Virtual Training Protocol: A Guide for Researchers in Refugee Camp Contexts

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Introduction

Enhancing the involvement and integration of community members in humanitarian field research is crucial for ensuring that research efforts are inclusive, culturally sensitive, and contextually relevant. In refugee camp contexts, youth access to high quality, meaningful educational and work opportunities is severely limited. Yet involvement in participatory research could provide refugee youth with opportunities to enhance digital literacy and build transferrable quantitative, collaborative, and leadership skills (Shohel, 2022). Although researchers conducting their studies in humanitarian contexts aim for a participatory research model that includes community researchers, research skills education within camps is rare, with many organizations relying on their own research teams trained outside of the context. The recent pandemic, with over 80% of humanitarian staff leaving refugee camps during lockdowns (Radio France International, 2020), forced innovative solutions to this model. Our participatory research was one such project needing to shift course when planned in-person research training of refugee youth in the camp was no longer possible due to pandemic restrictions on travel and access to the camps in the period between April 2019 and May 2021.

In this report we outline our approach to virtual training of a youth research team that implemented a research project to investigate the effectiveness of an intervention to foster social emotional development in Rohingya children living in the Kutupalong and Nayapara refugee camps located close to Cox's Bazar, Bangladesh (Callaghan et al, 2024). We first outline our team-building strategy, which included 12 Rohingya refugee field researchers and 4 non-refugee researchers. The materials used for training and the topics covered in training are subsequently described. Throughout the training and research implementation phases we assessed the effectiveness of training and corrected course when needed. Our training assessment approach is described below and followed by our reflections on the lessons learned throughout this process. We provide a researcher checklist to serve as a practical guide for future initiatives that incorporate virtual research education programs for refugee youth living in camps.

Background

Despite monumental efforts, international NGOs face challenges in keeping up with educational and training opportunities for refugee youth, prime among them being the rapid rise in the numbers of refugees globally, and the development of massive encampments to shelter them. By mid-2023, the UNHCR estimated that 110 million people worldwide were forcibly displaced (UNHCR, 2023a). By the end of 2022, UNICEF estimated that 46.2 million children were affected by crises and in need of educational support (UNICEF, 2023b). Over 965,000 Rohingya (52% children) live in makeshift shelters across the sprawling collection of 32 camps in the Rohingya refugee camp (Cox's Bazar, Bangladesh) (UNHCR, 2023b). The early humanitarian response to the Rohingya, the majority of whom fled genocidal violence in their home country of Myanmar in August 2017, necessarily focused on security and mental health support. A protracted effort by international NGOs to secure basic education for Rohingya children and youth came to fruition with the 2020 Bangladesh government announcement that the Bangladesh curriculum (Levels 3-5) would be implemented in established learning centers, with the addition of Level 10 programming for youth in 2023-2024 (UNICEF, 2023a). At the time of writing, youth access to basic education in the camps is still limited and the potential for a lost generation for Rohingya looms large, with current global realities suggesting that massive refugee encampments and the educational challenges they entail will not end anytime soon (UNHCR, 2023c). A sustainable approach to providing research education for refugee youth, one that can be rapidly implemented and adapted to context, may help to build resilience and avert the loss of engagement in securing their own futures that many refugee youth experience.

Much of the programming that is implemented in camp contexts is based on evidence from humanitarian research, which has utilized the expertise of refugee and host community researchers for many decades. To better understand root causes and provide an evidence base for designing supports to psychosocial development, partnerships between refugee, humanitarian. and academic researchers are critical. Our team recently completed partnership research to examine the success of an intervention designed to support the social emotional development of Rohingya children (5-12 years) living in the Bangladesh camp complex (Callaghan et al., 2024). Behavioral measures of helping, sharing and empathic responding consisted of standard protocols from developmental psychology research. The measures required consistent implementation across individual children prior to and following a 10-day intervention comprised of daily, small group engagement of children in a standardized program of collaborative educational activities. Thus, standardized, objective implementation of behavioral protocols was a main focus of the training. Given the special ethical considerations for research with children in humanitarian contexts (UNICEF, 2022), training also highlighted the nature and ways to address ethical issues in the research. Details of the virtual training and assessment approach follow.

Phases of Virtual Training

Team Building

Our academic-community partnership included developmental psychology researchers who worked closely with our Rohingya collaborator who had grown up in the camp and was resettled in a Canadian city. Our Rohingya partner recruited a team of 12 young adult Rohingya who lived in the camp and built

community trust through contacts with area leaders within the camp. In total the team consisted of the project PI and Rohingya partner, 2 Canadian student researchers, and 12 Rohingya field researchers.

