

Completion Report 2021

Annual Assessment of Pashe Achhi on Caregivers', Children's and Facilitators' Outcomes in Host Community

Background

Research evidence shows that the foundation of an individual's optimal development is laid down during the early years of life (Mary et al., 2007). Therefore, BRAC vision to establish play-based early childhood development program for the children of host community. From 2019, 100 Play Labs, collocated in Government Primary School have been running in the host community to support 4 to 5 years children's overall development. Every year new cohort is enrolled in the Play Lab and received one-year in-person intervention facilitated by Play Leaders.

Like most countries, in-person Play Lab activities have been halted since March 2020 due to the COVID-19 pandemic and the government's mandate. Hence, BRAC quickly designed an alternative approach and has been implementing Pashe Achhi to provide wellbeing and learning support to the caregivers and children through telecommunication from May 2020. Since the pandemic has not ended yet, the 2021 cohort of Play Labs received Pashe Achhi.

In January'21, the beneficiaries of the new cohort were enrolled through surveys conducted by Play Leaders. After the enrollment, Play Leaders started rapport building calls and started regular Pashe Achhi (PA) calls from mid-February. Play Leaders facilitated a 20 minutes call once a week for both the caregivers and children (10 minutes for caregiver and 10 minutes for children) to provide wellbeing and leaning support. In addition, from June 2021, caregivers started to receive parenting sessions once a month. Apart from that, this program has provided play and learning materials to children on a semiannual basis, such as paper, pencil, eraser, sharpener, crayon etc. Similarly, caregivers were also provided thread, needle, cloth to make home-made toys for their children.

Objective

The overall objective of the implementation study was to examine the progress of the caregivers', children's and facilitators' outcomes in the host community.

Method

A pretest-posttest design was followed to conduct the study. The total sample size of the study was 180 caregiver-child dyads. Following a simple random sampling method, 30 Play Labs were chosen from a total of 100 GPS. Then from each Play Labs, 6 caregiver-child dyads (3 boys and 3 girls) were selected randomly. However, due to migration in abroad and demotivation, six of them did not participate at the endline. This study covered all 100 play leaders, but due to job discontinuation, 19 play leaders did not participate at the endline. Therefore, this study report was produced based on the findings from 174 caregiver-child dyads and 81 Play Leaders.

The study tools comprised with Socio-Economic Status Questionnaire (SESQ), Parent's KAP, Play Leader's KAP, Bangla version of Patient Health Questionnaire (PHQ-9), Extended Bangla version of Ages and Stages Questionnaire (ASQ-3: Ex), Socio-Emotional (ASQ: SE-2) and Child-Parent Relationship Scale (CPRS). In the context of COVID-19 pandemic, both baseline and endline data was collected remotely over the phone in early April 2021 and December 2021 respectively. Before the both study phase, Field Research Assistants (FRA) were trained and their inter-rater reliability was examined. Hence for comparing the outcomes between baseline and endline, analyses were carried out on the matched sample of baseline and endline. To understand the status of outcomes, percentage were carried out. In addition, paired sample t-test was run to understand the findings better.

Findings

1. Demographic Characteristics of the Children

The mean age of the children was 52.32 months at baseline and 59.96 months at endline (not presented in the table). Table 1 shows that the mother's and father's mean age were found 27.91 and 35.77 years respectively. Educational qualification of parents shows that around 22.9% mothers and 33.4% fathers were below 5th grade. 97.2% of mothers were housewives and 2.8% were involved in different income generating activities. 47.2% of fathers were working as day laborers, 18.9% were small businessman, 9.4% were immigrant etc. Among the sample, 22% of caregivers received Pashe Achhi intervention in previous year as their elder children were enrolled in this program. However, 66.7% of children lived in a single family. The mean of the family income in a month was 13683.33 taka only. The mean asset index of the families was 12.14.

