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# Implementation Evaluation of the Mother-Child Education Program Among Refugee and Other Vulnerable Communities in Lebanon

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**Abstract**

*Despite the knowledge that quality early childhood development programs, including those that target parental knowledge and behaviors, are essential for ameliorating the negative effects of early-life adversity, robust analyses of their implementation and impact in highly vulnerable settings are scarce. To address this knowledge gap, we conducted a pilot wait-list randomized controlled trial (RCT) to assess the impact and the process of implementing and evaluating the Mother-Child Education Program (MOCEP) among refugee families and one low-income community in Beirut, Lebanon. This paper focuses on the analysis of MOCEP's implementation (i.e., key enablers of and barriers to the application and evaluation of the program). Our analysis suggests that, despite multiple challenges, implementation and robust evaluations of early childhood parenting programs in fragile contexts are feasible and urgently needed. This study illustrates how implementation evaluations are a key component of RCTs and crucial*

*to identifying strategies to optimize program uptake and maximize impact.* 

Humanitarian crises, including conflict, are estimated to affect approximately 75 million children worldwide (Overseas Development Institute, 2016). Early exposure to conflict, displacement, economic marginalization, and other conditions associated with humanitarian emergencies can produce detrimental consequences that negatively alter children's developmental trajectories (McEwen & McEwen, 2017; National Scientific Council on the Developing Child, 2007). Families living in such circumstances often struggle to support their children and to provide a nurturing environment for them (Murphy, Rodrigues, Costigan, & Annan, 2017). Quality early childhood development (ECD) programs, including those that target parental practices, are essential because they can assist in ameliorating the negative effects of early-life adversity and also can provide meaningful mechanisms to promote children's full developmental potential (Bradley & Corwyn, 2005; Britto et al., 2017; Engle et al., 2011). Despite evidence of the benefits of quality programs for young children and their parents in multiple global contexts, robust analyses of the implementation and impact of such programs in highly fragile settings in low- and middle-income countries (LMICs) are sorely lacking (Britto et al., 2017; Murphy, Yoshikawa, & Wuermli, 2018).

Despite limited efficacy studies, there are multiple programs implemented around the world that aim to bolster parenting skills and knowledge in fragile settings, with the objective, in turn, to improve children's outcomes. In the global context, programs have been designed to promote school readiness and child development by targeting parenting skills (Chazan-Cohen et al., 2009). Several of the program models target children and families of low socio-economic status, based, in part, on the evidence linking family income and poor school readiness (Farkas & Hibel, 2008). Furthermore, parental practices, such as harsh disciplinary style, have been associated with poor developmental and school readiness outcomes (Kilgore, Snyder, & Lentz, 2000). This is due, at least in part, to the negative effects of harsh parenting on the child's emotional development and self-regulation which, in turn, influence other developmental outcomes and markers of school readiness (Blair, 2002). One parenting program that targets comprehensive parental practices and skills to promote holistic early child development (in children 3-to-11 years of age), with a focus on school readiness, is the Mother-Child Education Program (MOCEP), designed and led by the Mother-Child Education Foundation (AÇEV) in Turkey (Kağıtçıbaşı, Sunar, & Bekman, 2001).

MOCEP has been adapted to and delivered in multiple countries around the globe. The program was recently implemented in Lebanon, a country that has faced critical geopolitical challenges including receipt

of more than one million Syrian refugees since 2011 (Operational Portal Refugee Situations, 2018). Lebanon also continues to host more than 449,000 Palestinian refugees, around 53% of whom live in areas designated specifically for refugee families (UNRWA, 2015). Studies in Turkey targeting low-income families have demonstrated that MOCEP improved parental knowledge and practice, and empowered mothers and their children (Bekman & Koçak, 2010; Kağıtçıbaşı et al., 2001; Kağıtçıbaşı, Sunar, Bekman, Baydar, & Cemalcılar, 2009). However, the impact and implementation of MOCEP in fragile contexts, such as refugee and other marginalized communities in Beirut, has been largely unexplored. Despite the assumption that a program that strengthens parenting skills should lead to positive child outcomes, there is limited evidence to support this assertion (Barnett & Escobar, 2002; Brooks-Gunn, Berlin, & Fuligni, 2000; Sweet & Appelbaum, 2004). We argue that, in part, impact evaluations alone fail to elucidate the challenges to or deviations from the intended implementation that could lead to small or null effects in children and families.

Randomized controlled trials (RCTs) are often considered the gold standard for evaluating social programs, when randomization is feasible (Oakley, Strange, Bonell, Allen, & Stephenson, 2006). However, the application of RCTs in the context of LMICs and humanitarian crises is complex, due to a myriad of factors. These include financial and human capacity deficits, ethical and regulatory system challenges, barriers to the maintenance of a robust research environment (such as lack of necessary research materials and lack of policy makers), operational difficulties, and competing demands (Alemayehu, Mitchell, & Nikles, 2018). Furthermore, RCTs are important in understanding the effect of programs on outcomes of interest, but alone do not necessarily offer information on the implementation of the interventions to explain challenges, reproducibility, and other processes to inform practice and policy (Moore et al., 2015). Implementation evaluations aim to inform those key attributes of implementation, such as participant perceptions, elements of the intervention that were challenging to implement, contextual factors that may alter the intervention, and dosage, among others (Wight & Obasi, 2003). Implementation evaluations within RCTs are particularly important because they can provide nuanced information with regard to *how* and *why* interventions may or may not have had a significant impact on outcomes (Oakley et al., 2006). Specifically, a recent review of the literature concluded that implementation evaluations of ECD programs are particularly scarce in humanitarian and LMIC settings (Murphy et al., 2018). The same review put forth a conceptual framework to operationalize implementation evaluations in the context of ECD programs including individual participant, family, community, provider, workforce, organizational, and systems levels (Murphy et al., 2018). As such, implementation evaluations of programs for young children are typically rolled out during the program's implementation, should be multi-level, and can be used to elucidate possible strategies to inform future applications.

