THE CULTURAL ADAPTATION OF A SCALABLE WHO E-MENTAL HEALTH PROGRAM FOR OVERSEAS FILIPINO WORKERS

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**Background:** eMental Health interventions can address the mental health needs of different populations. Cultural adaptation of these interventions is crucial to establish better fit with the cultural group and to achieve better treatment outcomes.

**Objective:** The aim of this study is to describe the cultural adaptation of the World Health Organization’s eMental Health program, Step-by-Step, for overseas Filipino workers (OFWs). We used a framework which posits that cultural adaptation should enhance: (a) relevance, in that the cultural group can relate with the content; (b) acceptability, where the cultural group will not find any element offensive; (c) comprehensibility, in that the program is understandable, and; (d) completeness, wherein the adapted version covers the same concepts and constructs as the original program. We aimed to have English and Filipino, and male and female versions.

**Methods:** Three experienced Filipino psychologists provided their perspectives on the program and how it might be adapted for OFWs. We then adapted the program and obtained further feedback and suggestions from 28 OFWs working in diverse industries through focus group discussions (FGDs). We conducted seven FGDs with all-male participants and nine FGDs with all-female participants. In each FGD, cognitive interviewing was used to probe for relevance, acceptability, comprehensibility, and completeness of illustrations and text. Participant feedback guided a further round of iterative program adaptations, which were again shown to participants to seek additional feedback for validation and improvement.

**Results:** We made a number of key adaptations to the Step-by-Step program. To enhance relevance, we adapted the program narrative to match OFW experiences, incorporated Filipino values, and illustrated familiar problems and activities. To increase acceptability, our main characters were changed to wise elders rather than health professionals (reducing mental health and help-seeking stigma), potentially political or unacceptable content was removed, and the
program was made suitable for OFWs working in a variety of sectors. To increase comprehension, we used English and Filipino languages, simplified the text to ease interpretation of abstract terms or ideas, and ensured that text and illustrations matched. We also used Taglish (i.e., merged English and Filipino) when participants deemed pure Filipino translations sounded odd or were difficult to understand. Lastly, we retained the core elements and concepts included in the original Step-by-Step program to maintain completeness.

**Conclusions:** This study showed the utility of using the four-point framework that focuses on acceptance, relevance, comprehensibility, and completeness in cultural adaptation. In the end, we achieved a culturally-appropriate adapted version of the Step-by-Step program for OFWs. We discuss lessons we learned in the process to guide future cultural adaptation projects of eMental Health interventions.

**Keywords:** cultural adaptation; labor migrants; eMental Health; Overseas Filipino Workers
Introduction

The use of technology to deliver mental health interventions proliferated in recent years, with eMental Health interventions providing accessibility to needed mental health interventions [1, 2] for more people [3] and at greater frequency [4]. Use of eMental Health interventions are especially promising for vulnerable and marginalized populations like migrants. They help reduce stigma associated with help-seeking and minimize treatment barriers such as geographical distance and culture, religion, and language differences between users and providers [2, 5].

eMental Health interventions that undergo cultural adaptation are more effective. Cultural adaptation is “the systematic modification of an evidence-based treatment (EBT) or intervention protocol to consider language, culture, and context in such a way that is compatible with the client’s cultural patterns, meanings, and values” [6]. Cultural adaptation is warranted when an intervention developed for one cultural group will be implemented within a different cultural group. When an intervention is adapted, a better fit between a program and the cultural group is expected, which in turn leads to better treatment outcomes [7].

Culturally adapted interventions are effective. A meta-analysis [8] of 78 studies revealed culturally adapted face-to-face interventions performed better than comparison conditions (another active intervention or no intervention), with an average effect size of $g = 0.67$. Further, culturally adapted interventions are more effective than their original unadapted versions, with a medium effect size of $g = .52$. Another meta-analysis [9] of eMental Health interventions, found that cultural adaptation resulted in greater reduction in depression and anxiety symptoms. Essential elements for adaptation according to the Bernal and Saez-Santiago framework [10], includes language, persons, metaphors, content, concepts, goals, methods, and context. For every additional element adapted resulted in a 14% increase in intervention efficacy.
It should be noted, however, that cultural adaptation does not equate with completely rewriting the program. In fact, a systematic review [11] on cultural adaptation of interventions for depressive disorders showed that all the studies included in the review preserved the original treatment’s framework and core principles that were deemed acceptable. The adaptations were made to establish cultural relevance, improve treatment acceptability, and remove barriers to care (e.g., lack of trained professionals, limited literacy). Inclusion of barriers to care could be considered implementation rather than cultural aspects and suggests that in some studies, what counts as a cultural adaptation may be poorly defined.