Training Platform and Materials Storage

The training platform was Zoom video conferencing with follow-up communication via email and WhatsApp messaging, and Telegram to share field researcher's practice videos and transfer data. Training materials were housed on a shared Google folder that all members of the research team could access. Field researchers' access to internet was intermittent and so one person from each of the two camp locations who had the most reliable access took on the role of data transfer, both during training and later in the study implementation.

Materials and Topics Covered in Training

The materials used in training encompassed print, Powerpoint slide and video formats. The following categories of materials were included: 1. Overview of the study with a brief summary of the research aims and rationale, the research design, and the ethical approach to child study in adverse contexts, 2. Specific ethical considerations in conducting research with children in forced migration contexts using hypothetical examples to illustrate the points, 3. Recruitment of participants including guidelines for obtaining informed consent in the refugee camp context, 4. Study design and importance of standardized implementation of all protocols, 5. Measures of prosocial behavior that included print outlines of the procedures and instructions, stimuli used in tablet-based procedures, and video demonstrations of children engaged in the procedures, 5. Descriptions of the intervention activities were accompanied by photos of the activity materials, videos of children engaging in the activities, and Powerpoint slideshows with embedded audio in the Rohingya language, and 6. Data collection procedures were outlined in print documents with individual participant Excel files prepopulated with labelled grids and having separate worksheets for each measure of prosocial behavior.

Virtual Training Sessions

Virtual training was conducted via Zoom videoconferencing and co-led by the PI and Rohingya partner. There were 10 core training sessions, with additional training-related communication and trouble-shooting taking place over WhatsApp messaging and email. Each Zoom session covered different topics and lasted 2 hours, with a Canadian research team member explaining the procedures and materials and answering any questions that arose and with translation from our Rohingya partner as needed throughout the session.

Offline Practice

In a second phase of training, field researchers met in small groups to practice the procedures they would implement in the study and to identify questions that they had. They practiced in pairs with one person administering protocols and the other serving as the participant, then switching roles. Once they were comfortable with their administration of the procedures researchers videotaped themselves and shared the video via Telegram with the Canadian team who reviewed them and provided feedback on any

changes that needed to be made to their delivery. Researchers spent 10-20 hours weekly, either individually or in small groups, to practice the procedures over a 5-week period.

Assessment of our Virtual Training Approach

At three points (immediately following training and before study implementation, after the first wave of data collection, and immediately following the study) the 12 field researchers assessed the strengths and limitations of the training they had received in questionnaires (see Appendix A). The questionnaires included rating, ranking, multiple choice, and open-ended questions regarding the researchers' virtual training experiences and problems that surfaced during training and implementation of the study. In addition, as a follow-up we administered semi-structured interviews to our Canadian Rohingya partner and one Rohingya field researcher to further probe themes that emerged over the three assessment points (see Appendices B & C). In the next section we describe the findings from our assessment of our virtual training protocol and recommendations that emerged from these findings for consideration in designing remote training protocols in refugee camp contexts.

Findings from the Assessment of Virtual Training

1. A natural evolution of leadership occurred within the field research team over the course of the study. Three team members became contact points for other field research team members and took on the role of liaison between Canadian and field research teams. These leaders were crucial for meaningful engagement of field researchers in decision-making, troubleshooting and consultative processes and in meeting language, cultural and technical challenges that arose. Additionally, as the leadership structure became evident, it became clear that Rohingya researchers felt most comfortable consulting with the Canadian Rohingya team member or each other and gained knowledge from opportunities to practice the protocols with one another, which fortified active collaborative learning and increased confidence with the training materials (Jeyakumar et al., 2021). In follow-up interviews it was suggested that proactively training field research coordinators to take a leadership role would provide the benefit of having in person guidance while learning the protocols. **RECOMMENDATION**: It is important to anticipate the important role that leaders within field research teams have in ensuring that field researchers have immediate feedback when learning procedures and feel comfortable in asking questions to clarify the study protocols.

2. The virtual training sessions emphasized the commitment to inclusion of all perspectives in order to build trust and enhance feedback on training or procedures. Field researchers received feedback to their practice videos, which served to enhance and guide the adaptation of training protocols (Jeyakumar et al., 2021). Nevertheless, in the assessment phase we observed a positivity bias in the feedback provided to the Canadian team, which may have been impacted by field researchers' reluctance to critically evaluate their training experience.   **RECOMMENDATION**: There may be unintentional barriers that make it difficult for field researchers to feel comfortable in providing their input to the research process. Thus, proactive discussion of the commitment to inclusion of all voices during virtual training may lessen the barriers to voicing their concerns experienced by field researchers.

