberry platform asked whether they had received the activity sheet and materials for that week (which should have been brought home to them by the child). Trigger Messages to initiate the weekly survey were sent to the parents of both treatment groups at the same time. Parents who did not respond to the message were sent a reminder the following day.

5.2 Attendance

Attendance data was collected through registration forms at both the kick-off and conclusion meetings for both treatment groups. Attendance was also taken at the weekly meetings for T1 through report forms submitted weekly by facilitators.

5.3 Interviews

Program facilitators (Tayari staff and DICECEs) collected feedback from informal interviews during both weekly meeting (for T1 only) and conclusion meetings (for both groups). This feedback was typically captured in their weekly reports or shared with Tayari staff during frequent check-ins. This feedback helped to gauge parent interest and provided a deeper understanding of the quantitative findings.

6. VARIABLES OF INTEREST

In order to answer our second research question on which method was more effective in engaging parents in their child’s learning at home, data were analyzed to address the following three criteria: Attendance/Receipt of Materials, Frequency of Use, and Satisfaction.

- **Attendance**: For T1, parent attendance was determined by registration at the kick-off (week 1) and conclusion (week 5) meetings as well as at each of four weekly meetings in between where parents received training, the activity sheet and corresponding materials. For T2, parent attendance was determined by registration at the kick-off and conclusion meetings only.

- **Frequency of Use**: For both treatment groups, the uptake of learning materials provided through the pilot intervention was measured with an SMS question sent every week to parents’ registered mobile phones asking them “How often did you do the activity this week?” Parents could respond by typing an open number response (1, 2, 3, 4, 5…) which indicated the number of times.

- **Parent Satisfaction**: Parents’ satisfaction with the activity and materials was measured individually by activity through a weekly SMS message asking them to rate their satisfaction with that week’s activity on a scale from 1 (low) to 5 (high).
Table 6-1 (below) shows the number of parents, by treatment group, who responded to SMS survey questions asking how often they used the activities at home (frequency) and how much they liked them (satisfaction). While some parents did not respond to SMS prompts every week, a robustness analysis shows this did not lead to any response bias, with very little difference (less than 5%) in school distributions and frequency and satisfaction ratings between the full data set and a comparison data set of only those parents who responded all four weeks. Therefore, we find this sample to be sufficient to draw conclusions about the feasibility of this approach to parent engagement and to compare the frequency and satisfaction ratings from parents in the two treatment groups.

Table 6-1. SMS Response Sample

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment 1</td>
<td>179</td>
</tr>
<tr>
<td>Treatment 2</td>
<td>232</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>411</strong></td>
</tr>
</tbody>
</table>

7. FINDINGS

7.1 Attendance

Figure 7-1 (below) shows the average attendance rates for kick-off and conclusion meetings across schools in each treatment group. Attendance rates at each school were calculated using the number of parents documented in meeting registers as a percentage of the expected number of participants for each school.

Figure 7-1. Attendance rates (%) by treatment group at kick-off and conclusion meetings

![Attendance Rates Chart]

Attendance at weekly meetings stayed relatively steady throughout the four weeks, with a slight dip in attendance among female and male participants towards the third weekly meeting, as shown in Figure 7-2. At the fourth weekly meeting (when activity #4 was distributed) average attendance was 95% of attendance at the initial kick off meeting,
suggesting overall a low level of parent attrition from the program. Reports from weekly parent meetings show that when attendance did decrease, parents were asked to remind their neighbors to come to the next meeting. Two main reasons parents gave for skipping meetings was that they couldn’t get away from work and that other parents came late previously, meaning the meeting took longer than they wished.

**Figure 7-2. T1 total attendance at weekly meetings, M/F**

![Graph showing attendance at weekly meetings](image)

### 7.2 Frequency of Use

Overall, most parents surveyed reported moderate to frequent use of the activities: over four-fifths of parents (83%) used the activities with their children an average of 3 or more times in the week; and over one-third (37%) used the activities with their children an average of five or more times per week (Table 7-1).

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Treatment Group 1</th>
<th>Treatment Group 2</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-2 times per week</td>
<td>6.3%</td>
<td>27%</td>
<td>16.3%</td>
</tr>
<tr>
<td>3-4 times per week</td>
<td>43.7%</td>
<td>49%</td>
<td>46.3%</td>
</tr>
<tr>
<td>5+ times per week</td>
<td>50%</td>
<td>24%</td>
<td>37.4%</td>
</tr>
</tbody>
</table>

**Figure 7-3** (below) compares the average number of times parents in the two treatment groups reported using the activities with their children each week. Within treatment groups, activity use is consistent from one week to the next. There does not appear to be one activity that was used more by parents in both groups over the others. Parents in T1 (weekly meetings) used the activities, on average, 0.5 to 1.3 times more each week than parents in T2 (materials sent home from school).