Cultural adaptation involves an integration of top-down and bottom-up approaches [12]. The original program (top-down) is modified based on feedback from the intervention target population (bottom-up). That is, the original program is adapted based on input from the cultural group to be responsive to the cultural group’s context and specific mental health concerns [8].

The World Health Organization is developing several evidence-based interventions – including transdiagnostic programs – designed to be scaled-up to reach populations globally who lack access to needed mental health services [13]. We adapted one of these, the Step-by-Step program, an eMental Health program based on the principles of behavioral activation treatment for depression, along with additional strategies like psychoeducation, stress management, and help-seeking. Following the Internet- and Mobile-based Intervention (IMI) categorization [1], Step-by-Step is considered a minimally guided self-help program, wherein an “eHelper” may provide technical support and assistance in accomplishing program activities through phone calls or text messaging up to 20 minutes a week.

In places with more established services, Step-by-Step may be suitable for use within a stepped-care structure, where users who show mild to moderate levels of symptoms could be
referred to higher intensity services should they require it on completion of the program. The program contains text and stories with corresponding illustrations and two main characters. The first character is an expert who helps the second character by sharing behavioral techniques to overcome problems and by explaining the concepts behind the problems and the techniques offered in the program. The second character narrates their experience of using the Step-by-Step techniques to overcome depression, reporting their previous encounters with typical problems and psychological symptoms of the target population, and explaining how they employed the program to reduce these problems.

The original version already has three of four desired features of effective eMental Health interventions, as it is based on the empirically tested theory of BA, structured, and interactive or experiential [14]. The last desired feature of being targeted for a specific group [14] must be addressed through cultural adaptation. To ensure high quality adaptation of Step-by-Step, we followed the approach used by Manson [15] and Van Ommeren and colleagues [16]. Manson [15] theorized that the end product needs to be: (a) acceptable, with nothing in the program offensive or potentially offensive to the cultural group; (b) relevant, in that the program’s content is related to the cultural group and does not contain unrelated phenomena; (c) comprehensive or understandable by the cultural group; and (d) complete, in that the program covers the same semantics, concepts, and theoretical constructs as the original version.

In the current study, Step-by-Step was adapted for Overseas Filipino Workers (OFWs). There are 2.24 million OFWs around the world [17]. The majority (85%) work in Asian countries such as Saudi Arabia, United Arab Emirates, Qatar, Singapore, and in China (i.e., Macao and Hong Kong Special Administrative Regions). There are roughly the same number of male and female OFWs but occupational differences exist between the groups. Male OFWs are mostly
plant and machine operators and assemblers (24.7%) and craft and related trade workers (23.1%), whereas female OFWs are mostly employed as household service workers, cleaners, and other low skilled occupations (56.2%). In Macao, Special Administrative Region of the People’s Republic of China, OFWs are the second largest migrant group at 29,426 [18]. Roughly half are household service workers, more commonly referred to as domestic workers, followed by hotel and restaurant workers.

Previous studies focused on the risks and challenges OFWs and other labor migrants experience. OFWs’ primary reason for working abroad is the desire to escape poverty or to achieve socioeconomic mobility, mainly for their family, rather than individual aspirations [19, 20]. However, while abroad, and similarly to other labor migrants, OFWs are at higher risk of experiencing mental health-related issues such as loneliness, stress, anxiety, depression, and serious mental illness [20, 21], and for experiencing occupational hazards [22]. Resolving these challenges are problematic, however, as labor migrants tend to have poor access to mental health services [23-25] and poor support systems [26]. eMental Health interventions are a way to address their mental health needs, since more than 90% are smartphone users and there is high potential uptake as 68% are likely to use an online program when one is available [27].

The current study aims to culturally adapt the WHO Step-by-Step program for Overseas Filipino labor migrants. We made an English and Filipino, and male and female version. It was intended for use by OFWs engaged in different occupations.