Table 1: Demographic Characteristics of 4 to 5 Years Children and their Families at Baseline

Variables	Mean \pm SD/Percentages/Range
Mother's Age in Years	27.91 \pm 5.92
Mother's Education (below class 5)	22.9%
Mother's Occupation (Housewife)	97.2%
Father's Age in Years	35.77 \pm 9.42
Father's Education (below class 5)	33.4%
Father's Occupation (Day Labor)	47.2%
Mother Received Pashe Achhi Intervention in Previous Year	22%
Family Type (Single)	66.7%
Family Member	5(3-15)
Monthly Family Income	13683.33 \pm 5831.40
Total Asset	12.14 \pm 6.59

2. Caregivers' Outcome

Table 2.1 exhibits the percentage of caregivers after calculating the difference from endline to baseline (prepared according to Result Based Framework) for respected indicators. Findings show that, 94.8% of caregivers understanding on ECD knowledge were improved, while 4.6% of caregivers were steady (no change, indicating the difference between the baseline and endline was 0) in condition. Similarly, in terms of caregivers' attitude towards gender equity, 40.8% of caregivers were improved, while 40.8% were stable on their status. Regarding supportive interaction with their children, 74.1% were improved and 8% were stable. Moreover, in self-care practices, 65.5% were improved, while 28.2% were stable.

Caregivers' mental wellbeing was assessed using PHQ-9 and by calculating the difference from baseline to endline. It was found that 42% of caregivers' mental health condition were improved and 3.4% were stable. Figure 1 shows (see Annex) that at baseline 88.30% of caregivers were found not depressed and 11.70% of caregivers were depressed.

Notably, the percentage of depressed caregivers reduced from baseline to endline. Likewise, CPRS analysis demonstrates that 64.9% of caregivers were improved in parent-child relationship, whereas 5.2% were stable.

Table 2.1: Distribution of Changes in Caregivers' Outcomes from Baseline to Endline (Percentage)

Outcomes	Improved	Stable	Declined
ECD Knowledge	94.8%	4.6%	0.6%
Attitude toward Gender Equity	40.8%	40.8%	18.4%
Supportive Interaction	74.1%	8%	17.8%
Self-care Practices	65.5%	28.2%	6.3%
Mental Wellbeing (PHQ-9)	42%	3.4%	54.6%
Parent-Child Relationship (CPRS)	64.9%	5.2%	29.9%

In addition, a paired sample t-test was used to compare the baseline and endline scores of caregiver's knowledge, attitude and practices as well as caregivers' mental wellbeing for better understanding. Table 2.2 demonstrates that the mean scores of caregivers' knowledge about ECD improved from 2.17 (1.03) to 4.77 (1.05) out of 6 from baseline to endline ($p < .001$). Similarly, the mean (SD) score for caregivers' attitudes towards gender equity increased by 1.11 points at the endline {baseline vs. endline: 4.37 (2.09) vs. 5.49 (1.00)}. However, caregivers' supportive interactions with their children significantly improved 10.24 (3.90) to 13.93 (2.99) out of 20 from baseline to endline ($p < .001$). Likewise, the mean score of caregivers' self-care practices significantly improved and the significance level was .001. On the other hand, the mean scores of PHQ-9 total in the baseline was 3.15 (3.76) and in the endline the score decreased by 0.68 points, with an effect size of $d = -0.15$. But, the mean score of total CPRS increased by 3.71 points from baseline to endline (baseline vs. endline: 98.67 vs. 102.39, $t = 5.35$, $p < .001$, $d = .40$).

Table 2.2: Comparison of Caregivers' Outcomes at Baseline and Endline (Mean)

Outcomes	Mean±SD		Mean difference (EL-BL)	t	p	Effect size, d
	Baseline (BL)	Endline (EL)				
ECD Knowledge	2.17±1.03	4.77±1.05	2.59	24.30	.000	1.84
Attitude toward Gender Equity	4.37 ±2.09	5.49±1.00	1.11	6.27	.000	.475
Supportive Interaction	10.24 ±3.90	13.93±2.99	3.69	10.98	.000	.832
Self-Care Practices	.86±.61	1.64±.61	.78	12.21	.000	.925
Mental Wellbeing (PHQ-9)	3.15±3.76	2.47±2.40	-.68	-2.03	.044	-.15