To contribute to the sparse body of literature on the impact and implementation of ECD programs in fragile contexts, we tested the effectiveness of MOCEP via a pilot wait-list RCT among marginalized communities in Beirut, including Palestinian refugees. The program had a positive impact on self-reported disciplinary practices of the mothers as well as on their level of self-reported parental stress. These findings were most robust for mothers who attended 14 or more of the 25 training sessions. A full presentation of the results is reported elsewhere (Ponguta et al., under review). Here, we report on the processes of implementing MOCEP and applying an RCT to assess its impact on participating children, mothers, and families. This study is focused on the analysis of implementation characteristics (such as contextual factors and key challenges) and not on the impact of MOCEP. Specifically, our study aimed to systematically characterize the implementation and evaluation of MOCEP in Beirut, through four main processes: (1) characterizing key contextual factors among the target population; (2) describing the enablers of and challenges to program enrollment and participation; (3) assessing the barriers to program quality, attendance, and adherence; and (4) exploring the opportunities for and threats to evaluating the program through a wait-list RCT design. We discuss the implications of generating evaluative frameworks that are contextualized, feasible, and robust; the role of community leaders (such as directors of agencies who implement programs in the communities) and local partners in the design and adaptation of evaluation frameworks; and the strategies and lessons learned in the process of applying an RCT in vulnerable contexts. This study addresses, as a crosscutting issue, the ethical implications of the above processes and reflects on the implications of the RCT's results for practice and research.

## Method

We conducted a mixed-methods implementation and impact evaluation of MOCEP using a wait-list RCT design (ClinicalTrials.gov identifier: NCT02402556) between May 2014 and September 2016 (see Supplemental Figure 1 for study consort diagram). The methods for the impact evaluation included standardized questionnaires for mothers, direct assessments and maternal reports of child outcomes, and videotaped dyadic interactions to explore changes in maternal-child behaviors. Staff members at the Arab Resource Collective (ARC), a Lebanese non-governmental organization, conducted and oversaw all aspects of the program implementation and the on-the-ground data collection procedures for the impact and implementation evaluations. The MOCEP supervisor trained and oversaw the three MOCEP trainers, each of whom delivered the program in one site. All three MOCEP trainers held doctoral degrees in ECD and the MOCEP supervisor (from ARC) had a bachelor's degree ECD and a master's degree in social work. The trainers were trained for 10 days through sessions that focused

on facilitation skills and MOCEP's thematic content. The data collectors for the RCT (CM, AA) and implementation evaluation (SN) were trained on site and remotely by members of the Yale team. The ARC team and community leaders/NGO directors contributed to the finalization of the study battery and protocol, drawing partly from their experience in the field and their work in the communities. Weekly calls between the ARC and Yale University teams were held during the implementation and evaluation of the program.

**Participant Eligibility and Recruitment.** Participants ($n = 106$ dyads at baseline) were residents of three communities in Beirut, Lebanon: Bourj El Barajneh (Site #1), Shatila (Site #2), and Chiyah (Site #3). Both Bourj El Barajneh and Shatila have historically been home to Palestinian refugees; Shatila has recently welcomed a large population of refugees from Syria. Chiyah is a low-income Lebanese neighborhood in Beirut. Community leaders and the MOCEP supervisor facilitated the recruitment for MOCEP and the evaluation study. Determination of eligibility, enrollment, and baseline data collection occurred sequentially across sites. Eligibility for the study was based on three inclusion criteria: (1) the mother, or other female primary caregiver (which could be another female living in the home providing care to the child), was able to read and write in Arabic; (2) the mother, or other female primary caregiver, had a child between 2 and 7 years of age; and (3) the mother, or other female primary caregiver, was able to commit to participate in the complete 25-session MOCEP curriculum, to the best of her ability. Mothers were recruited from the catchment areas of the partner NGOs. After completing a baseline questionnaire, mothers were randomized to either the intervention or wait-list control group. The latter group would participate in MOCEP after the intervention group completed the 25 sessions. To promote retention of the wait-list control group, the program supervisor organized bi-monthly recreational activities in local areas (e.g., parks, theatres). During the activities, no discussions involving the MOCEP themes took place, and the events were kept entirely of a social nature, with the primary purpose of maintaining contact with mothers and incentivizing their participation in the study.

**MOCEP Curriculum and Theory of Change.** MOCEP is an early childhood parenting intervention aimed at promoting positive parenting practices (such as reduction in harsh discipline) and improving school readiness in young children. MOCEP was designed to be implemented over 25 weekly sessions among groups of mothers, each lasting approximately 3 hours. The meeting topics and sessions are summarized in Supplemental Table 1. Prior to the implementation of MOCEP in 2014, ARC partnered with AÇEV to translate and adapt the MOCEP curriculum and all associated materials for the Lebanese context. Although AÇEV released a revised version of the curriculum in 2017, it was not available in time for the implementation and evaluation described here. Meetings began with a group-wide discussion of the weekly topic, led by a trainer, followed by

a review of the content from the previous session, in part to ensure that mothers who had been absent had some exposure to this content. The group discussion is the Mother Support Program (MSP) sub-component of MOCEP.