**Method**

**Participants**

There were 31 participants, all of whom were selected through purposive sampling. We used a two-stage approach (refer to Figure 1), first interviewing three Filipino psychologists with
considerable experience in psychological practice and in working with OFWs using Zoom video conferencing (each approximately 120 minutes long). The second stage consisted of focus group discussions (FGDs) with 28 OFWs in Macao. Of the FGD participants, 16 were women, aged 24-52 (\(M = 36.31, SD = 9.44\)), employed as domestic workers, caregivers, and food and beverage workers. Nine were married, six were single, and one was widowed. Length of time working in Macao ranged widely, from one month to 12 years (\(M = 4.28\) years, \(SD = 3.46\)). 12 participants were men aged 23-47 (\(M = 30.58, SD = 7.66\)), employed in hotel and casino, food and beverage, and facilities management industries. Half were single and half were married. They had been working in Macao for an average of 1.63 years (\(SD = 1.12\)), with a range of six months to four years. FGDs were conducted separately for male and female participants, with each FGD covering 1-3 sessions of the program. Because of scheduling difficulties, participants were not able to join all FGDs to discuss all the sessions of the program. Each participant joined at least one FGD and at most six FGDs. There were seven male and nine female FGDs in all, with 2-11 participants per FGD. The FGDs lasted between 2-3.5 hours and were conducted in private rooms in a local NGO or in a university. The FGDs were held on Saturday nights and Sundays, either after participants’ work or during their day off.

**Materials**

The intervention material was a generic version of the Step-by-Step program. The program starts with registration and introduction (Session 0), followed by Sessions 1 to 5. Each session is meant to be completed online by the user once per week, with each session lasting between 30-40 minutes.

In advance of the interviews with psychologists, we provided a summary of the program’s content, the complete intervention content, and examples of possible illustrations with
instructions to review all materials prior to the interview. For the FGDs with OFWs, we made PowerPoint presentations that showed the entire initial adapted texts and illustrations. We started only with the intervention text for Sessions 0-2, as the illustrations were not yet ready. Eventually, we showed both texts and illustrations to the participants side-by-side for the remaining three sessions.

We also utilized interview and FGD guides. The interview guide for the psychologist interviews consisted of questions about their opinions on whether or not the Step-by-Step program can address OFWs’ mental health needs, the type of OFWs that the program will be most or least suitable for (i.e., hotel staff, domestic workers), appropriateness of the content of the program, considerations we had to make with regard Filipino culture and OFW culture and challenges they foresaw in using the program. We added questions on what specific groups we needed to consider for tailoring of content (e.g., younger or older OFWs), suggestions on the characters in the story, and opinions with regard the characteristics of the eHelpers.

For the FGDs with OFWs, we started “cognitive interviews” (a technique whereby participants “think aloud” [28]) with a broad question on what participants thought about each of the PowerPoint slides. We then probed, using open-ended questions, if the content is relevant or relatable, understandable, or acceptable, and the ways by which we can improve the text or illustrations. We also asked if the text and illustrations on each of the slides match, and if not, how we can change the text or illustrations to ensure they correspond with each other. When asking these questions, we told participants to think about all OFWs globally (e.g., Would all or most OFWs understand this text?) and not just themselves or just OFWs in Macao because the program is meant to reach as many OFWs as possible across ages, marital statuses, occupations, and countries where they are employed.
**Procedure**

FGDs were conducted in English to adapt an English language version, and in Filipino to adapt a Filipino language version. We matched the sex of the facilitator with the sex of the participants (i.e., male facilitator during male FGDs).

We first gave participants consent forms to read and sign, and then introduced the interview or group discussion and the Step-by-Step program. We then proceeded with the interviews or FGDs. The first FGDs concerned developing the illustrations of the main characters. After this, once illustrations had been developed, further groups were conducted based on the remainder of the stories and activities. The entire adaptation process was thoroughly documented. We used both audio-recording and note-taking. After an interview or FGD, we (MRG & BJH) discussed what transpired and decided on pertinent changes that needed to be made to the text and illustrations. All changes in text and illustrations were documented using standard forms developed by the World Health Organization.

Suggested changes to the illustrations were sent to a professional illustrator. He was the illustrator who made the illustrations for the original Step-by-Step program and was familiar with the program and cultural adaptation process. Using the original illustrations as starting point, we gave instructions on what changes to make and at times accompanied instructions with sample photos taken from the Internet to guide the development of new illustrations. Changes in illustrations and in stories were then shown to participants during subsequent FGDs for their feedback and approval.

After we conducted all the FGDs on the English and female version and after revising the texts, we sent the texts to a professional translator. The translator was a Filipino fluent in both Filipino and English, with a BA in Malikhaing Pagsulat or Filipino Creative Writing. We gave
her a background of the adaptation process and informed her of the desired tone of the story and personality of the characters. We then edited the translated text to capture the OFW experiences better (i.e., words they often used in FGDs to describe their experiences.) The edited translations were then shown to female FGD participants during subsequent cognitive interviewing. Their comments and suggestions to simplify the texts, especially words that were too difficult to understand or lines that were too long, were then used to make additional translation edits.

