

# Feasibility and Acceptability of Culturally Adapted, Evidence-Informed Psychological Support on Mental Health Symptoms and Violence for Conflict-Affected Populations in Afghanistan: A Study Protocol

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## Abstract

**Background:** A large portion of Afghanistan's population, particularly children, has endured prolonged conflict, poverty, and displacement, leading to significant psychological distress. As children grow into adolescence and adulthood, this distress often manifests in mental health symptoms and an increased likelihood of violent behaviours. With limited mental health professionals and strong stigma around mental health in Afghanistan, culturally adapted, evidence-based interventions are needed.

**Objective:** The study aims to explore the feasibility and acceptability of culturally adapted mental health intervention Problem Management Plus with an additional Emotional Processing module (PM+ EP), in reducing psychological distress in young Afghans. The primary objective is to assess the feasibility of delivering this intervention in Afghanistan and its acceptability by the target communities, and the secondary objective is to assess symptom reduction and behavioural change.

**Methods:** This is a pilot Randomized Control Trial (RCT) with participants aged 16 to 30 in Afghanistan. Eligible participants, young Afghans with high levels of distress and impaired functioning - measured by the Kessler Psychological Distress Scale (K10) -, will be randomized to PM+ EP (n=30) or the waiting group (n=30). The participants will be evaluated through self-report questionnaires at three time points; baseline (T1), four weeks later immediately post-intervention (T2), and 3 months post-intervention (T3), and through a qualitative interview (Process Evaluation) at the end of the study. Outcomes will include measures of anxiety and depression (HSCL-25), aggressive behaviours (AGQ), PTSD symptoms (PCL-5), and daily functioning (WHODAS 2.0).

**Results and Conclusion:** This study will assess the feasibility and acceptability of culturally adapted PM+ EP in Afghanistan and explore the relationship between mental health symptoms and violence among young Afghans. It will be the first to evaluate the feasibility of PM+ EP with this population and could pave the way for a large define RCT examining the effectiveness this approach, should the results show promise.

## Highlights

- Examine the feasibility and acceptability of culturally adapted PM+ EP among young populations with high levels of distress in Afghanistan.
- Assess mental health symptoms reduction and behavioural change among Afghan youth.
- Discuss the process of culturally adapting evidence-informed mental health interventions for Afghan populations.

### 1. Background and Rationale

An estimated 85% of Afghanistan's population have experienced or witnessed at least one traumatic event that has left them in psychological distress, with most averaging four events (Human Rights

Watch, 2018). The psychological disturbance from decades of conflict, is only accentuated by high rates of poverty, and the cultural and structural barriers to mental health and health care. Similarly, recent assessments have illustrated that more than a third of children in Afghanistan have experienced some psychological distress due to loss of loved ones, and the constant threat of death and illness around them; oftentimes manifesting into mental health conditions, such as Post-Traumatic Stress Disorder (PTSD), anxiety and depression (Qamar et al, 2022). Children and adolescents are more vulnerable to developing mental health symptoms due to their ongoing emotional and social development (Lewis et al, 2019). In fact, children who are subjected to violence and conflict are at a high risk of developing cognitive and social difficulties (Neto et al, 2022). In a study of 1011 adolescents in Afghanistan, 22.2% met the criteria for a probable psychiatric disorder and 18.0%, 4.8%, and 23.9% met the criteria for emotional concerns, conduct problems, and PTSD, respectively (Panter-Brick et al, 2019). In another study, it was found younger age was itself a risk factor for developing mental health disorders (Alemi et al, 2018).

Researchers have identified a link between the negative mental health effects caused by a lack of social cohesion within Afghanistan's insecure context, and a high level of violence (Abasi, 2008). They found mental health problems are a key contributor to violence, in combination with other impacts of adversity faced in Afghanistan. Whilst research on child development shows, in turn, experiences of violence can lead to mental health issues developing (Shoib et al, 2022). In Afghanistan, children are particularly prone to being victimized by persistent violence; one cross-sectional study found 71% of children experienced physical violence across 2017 (Shoib et al, 2022). Furthermore, subsequent vulnerability, anxiety, and psychological distress all have a detrimental impact on the neurocognitive development of children and have resulted in widespread mental health issues in the country (Shoib et al, 2022; Kovess-Masfety et al, 2021). Further studies conducted in Afghanistan have found that vulnerable youth who experience distressing experiences are more likely to join non-state armed groups, and that without effective rehabilitation and mental health support, violence is likely to be a reoccurring issue (Schwartz, 2020).