During the remaining time in the session, mothers gathered around tables in groups of four or five and, with the help of a mother aide chosen from the group, learned skills from the Cognitive Training Program (CTP). The CTP was designed to provide mothers with techniques to support the following child developmental domains: hand-eye coordination, social development, emotional development, pre-literacy, concepts, general aptitude, and pre-arithmetic. Many CTP activities involved role-playing, where mothers practiced and reviewed exercises by taking on the roles of both mother and child. Mothers were asked to work through the CTP forms they practiced during that week's meeting at home with their children as well. Group leaders conducted two home visits per household over the course of the program to provide additional advice and support to participating mothers in their application of the program's content.

**Implementation Evaluation: Domains, Process Constructs, and Sources of Data.** We developed an implementation evaluation framework to explore the delivery and evaluation process of MOCEP in Beirut, including six overarching domains: (1) exploration of context; (2) enrollment; (3) quality of program implementation; (4) attendance, adherence, and perceived maternal engagement; (5) self-reported impacts, including acceptability of the program's content; and (6) enablers of and barriers to the program's evaluation (Cluver et al., 2016; Durlark & Dupre, 2008). Table 5.1 specifies the operationalization of these domains through discrete constructs, the scope of inquiry for each, levels of sampling, and the data collection instruments utilized.

**Focus Group Discussion and In-Depth Interviews.** An Arabic-speaking researcher (SN)—with a degree in psychology and experience in qualitative data collection—conducted one maternal focus group discussion (FGD) per site before (at baseline) and after (at endpoint) program implementation to explore contextual factors, recruitment and refusal challenges and enablers, parenting practices and knowledge, and enablers of and barriers to program participation. All mothers who were part of the study were offered the opportunity to participate in the FGDs. Although we intended to conduct FGDs at baseline and endpoint with the same mothers, we were unable to do so for reasons such as dropout or lack of availability to participate. The groups ranged from 3 to 7 participants and were held in the same locations where MOCEP was implemented in each site. Endpoint FGDs also explored perceived impacts of the program for mothers, their children, and their families as a whole. The FGDs were recorded and transcribed, and subsequently translated into English. Two researchers (AZ, AS) independently coded the data by labeling the transcripts according to a set of *a priori* codes, which they then reconciled (Supplemental Table 2). A

**Table 5.1. Implementation Evaluation Framework**

| *Domain* | *Process Construct* | *Scope* | *Instrument(s)* |
|---|---|---|---|
| Context | Contextual analysis | – Describe general conditions at the outset of the intervention with regard to social, cultural, and family context, general stressors | – Mothers FGD<br>– Father interviews<br>– Community leader interviews |
| Participation | Recruitment and refusal challenges and enablers | – Reasons to not participate<br>– Motivations/ enablers for participation | – Mothers FGD<br>– Fathers FGD<br>– Community leader interviews<br>– MOCEP program supervisor interview |
| Attendance | Attendance records | – Reasons for absenteeism | – Attendance management log |
| Program quality | Structural quality | – Physical environment<br>– Materials<br>– Contextual (security, environment) issues | – Daily observation form |
| | Process quality (including fidelity of implementation) | – Describe process of program delivery | – Subject mastery form Daily observation form |
| Engagement | Engagement of maternal participation | – Keep track of maternal engagement, participation, and perception of comprehension of the content during program implementation<br>– Assess satisfaction of mothers with program | – Maternal rating forms |
| Impact | Perceived impacts<br>Perceived strengths<br>Perceived weaknesses | – Describe self-reports of impact and experience of mothers who completed the program | – Mother FGDs<br>– Father interviews |

(*Continued*)

**Table 5.1. Continued**

| *Domain* | *Process Construct* | *Scope* | *Instrument(s)* |
|---|---|---|---|
| Program evaluation | Enablers of and challenges to RCT | – Characterize enablers of and barriers to evaluation design and RCT rollout and completion<br>– Document strategies to minimize risks and overcome barriers | – Lead data collectors' interviews |

*Note.* FGD = *focus group discussion.*

third researcher (LP) resolved disagreements in coding and performed a content analysis to identify emerging themes under the six domains of the evaluation framework.

At endpoint, a male, Arabic-speaker researcher (RQ)—with a degree in cognitive science—interviewed 13 husbands of women who had completed the program. Interviews were recorded, transcribed, and translated into English by the interviewer. A second researcher (MA) coded the transcripts utilizing Dedoose (software for qualitative analysis) and a third researcher (LP) performed a content analysis with the coding outputs to identify emerging themes under the six domains of the evaluation framework. The coding scheme for the father interviews is included in Supplemental Table 3.

A Lebanese researcher (SN) also interviewed two community leaders at endpoint. Interviews were transcribed and translated into English. A second researcher (LP) performed a content analysis with the translated transcripts to identify emerging themes. The lead data collector from ARC and the MOCEP supervisor were interviewed remotely and at endpoint by a Yale researcher (LP) using a fit-for-purpose questionnaire to address enablers of and barriers to the implementation and impact evaluations. The questionnaire covered the following key themes: (1) challenges to randomization and recruitment, and strategies applied to overcome those challenges; (2) challenges to consenting and completing assessments, and strategies applied to overcome those challenges; and (3) key benefits to conducing the evaluation. During the implementation of the program, one Yale researcher (KK) interviewed the trainers in the presence of a translator. The interview transcripts were content-analyzed by a second researcher (LP).