**Reflexivity and Procedures for Verification**

This study was conducted by a research group that aims to improve the health of migrants in the Macao (SAR). As such, implementing researchers (MRG, BJH) were familiar with the OFW context, through prior knowledge and interactions with the study population, and work with organizations providing support to this community (e.g., Philippine Government, churches, NGOs) for years, including those based in Macao (SAR). MRG is a native Filipino who speaks the Filipino language fluently and has a similar cultural background as the participants. During data collection, MRG was an OFW herself. BJH is from the United States of America and emigrated to China over five years ago. However, neither researcher is employed in the same sector as the participants. We also had higher educational attainment, occupational prestige, and socioeconomic status. Although we are migrants ourselves and have rich understanding of the OFW context, our experiences are different from the participants’ and other typical OFWs. With this acknowledgement, we attended to our own beliefs by assuring participants their feedback on the materials were crucial in improving the program and that they were the experts when it came to OFW experiences. We also probed participants’ answers to get more information and asked them to confirm our understanding of their input. Further, we presented to them the interim changes we made on the stories and illustrations for validation. They verified many of the
changes, but at times provided clarifications and more details for additional changes. We also presented the findings to a group of stakeholders, which included Philippine Government staff (Consul General, Labor Attaché), NGO workers, a Macao government official, Macao mental health professionals, and Filipino priests and nuns, for their feedback, which was taken into account in finalizing the program content.

Results

Acceptability

Based on key informant interview data and FGD data, adaptations were made to make Step-by-Step acceptable by: reducing content that may increase the stigma associated with mental health and help-seeking; changing content that appeared political or potentially unacceptable to an OFW subgroup, and depicted as negative when it is socially acceptable in the OFW’s context; and making considerations for the male version. These are explained below.

In the Philippines, mental health problems and mental health help-seeking are still stigmatized. This was identified by the experts during interviews and by previous research [29]. To address this, we made three modifications. First, instead of stating the original program goal of “helping the user cope with difficult emotions and problems” explicitly, we changed it to “helping the user become a successful OFW, for their families’ sake.” The latter deemphasizes the focus on mental health and increases emphasis on positive goals and outcomes. The latter also still addresses the original goal but focuses on a common and integral OFW experience and value of working abroad to contribute to family’s expenses, at times as the family’s sole provider. Second, we developed the character that explains Step-by-Step concepts to the user (i.e., stress, sadness) into an older OFW who has been successful in his/her work, rather than a medical or mental health professional (refer to Figure 2). Based on interview data with experts, the use of a
doctor pathologizes the users’ experiences and connotes there is something wrong with them. Thus, changing the character to a fellow OFW normalizes the experience of problems and removes stigma. Further, interview and FGD data showed that making the character successful incorporates the aspirations of the target group. Third, we changed text like “suffering at the moment” to “stressed at the moment” to make them sound less grave and more normative, as advised by FGD participants.

Some of the initial illustrations included hand gestures that reminded participants of political parties. The text mentioned drug use as a negative coping strategy, but participants shared this was reminiscent of the popular but polarizing drug war campaign of the current administration in the Philippines. These were removed from Step-by-Step to make the program apolitical.

Some of the content was changed to make it acceptable to all sub-groups of OFWs. For instance, while many OFWs are skilled workers, there are many professionals such as nurses, managers, and teachers. Hence, we modified illustrations such as those about personal strengths that depicted the characters doing household chores as these leaned too much towards domestic work. We made the illustration more neutral and suitable across occupations by changing the illustration to sending remittances in a bank and filling-up a package or what Filipinos call “balikbayan box” (literal translation: back to country) to the Philippines and preparing to go to work (refer to Figure 3). These are ubiquitous OFW experiences, regardless of job or socioeconomic status.

Other content was changed as they were originally depicted as negative coping strategies but are normative or even positive coping strategies in the OFW context. For example, an illustration and text were about a character staying in bed all day. This was deleted because
participants shared that for OFWs in physically demanding jobs, this is a good strategy to recover from stress at work. Another is “drinking alcohol”, which we changed to “drinking too much alcohol” because it is culturally normative for Filipinos to drink especially when they are with their friends. Participants recommended adding the term “too much” to make it a negative coping strategy.