3. The Rohingya field researchers voiced that one of the biggest challenges they encountered was accessing internet during training and implementation of the study, and for researchers tasked with data

management having to send large files of video data overnight when internet traffic was lighter. This context-specific challenge was not reflective of the training approach, but instead of the refugee camp context. In the Bangladesh camp internet and phone access is restricted to 3G access with researchers resorting to workarounds such as WhatsApp and Telegram apps to share data and access Google Drive documents. The constraints to accessing mobile high-speed internet also posed challenges to timely communication between Rohingya and Canadian research teams. **RECOMMENDATION**: For data transfer between field sites and research PIs it is important to identify all of the technical challenges upfront in order to ensure data security and management. When immediate data transfer is not possible, ensure that field researchers have the tech needed to back up data in the field for later uploading when access is reliable, and that data is destroyed on field devices once it is securely stored on PI computers.

4. Data management and data transfer methods posed significant challenges to several team members. In their questionnaire responses, field researchers made two main suggestions: 1. To have additional explanation of data entry methods and Zoom sessions to cover these methods, and, 2. To practice data entry with printed coding sheets prior to practicing with excel file data entry on tablets. Data management was organically taken up by team members whose educational background provided them with more quantitative skills, skills that contributed to their sense of ease with data management. **RECOMMENDATION**: In recruiting field researchers, affinity for different research skills should be established and researchers matched to tasks that match their skill sets. Data management training protocols can be developed that will not only hone existing skills of field researchers but can also add to skills of those who have not yet had the opportunity to develop these skills.

5. There was an increase over the first wave of study implementation in questions regarding procedural implementation. Although trainees voiced readiness to begin the study, the rise of clarification questions in the initial wave of implementation confirms that frequent assessment and check-in between field research and PI teams is critical for standardized implementation of study protocols. **RECOMMENDATION**: Researchers may benefit from pilot testing of children with field research team leaders providing feedback and resolving any emerging issues. This hands-on approach would enable researchers to familiarize themselves with procedures, ensuring preparedness for fieldwork.

6. Researchers identified safety and security concerns for themselves and for children travelling to the study venues, with female researchers voicing this concern most often. Indeed, a security issue arose during the study when a Rohingya activist living close to the study venue was murdered. In forced migration and refugee camp contexts, women and children are at significant risk for sexual exploitation and abuse. In response to the concerns raised by field researchers, the PI reiterated a message from training - that safety and security of participants and team members was of paramount importance - throughout the implementation of the study. **RECOMMENDATION**: Proactively make it clear that safety and security of the team and participants is of upmost priority and reiterate that message over the course of the study. Ensure that there is a channel for field researchers to voice their concerns openly with an expectation of team support to resolve safety issues. Ideally, a community partner who has experience in the setting will provide support to field researchers and identify specific safety concerns ahead of time.

7. Field researchers identified problems with transportation to the study venues from their homes. The Rohingya camps in Bangladesh consist of a sprawling collection of 32 camps, with significant distances

needed to traverse even within individual camps. Transportation also raised issues of safety, especially for women researchers. **RECOMMENDATION**: Access to reliable and safe transportation to and from study venues will depend on the nature of the refugee settlement but is clearly a logistical concern that needs to be proactively addressed when conducting research in humanitarian settings.

8. Language fluency of trainees and communication skills of trainers are crucial to consider when designing virtual training programs. In the training for this study the PI and students led training sessions in English with the bilingual Rohingya researcher following up with Rohingya translation as needed. High levels of fluency in the language used in training will not always be possible in humanitarian contexts when the aim is for the inclusiveness of community stakeholders in the implementation of the research. It is also important to include community members who can monitor the cultural relevance of the research and training protocols, adapting when needed, which was provided in our study by our bilingual Rohingya partner who had lived experience in the refugee camp. **RECOMMENDATION**: Ideally, training programs will involve a bilingual team member trained in the specific procedures by the PI of a research project. Then, that individual would oversee the training of the field researchers and communicate with the PI for troubleshooting and ensuring the fidelity of the implementation of the research protocols. Back translation of task instructions is also needed. Thus, language accessibility and cultural relevance is important to consider in research training, a view that is supported by evidence that field researchers who share language and culture with research participants can help build trust and strengthen comprehension, ultimately resulting in data that more closely captures the realities of the researchers, participants, and their communities (REACH, 2019).