Children in Afghanistan face numerous obstacles to achieving stable mental health, including poverty, lack of stability, and persistent violence. This can in turn contribute to adverse childhood experiences, such as difficulty maintaining relationships, difficulty regulating emotions, and difficulty concentrating (Jones et al, 2020). Without support to help them regulate their emotions, in an attempt to manage high stress levels, some children may resort to unhealthy coping mechanisms, such as being violent, withdrawing from society, or taking drugs (Catani, 2018; Hadid et al, 2019). Living in an environment where there is a constant state of conflict exacerbates mental health symptoms. This combined with the cultural stigma around mental health, lack of inclusion, and lack of mental health literacy, prevents enabling environments to form where support is available.

In Afghanistan, much of the interpersonal violence is concentrated in the most conflict-affected areas including Central Highlands, western, and southern regions, where health and justice infrastructure are weak (Ferguson, 2018). Such socioeconomic risk factors as poverty, unemployment, lack of education, and exposure to violence have also been found somewhat associated with attitudes towards violence, with a higher acceptance of violence among populations most affected by adversity (Li et al, 2018). Identifying mechanisms that minimise this risk of violence is critical in developing violence prevention programs and interventions. One study, designed to analyse the relationship between childhood exposure to violence and adolescent conduct, revealed that children who are

exposed to violence and victimization before the age of ten have an increased risk of enacting violent behaviours, and that exposure to violence is a demonstrated predictor of violence in adolescents (Weaver et al, 2011). Further research indicates that persistent violence in Afghanistan is both a catalyst and a consequence of mental health disorders (Nascimento et al, 2022). Thus, by better understanding this relationship between mental health symptoms and violence, we can support the development of preventative interventions that work to effectively prevent and mitigate violence for this particular population.

Afghanistan's mental health system has been historically weak, with decades of underinvestment, limited specialist availability, and a fragmented approach to care (Rahimi-Movaghah et al, 2014). In response to these challenges, the Basic Package of Health Services (BPHS), introduced in 2003, sought to integrate mental health into primary healthcare, aiming to improve accessibility in a country where psychiatric services were previously centralized in just a few urban centers (Trani et al, 2010). This integration marked a significant step forward, ensuring that mental health care was included in public health facilities nationwide. However, despite its ambitious goals, the BPHS faced several obstacles. While it expanded the availability of psychological support within primary healthcare facilities, the actual implementation remained inconsistent, largely due to inadequate funding, a shortage of trained mental health professionals, and competing healthcare priorities (Ventevogel et al, 2013). Many BPHS clinics lacked the resources and staffing to provide meaningful psychological interventions, often reducing mental health care to the prescription of psychotropic medications by undertrained general practitioners (Scholte et al, 2004). Additionally, stigma and cultural misconceptions surrounding mental illness limited community engagement, preventing many from seeking available services (Rahimi-Movaghah et al, 2014). The collapse of international funding following the Taliban takeover in 2021 further weakened the system, leaving mental health services even more under-resourced (HRW, 2022). Given these limitations, the need for alternative, community-based, and culturally adapted mental health interventions is clear. Programs that train lay health workers in structured, evidence-based approaches - such as Problem Management Plus (PM+) - offer a feasible way to bridge the current service gaps. PM+ is an evidence-based low intensity psychological intervention developed by the World Health Organization (WHO), designed for adults impaired by distress due to exposure to conflict and adversity. The intervention seeks to introduce strategies to help people problem solve, manage stress, build resilience, and reflect on behaviors and actions in real time. It has been tested with favorable outcomes amongst refugee and LMIC populations (Schafer et al, 2023). 'Emotional Processing' (EP) is a newly developed component introduced in session 3 that helps participants process significant life memories—two positive and one distressing—by discussing the emotions, thoughts, and future perspectives associated with them, using a jigsaw puzzle metaphor. Its goal is to reduce emotional intensity around these memories through structured reflection and emotional expression (Alozkan Sever et al, 2021). This pilot study will analyse the applicability of PM+ EP in a country of origin, in this case, Afghanistan. By providing interventions that align with local cultural frameworks and strengthening community engagement, these programs have the potential to address both psychological distress and associated risk factors for violence among young people in Afghanistan (Alem et al, 2008).