**Figure 7-3. Average Frequency of Activity Use**
7.2.1 Program Cost per Frequency of Use
We further analyzed the average direct service cost of 391 Kshs per child by the frequency activities were used. We found that for T1, in which parents were using the activities an average of 4.5 times per week, the unit cost came to 87 KShs (about $0.85 US) per child per use. For T2, in which parents were using the activities an average of 3.6 times per week, the unit cost came to 109 KShs (about $1.08 US) per child per use.

7.3 Parent Satisfaction
Parents in both treatment groups reported overwhelmingly high rates of satisfaction with the activities, with one parent noting during the conclusion meeting that the activities “helped me to engage in my child’s schooling without fear.” Nearly three-quarters (72%) of parents said they were, on average, very satisfied with the activities and 43% of parents ranked all four activities a “5” on a scale of one to five (Table 7-2).

Table 7-2. High Satisfaction Rating from Parents; by Treatment Group

<table>
<thead>
<tr>
<th>Treatment Group</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment 1</td>
<td>80%</td>
</tr>
<tr>
<td>Treatment 2</td>
<td>63%</td>
</tr>
<tr>
<td>Overall</td>
<td>72%</td>
</tr>
</tbody>
</table>

Unsurprisingly, and as Figure 7-4 (below) illustrates, higher satisfaction ratings by parents were associated with higher frequency of use, with the majority of parents using the materials often and rating them highly.
Figure 7-4. Distribution of Parents by Average Satisfaction and Frequency

No one activity appears to have been favored by parents over the others, while parents in Treatment group 1 responded with slightly higher mean satisfaction rates than Treatment group 2 parents (Figure 7-5).

Figure 7-5. Average Satisfaction Rating by Parents

During conclusion meetings, parents at a majority of schools reported that the read-aloud activity was the most impactful. In fact, in several schools, parents noted they had bought storybooks for their children since the pilot started. Parents also reported that children responded very positively to competition within the games, whether it was making all the matches in the memory game activity or earning all the ticks in the letter hunt. Still, other parents complained that the repetitive nature of the activities was boring and that they took too long (reports note most activities took ~20 minutes). Some parents who didn’t have time to complete the activities with their children delegated the task to older siblings.
8. LIMITATIONS

Some limitations of this pilot intervention include its duration, cost comparisons, and use of self-reporting. The pilot ran for five weeks, with activities distributed for four, making it impossible to tell if parents' attendance at weekly meetings, satisfaction with materials, or use of the activities might drop off over a longer period. Because this pilot was implemented as a complement to a larger program, it also was not possible to discern the costs of either approach as a stand-alone activity. Lastly, asking parents to self-report the frequency with which they used activities raises concerns around reporting bias. To mitigate this risk, we used SMS reporting which likely gave parents a greater feeling of anonymity than an in-person survey would.

9. DISCUSSION AND CONCLUSION

Research Question 1: Is this low-cost approach to engaging pre-primary parents feasible in the Kenyan context?

This approach can be considered feasible in terms of uptake, consistent frequency of use by parents, and parent satisfaction with meetings and materials. Parents in both treatment groups reported high rates of satisfaction with the activities and reported using them frequently enough (3 to 4 times per week on average) that the intervention would likely enhance young children's exposure to pre-literacy and pre-numeracy skills through play. The PP1 and PP2 curriculum supported by Tayari would be reinforced at home in a low-cost way, helping children to enter primary school better prepared.

Attendance at kick-off meetings for both treatment groups was high (68% in T1 and 80% in T2) and parent attendance at weekly meetings in T1 remained at 95% throughout the pilot. This suggests that once we get parents "in the door", they continue to participate in the program. Attendance at the conclusion meeting was much lower, potentially because they saw no clear benefit to attending, thus some kind of incentive (such as more learning materials) may have realized higher attendance at the conclusion meeting.

On average, five times as many females as males participated in the parent engagement pilot intervention. While this is not an irregular trend in Kenya, increased efforts to engage fathers could be incorporated in the design of any scale up of the program.

RQ2: What delivery method is more effective in engaging parents in their child’s learning and development at home?

While parents in both treatment groups used and liked the activities, weekly frequency and satisfaction ratings were consistently higher in T1, with T1 parents using materials 0.5 to 1.3 more times per week than parents in T2. Both frequency and satisfaction rates fluctuated slightly from week to week, but in terms of fade-out there was no steady decrease in parents’ use of or satisfaction with the activities over the life of the pilot.