Parent-Child Relationship (CPRS)	98.67±6.91	102.39±7.77	3.71	5.35	.000	.40
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3. Children's Developmental Outcome

Table 3.1 represents the percentage of children's development outcomes after calculating the difference (according to Result Based Framework) from endline to baseline for respected indicators. In communication skill, 94.3% of children were improved, while 2.3% were steady. Similarly, in terms of gross motor, fine motor, problem solving and personal social, the percentage of children were improved 78.2, 86.8, 77.6 and 67.8 respectively. While 12.1%, 6.3%, 8% and 12.1% were in stable in these cases. In terms of Total ASQ, 92.5% of children's condition were improved and 1.1% were constant as well as for ASQ SE 63.2% of children were in improved condition, whereas 8.6% showed stability.

Table 3.1: Distribution of Changes in Children's Developmental Outcomes from Baseline to Endline (Percentage)

Outcomes	Improved	Stable	Declined
Communication	94.3%	2.3%	3.4%
Gross Motor	78.2%	12.1%	9.8%
Fine Motor	86.8%	6.3%	6.9%
Problem Solving	77.6%	8%	14.4%
Personal Social	67.8%	12.1%	20.1%
Total ASQ	92.5%	1.1%	6.3%
ASQ SE	63.2%	8.6%	28.2%

In addition, to gain some insights about the intervention, a paired sample t-test was also conducted to compare the baseline and endline scores of children's developmental outcomes. Table 3.2 illustrates the mean score of children's developmental outcomes in various subscales at the baseline and endline.

More specifically, at baseline, communication, gross motor, fine motor, problem solving, and personal social mean scores were 74.89 (15.63), 71.78 (16.11), 41.32 (20.10), 69.77 (18.60), and 77.59 (23.90), respectively. As the overall score of the ASQ-3 subscales ranges from 0 to 60, these numbers imply that children had a higher level of proficiency in all subscales of skills at baseline. On the other hand, children scored 104.08 (10.62), 96.41 (17.66), 80.69 (27.71), 94.66 (19.98), and 96.44 (18.04) in communication, gross motor, fine motor, problem solving, and personal social subscales, respectively, at the endline, suggesting higher scores compared to baseline. From baseline through the end of the study, the mean ASQ total score raised from 335.34 (68.80) to 472.27 (77.78)

Children scored 1.94 (.77) and 1.61 (.82) at the baseline and endline, respectively, in social-emotional skills, showing that they had a better level of abilities as a lower score implies a higher degree of socio-emotional skills in ASQ SE. With an effect size of $d = -0.34$, the results also reveal an improvement from baseline to endline.

Table 3.2: Comparison of Children’s Developmental Outcomes at Baseline and Endline (Mean)

Outcomes	Mean±SD		Mean difference (EL-BL)	t	p	Effect size, d
	Baseline (BL)	Endline (EL)				
Communication	74.89±15.63	104.08±10.62	29.19	22.70	.000	1.72
Gross Motor	71.78±16.11	96.41± 17.66	24.62	14.07	.000	1.06
Fine Motor	41.32±20.10	80.69 ±27.71	39.36	18.18	.000	1.37
Problem Solving	69.77±18.60	94.66 ±19.98	24.88	12.62	.000	.95
Personal Social	77.59±23.90	96.44 ±18.04	18.85	8.71	.000	.66
Total ASQ	335.34±68.80	472.27± 77.78	136.92	18.40	.000	1.39
ASQ SE	1.94±.77	1.61±.82	-.96	-4.58	.000	-.34

4. Facilitators’ Outcome

Table 4.1 displays the percentage of Play Leaders after calculating the difference from endline to baseline in their knowledge of early childhood development as well as mental wellbeing (according to Result Based Framework). Findings present that 66.7% of Play Leaders’ knowledge on ECD were improved, while 12.3% were stable comparing to baseline and endline.

In this study facilitators’ mental wellbeing was also evaluated and the PHQ-9 analysis shows that 55.6% of Play Leaders improved their mental wellbeing and 30.9% remained stable at the endline. However, figure 2 shows (see Annex) that the percentage of non-depressed Play Leaders were 97.5 (n=79) and depressed were 2.5 (n=2) in both baseline and endline.