**External Observations and Trainer Self-Reports.** The MOCEP supervisor observed five sessions per site during the implementation of the program and completed the *subject mastery form*, where she rated if the trainer completed, partially completed, or did not complete sessions as

expected (in terms of the content and mode of delivery of the content). Trainers completed the *maternal rating form* at the end of each session, and they rated the engagement of mothers (namely, interest displayed, participation, and perceived uptake and comprehension of the session's material). The scores (rated via a 5-point Likert scale) were entered into REDCap data management software and classified according to low (1–2), moderate (3), or high (4–5), then averaged across sites for the 5th and 25th observed sessions. Additionally, each trainer completed a daily attendance sheet and recorded, to the extent possible, reasons for absenteeism. Trainers also completed *daily observation forms* in which they documented if there was anything unusual about the classroom environment or the session in general, as well as their own perception of the progression of the sessions. A Yale researcher (LP) performed a content analysis and classified reported reasons for absenteeism, generating a thematic summary of the daily observation entries, to determine patterns in process as well as in structural quality of the program.

**Consenting and Ethical Review.** This trial was conducted according to the protocol approved by the Human Subjects Committees at Yale University and the Arts, Sciences, and Technology University in Lebanon, who approved all recruitment, assessment, data management, and participant protection procedures and materials. Introductory group meetings were held in each study site, with the support of the NGO directors, to introduce MOCEP and the study. Written consent was obtained upon enrollment and the mothers provided permission for their children. The Principal Investigator in Lebanon (GI) obtained written consent from NGO directors to ensure clarity and acceptance of the protocol. Participants were offered the equivalent of 10 US dollars upon completion of data collection waves. No adverse events occurred during the course of the study.

## Results

**Characterization of Context in the Study Sites.** Of the 106 mothers recruited to the study, 98% of mothers were married, the majority (51%) had completed at least elementary school, 10% were employed, and 69% were born in Lebanon. Of the 33 mothers who reported being born in another country, 29 were born in Syria, 1 was born in Libya, 1 in United Arab Emirates, 1 in Jordan, and 1 in Saudi Arabia. Fifty-one percent of the children were male, 85% were attending another education/development program, and 27% were reported by their mothers as having a diagnosed or possible developmental disability. Most children were 4 years old. We explored four overarching contextual domains among the mothers: (1) sense of security, safety, stability, and quality of life; (2) perceptions of community cohesion; (3) major stressors; and (4) perceptions of the impact of the context on participating children. Supplemental Table 4 summarizes the emerging themes and representative quotes illustrative of the analysis.

Generally, mothers and fathers residing in the refugee communities expressed a sense of insecurity and lack of safety. In addition, the community leaders remarked on the increase in the influx of Syrian refugees, which they felt had increased inter-ethnic tensions among the communities. One of the most commonly reported challenges with respect to quality of life was crowding in the homes, which, according to informant testimonies, was a conduit to stress. With regard to perceptions of community cohesion, there was an overarching sense of mistrust, lack of unity, and challenges to socializing with the larger community. Participation in programs led by local agencies emerged as a mechanism through which some mothers were able to socialize. In terms of key stressors, economic need and unemployment, as well as a sense of loss and hopelessness, emerged as common factors. These, in turn, affected the perceptions of the impact that the environment had on children's wellbeing, which included concerns around safety and negative effects resulting from displacement and war experienced by some.

**Program Enrollment: Enablers and Challenges.** To explore the enablers of and challenges to MOCEP enrollment, we asked mothers in the FGDs to discuss the reactions of their friends, husbands, and/or close relatives when they learned about the program. Enabling and supportive reactions included openness and interest in new content and acceptability of exploring parenting strategies: "*People who are close to me encouraged me and said it is a good idea. Even if we are educated there are still things and skills that we don't know so it is good to learn them from someone with experience.*" One of the major points of resistance was the perception that parenting knowledge is innate and cannot be learned or developed. As one mother recalled, quoting her friend: "*Why do you need to go to the Mother and Child Program*? *Why don't you know how to raise your children?"*

Another mother characterized the reaction of her husband as a challenge to enrolling: "*My husband laughed at me and said, 'Without trainings you raised your kids in a modern way even if you don't agree with it.*'" However, some mothers also remarked that their husbands were supportive. "*My husband was happy for me. Since I don't go anywhere, he wanted me to participate and learn.*"

In terms of common expectations for the program, mothers expressed interest in learning new approaches to parenting—with an emphasis on effective strategies to discipline their children—as well as in promoting their own and their children's social skills. The community leaders highlighted two enabling factors they believed promoted program participation. The first was mothers' interest in engaging in skills-based training, along with the testimonies of prior participants, who expressed that the program was useful to them. The second was the trust that mothers generally had in community leaders. As such, the leaders' endorsement of MOCEP was highlighted as an enabler to program enrollment. The perception of the community leaders was that a critical challenge to enrolling mothers in MOCEP included the time commitment required to participate in the

**Table 5.2. Attendance Rates and Reported Reasons for Dropout—Trainer Reports**

| | *Average Number of Sessions Attended (SD)* | *Commonly Reported Reasons for Non-Attendance* | *Commonly Reported Reasons for Dropout Across All Sites* |
|---|---|---|---|
| Site 1 | 11.7 (11.2) | Doctor's appointments, sickness, family problems, no reason given | Change in life circumstances, sickness of family member, sickness of the participating mother, left country, program burden (with regard to both the length and frequency of sessions), started working, lost to follow-up, no longer interested, and travel (site 3) |
| Site 2 | 13.6 (8.8) | Travel, withdrew from study, no reason given | |
| Site 3 | 18.6 (5.4) | Withdrew from study, no reason given | |
| Overall | 14.5 (9.2) | | |

*Notes.* Attendance records were missing for four mothers. No statistical significance between sites on average attendance rates ($p = 0.09$).

program. Proximity of the NGOs where the program was held was another program participation enabler.