In conclusion, both approaches to parent engagement were successful in terms of parental participation, uptake and satisfaction, and both delivery methods proved effective. Parents in T1 did appear to get more satisfaction out of the activities and used them more frequently with their children than parents in T2. It is possible that the meetings helped guide parents who would otherwise struggle to use the activities with their children: during
weekly meetings on the letter hunt activity, some parents asked for help as they didn’t know the name and sound of letters; and at weekly meetings on the read aloud activity, illiterate parents were guided to tell the story using the pictures. Additionally, parents said they enjoyed the weekly meetings as an opportunity to meet one another. While it’s not clear what the difference in spending would be between the approaches, both delivery methods are relatively low-cost. If the finances and organizational structures are available to hold weekly parent meetings, using the delivery method employed with T1 would be more beneficial to increasing parents’ proactive engagement with their children.
REFERENCES


Appendix A: Activity Sheets

Read aloud

**What you need**

- [Image of a reading material]

**Why it’s important**

- Builds foundational skills that children need to become successful readers. Skills include improving speech, learning of new words and identification of pictures, letters and words.
- Spending time reading together builds a bond between parents and children.
- Promotes a love for books and reading.

**Tips**

- Read aloud with expression and interest.
- Ask questions about the story: What do you think is happening here? Why do you think that happened?
- Guide your child to make predictions: What do you think will happen next?
- Talk to your child about the story: That was a funny story, my favorite part was when....what was your favorite part?
- Talk about new words, pictures, or characters.
- Read it again! Create a special time of the day and make reading to your child a daily routine.
Counting Game

What you need

Why it’s important

- Number sense is fundamental for learning formal math concepts in the later grades. Children can learn a lot about mathematical concepts through play and everyday routines.

How to play:
1. Put the cards facing down in no particular order.
2. Ask your child to flip the top card on the pile and count the same number of counters as the number on the card.
3. Repeat using all the cards

Extension: Have child pull two cards and use the counters to produce the sum of both numbers.
**Letter Hunt**

**What you need**

- A pencil
- A wheel with letters of the alphabet

**Why it’s important**

- Being able to identify and name letters is the first step in learning how to read.

**Target Skills:**

Target Skill: Letter recognition: knowing the name of letters in the alphabet and recognizing them in print.

**How to play:**

Using the storybook, Fisi Mjinga na Chura na Kiboko, have your child try to find each letter on the alphabet wheel. Use a pencil to tick the letters that have been found.

For example, choose any page of the book. Ask your child if she can find the letter M on the page. If she points at the correct letter, tick it with a pencil on the alphabet wheel.

**Extension:** Observe which letters are particularly tricky for your child to identify or name. Focus on hunting for those letters in other types of print (newspapers, magazines, signs, food labels, etc.).
Memory Game

What you need

- Dog
- Elephant
- Duck

Why it’s important

- Working memory is the ability to hold onto information and use it in some way.
- Working memory is responsible for many of the skills children use to learn.

How to play:
1. Shuffle the memory cards and place them face down on the floor.
2. The youngest player takes the first turn flipping any two cards over.
3. If the cards match, the player keeps the cards and takes another turn. If the cards do not match, those cards are turned face down again (in the same position) and it becomes the next player's turn. The trick is to remember which cards are where!
4. The goal is to collect the most matching pairs.

Extension: Encourage siblings to join the game!
Appendix B: SMS questions sent to parents via Gooseberry

The questions sent to the parents via SMS platform were:

**Treatment 1**
1. Did you attend the meeting this week? *Response options: Y/N (Y for YES and N for No)*
2. How often did you do the activity this week? *Response options: 1, 2, 3, 4, 5, 6, (enter the response in numeric e.g. 1)*
3. Rate your satisfaction with this activity on a scale of 1-5. *Response options: 1 low satisfaction, 5 high satisfaction. (Answer numbers only e.g. 1 if you had low satisfaction)*
4. Rate your enjoyment with this activity on a scale of 1-5. *Response options: 1 low satisfaction, 5 high satisfaction. (Answer numbers only e.g. 1 if you had low satisfaction)*

**Treatment 2**
1. Did you receive this week’s take home activity from your child? *Response options: Y/N (Y for YES and N for No)*
2. How often did you do the activity this week? *Response options: 0, 1, 2, 3, 4, 5, 6, (enter the response in numeric e.g. 1)*
3. Rate your satisfaction with this activity on a scale of 1-5. *Response options: 1 low satisfaction, 5 high satisfaction (Answer numbers only e.g. 1 if you had low satisfaction)*
4. Rate your child’s enjoyment with this activity on a scale of 1-5. *Response options: 1 low enjoyment, 5 high enjoyment. (Answer numbers only e.g. 1 if you had low satisfaction)*