9. The tool used to assess virtual training tool consisted of the questionnaire as detailed in Appendix A. We encountered several limitations to this assessment approach, including respondents' confusion about how to rank order several options, which we resolved through additional instruction, and ceiling effects in responses to some rating questions. Regarding ceiling effects, field researchers may have followed a cultural norm of deference to authority with the PI seen to be the figure of highest authority. Given that for most researchers this was their first opportunity to participate in a research project, they may have been more likely to show deference to the PI who was providing this unique and valued opportunity, and less likely to offer criticisms. **RECOMMENDATION:** Assessment of training throughout training and implementation phases is critical to ensure the standardization of implementing protocols. Familiarization with the assessment tool and explicit training regarding the value of all team members perspectives as part of the training protocol may alleviate shortcomings often encountered in cross-cultural and cross-sectoral research where the 'outsider' is often considered to be the expert.

Conclusion

Despite the challenges posed by COVID-19, the virtual training and implementation of the study proved successful overall and revealed several strengths of our approach. The participatory involvement approach provided refugee youth with an opportunity to gain experience and enhance their research skills. The strong emphasis on inclusiveness of perspectives from the field researchers throughout training and implementation addressed historic exclusions of community members from decision-making processes. Frequent feedback through messaging apps facilitated communication between field and lab research teams throughout training and implementation, enabling timely response to concerns that arose. Shared

internet storage of training materials provided researchers with access to materials at any time, effectively ensuring researchers could review and practice on their own schedules. The Rohingya researchers who assumed leadership within their locations fostered the meaningful engagement of the other team members and promoted confidence and collaborative learning. A particularly rewarding outcome of the virtual training approach for the research partners was the positive feedback from the Rohingya researchers, who emphasized their pride and honor in participating in the virtual training and intervention study. However, several considerations for future training protocols were also identified, including the need for targeted instruction on data management, balancing research teams with bilingual team members, general and gender-specific safety concerns, and logistical challenges related to internet access and transportation issues throughout the research phases. Addressing these limitations will be crucial for future endeavors in similar contexts.

References

Callaghan, T., Colasante, T., Muhammad, S., Corbit, J., Yavus-Muren, M., Raffaele, C., Akter, R., Al-Janaideh, R., Duan, T.-Y., Didkowsky, N., Beuze, J.N., Homer, B., Cameron, C.A. & Malti, T. (2024). Fostering prosociality in refugee children: An intervention with Rohingya children. *Monographs of the Society for Research in Child Development, 89(1-2).* https://doi.10.1111.mono.12477

Jeyakumar, T., Ambata-Villanueva, S., McClure, S., Henderson, C., & Wiljer, D. (2021). Best Practices for the Implementation and Sustainment of Virtual Health Information System Training: Qualitative Study. *JMIR medical education*, *7*(4), e30613. https://doi.org/10.2196/30613

Radio France International (RFI). *Rohingya camps in Bangladesh under complete virus lockdown*. (2020.). Retrieved June 13, 2024, from https://www.rfi.fr/en/international/20200409-rohingya-camps-in-bangladesh-in-complete-coronavirus-lockdown-risk-spread-covid-19

REACH (2019). *Participation of Rohingya Enumerators in Data Collection Activitie*s. Relief Web: OCHA. Retrieved June 13, 2024, from https://reliefweb.int/sites/reliefweb.int/files/resources/reach_bgd_brief_rohingya_enumerator_pilot_april2019_1.pdf

Shohel, M. M. C. (2022). Education in emergencies: Challenges of providing education for Rohingya children living in refugee camps in Bangladesh. *Education Inquiry*, *13*(1), 104–126. https://doi.org/10.1080/20004508.2020.1823121

United Nations High Commission on Refugees. (2022). *Figures at a glance.* Retrieved June 13, 2024, from https://www.unhcr.org/about-unhcr/who-we-are/figures-glance

United Nations High Commission on Refugees. (2023a). Mid-year trends 2023. Retrieved June 13, 2024, from https://www.unhcr.org/sites/default/files/2023-10/Mid-year-trends-2023.pdf.