We also made considerations for the male version. As much as possible, we ensured that female and male versions have similar storylines, activities, and illustrations so as to limit gender stereotyping as much as possible. However, for some illustrations, we made them slightly different to appeal to male OFWs by avoiding what male FGD participants believed to look too feminine. Due to strong traditional gender roles, it is important to maintain a masculine stance or at least not exude femininity including emotional weakness. For example, in a scene that shows the character is isolated from others, the male character is in his bedroom looking lonely, with legs on v-position, elbows resting on his thighs, and hands clasped together. In the female version, the character is still alone in her bedroom but is in fetal position and hands covering her face (refer to Figure 4).

Relevance

To increase relevance, we made the following adaptations: (a) choosing appropriate names and appearance of main characters; (b) highlighting Filipino values; (c) using relatable problems; and (d) using relatable activities.

We first developed characters’ names and appearances to make them sound and look Filipino. The older characters had Spanish-sounding names (Kuya Ronald and Ate Sonia) whereas the younger characters had more modern and American-sounding names (John and Leona), both of which are common naming practices which are related to the colonial and
changing cultural context of the Philippines. We also ensured that the names had positive meanings (i.e., a wise person, a fighter) and were approved or chosen by the participants. For the older characters, we added the terms “Ate” or “Kuya” before their names, which mean respected older sister or older brother in Filipino, often associated with being sensible and experienced. For the characters’ appearances (refer to Figure 2), participants wanted their hair straight and black and their skin color warm or olive in tone. The participants also wanted the characters to look successful as they link being a migrant for years to having saved money and made investments, but added they needed to dress comfortably as they are busy at work. They proposed making their clothing simple, comfortable but modern, and adorned with jewelry like watches for the male characters and earrings, necklaces, and watches to the female characters.

We highlighted Filipino values in three ways. First, experts and participants advised adapting the personality of the program and characters to exude desirable Filipino values of family-orientation, showing warmth and care for others, sociability, and positive thinking. Participants added changing the tone of the text to become more conversational and story-like to sound more engaging and realistic such that the characters seem to be talking to the users. Participants also recommended that the characters addressed the user as “kabayan” or countryman, a common term used among OFWs which denotes similarity and familiarity with fellow Filipino migrants. The older characters also acted as mentors or coaches to the younger characters and user. The younger characters called the user “sis” or “bro” to denote kinship. They showed eagerness to share their stories and emotions to the users, and to learn and become better. Participants advised for all characters to offer encouragement or reassurance to the user, with lines such as “Keep up the good work!” and “You can do it!” They recommended matching these
with illustrations where the characters gave warm smiles to welcome and bid the users goodbye and thumbs up sign to show approval.

Second, the texts were changed to highlight that OFWs consider their family as motivation for going abroad and working hard, even making sacrifices for them. Participants suggested matching the illustrations by showing OFWs thinking of their families often and missing them. Further, participants wanted to emphasize being with friends and family as crucial to one’s mental health and as culturally appropriate and expected. Participants proposed matching the text with illustrations of characters spending time and having fun with friends who were also OFWs and with family through online communication as they could not be physically together.

Third and last, as suggested by experts, we mentioned additional Filipino values such as “bayanihan” and “utang-na-loob” in the stories. “Bayanihan” means working together to help someone, which we added in an activity where an OFW helped a main character in a task. “Utang-na-loob” means debt of gratitude, which we mentioned as a motivator for a main character to reach out to a friend who helped them in the past.

We adapted the content in terms of the problems the characters experienced to make them more typical, based on interview and FGD data. Examples of problems include e.g., leaving their family behind, having personal conflicts, and having too much work or having no break or day-off.

We likewise adapted the content in terms of the activities the characters engaged in to make them enjoyable and doable to as many OFWs as possible. Based on FGD data, examples include eating “merienda” or afternoon snacks with friends; visiting nearby historic sites; celebrating events with family using online communication; and singing videoke (video karaoke)
with friends (refer to Figure 5). These are typical fun activities that Filipinos engage in (i.e., Filipinos are fond of eating meals together, exploring new sites when abroad, connecting with families back home, and listening to music and singing.) These activities are also relatively inexpensive and not that time-consuming, which make them feasible to do during days-off and even with limited finances.

**Comprehensibility**

To make the adaptation comprehensible, we used Filipino and English languages. Filipino is the national language in the Philippines. Both Filipino and English are official languages and are widely spoken by OFWs as primary media of communication, i.e., Filipino with fellow OFWs who come from different regions in the Philippines, and English with their employers. Filipino is derived from Tagalog, the main language of 35.1% of households in the Philippines [30].