**Attendance Rates.** Trainers recorded daily attendance and reported common reasons for non-attendance and dropout (Table 5.2). There were no statistically significant differences among the sites with regard to average attendance rates. Reasons for early withdrawal (of the total sample), included new employment (6%), program burden (5%), change in life circumstances (4%), illness of family member (4%), travel (4%), illness of the participant (1%), no reason reported (2%), or lost to follow-up (13%). The average attendance rate across the three sites was 14.5 ($SD = 9.2$) sessions, out of 25 possible program sessions. Illness and travel (site 3) were commonly reported reasons for non-attendance. There were no statistically significant differences among the three sites in terms of the average attendance rates ($p = .09$).

**Fidelity of Implementation, Program Quality and Maternal Interest, Participation, and Uptake of Content.** To determine the fidelity of the MSP component of MOCEP, the MOCEP supervisor conducted external observations during five of the 25 group sessions. A standardized checklist was utilized to ensure that the trainers delivered and applied the activities as outlined in the curriculum. The MOCEP supervisor's ratings showed high adherence to the program content by the three trainers (data not shown due to low variability of the ratings). To oversee the compliance in the delivery of the CTP component, trainers were expected to review the mothers' worksheets weekly and to provide feedback during the sessions. However, entries from the trainers' daily observations often noted low completion rates of the CTP worksheets. Some of the challenges included lack of time (due to

**Table 5.3. Positive and Negative Structural and Process Quality Characteristics Experienced in Each Session as Reported by the MOCEP Trainers**

| *Quality Characteristics* | *Positive* | *Negative* |
|---|---|---|
| Structural | Content of program<br>– Interest in features of the curriculum<br>– Delivery modalities (role-play, videos<br>Trainer skills/training<br>– Comprehensive and skills-based training | Environmental/contextual<br>– Extreme weather<br>– Insecurity (e.g., bombing occurred in one site during completion of trial)<br>Environmental (places were sessions took place)<br>– Noise<br>– Presence of children in sessions<br>– Poor lighting in rooms<br>– Materials needed not always available<br>Delivery characteristics<br>– Length of session time |
| Process | – High interest in the topics covered<br>– Positive relation with trainers<br>– General acceptability of program content | – Flow of sessions altered due to conversations addressing stressors, current situations (although this could have contributed to strengthening group dynamics, it was noted that conversations could elicit negative emotions and challenge the ability to cover the content originally intended for the sessions)<br>– Level of comfort with regard to some topics for discussion<br>– Content of program (e.g., level of complexity for some mothers, time needed for application at home for assignments related to CTP) |

additional responsibilities of the mothers in the home, as well as children having to attend to schoolwork, in the case of those enrolled in other ECD programs). To assess the quality of implementation, trainers documented positive and negative structural and process characteristics experienced in each session (Table 5.3).

To assess the level of engagement of mothers throughout the delivery of the program, the MOCEP trainers rated interest, participation, and uptake of the content for each of the mothers during the external observations. Supplemental Figure 2 illustrates the proportion of mothers displaying low

versus high engagement during the first and last observed sessions. The data show that interest, participation, and perceived uptake of content increased over time across the groups.

**Enablers of and Challenges to the Application of an RCT for the Assessment of Program Impact in the Lebanese Context.** We conducted a fit-for-purpose interview with the lead data collector and the MOCEP program supervisor (who are also co-authors of this study) in Beirut. Table 5.5 highlights (1) the factors that posed significant barriers to the completion of the RCT (including recruitment, randomization, financing, safety and security, and time for completion of assessments), and (2) effective strategies to overcome those challenges. In general, trust in the local agencies, continuous communication with community leaders and participants, capitalizing on the consenting process to inform and build trust, and identifying contextually effective incentives to promote participation in the evaluation (e.g., monetary compensation and providing food during assessments) were some notable enablers.

**Maternal and Paternal Reports of the Program's Impact.** To explore the perceived impact of the intervention on maternal, family, community, and child outcomes, FGDs with the mothers were conducted before and after program participation. With regard to impacts on home practices, the maternal reports suggested that the types of supports offered to the children after participating in the program were more intentional and included explicit encouragement and guidance. With regard to perceptions and attitudes related to disciplinary strategies prior to participating in MOCEP, several mothers reported yelling, depriving of privileges, ignoring, and hitting. At the same time, some mothers also reported at baseline using dialogue, speaking nicely, and applying corporal punishment as a last resort. After the intervention, disciplinary practices were largely focused around listening, dialogue, and redirecting behavior. Corporal punishment and yelling were reported at endpoint to be used less frequently, compared to frequencies reported at baseline. After the intervention, mothers also reported changes in their own social and communication skills, as well as in their own feelings of resilience (e.g., ability to cope with stress) and wellbeing. With regard to perceived changes in the child, several mothers reported increased confidence in their children.

