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Impact evaluation of the father engagement intervention in the humanitarian play lab (HPL) in Rohingya camps and host community in Cox's Bazar, Bangladesh

Submission date
18/11/2025

Recruitment status
No longer recruiting

Registration date
20/11/2025

Overall study status
Completed

Last Edited
10/04/2026

Condition category
Mental and Behavioural Disorders

[ ] Prospectively registered
[ ] Protocol
[ ] Statistical analysis plan
[X] Results
[ ] Individual participant data

Plain English summary of protocol
Background and study aims
Early childhood is a critical period for children's learning and development, and research has shown that when fathers are actively involved, children benefit in many ways — they develop stronger language, thinking, and social skills and grow up with better emotional wellbeing. However, most parenting programmes focus on mothers, especially in low- and middle-income countries. This leaves a gap in understanding how to support fathers, particularly in difficult settings such as refugee camps.

This study evaluates a 6-month father engagement programme added to BRAC's existing Humanitarian Play Lab (HPL) initiative for mothers of children aged 0–3 years. The programme was developed by BRAC Institute of Educational Development (BRAC-IED) with research led by New York University's Global TIES for Children, in collaboration with the University of Pennsylvania and ARCED Foundation.

The study focuses on the Rohingya refugee camps and nearby host communities in Cox's Bazar, Bangladesh, where hundreds of thousands of Rohingya families have been displaced due to violence in Myanmar. It examines whether the father-focused programme can improve fathers' mental wellbeing, strengthen the father's engagement with the family and parenting, and promote children's early learning and social-emotional development.

The main goal of the research is to find out whether involving fathers directly through home visits and group sessions can lead to better outcomes for fathers and young children.

Who can participate?
The study involves fathers and mothers with children under the age of three who live either in the Rohingya refugee camps or in nearby host communities (Cox's Bazar Sadar, Ukhiya, Ramu, and Teknaf). To be able to participate, the family needs to have a child aged 0-3 years, agree to being part of the study, and the father needs to intend to live with the family for the duration of

the study (8 months). The programme and study are open to both fathers and mothers from these communities regardless of education level or employment status.

What does the study involve?
Groups of families are randomly assigned to one of two groups:
Control group: mothers received BRAC's regular parenting sessions for mothers only.
Treatment group: mothers received the same sessions, and fathers received an additional programme designed specifically for them.

The father engagement intervention is six months long. Fathers receive weekly home visits and monthly group sessions, both led by trained male volunteers from their own communities. Group sessions are scheduled at times convenient for each father and each session lasted about 30–60 minutes and covered topics such as: understanding emotions and managing stress, building positive relationships with children and spouses, the importance of play and early stimulation for children, practicing self-care and problem-solving, and learning to support children's emotional and social growth.

Mothers continued to participate in BRAC's existing group based parenting programme, which met weekly and focused on child development, mothers' wellbeing, and the use of play to strengthen the parent-child bond.

Both programmes were supported by trained paracounselors, who supported volunteers and helped ensure quality delivery.

To measure impact, researchers conducted surveys with both fathers and mothers before and after the programme and used a child development assessment (Bayley -4) with a sample of children at the end of the programme.

What were the possible benefits and risks of participating?
The benefits of participating in the program include:
1. Fathers gain new knowledge and skills about child development, emotional wellbeing, and positive parenting.
2. Mothers benefit from increased emotional and practical support from their partners.
3. Children may experience improved learning and social-emotional growth through more responsive care and play from both parents.
4. The programme provides psychosocial support which might help families strengthen relationships in stressful environments.

The risks of participating in the program:
There were minimal risks to participating. The sessions involved discussions about family life and emotions, which may sometimes feel sensitive, particularly for men. However, all volunteers were trained to create a respectful and supportive environment, and paracounselors were available for any participant needing extra support.

Participation in the study was completely voluntary, and families could withdraw at any time without any consequences for their access to BRAC services.

Where is the study run from?
The study was led by New York University's Global TIES for Children in collaboration with:
1. BRAC-IED who created and implemented the intervention in Bangladesh.
2. ARCED Foundation who led data collection and field supervision.
3. Center for Benefit-Cost Studies of Education at the University of Pennsylvania who conducted

the cost-effectiveness analysis.
4. International Centre for Diarrhoeal Disease Research, Bangladesh who supported the training and quality assurance for child development assessments.