United Nations High Commission on Refugees. (2023b). UNHCR Bangladesh Operational Update, June 2023—Bangladesh | Retrieved July 13, 2024, from https://reliefweb.int/report/bangladesh/unhcr-bangladesh-operational-update-june-2023

United Nations High Commission on Refugees. (2022). *Figures at a glance.* https://rb.gy/0cepb6

UNICEF. (2022). *UNICEF Procedure on Ethical Standards in Research, Evaluation, Data Collection and Analysis | UNICEF Evaluation*. Retrieved June 13, 2024, from https://www.unicef.org/evaluation/documents/unicef-procedure-ethical-standards-research-evaluation-data-collection-and-analysis

UNICEF. (2023a) *Against the odds, children begin the new school year in Rohingya refugee camps*. Retrieved June 13, 2024, from https://www.unicef.org/press-releases/unicef-against-odds-children-begin-new-school-year-rohingya-refugee-camps

UNICEF. (2023b). *Bangladesh humanitarian situation report* (No. 63). https://www.unicef.org/media/139271/file/Bangladesh-Humanitarian-SitRep-No.63-31-March-2023.pdf

A Checklist
For Virtual Training in Refugee Camp Contexts

Leadership within the team:

    1.   Have you identified the leadership qualities most relevant to your project and sought to recruit team members having these strengths?

    2.   Do the skills and experience of team members match the needs of the project?

    3.   Have you considered diversity in skills and experiences to ensure a well-balanced team?

    4.   Are there clear communication channels established within the team?

    5.   Are mechanisms in place to address any conflicts that may arise within the team?

Inclusion of perspectives:

    1.   Has training emphasized the value of inclusiveness of diverse perspectives to ensure project success?

    2.   Have you included team members who are community partners with lived experiences and firsthand voices relevant to your research goals?

    3.   Have team building exercises been developed to encourage inclusive engagement?

    4.   Are tools in place to address any perceived power differentials between academic researchers and community researchers?

Logistical challenges of internet and cellular communication:

    1.   Have you addressed internet and cell phone access capacity within the location of the study, along with daily fluctuations in access?

    2.   Are there any specific challenges or limitations identified, such as network outages, bandwidth restrictions, or infrastructure constraints?

___ **3.** Have you identified field researchers on the team who have knowledge and experience with internet work arounds (e.g., alternative communication platforms)?

___ **4.** Have contingency plans been developed to address potential disruptions or delays caused by variations in connectivity?

Data management skills:

___ **1.** Have team members with existing quantitative skills or those who want to enhance their skills been identified?

___ **2.** Have you identified ways to ensure data security when transferring data?

___ **3.** Is there a need to back up data in the field before transferring to the PI's secure storage?

___ **4.** Have data confidentiality and security been discussed in training?

___ **5.** Have you identified ways to ensure accuracy in data collection (e.g. using printable documents, scanning the documents to upload)?

Safety concerns:

___ **1.** Have security concerns in the camp been assessed and discussed with team members?

___ **2.** Have you emphasized in training that security concerns may differ based on gender?

___ **3.** Have study venues been chosen with participant and research team safety as a primary consideration, considering factors such as accessibility, visibility, and proximity to community support services?

___ **4.** Are measures in place to ensure the physical safety and emotional well-being of participants and team throughout their engagement in the research activities?

___ **5.** Are there protocols in place to prevent and respond to incidents of gender-based violence, harassment, or discrimination within the research context?

Transportation:

___ **1.** Have transportation options and travel times been carefully evaluated to minimize logistical challenges for research activities?

___ **2.**   Have you identified a distance to the study venue that is walkable for research participants and set the recruitment range with that distance?

___ **3.**   Are transportation challenges, such as limited or nonexistent public transit options, road conditions, or fuel availability, actively addressed through contingency planning and resource allocation?

___ **4.**   Have alternative transportation solutions been explored to facilitate the mobility of both researchers and potential participants?

Language fluency, translation, and cultural relevance:

___ **1.**   Have you identified team members who are bilingual and can provide translation support for the project and for training?

___ **2.**   Have you ensured that all study materials, including surveys, consent forms, and instructional documents, are translated into the languages/dialects spoken by the participants and back-translated to ensure accuracy?

___ **3.**   Are additional translation supports beyond team members needed for training and implementation of the study?

___ **4.**   Has cultural relevance of tasks and materials been assessed by the team?

Assessing training and study progress:

___ **1.**   Have assessment tools been developed to evaluate training effectiveness?

___ **2.**   Is the assessment scheduled at key points during study implementation?

___ **3.**   Are responses to assessment feedback provided in a timely manner to correct course when needed?

___ **4.**   Have all types of measures for assessment and evaluation (e.g., questions, ratings, ranking, open-ended responses) been vetted for clarity the researchers?