This pilot study will assess the feasibility, acceptability, and safety of implementing the culturally adapted PM+ EP among a novice population in Afghanistan. The study will examine the process of cultural adaptation and implementation, evaluating whether these interventions are practical and well-received by the target population. As a secondary objective, the study will explore the association

between mental health symptoms—such as depression, anxiety, aggression, and impaired functioning—and experiences of violence among young people in Afghanistan. Using our chosen instruments, we can examine key factors contributing to violence at baseline and explore how differences in mental health outcomes relate to behavioural change. Ultimately, the findings may inform the development of scalable mental health interventions that support improved mental health outcomes, daily functioning, and a reduction in violence.

## 2. Methods

### 2.1 Design and Setting

The study is a stand-alone project, culturally adapting the existing World Health Organization (WHO) PM+ programme and trialling it with a new subject population - Afghan youth. This pilot RCT will be conducted in a community setting in Afghanistan and the research team will be a mix of researchers attached to the Vrije Universiteit (VU) Amsterdam, and field researchers in Afghanistan working with non-profit Peace of Mind Association (PoMA).

This study is a pilot randomized controlled trial (RCT) which involves assessing the feasibility and acceptability of culturally adapted PM+ with an Emotional Processing (EP) module (PM+ EP), and exploring the relationship between mental health symptoms and behavioural change. Self-report assessments will be conducted at three points during the study; prior to delivering the intervention (T1), directly post-intervention (T2), and 3 months-post intervention (T3), and through a qualitative interview conducted at the end of the study.

### 2.2 Participants

Participants for this study will be recruited through health-related entry pathways, such as health clinics, gender-focused support services, community hubs, and ministries and stakeholders working within the mental health sector in Afghanistan. Participants will be men and women between the ages of 16 and 30 residing in Afghanistan, who experience psychological distress. Eligible participants will have elevated levels of psychological distress measured by the Kessler-10 Psychological Distress Scale (K10 > 15) (Andrews, 2001). They should also meet the inclusion criteria of having the ability to read and write in Dari. Those who present as an imminent suicide risk, with psychosis, or those with neurological or cognitive disabilities, will be excluded. Potential participants will be asked to provide their contact information and will be invited to complete the K10 self-report assessment, to measure their level of psychological distress. Once determined as having elevated levels of psychological distress, 60 eligible participants will be invited to partake in the study. Participants will be assigned a case number, to protect their identity and provide anonymity. Participants will be asked to provide written consent in Dutch/English and/or Dari and be made aware that they are permitted to withdraw from the study at any point.

#### 2.2.2 Sample Size

Since this is a pilot RCT no power calculations have been carried out. The total sample size will be 60 persons, with half of the participants receiving PM+ EP (N=30) and half assigned to the waiting group (n=30). Randomization will be carried out using a random numbers table generated by computerised software. Those participants in the waiting group will be offered the chance to receive the intervention

post-study. The total number included in the study allows us to evaluate the feasibility and acceptability of the intervention and allow for drop-out rates and incomplete data to be omitted. For the Process Evaluation, a non-random sample size of ten people will be interviewed.

### 2.3 Procedure

Participants receiving PM+ EP will meet their facilitator individually, someone of the same gender, and receive the intervention through sessions conducted over Zoom or a similar platform; mitigating the difficulties around accessing psychological support, and the risks associated with safety of participants and stigma around mental health. Participants will receive six individual sessions of PM+ EP over the period of one calendar month.