To explore the impact of MOCEP on perceived social cohesion, mothers were asked to discuss their feelings with regard to the group dynamics. Generally, there was a sense that the groups provided support, a space for socialization, and a vehicle to improve their self-confidence. However, there was no direct evidence to suggest the program had an impact on the general sense of security and community cohesion beyond the group meetings. Mothers also consistently noted a positive relationship with the trainers, across all sites, and, in many instances, the mothers established groups in social networking and communication apps/programs (e.g., WhatsApp) so that they could continue to connect with one another following the

**Table 5.4. Fathers' Reported Impact of MOCEP**

| *Emerging Theme* | *Representative Quotes* |
|---|---|
| Changes in father's engagement and interaction with children | – *"My wife is more assertive as to when I should be stricter with our daughter. She gives me added responsibility as a father to deal with that."*<br>– *"She used to remind me a few times. If I was trying to teach my child about something she'd remind me that she learned something from the program that would help and would be a better way."* |
| Changes in mother's interaction with father and children | – *"Our relationship has become better, she's in a better mood. Once she's calm I become calm so yes our lives are better than before."*<br>– *"She has more awareness. She has an ordered way of doing things, calculated, calm, she has a goal to work towards in the school. There have been good things. She teaches them better, she learns things and applies them on the children."* |
| Changes in mother's interaction with other people outside the family | – *"She changed quite a lot. She couldn't do 1 out of 100 before the program. She improved the way she interacts with her community, her friends, became more social. Before, she was not really social. Now I feel her social skills are much better with other people."* |

completion of the study. The statistical significance of the changes across these parenting domains and behaviors were quantitatively assessed in the outcomes of the RCT, and, as noted above, the results were much more promising among those mothers who participated in 14 or more of the 25 sessions (Ponguta et al., under review).

There were three emerging themes with regard to the perceived impact of the program on mothers, as reported by the fathers. These included changes in fathers' engagement and interactions with children, changes in mothers' interactions with fathers and children, and changes in mothers' interactions with other people outside the family (Table 5.4). In general, fathers felt the program increased how assertive mothers where in terms of child-rearing practices, and they also noted an increase in social relationships with other women upon engaging in the program activities.

## Discussion

The impact of parenting programs on parental knowledge, attitudes, and practice, as well as on child development outcomes, in contexts of high fragility—including among communities experiencing displacement,

**Table 5.5. Perceived barriers to conduct the RCT in and effective strategies to overcome them**

| *RCT Process* | *Barrier* | *Effective Strategies to Overcome Barriers* |
|---|---|---|
| Recruitment to participate in RCT | – Perception of the purpose and use of the data (mistrust) | – Trust in centers and community leaders<br>– "Open house" events to discuss the study and objectives. Detailed consent form was provided to mothers who were given the opportunity to discuss with their families and ask additional questions |
| Randomization, wait-list design | – Confusion with regard to the purpose of a wait-list design<br>– Preference to participate with friends and family members (who may not have been randomized to the intervention group) | – Conversations with individual mothers, restating objectives of group assignment, and reinforcing commitment by the agencies to deliver the program at a later time |
| | – Risk of losing mothers during the wait-time | – Group events/outings held during the wait period to keep mothers engaged |
| Completion of maternal assessments | – Length of assessment | – Offer breaks, snacks; respect participant's pace<br>– Provide incentives to mothers to compensate their time |
| | – Mistrust in process (use of data) | – Review the consent form, which provided an additional opportunity to ask questions, understand possible risks and benefits, and rights of participants |
| | – Videotaping of dyadic interactions | – Remind mothers and children they had a right to refuse<br>– Allow mothers and children not to show their face to the camera, if they preferred<br>– Explain the purpose for the videotape and mechanisms to protect confidentiality<br>– Provide a relaxed, safe environment |
| | – Elicitation of sadness, emotions by mothers during the completion of certain questionnaires | – Allow mothers to speak as needed<br>– Provide referrals to other services as needed<br>– Have plans in place to report and manage incidents as needed |

(*Continued*)

**Table 5.5. Continued**

| *RCT Process* | *Barrier* | *Effective Strategies to Overcome Barriers* |
|---|---|---|
| Completion of direct child assessments | – Length of assessment | – Make the assessments interactive, fun for children<br>– Give children the time needed |
| Conducting an RCT by the local implementing agency | – Burden of data collection<br>– Following new protocols and procedures that had not been applied prior to the agency working in this context | – Continuous communication with all research partners<br>– Utilization of a data collection platform that was user-friendly<br>– Utilization of the research to promote the agency's own research practices in future programs |
| Funding mechanisms and cycles | – Unexpected delays leading to emergent funding needs | – Flexible funding agencies<br>– Agencies providing supplementary funding to overcome unexpected barriers |
| Safety and security | – Bombing occurred during completion of the trial in one of the study sites | – Delay data collection until safety conditions were restored |

insecurity and poverty—are poorly understood (Britto et al., 2017; Murphy et al., 2017). We were interested in documenting the process of implementing MOCEP—a program that targets parenting practices and knowledge with the aim to boost children's holistic development and school readiness—in Lebanon. This is important because exposure to adversity during early childhood has been shown to be predictive of post-traumatic stress disorder among Syrian refugee children living in Lebanon (Karam et al., 2019). Caregiver support has been identified as a necessary, core component of humanitarian responses, yet parenting programs in these contexts are scarce (Cobham & Newnham, 2018). A recent meta-analysis found that program components associated with larger effects in parenting programs include (1) incorporating strategies to enhance positive parent–child interactions and emotional communication skills, (2) promoting non-harsh discipline and consistent limit-setting, and (3) providing the opportunity for parents to practice skills directly with their children (Kaminski, Valle, Filene, & Boyle, 2008). Although MOCEP covers these critical domains and strategies, no experimental evaluation of the program in humanitarian settings had been conducted to date. Furthermore, most of the studies that systematically analyze parenting programs have emerged from high-income country contexts. One review of parenting programs in developing countries, targeting the prevention of behavioral difficulties in children, revealed that most programs aim to prevent physical and neurocognitive difficulties, and that rigor is poor among evaluations of interventions aimed at preventing emotional and behavioral outcomes (Mejia, Calam, & Sanders, 2012).