___ **5.**   Do the assessment and evaluation methods ensure confidentially and anonymity of the respondents?

___ **6.**   Are there protocols in place to ensure rapid communication between field and PI research teams to ensure that feedback is acted upon promptly throughout the research process?

Appendix A

Virtual Training Assessment Questionnaire

We ask that you first fill in a few details that provide general demographic information about yourself. Following the demographic information is the questionnaire. The questionnaire includes sections where I ask you to rate (Section A), or rank order (Section B) different parts of the training, as well as open-ended questions for feedback (Section C). Each section has instructions for how to approach your answer.

Demographic Information

This information may help us interpret our findings from the assessment questionnaire. Please fill in these boxes with the appropriate information below:

Participant ID	Age:	Gender:	Birthplace:	How many years have you lived in Nayapara/ Kutupalong?	Education level?

Please rate your fluency in the languages listed in the table below for understanding the spoken language, speaking the language, and writing the language (you can omit writing for Rohingya as it does not have a written form). Please rate fluency on a scale of 1-7. Please add additional languages that you use.

	Understand	Speak	Writing
Rohingya			
English			
Other (list)			

Topic: Callaghan, T. (2024). Fostering Prosociality in Refugee Children: An Intervention with Rohingya Children. *Monographs of the Society for Research in Child Development, 89*(1-2). https://doi.org/10.1111/mono.12477

Section A:

Instructions: The purpose of a rating scale is to gather information about how different parts of the virtual training compare to each other. You use a numeric scale to assess approximately how the item should be rated. For example, if you are rating how much you like candy on a scale of 1-7, if you like it a lot you will rate it toward the top of the scale (e.g., 6) and if you do not like candy you would rate it toward the bottom of the scale (e.g., 2).


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|-----|-----|-----|-----|-----|-----|
1     2     3     4     5     6     7
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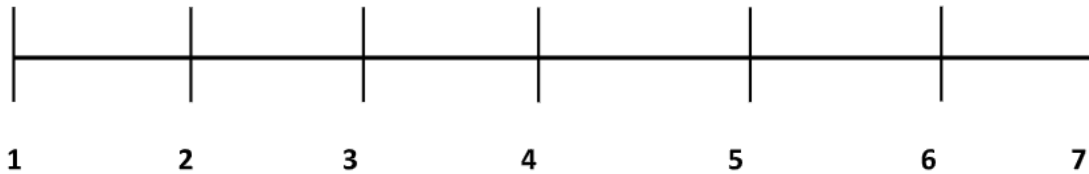
In this section, please rate each of the suggestions for improvements on a scale of 1 to 7, with 1 indicating "**will not improve training**" and 7 indicating "**will be an excellent way to improve training**":

A1. Have group sessions followed by 1-on-1 sessions with a Canadian team member (Rating: ___).

A2. Have assignments from the Google documents prior to each group Zoom call (Rating: ___).

A3. Have documents emailed to our individual emails (Rating: ___).

A4. Have a training session for each of the 3 main Google drive folders – 1Overview, 2PrePost 3Intervention Rating: ___).

In the table below, each of the instructional PowerPoint documents are listed. On a scale of 1-7 please rate how useful each PowerPoint was in learning how to present the task to children (1= not very useful, 7 = very useful).

Specific PowerPoint Document	Rating
1.Origami PowerPoints	
2.DCCS training PowerPoint	
3.Hearts and Flowers training PowerPoint	
4. Fish Pattern training PowerPoint	

5. Race to Treasure PowerPoint	
6. Snug as a Bug training PowerPoint	
7. Puzzle training PowerPoint for younger kids	
8. Puzzle training PowerPoint for older kids	
9. All You Can ET training PowerPoint	
10. Gwakkamole training PowerPoint	

Additional Comments:

In the table below, please rate the usefulness of each specific instructional video on a scale of 1-7, where 1 = not useful and 7 = very useful.

Specific Instructional Videos	**Rating:**
1. How-to set up Mirage	
2. The how-to Auto sync	
3. The how-to video File Manager	
4. The how-to video coding manual sheets	
5. The how-to video Dictator Game	
6. The example video Sharing Game	
7. The how-to video Origami	
8. How to upload and rename video data	
9. How to upload and rename audio data	
10. The how-to Judgement and Imagine	

11. YouTube video of Canadian team implementing the procedures	

Additional Comments:

In the table below, please rate the usefulness of each Word document on a scale of 1-7, where 1= not useful and 7 = very useful.