Table 4.1: Distribution of Changes in Facilitators’ Outcomes from Baseline to Endline (Percentage)

Outcomes	Improved	Stable	Declined
ECD Knowledge	66.7%	12.3%	21%
Mental Wellbeing (PHQ-9)	55.6%	30.9%	13.6%

Paired sample t-test (Table 4.2) illustrates that the mean score of ECD knowledge of the Play Leaders raised 12.09

(SD=2.72) to 14.00 (SD=2.15) out of 18 from baseline to endline, which was statistically significant. The mean score of Play Leaders' mental wellbeing (depression level) was decreased by 1.71 points from baseline to endline (baseline vs. endline: 3.01 vs. 1.30, $t=-3.31$, $p<.001$, $d=-.37$).

Table 4.2: Comparison of Facilitators' Outcomes at Baseline and Endline (Mean)

Outcomes	Mean±SD		Mean difference (EL-BL)	t	p	Effect size, d
	Baseline (BL)	Endline (EL)				
ECD Knowledge	12.09±2.72	14.00±2.15	1.90	5.39	.000	.59
Mental Wellbeing (PHQ-9)	3.01±3.19	1.30±3.46	-1.71	-3.31	.001	-.37

Discussion

The pretest-posttest design study was devised to sought the effectiveness of the Pashe Achhi intervention on caregivers, children and Play Leaders outcomes. Sample consisting 180 caregiver-child dyads along with 100 Play Leaders were assigned in the study's baseline. In the endline, six of the caregiver-child dyads dropped out and nineteen of the Play Leaders resigned. Parents' KAP was used to assess caregivers' knowledge on ECD, attitude towards gender equity, supportive intervention approaches, and self-care practices, while PHQ-9 was administered to identify mental health status. Play Leaders' knowledge on ECD was also assessed in this study. Furthermore, the ASQ-3 and ASQ SE were used to evaluate the children's developmental outcomes. The findings contribute to provide an insight on evidence-based program where adult mental wellbeing and ECD knowledge contribute in promoting children's development through improvement in child-rearing practices.

Caregivers' Outcome

The study shows improvement of caregivers' knowledge and practices in all the indicators after receiving intervention. It can be assumed that the Pashe Achhi intervention along with parenting calls benefitted them by improving their mental health and enriching their knowledge self-care as well as positive parenting practices.

Moreover, findings also indicate that caregivers' knowledge expanded when Play Leaders conversed and shared various information with them. The emphasis on parental knowledge as a focus of intervention is crucial since parents' understanding of child development is linked to their practices and actions (Okagaki and Bingham, 2005). Evidence suggests that community based intervention can enable parents to enhance their knowledge and practices (Aboud, 2007; Zaman et al., 2016). Research also supports that intervention through phone for parenting practices and children's behavior showed improved practices in intervention groups between baseline and endline compared to the control group (Lefever et al., 2017).

In terms of caregivers' mental health status, it was found that the percentage of depressed caregivers were remarkably decreased from baseline to endline. Similar findings also suggest that selfcare strategies can provide more opportunities for the caregivers to understand which activities are vital for wellbeing and soothe negative symptoms of stress and depression (Moceo, 2020). Findings also show that the majority of caregivers have maintained self-care routines in their daily lives and are happier and less depressed than earlier. This conclusion is consistent with similar researches that show that self-care activities considerably reduce depression symptoms (Gonzalez et al.,

2008; Bagher-Nesami et al., 2016).

Children's Developmental Outcome

The study clearly demonstrates that the children's showed improvement in the endline from baseline in all developmental outcomes such as Communication, Gross motor, Fine motor, Problem solving, Personal social, Total ASQ and ASQ SE. The ASQ SE decreased in the endline which refers the improvement in children's socio-emotional domain, as lower score in ASQ SE indicates better performance. After receiving the intervention, the children's developmental outcomes in Communication, Gross motor, Fine motor, Problem solving, Personal social, Total ASQ and socio-emotional development improved than baseline as caregivers spend more time with them than before.