There are few studies that evaluate the impact of parenting programs among refugee and other marginalized communities in humanitarian relief contexts, while concomitantly exploring the process of the implementation and evaluation of the program (Murphy et al., 2018). The understanding of impact, as well as of the implementation, is crucial to strengthen the design of programs in complex settings and to better advocate for these programs in hard-to-reach areas. Our study has implications for the implementation of MOCEP across the globe and is relevant to the delivery and evaluation of early childhood parenting programs in settings facing displacement, poverty, and insecurity.

**Analysis of Context and Enablers of and Barriers to Program Enrollment and Adherence.** Prior to the implementation of the program and the rollout of the evaluation, we qualitatively explored the context within which the target communities lived. Other process evaluation frameworks have highlighted the relevance of assessing the conditions within which interventions are delivered (Durlark & DuPre, 2008). Our analysis revealed notable stressors (e.g., inter-ethnic tensions, crowding in the homes) for multiple stakeholders, which reportedly had an impact on daily life and community dynamics. One important lesson learned, therefore, was the timing for conducting an exploratory and systematic analysis of context. Such analyses should ideally be applied prior to the implementation of the program and should be utilized in designing the process and impact evaluations and in informing all necessary cultural adaptations. A characterization of context should also be applied to determine ways in which existing practices, beliefs, and talents of the mothers can be included to sustainably empower the communities, while working in partnership with the mothers and families themselves to recognize their own potential and capital.

We explored factors that may promote or hinder program enrollment. One enabler to program participation was paternal support. This is consistent with literature in non-humanitarian contexts where spousal support contributed to maternal participation in parenting programs (Piotrowska et al., 2017). A limitation of our study was that the father interviews possibly assessed fathers who were already generally engaged and more supportive. Therefore, a more systematic look at paternal perceptions and attitudes among a more diverse group of fathers is needed. One key barrier to enrollment that emerged was the way in which communities perceived the objective of MOCEP. There was an assumption by some that the program aimed to "teach mothers how to parent," rather than offering a set of skills to facilitate parenting functioning and to support the development of their children. Community leaders also highlighted that mothers valued skills-based programs. Therefore, aligning tipping-points for engagement with the framing and dissemination of the programmatic scope could be an effective strategy to increase enrollment. Working closely with the community leaders, given the trust that

families place in them, is an important consideration with regard to promoting participation.

**Attendance, Fidelity, and Quality of the Implementation.** Attendance rates in the program were relatively low and attrition rates were high (Table 5.2). This is not surprising, as dropout in high-intensity parenting programs is common, and possibly exacerbated in certain contexts (Gross, Julion, & Fogg, 2001). MOCEP is a 25-session group intervention, and it requires in-depth discussions, as well as modeling and coaching by experienced trainers. Travel, change in employment status, illness, and program burden emerged as common barriers to attendance. To accommodate the availability of the mothers in some sites, the sessions were offered twice a week, instead of once. Although this may have contributed to retaining some participants, the effect that changes to the weekly delivery had on participation and on the program's impact is yet to be determined. In addition, it is clear that the positive impact of the program was significantly greater for the mothers attending 14 or more of the 25 sessions (Ponguta et al., under review). Therefore, exploring the effect of reducing the number of sessions, as well as the frequency of delivery, is an important area for future research.

In addition, we explored attributes of quality in the delivery of the program and identified notable structural and process challenges. From a structural perspective, the physical conditions of some of the facilities, harsh weather conditions, and lack of availability of materials emerged as notable barriers. Furthermore, the MOCEP group sessions ideally must be implemented among mothers only. Therefore, in all sites, childcare was offered during the sessions. However, it was often noted that there were factors that made it challenging to keep the children outside of the meeting sessions (e.g., lack of familiarity with the person offering care and children wanting to be with their mothers while at the centers). Ensuring suitable childcare options is an important consideration to ensure fidelity of implementation in future applications.

With regard to process, although external ratings of trainers' fidelity to program delivery were high, ad hoc changes to the delivery of the program were notable in Lebanon. For instance, mothers were instructed and expected to apply CTP components regularly with their children at home. According to trainer reports, mothers often reported difficulty in applying the CTP (e.g., due to other responsibilities in the home and/or to other obligations children had from other programs in which they were enrolled). This inconsistency could have hindered the efficacy of the CTP modules. Furthermore, we found that over 88% of the children in the intervention arm and over 81% of children in the wait list control arm were enrolled in a nursery or an early childhood education program. This means that MOCEP is an additional intervention in this context, whereas it was originally designed to be delivered to children with no access to other programs. This could further impact the expected outcomes of the program for

children, and further research is needed to determine how engagement in other programs may have an impact on the efficacy of MOCEP with regard to boosting development and school readiness. 27% of children reportedly had a diagnosed or suspected disability, according to maternal reports. We were unable to verify the prevalence of disabilities, an issue that warrants attention in highly vulnerable contexts.

Furthermore, the daily observation entries by the trainers revealed that, in some sessions (either because of the nature of the topic or the occurrence of an event such as the surge of violence in the sites), the mothers were eager to talk about their own lives, concerns, and stressors. These changes to implementation may have had unintended positive consequences with regard to social connectedness and provision of additional support to the mothers. At the same time, these events were regarded by trainers as significantly reducing the time available for the intended delivery of MOCEP's content. Yet, mothers expressed becoming friends, and some wanted to continue attending the sessions.