When Is the study starting and how long is it expected to run for?
September 2022 to August 2023.
Data collection included:
1. Baseline surveys: September–December 2022
2. Midline data collection to assess the quality of the father home visit in June 2023
3. Endline data collection: July-August 2023

Who is funding the study?
The project was part of the Play to Learn initiative, funded by the LEGO Foundation and implemented through a global partnership between Sesame Workshop, BRAC, the International Rescue Committee (IRC), and New York University.

Funding supports program delivery, training, data collection, and research activities in both Rohingya camps and host communities.

Who is the main contact?
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13880.1v2

Study information

Scientific Title
Impact evaluation of a father engagement model in the home visiting humanitarian play lab (HPL) Program in Rohingya camps and host community in Cox's Bazar, Bangladesh

Acronym
IEFE-Bangladesh

Study objectives
The intervention assessed in this study is an added component to an intervention implemented by BRAC- IED that has been working with mothers of 0-3 year old children to maximize positive outcomes of child development and develop positive family relationships. The new component is a father engagement program for fathers with children below three years of age. The objectives of this added component are to promote fathers' wellbeing by improving their emotional literacy, encourage fathers to develop relationships with their spouses and children, and encourage responsive caregiving practices among fathers (BRAC & Sesame Workshop, 2022).

The primary research questions are: what is the added impact of father home visits and groups on child development, father engagement (e.g. activities with their children), perceptions of learning and play, and attitudes and well-being, above and beyond group visits conducted with only mothers?

Ethics approval required
Ethics approval required

Ethics approval(s)
Approved 07/11/2022, The Institutional Review Board of the Institute of Health Economics (IHE-IRB), University of Dhaka, Bangladesh (Institute of Health Economics, Arts Faculty Building, University of Dhaka, Dhaka, 1000, Bangladesh; +88 01675915701; n_ifteakhar@ihe.du.ac.bd), ref: IHE/IRB/DU/49/2022/Final

Primary study design
Interventional

Allocation
Randomized controlled trial

Masking
Blinded (masking used)

Control
Placebo

Assignment
Parallel

Purpose
Supportive care

Study type(s)
Treatment

Health condition(s) or problem(s) studied
Early Childhood Education, child development, caregiver mental health, and father engagement in parenting

Interventions
This was a multisite (blocked) interventional cluster randomized trial. The study evaluates the added impact of a father-focused parenting intervention implemented by BRAC-IED in Cox's Bazar, Bangladesh, across both refugee camps and host communities. The intervention builds upon an existing mother-focused group program designed for mothers of children aged 0–3 years by adding a father-focused home visit and group session component.

Treatment arms:
1) Comparison group (mother-only program):
Mothers participate in the standard BRAC-IED group-based parenting sessions, delivered by trained mother volunteers. Fathers in these households do not receive any additional intervention.
2) Treatment Group (mother + father program):
In the treatment group, fathers receive a home-based and group-based intervention delivered by trained father volunteers addition to the mother-focused sessions. This component focuses on enhancing fathers' emotional wellbeing, strengthening family relationships, and promoting responsive caregiving practices.

Dosage and Administration:
Fathers in the treatment arm receive approximately 6 months of intervention, consisting of three home visits and one group session per month. Home visits take roughly 30 minutes each, focusing on topics such as the importance of father engagement in child development, emotional literacy, stress responses in children, and the role of play. Group sessions take 45–60 minutes each, reinforcing similar content through peer discussion and guided activities.

Randomization: the unit of randomization is a mother volunteer's caseload. Each mother volunteer oversees four pockets of households, with two groups per pocket. The entire caseload of a mother volunteer was randomly assigned randomly to either the comparison or treatment condition.

Baseline data was collected prior to randomization and families were randomized into treatment and control conditions based on the below procedure (The implementing organization, BRAC,

was provided with a spreadsheet listing which families were in the treatment and which were in the control group based on the below procedure).

Randomization was assumed at mother volunteer level, with each mother volunteer (and her full caseload) randomly allocated to treatment or control. In the camps, the caseloads of 125 mother volunteers were allocated to treatment; this means that the husbands of the mothers assigned to these mother volunteers received the intervention, delivered by father volunteers. In the host, the caseloads of 63 mother volunteers were assigned to treatment.

The camp and host baseline data were randomized immediately to provide BRAC with treatment and control allocations; this information was vital to them to begin the intervention as father volunteers would be recruited and trained based on the locations of the treatment condition households. In the host community, simple randomization was performed given the large baseline sample. Balance checks on potential confounders indicate that the randomization was successful.