Based on FGD data,, we also simplified the text in three ways to boost comprehension: shortening long sentences by removing words, dividing long sentences into two sentences, and using simplest words and phrases (i.e., changed the word “peers” to “friends”, “pace” to “speed”). When a term or an idea is too abstract, we changed the words or added extra words or lines to clarify what they mean. For example, instead of the abstract concept of “social support”, we used “helping hands” as suggested during an FGD because while participants understood what social support meant, they could not verbalize their understanding of the term.

For the Filipino version, participants suggested simplifying text by removing sentences when paragraphs sounded repetitive and confusing. We retained those lines in the English version as they did not sound repetitive in English. Moreover, some English words or phrases when translated to Filipino sounded awkward; hence we retained the original words in English.
For example, we retained the word “congratulations” because its Filipino translation of “binabati kita” or “I compliment you” sounded odd to participants. We removed English words or phrases that did not translate well into Filipino, as suggested by participants.

Some texts and illustrations were not clearly linked to participants and therefore had to be changed. For example, one passage in the text was about isolating oneself from other people when one feels sad. While participants understood the text, they mistook the illustration where the character is facing away from two other characters as friends gossiping about the character. We had the illustration changed so that the character is in bed alone, which was clearer to participants (refer to Figure 4).

**Completeness**

All key concepts in the original version are intact in the adapted Step-by-Step for OFW. We also made sure that the English and Filipino versions were as similar as possible, so that if an OFW choose to use the English version, they would have an equivalent program to the Filipino version and vice versa. For the Filipino version, instead of translating all English words to Filipino, we retained some English words because OFWs use these words to describe their experiences. The combination of Filipino and English (i.e., Taglish), is an unofficial language [30] that is normative and accepted among Filipinos. An example is being “homesick” as they are away from their family. Participants recommended retaining the English word “homesick” instead of using the Filipino translation of “hinahanap-hanap ang pamilya” (yearning for family) because the word homesick is a common OFW term and is deeply tied to working abroad far from one’s family.

**Discussion**
To our knowledge, this is the first study that culturally adapted an eMental Health intervention for the OFW population and Filipinos generally. We illustrated how the four-point framework to improve acceptance, relevance, comprehensibility, and completeness is useful in navigating the process of culturally adapting the Step-by-Step program. It was a practical guide to both us, the researchers, and the participants as it enabled us to capture and flesh out crucial elements to make the finished product attuned and sensitive to the context and experiences of OFWs. In turn, we were able to make the program culturally specific for this group, which is essential among the four features of effective eMental Health interventions [14].

Lessons learned

For future cultural adaptations, we recommend that all illustrations and content be adapted at the same time. In our experience, participants were more engaged in the presence of visual stimuli (recall that we were not able to present illustrations for sessions 0-2). Further, it was easier for them to understand the texts and key concepts while being able to see the illustrations.

We recommend that the same set of participants be part of the FGDs from start to finish to avoid spending time explaining the program, the mechanics of the cognitive interviews and discussion, and details from previous sessions. We were able to do this with the majority of our FGDs, but scheduling limitations hindered participants from attending all sessions. Therefore, to accommodate the realities of the population, we allowed the FGDs to be open to newcomers. Some participants were more able to provide input than others. Like in any FGD, it is important to select participants who are more open, less shy, and comfortable to freely share their thoughts. In the context of this adaptation study, norms of social hierarchy and harmony within the cultural group may have influenced how much people shared within the groups.
Another limitation is the lack of standard and systematic evaluation on whether the inputs from members of the FGD represent the entire community. Further investigation is also recommended to determine which elements were most salient to the participants to more clearly know when adaptations are good enough for the cultural group.

**Relevance of the research**

The methods and detailed results of formative adaptation work as is described in this article are often not shared by researchers or program implementers in mainstream literature [9, 11]. As such a crucial step in planning and care provision, we hope that this article will not only highlight the importance of cultural adaptation, but also provide the audience a replicable account of how to conduct such formative research.

Following the Medical Research Council Guidelines for Complex Interventions and the WHO scalable psychological interventions program [31, 32], this adapted program will be rigorously evaluated. The initial feasibility trial and subsequent full-scale RCT, both include process evaluation components. Subsequent changes to the illustrations, content, and the program story will be made, if needed.
References


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