All participants will complete four surveys for assessment at study points T1, T2 and T3; The Hopkins Symptom Checklist 25 (HSCL-25) to measure for anxiety and depression (Mollica et al, 1987), The Aggression Questionnaire (AQG) to measure violent behaviours (Buss and Perry, 1992), The Post Traumatic Stress Disorder (PTSD) Checklist for DSM-5 (PCL-5) will screen participants for symptoms of PTSD (Weathers et al, 2013), and cognitive ability and overall ability to function will be measured by WHO Disability Assessment Schedule 2.0 (WHODAS 2.0) (WHO, 2012). The latter has been used in studies looking at PTSD and other trauma-symptoms in low-resource settings, to assess the communities' impaired daily functioning (Hamdani et al., 2020). After the final assessment has been complete, a non-random sample of participants will be invited to partake in an interview – the Process Evaluation -, to gather qualitative data to assess the feasibility and acceptability of the program.

The timeline and frequency at which the instruments that will be used for screening, baseline and post intervention are listed in the table below. Some of the listed instruments have translations in Dari or Farsi (Afghan Persian/Iranian Persian). In case there is no translation, the instrument will be translated and back translated by the research team.

*Table 1. Measure Overview and Timeline*

Assessment Timeline					
Enrolment T0	Allocation	Baseline T1	Post-intervention T2	Follow-up - 3 months Post- intervention T3	Close-out
<b>Enrolment:</b>					
Eligibility criteria	X				
Informed consent	X				
Allocation		X			
<b>Intervention:</b>					
PM+ EP		X	X	X	X
Waiting Group					
<b>Assessment:</b>					
K10	X				
HSCL-25		X	X	X	
AGQ		X	X	X	
DSM-5 (PCL-5)		X	X	X	
WHODAS 2.0		X	X	X	
Process Evaluation					X

#### 2.3.1 Facilitators

The PM+ EP intervention will be delivered by facilitators who are Afghan and speak the Dari language. Future adaptations may allow for a wider variety of Afghan languages. Facilitators will be trained to

deliver the PM+ EP program sessions to participants, by a PM+ Training expert, in addition to carrying out consent and screening procedures. The facilitators will be recruited based on their qualifications and experience and receive a three-day training on delivering the culturally adapted PM+ EP, psychological first aid (PFA), selfcare techniques, and ethics in research. Following training, facilitators will be required to role play practice cases using case studies provided by the research team and will receive bi-weekly supervision throughout the program by a PM+ supervisor, alternating between group supervision and individual supervision; allowing facilitators to learn from peers and from their supervisor. Facilitators must be fluent in Dari and preferably have a good knowledge of English.

### 2.3.2 Process Evaluation

After the study, participants will be approached for the Process Evaluation; sampling five people ensuring variance on gender, age, and completion of the program (drop out/completed), to partake in a qualitative interview. Five mental health providers who delivered the intervention PM+ EP will also be approached to participate in the qualitative interviews. The objective of this process is to understand the perspectives of those who received the intervention and those who delivered the intervention, on the feasibility and acceptability of the program among their own communities and in their country, and the perceived change in mental health symptom and behavioural change for themselves or the participants. This will provide insight into the possibility of scaling the study and providing the intervention on a wider scale. The Process Evaluation will use a semi-structured interview script to collect qualitative data, and participants will be asked about their experiences with the intervention, ease of adherence to the intervention, thoughts on the recruitment process, the PM+ EP facilitators and their approach, and whether the program could be effectively integrated into health systems in Afghanistan.

### 2.3.3 Outcomes

In this pilot RCT, the primary outcome is to explore the feasibility and acceptability of delivering the PM+ EP intervention in Afghanistan. The study serves to demonstrate whether such interventions could be safely scaled and produce positive outcomes for the target population. The study's secondary outcome is to analyse the relationship between mental health and violence, and to discuss the potential for impact of culturally adapted mental health programming on symptom-change and behavioral change, in particular in reducing violence, and to illustrate the context-specific linkages between mental health and violence. Through this research, we can examine the mental health symptoms, risk factors, and functional impairment, caused by ongoing exposure to conflict or adversity, and advocate for scaling-up adaptation and implementation of evidence-informed mental health interventions in countries such as Afghanistan.