Evidences indicate that parental knowledge is associated with positive parenting and the quality of the home environment, which is connected to children's positive outcomes (Benasich and Brooks-Gunn, 1996; Parks and Smeriglio, 1986; Winter et al., 2012). Similar study found out that the caregivers who received parenting program, had better levels of knowledge and provided more stimulation to their children which promotes children's better development outcomes (Aboud, 2013). As a consequence, improving caregivers' knowledge, attitude, and practices seems to have a favorable impact on children's development. The sessions that the caregivers received, improve their understanding of early childhood development as well as their interaction skills with children, promoting holistic development in children. Findings also reveal that caregivers provide more quality time with their children than before which strengthen their bonding and children become happy and healthy than before.

Facilitators' Outcome

Findings illustrate that the ECD knowledge of facilitators raised from baseline to endline. The reason which can be assumed that they received capacity development training throughout the year. Besides this, they also received monthly refreshers training to conduct the sessions smoothly which also enrich their knowledge. Furthermore, findings show, the mental health condition of the facilitators remained same due to physical sickness and relationship conflict.

Conclusion

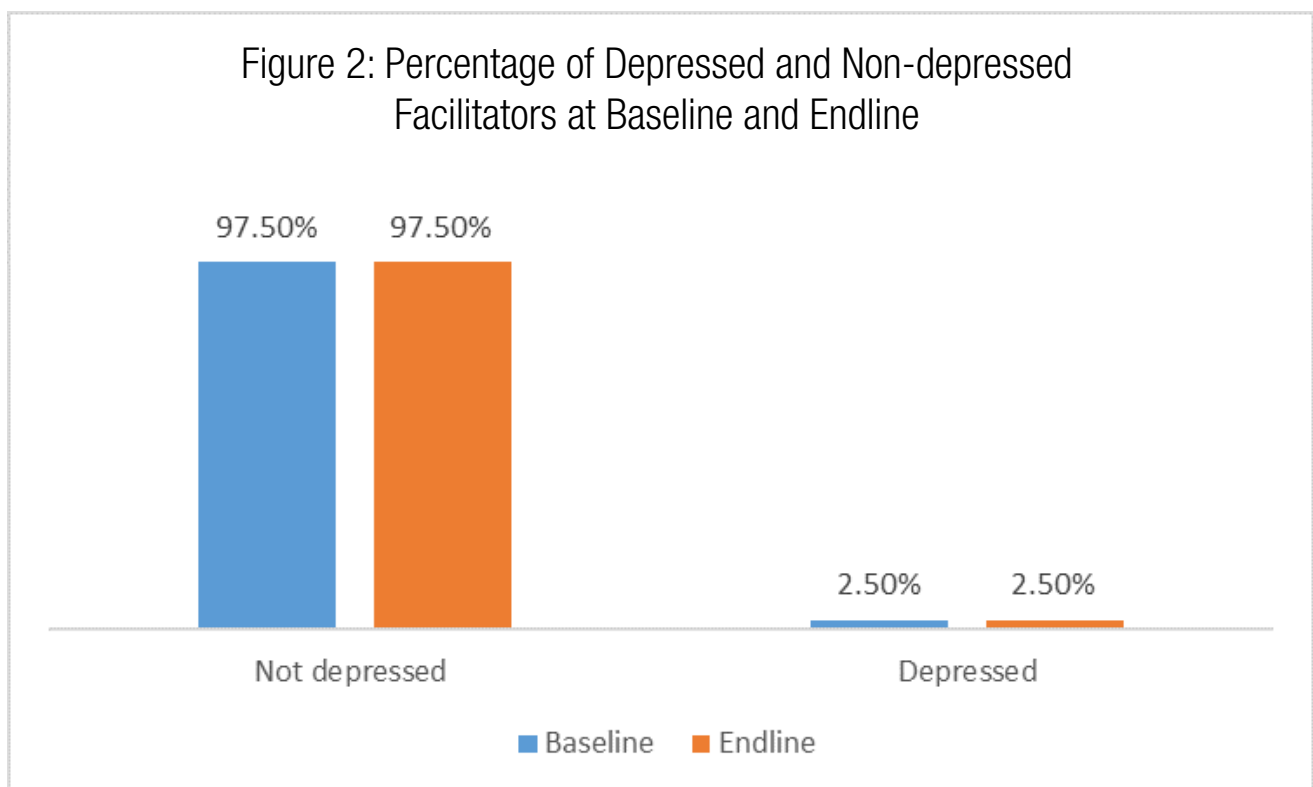
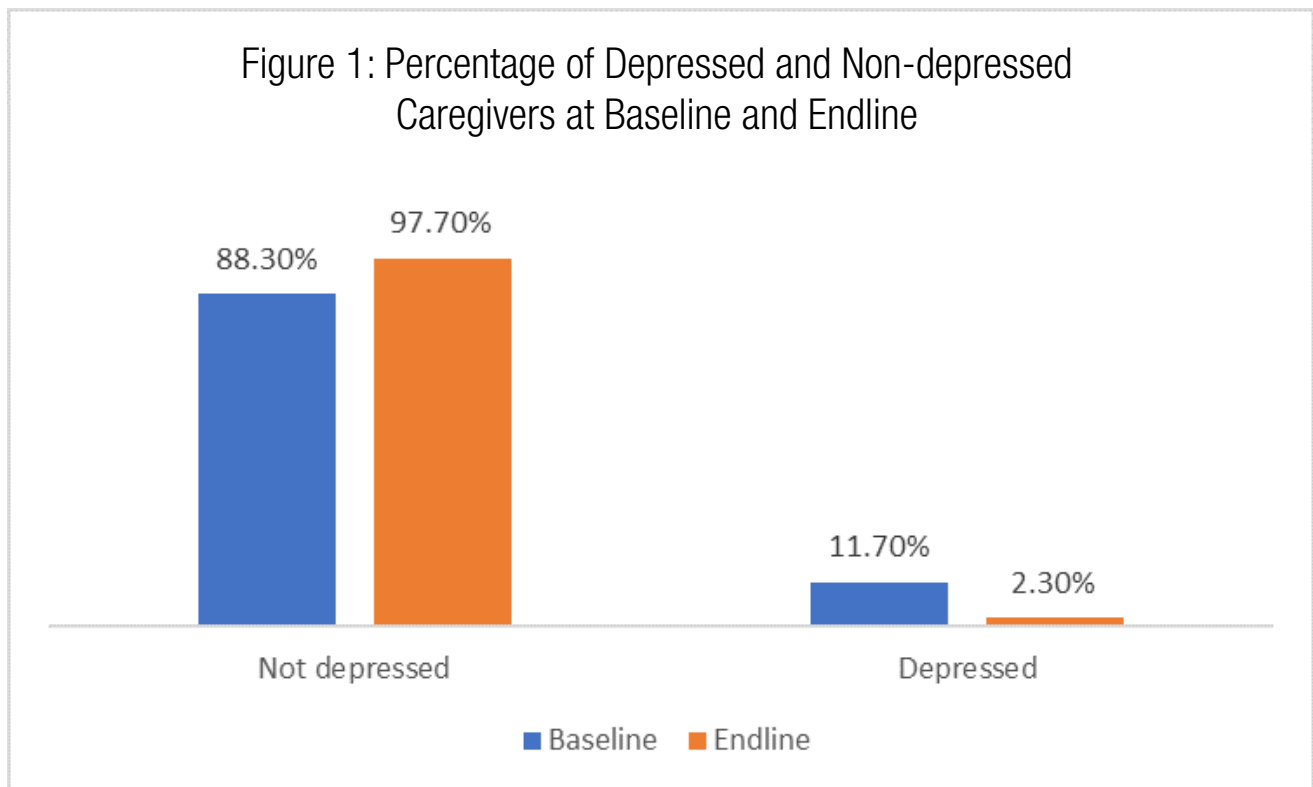
The study shows a significant positive effect of intervention on caregiver's ECD knowledge and self-care practices. Moreover, this study also demonstrates substantial effect on children's development outcomes and Play Leaders'

improvement on ECD knowledge as well as mental health.

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Annex





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