In the camps, constrained randomization was performed to ensure covariate balance between arms on all potential confounders. Constrained randomization involves generating many possible allocation schemes and calculating a balance score that assesses covariate imbalance for each of those schemes. It then limits the randomization space to a pre-specified percentage of candidate allocations before randomly selecting one scheme to implement. For this study, the 12-balance metric was used, which was first introduced by Raab and Butcher (2001), and constrained the randomization space to the 10% of schemes that provided the best balance. The covariates that were used included camp number/location, mother volunteer characteristics (age and tenure at BRAC), caseload characteristics (mother health, education, literacy, and age; father education, literacy, and age; the number of children under 2 in the household; whether the mother is pregnant, and whether the mother suffered a serious injury in the last year) and baseline versions of the outcomes aggregated to the caseload level.

All of the primary outcome(s) are considered primary because the RQs related to them are confirmatory. The secondary outcome measures related to the exploratory research questions are the same as the ones listed under primary outcome(s), but explore moderation by community (camp/host) , parental education, baseline household resources (using PREI - perceived refugee environment index items), baseline parental physical health, child age /gender, and mother-report of mother-child stimulating behaviors at baseline(from a measure created for this study).

Intervention Type
Behavioural

Primary outcome(s)
1. Father engagement with child and family (6 subdomains) measured using a group of likert-scale items created for this study at baseline and endline via both father and mother report.
2. Father's beliefs about fathering measured using a group of likert-scale items created for this study at baseline and endline via father report
3. Caregiver wellbeing for mothers and fathers measured using the Patient Health Questionnaire-9 (PHQ-9) at baseline and endline
4. Caregiver wellbeing for fathers measured using the Generalised Anxiety Disorder 7-item (GAD-7) questionnaire at endline
5. Child development measured using the Bayley Scales of Infant and Toddler Development (Bailey-4) and Caregiver-Reported Early Development Index (CREDI) at endline

Key secondary outcome(s)
1. Moderation by community (camp/host) measured using data on whether the participant lives in the camps or in the host community is known a priori at one time point
2. Parental education (literacy and up to which grade of school they had gone to) measured using data gathering at baseline
3. Household resources measured using the Pre-Perceived Refugee Environment Index (PREI) items at baseline
4. Parental physical health measured using using three items: 1) How would they rate their overall health on a 5 point Likert scale ranging from ‘very bad’ to ‘very good’; 2) if the participant had suffered from a serious illness or injury in the past year (yes/no response); and 3) if the participant was currently pregnant (yes/no response); at baseline
5. Child age/gender measured in age in months/parent report of gender] at baseline and endline
6. Mother-report of mother-child stimulating behaviors measured using a 15-item tool created for this study; the items seek to understand how often each day the caregiver engages with stimulating activities with the child, including general activities such as counting objects or naming colors, at baseline

Completion date
15/08/2023

Eligibility

Key inclusion criteria
1. Family has a child between ages 0-3 years
2. Father intending to reside with family for the duration of the intervention
3. Family consents to being part of the study
4. In host community, being in or near BRAC’s existing pockets (households that are geographically proximal to early childhood development programs situated in government primary schools).

Participant type(s)
Carer, Service user

Healthy volunteers allowed
No

Age group
Mixed

Lower age limit
0 Months

Upper age limit
35 Months

Sex
All

Total final enrolment
3998

Key exclusion criteria
Some families were pre-determined for exclusion . These were those who were:
1. In particular camps that received the intervention on a delayed schedule and were dropped from the study (camp 8w and 22; a total of 124 families)
2. The half of the host sample that we did not include at endline

Date of first enrolment
25/09/2022

Date of final enrolment
25/09/2022

Locations

Countries of recruitment
Bangladesh

Study participating centre
Homes in Rohingya Camps and Cox's Bazar Host Communities
-
-
Bangladesh
4700

Sponsor information

Organisation
Global TIES for Children - NYU

Funder(s)

Funder type
Not defined

Funder Name
LEGO Foundation

Alternative Name(s)
The LEGO Foundation, The LEGO Group, LEGO Fonden

Funding Body Type

Private sector organisation

Funding Body Subtype
Trusts, charities, foundations (both public and private)

Location
Denmark

Results and Publications

Individual participant data (IPD) sharing plan
The datasets generated and analyzed during the study will be stored in a publicly available repository (https://dataverse.harvard.edu or isrctn) by the end of November 2025. This will include all the (de-identified) data relevant to replicating answers to the confirmatory research questions of the study, along with the scripts used to obtain the reported estimates.
Data will be shared under an open license - it can be accessed and downloaded by anyone without restriction. Study consent forms obtained by participants allow the researchers to share the anonymized data publicly.

IPD sharing plan summary
Stored in publicly available repository

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article		09/04/2026	10/04/2026	Yes	No