## 2.4 Intervention: Program Management Plus (PM+) with Emotional Processing (EP) Module

PM+ EP comprises of Problem Management Plus, an evidence-based low intensity psychological intervention developed by the World Health Organization (WHO), with an additional Emotional Processing module specifically to address psychological distress related to trauma exposure. The core of the intervention is designed for adults impaired by distress in communities exposed to conflict and adversity; it consists of CBT techniques that have been adapted for communities that do not have good availability of specialist care. The additional module was developed by researchers treating

refugee youth (Alozkan Sever et al, 2021). For this study, PM+ EP will be a six-session individual and guided support program. The original sections of PM+ are available in many languages including Farsi, and the additional EP module will be translated by PoMA's Afghan translator. The sessions cover the topics of managing stress, strengthening social support, staying well and persevering. PM+ includes the strategies problem solving, stress management, behavioural activation and accessing social supports. The additional EP module aims to address negative emotions related to memories of adverse and potentially traumatic events, which are common amongst much of the population in Afghanistan and so particularly relevant to recovery and healing. The module consists of guiding participants to recall and explore both adverse and positive autobiographical memories—conceptualized as 'puzzle pieces'—which they symbolically assemble like a jigsaw to facilitate emotional integration; the module concludes with a positive imagery exercise where participants envision an ideal future, fostering resilience and goal-oriented thinking. PM+ EP works not only to treat the symptom in the immediate, but to help build resilience in participants and help them feel prepared for any future traumatic events. The intervention provides adaptive skills to participants that help them improve or cope with the mental health symptoms they experience.

Initially, our research team will engage with the target population and conduct in-depth qualitative interviews with a variety of persons through key-informant interviews (KIIs). These will cover a broad range of questions related to cultural perceptions towards mental health, violence, and the relationship between the two. The team seeks to gather information on the target population's mental health needs, where they seek help, and how cultural context and stigma around mental health impacts them; to inform on the adaptation process of the PM+ EP intervention. Cultural adaptation of PM+ EP should consider adapting the intervention's language, visuals, cultural concepts of mental health, treatment goals, and incorporating culturally sensitive and de-stigmatizing delivery methods, in such a way, that it is compatible with the client's "cultural patterns, meanings, and values" (Bernal and Rodriguez, 2009). Heim's new framework for cultural adaptation focuses on three main possible aspects for adaptation; cultural concepts of distress, treatment components, and treatment delivery (Heim and Kohrt, 2019). Following adaptation of PM+ EP, facilitators will be trained to provide the intervention, and a pilot randomized control trial (RCT) will test the adapted PM+ EP with this population.

## 2.5 Study Instruments

### 2.5.1 Screening Measures

#### *K-10*

Kessler-10 Psychological Distress Scale is a 10 item self-report questionnaire used for determining whether someone, and to what extent, experiences psychological distress (Kessler et al, 2002). The questions in the instrument are rated on 1 to 5 Likert type scale (from none of the time to all of the time), higher scores representing higher levels of stress the individual experienced in the last thirty days. There is no standard cut-off score; for this study we will use a score of >15 to align it with the previous similar research that was carried out with Syrian refugees (de Graaff et al, 2020). The K10 is available in Dari by the Transcultural Mental Health Centre (TMHC).<sup>1</sup>

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<sup>1</sup> Kessler Psychological Distress Scale in Dari language, <https://www.dhi.health.nsw.gov.au/transcultural-mental-health-centre-tmhc/resources/multilingual-resources-by-title/kessler-10>

## 2.5.2 Feasibility Measures

The primary outcome of this study is to assess the feasibility and acceptability of PM+ EP among young populations in Afghanistan. Feasibility will be evaluated based on participant retention rates, intervention and assessment completion rates, and the frequency of engagement with provided resources. Acceptability will be assessed through participant feedback and dropout rates. Additionally, qualitative data from process evaluation interviews will provide further insights into feasibility and acceptability by exploring participants' perceptions of the intervention and their willingness to engage in future studies.

## 2.5.3 Other Measures

### *HSCL-25*

Hopkins Symptom Checklist-25 (HSCL-25) is a 25 item self-report questionnaire assessing symptoms of psychological distress; 10 items for anxiety symptoms and 15 items for depression symptoms (2 of which identify somatic symptoms) (Mollica et al, 1987). The items are rated on a 4-point Likert scale, ranging from 1 (never) to 4 (always) with the anxiety scale ranging from 10-40 and the depression scale from 15-60. The total scale (range 25-100) represents psychological distress. It has been translated to several languages and validated among culturally diverse refugee adolescent population. Researchers who have gathered data from Afghan unaccompanied asylum seekers recommended a cut-off of 69.00 for total score, 20.00 for anxiety, and 33.21 for depression (Bronstein et al, 2013). The HSCL-25 is available in Dari, created by researchers Kenneth E Miller et al.<sup>2</sup>