Specific Word Documents	Rating:
1.Glossay of terms	
2.The Pre and Post Child Protocol	
3.The Intervention Child Protocol	
4.Researcher roles for pre and post	
5. The morning intervention logistics document	
6. The afternoon intervention logistic document	
7. The pre and post logistic document	
8. How to use Mirage	
9. How to Sharing (Candy Game)	
10. How to Helping (Origami)	
11. How to Dictator Game	
12. How to Judgement and Imagine	
13. How to counterbalance and manual data document	

Additional Comments:

Section B:

Instructions: In this section, please rank order the items listed. In rating items, you compare items to *one another and* arrange them in order from least to most preferred (or most useful, etc.).

B1: Rank order the tasks listed below from most difficult to understand (1) to easiest to understand (4) as you studied the procedures in training?

     a) **Origami (helping)**   _____
     b) **Sharing (candy game)** _____
     c) **Emotion perspective taking (emotion dictator game, emotion judgement / emotion imagine task).** _____
     d) **Executive function (Hearts and Flowers and DCCS)** _____

B2: Rank order these tasks from most difficult to understand (1) to easiest to understand (4) as you studied the intervention procedures?

     a) **The board games (Race to Treasure and Snug in a Bug)** _____
     b) **Mirage games (All you can ET and Gwakkmole)** _____
     c) **The puzzles and patterns (fish patterns, younger wooden puzzles, Tetris, and Lego)** ____
     d) **The emotion perspective story bundles.** _____

B3: This is not a rating question. For this question, please circle or highlight any of these challenges listed below if they occurred for you as you completed the virtual training:

     a) **Language difficulty**
     b) **Challenge with learning materials**
     c) **Challenges with meeting with other research for practice**
     d) **Challenges with transportation to practice**
     e) **Security in the camps**
     f) **Challenges with access to internet**
     g) **Challenges with health**
     h) **Difficulty communicating to the other researcher's**
     i) **Please list any other challenges that are not listed above:**

Section C:

As researchers, we are committed to implementing EDI (equity, diversity, inclusion) in our research practice. Equity refers to being treated fairly, and as an equal member of the team. Diversity refers to recognizing each other's different perspectives and encouraging everyone to consider diverse perspectives. Inclusion refers to having a research environment where everyone feels that their input is valued on the research team.

For the first two questions below please rate your research training experience of inclusiveness, equality, and diversity, where 1 = low level of the experience and 7= high level.

C1: How would you rate your feelings of inclusion as a research team member? ____

C2: How would you rate your feelings of equality as a team member? _____

For the next question, please write in your answer:

C3: Did you experience discomfort at any time during training because a cultural practice or cultural value was not considered by the Canadian training team? If yes, please indicate some ways that the research training could improve equity, inclusiveness and diversity.

Section D:

In this section we would like to hear how you think training could be improved. We also ask you to estimate how much time you spent each week in studying and learning the materials. Please give as close an estimate as possible for how much time you spent in each of the different aspects of the training listed.

D1: Are there any ways that training could be improved? (Examples; more zoom training sessions, more printable documents to use, more explanation of coding sheets, etc.). Please describe any kinds of improvements that would make our virtual training methods better in the future.

D2: Approximately how many hours per week did you spend in the following activities related to training?

a) Group practice (with one or more other members of the team – e.g., playing board games, practicing procedures with each other). _____

b) Individual study of the materials (reading, going through Powerpoints, playing video games) _____

c) Learning how to code and enter into the manual data sheets _____

d) Watching video from Google Drive and YouTube _____

e) Learning the Mirage system and how to set up children to play these games using their PIDs _____

Appendix B

Interview Questions for CRDI Partner

1. When you think of the calls and questions that you handled from the research team, which of the tasks did they have the most questions about? (For example, Mirage – presenting these games to the children, uploading data, etc; procedures on PowerPoint, entering data into manual Excel files, any others?)

2. Which researchers contacted you the most? Did that researcher seem to be designated by the team members, or naturally became, a leader of their classroom group?

3. Overall, would you estimate that you received more or less messages or contact from the researchers before starting the study (after training), during or after Wave 1, during or after Wave 2?

4. What recommendations do you have that would help us to improve virtual training methods for studies in the camp

5. Can you share with us any complaints or concerns from the researchers that we will keep completely confidential?

6. Did you hear from the researchers about any improvements they would like to see in training?

7. Would it be helpful to organize Zoom sessions so that we alternate between English and Rohingya instruction or information sharing?