**Contextualization and Enablers of and Challenges to the RCT.** RCTs have challenged the research and practice communities because of their cost, feasibility, differential attrition rates across groups, and lack of validated and contextualized measures, as well as the ethical implications of random assignments (Slobodin & de Jong, 2015). Here, we showcase some of the self-reported impacts of the program on maternal, child, and family outcomes. For instance, both the qualitative and quantitative analyses signaled positive changes in the way in which mothers engaged with children in the home to support their learning. They also showed a reduction in harsh disciplinary practices (Ponguta et al., under review). This is in line with research in diverse cultural contexts, noting positive changes to parental practices in response to targeted parenting interventions (De Graaf, Speetjens, Smit, de Wolff, & Tavecchio, 2008; Wittkowski, Dowling, & Smith, 2016). A recent systematic review found that a majority of studies reported positive changes in parental self-efficacy—the expectation of a parent that s/he is able to successfully parent—following group-based interventions similar to MOCEP (Wittkowski et al., 2016). Parental self-efficacy has been associated with positive parenting, which, itself, promotes positive child development outcomes (Jones & Prinz, 2005; Jackson & Moreland, 2018). Further research is needed to understand the mechanisms by which group-based interventions may improve parental self-efficacy in highly vulnerable contexts. In this study, fathers pointed to positive changes in their own parental practices as well as in their own relationship with the mothers. Other emergent themes with respect to the perceived changes in children were their self-confidence and social skills, as reported by the mothers in the FGDs. These findings indicate several potential areas of impact and may inform other possible areas of exploration in future evaluations.

In our experience, the co-construction of an assessment battery that considered the program's theory of change and the perceptions of the

community were crucial. For instance, an initial interest from the research team was the exploration of the impact of the program on biological markers of stress. In discussions with community leaders, the acceptability of some of those measures was deemed low. This required the readjustment of the original battery, as well as a close partnership with Lebanese and regional experts, to optimize the final measures. One particular limitation was the lack of validated measures for child development and parental behaviors in these communities. It was crucial to work collaboratively with local and regional experts to maximize the face validity of the final instruments.

Key challenges to evaluations of ECD programs in fragile contexts include safety, security, and mobility; staff capacity and interest; and funding (Murphy et al., 2018). Our experience aligned well with the challenges reported in the existing literature, particularly with regard to safety and funding concerns. Another significant challenge to the evaluation of MOCEP was the application of an RCT design that would be acceptable to the community and would not affect the trust that mothers had in the community leaders, while maintaining scientific rigor. We found that the wait-list control design was acceptable to community leaders and to the communities themselves, but this was only achieved through extensive communication with mothers about the reason for the wait-list design and by operationalizing the successful retention of the wait-list control group. To overcome these challenges, the local implementing agency was explicit in the commitment that all groups would receive the intervention, and it also led recreational activities with the wait-list control group to promote their participation and help maintain engagement while the intervention group participated in program sessions. Open house events introducing the program and the study, as well as detailed consenting processes, were crucial to highlighting the rights of participants and reinforcing trust in the research process. Another major point of consideration is that because we elected, for ethical reasons, to offer the program to the wait-list control group, we eliminated the possibility of conducting longitudinal follow-up studies of this cohort.

**Future Directions and Implications for Practice.** Implementation evaluations, including ours, have certain limitations and require specific considerations. First, it is crucial to have committed and motivated practitioners willing to capture objective data on the process of implementation, which may not always be feasible in other settings. Second, when capturing perceptions of participants, it is important to reduce bias in order to gather a large, generalizable range of perceptions. In our case, the evaluation was important to highlight possible barriers to program implementation, as well as opportunities to increase enrollment and strengthen quality. Implementation evaluations should be fit-for-purpose (e.g., to detail implementation during a pilot, to characterize scale-up, or to document a process of routine implementation) and should match local data collection capacities. The outcomes of this implementation evaluation have several implications

for practice. We provided evidence to highlight contextual characteristics that should be considered in future program adaptations and applications, including inter-ethnic relations, concerns around security and trust and the importance of engaging community leaders in the dissemination of information about a program's intent. From a fidelity perspective, in the context of Lebanon, there were several challenges to the quality of the program: (1) adherence (length of the program, frequency of sessions, and adherence to delivery of CTP content), (2) structural challenges (need to find reliable and efficient care for children during the sessions, and ensuring proper physical conditions and availability of materials), and (3) process considerations (addressing stressors that affect the daily lives of the mothers and their families). Despite these challenges, our analysis shows that MOCEP has an impact on key domains of parental practices—notably, a decrease in harsh disciplinary practices (Ponguta et al., under review). The RCT was crucial in robustly assessing these impacts. Our analysis shows that although a waitlist RCT was challenging and attrition rates were very high, the study was feasible in this context, in part due to close partnerships with community leaders and buy-in from local partners. Finally, to the extent possible, we explored paternal involvement (through maternal reports) and conducted an ancillary qualitative study with fathers. However, it is important to more systematically explore paternal roles and impacts as well as gender differences upon participation in parenting interventions in the global context. It is also clear that finding ways to reduce the number of program sessions and to increase the engagement of fathers may be important future directions for this field of research.

Through targeted dissemination of this work, we aim to (1) partner with program implementers to communicate our findings; (2) provide recommendations to practitioners in these settings to help optimize program delivery; and (3) identify ways to mobilize investments to support evidence-based programs for early childhood in fragile contexts, particularly in communities experiencing displacement. RCTs in settings like the one described here are challenging. However, our research indicates that they are feasible if thoughtfully aligned with cultural and programmatic contexts. Moreover, they are critically important, along with implementation evaluations, in efforts to strengthen programs and to identify avenues for promoting empowerment and facilitating cohesion among families.

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