### *The Aggression Questionnaire (AGQ)*

The Aggression Questionnaire (AGQ) is a 29-item self-report questionnaire that measures both acts of aggression and traits that indicate a temperament to be aggressive or violent. The questionnaire covers four major components of aggression; physical aggression, verbal aggression, anger and hostility. Participants are asked to rate statements based on how characteristic they are of them. Answers are rated on a seven-point Likert scale ranging from 1 (Extremely uncharacteristic of me) to 7 (Extremely characteristic of me) with the total score ranging between 29 and 203. (Buss and Perry, 1992). The AGQ scale will be translated by PoMA's Afghan translator and checked for correct clinical terminology by a clinical team member.

### *The PTSD Checklist for DSM-5 (PCL-5)*

The PTSD Checklist for DSM-5 (PCL-5) is a 20 item self-report measure that measures symptoms of PTSD. All questions follow the same structure of "In the past month, how much were you bothered by...". Each question is scored from 0 (Not at all) to 4 (Extremely). Consistent with the DSM-5, the four symptom clusters are represented in the PCL-5 by the following subscales; Re-experiencing (Criterion B), Avoidance (Criterion C), Negative Alterations in Cognition and Mood (Criterion D), and Hyperarousal (Criterion E). Given the PCL-5 questions closely reassembled the diagnostic criteria in the DSM-5-TR, a provisional PTSD diagnosis can be made based on the following rule. The DSM-5 diagnostic criteria requires at least: 1 Criterion B item (questions 1-5), 1 Criterion C item (questions 6-7), 2 Criterion D items (questions 8-14), and 2 Criterion E items (questions 15-20). A score of 2 (Moderately on the likert scale) or higher is an endorsed symptom. Initial research suggests that a PCL-5 cutoff score between

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<sup>2</sup> HSCL-25 scale in Dari, [\(PDF\) Hopkins Symptom Checklist 25-Dari](#)

31-33 is indicative of probable PTSD across samples (Weathers et al, 2013). The PTSD Checklist for DSM-5 (PCL-5) is available in Persian (Farsi), created by researchers Homeria Varmaghani et al.<sup>3</sup>

#### **WHODAS 2.0**

WHO Disability Assessment Schedule (WHODAS 2.0) is an assessment tool developed by the World Health Organization (WHO) to measure health and disability for both research and clinical purposes (WHO, 2012). The instrument captures the functionality on six domains which are; 1) Cognition, 2) Mobility, 3) Self-care, 4) Getting along, 5) Life activities, and 6) Participation. The questions inquire about the experiences of difficulties in the specific domains of functionality within the last thirty days. Difficulties are scored on a five-point Likert scale ranging from 1 (none) to 5 (extreme), before summation (range 12-60). Higher scores indicate worse functional impairment. WHODAS 2.0 is available in Persian (Farsi), shared by the World Health Organization (WHO).<sup>4</sup>

#### **2.5.6 Fidelity Assessment**

Protocol adherence will be evaluated through two methods. First, helpers will complete a session-by-session checklist after each session, indicating which core components of PM+ EP were delivered. Second, with informed consent, sessions will be audio-recorded, and approximately 10% of these recordings will be analyzed alongside the checklists to assess fidelity.

#### **2.5.7 Adverse Event Reporting**

Adverse events (AE) can be defined as any undesirable event that occurs to a participant or facilitator during the study. A serious adverse event (SAE) refers to any event that causes a serious medical emergency. Any AE or SAE will be reported promptly by the investigator to the ethics board (WCG Clinical).<sup>5</sup> Any serious adverse events, such as incidents that are life threatening, require hospitalization for an ongoing duration, result in significant disability, or surgical intervention, may result in the study being temporarily paused while the situation is reviewed and necessary safety measures are addressed.