8. Our early training period was long. Do you have any recommendations for us to guide researchers more effectively at the very beginning of a study? At one point in the early training, we began to ask researchers to read over specific files or videos in the Google drive. Was this helpful, or could we have provided better guidance in other way

9. One thing we noticed about the progress of the study and training was that certain people naturally began to lead the group – these individuals contacted us more on WhatsApp, asked very thoughtful questions, and made suggestions for improvements. They also seemed to be the individuals who had the most experience with the technology tasks like uploading data. Would it be beneficial to organize training in the future so that we do have a leader from each group at the outset, or that we assign a leader part way through training once we know who has the necessary skills to take on responsibility for keeping others informed and learn their assigned tasks? Do you have any thoughts on a better model for local research team building?

10. We had concerns about the safety of our team members throughout the study and especially for our female team members who may face additional safety concerns. Do you have advice for how the Canadian team could do a better job of opening communication channels with researchers in

the camp so that they feel comfortable in telling us about any concerns they have about their own, or the children/families' safety? Can you recommend news sources?

11. Related to this, how could we as a Canadian team do a better job of keeping informed about the situation in the camps and the cultural norms and expectations that would affect our researchers in the camp? Is there anything more we can do other than to follow the practice of conducting research in partnership with community members like you?

Appendix C

Interview Questions for Rohingya Field Researcher

1. During the implementation of the research study, it became clear that you played a significant leadership role and served as one of our primary contacts. Can you identify researchers from the table below who reached out to you or who you were able to provide help through the WhatsApp groups? What type of help were you able to provide?

2. Do you have any suggestions for how we can better facilitate communication within the Rohingya cultural context with all the researchers and ensure everyone feels comfortable to contribute their own ideas and suggestions throughout the study?

3. Would it have been helpful to enhance team building and collaboration across the Nayapara and Kutapalong research groups? If so, what ways would work best in the camp context to bring the research teams together? (Virtual? In person?)

4. We asked all the participants for suggestions to improve virtual training, some of the suggestions included, a) More Explanation on Data Entry Methods b) Increase the Amount of Zoom Training Sessions c) An Increase in Printable Documents. Which of the options did you and other researchers you had contact with find most straightforward, and which required extensive discussion to reach understanding (here you may mention a particular misunderstanding that came up)? Did you hear about any other concerns or suggestions for improvements from researchers over the period of the study or afterwards?

5. Would it had been helpful if the zoom training sessions had been conducted exclusively in Rohingya? Alternatively, do you believe that training one bilingual researcher to then educate others in Rohingya would have been a better approach? Related to this – for our feedback interviews - would conducting one-on-one interviews with a Rohingya research leader, rather than a member of the Canadian team, be a more effective way to gather feedback once training is completed?

6. After implementing Wave 1, we realized there was confusion about the coding sheets, using mirage and the PIDs associated to each child participant, and the sharing/candy game. Two potential improvements would be extending the training period or arranging a mock session day where researchers can practice all procedures with children present? What are your thoughts on these suggestions? Do you have other suggestions for a way to reduce confusion with the materials or implementation of the study?

7. In the questionnaire that you and the other researchers completed a year ago, many of the answers were very positive – which is very nice to hear! However, we also would like to have your insights on where we can improve. Asking for negative feedback may not be a good way to approach this with the Rohingya team – can you advise us on how we can also get feedback on things that went wrong, things that could be improved for future virtual training sessions?

8. Can you advise up on the best way to effectively build a strong research team in the camp? By strong we mean a group where all the necessary skills for research recruitment and implementation are found across the team members, not necessarily that everyone on the team has all the skills. We are also interested in your input on whether you or other team members were interested in being more involved in research design and development as the research progressed. In your opinion, were there team members who would be interested in becoming more involved in research being conducted in the camp?

9. Sometimes doing research like this raises interesting and new questions about children's development. Did you find that this happened for you? (If yes, what sort of questions were raised?) Did any of the other researchers talk to you about the research and other questions that arose for them?

10. Ensuring the safety of our team members is of utmost importance. Can you provide any suggestions on how the Canadian team could improve communication channels with the researchers in the camp to encourage them to share any safety concerns they may have about themselves, children, or families? How would you approach this if you were a team leader responsible for the researchers?

11. What steps can the Canadian team take to improve our understanding of the situation in the camps and the cultural norms and expectations that may impact our researchers? Can you share with us any cultural ways that made any aspect of the research project uncomfortable for any of the team members (e.g., being younger than others, education level, gender)?

12. Are there any additional measures we can take beyond our current practice of conducting research in collaboration with community members to improve the relevance of the research to questions and issues that concern Rohingya families? (e.g., interviewing a subset of families in depth, or all of the parents with a short interview)