### **3. Analysis**

To evaluate the feasibility and acceptability of the intervention, qualitative analysis will be conducted through interviews with participants and facilitators, in addition, quantitative data will be gathered on mental health symptoms and behavioral outcomes. Qualitative data will be analyzed using ATLAS.ti to explore participant experiences and inform future intervention development. Interview transcripts will be imported into the software for systematic coding. An initial coding framework will be developed both deductively, based on study objectives, and inductively, based on emerging data. Two researchers will independently code a subset of transcripts, refining the codebook through consensus discussions to ensure consistency. All transcripts will then be fully coded, and thematic analysis will be conducted to identify key patterns and relationships. Findings will be used to complement

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<sup>3</sup> DSM-5 (PCL-5) in Persian, [Psychometric Properties of the Persian Version of the Posttraumatic Stress Disorder Checklist for DSM-5 \(PCL-5\)](#)

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<sup>5</sup> [WCG Clinical Services: Improving Clinical Trial Quality & Efficiency](#)

quantitative outcomes, providing a deeper understanding of feasibility, acceptability, and potential mechanisms of change within the intervention. To analyse quantitative data, mean differences in subscale scores and total scores between baseline (T1) and follow-up assessments (T2 and T3) will be determined. Linear mixed models will be employed to analyze feasibility and acceptability data, with treatment as a fixed effect, baseline endpoint measurements as covariates, and subjects as a random effect. This approach will allow for the assessment of trends in participant retention, session attendance, and intervention adherence over time while accounting for individual variability.

Feasibility will be assessed through intervention-specific metrics, including recruitment and consent rates, session attendance, assessment completion, protocol adherence, and occurrences of adverse events. Qualitative data collected through Process Evaluation interviews will complement these findings, providing contextual insights and a deeper understanding of the feasibility and acceptability of the program.

#### 4. Ethics Approval

The study has received IRB ethics approval for this study from the Ministry of Public Health (MoPH) in Afghanistan and from WCG Clinical in the US (International approval). Both MoPH and WCG reviewed our study protocols, the Principal Investigator, and materials such as the data collection tools and consent forms, and provided approval to implement the pilot RCT, collect personal data from participants, and publish our findings.

#### 5. Discussion

This study aims to evaluate the feasibility and acceptability of PM+ EP for young people between 16 and 30 within Afghanistan. By implementing this intervention, we seek to understand its potential for impact, to improve mental health symptoms and psychological distress for youth living in adversity, through understanding how feasible it would be to implement in Afghanistan and how accepted it would be by target communities. Furthermore, this study will provide critical insights into trial procedures, informing the cultural adaptation of further trials and the implementation of mental health interventions in Afghanistan.

Previous research has demonstrated the efficacy of PM+ in low-resource and humanitarian settings (Alem et al, 2008). However, this study represents one of the first efforts to assess PM+ EP with the additional module, and in Afghanistan. Given the existing barriers to accessing mental health services in Afghanistan, such as a lack of psychologists and mental health professionals in the country, and social and cultural restrictions to seeking mental health support, this remote-delivery intervention could serve as a more accessible and scalable option for addressing mental health needs.

The findings from this study will contribute to ongoing efforts to integrate evidence-based, scalable psychological interventions within community settings in Afghanistan. If the intervention is found to be feasible and acceptable, the results can support further implementation efforts, policy recommendations, and capacity building for mental health providers. Additionally, findings regarding

cultural adaptation will provide valuable information on the feasibility of delivering evidence-based interventions created for populations in the Global North, in this context.

Further research is necessary to assess the effectiveness and impact of culturally adapted interventions and integration strategies within existing service structures. By addressing these gaps, future studies can refine intervention models and maximize their impact on mental health outcomes in Afghanistan.

## 6. Data Availability Statement

Since this manuscript describes a protocol, there is currently no data available to share. Once the trial data has been collected, it will be available upon request from the Principal Investigator, with all data anonymized if shared.

## 7. Disclosure Statement

No potential conflict of interest has been reported by the author.

## 8. Funding Information

The funding for this study will be provided by the non-profit organization Peace of Mind Association (PoMA). The study is a joint project between Vrije University of Amsterdam and PoMA, with Principal Investigator Lyla Schwartz being a PhD student at the first, and the Director of Programs and Psychology at the latter. This joint venture will be led by Ms Schwartz, and supported by professors at the university and researchers at PoMA.

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