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Anna Chiumento, Walaa Hosny, Eman Gaber, Maha Emadeldin, Walaa El Barabry, Hesham M. Hamoda, Olakunle Alonge

PII: S2666-5603(22)00015-9

DOI: https://doi.org/10.1016/j.ssmmh.2022.100075

Reference: SSMMH 100075

To appear in: *SSM - Mental Health*

Received Date: 27 September 2021

Revised Date: 9 February 2022

Accepted Date: 9 February 2022

Please cite this article as: Chiumento A., Hosny W., Gaber E., Emadeldin M., El Barabry W., Hamoda H.M. & Alonge O., Exploring the acceptability of a WHO school-based mental health program in Egypt: A qualitative study, *SSM - Mental Health* (2022), doi: https://doi.org/10.1016/j.ssmmh.2022.100075.

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AUTHORS: Anna Chiumento*[1] (corresponding author), Walaa Hosny[2] (Joint first author), Eman Gaber[2], Maha Emadeldin[3], Walaa El Barabry[4], Hesham M. Hamoda[5], Olakunle Alonge[6]

1. University of Liverpool, UK
2. General Secretariat for Mental Health and Addiction Treatment, Ministry of Health, Egypt
3. Beni-Suef University, Egypt
4. Ain Shams University, Egypt
5. Harvard Medical School / Boston Children's Hospital, USA
6. Johns Hopkins School of Public Health, USA

*****Corresponding author information: Dr Anna Chiumento, Research Associate, Department of Primary Care and Mental Health, Institute of Population Health, The University of Liverpool, Block B, Waterhouse Buildings, 1-5 Brownlow Street, Liverpool, L69 3GL, Tel: +44 151 795 5984.; e-mail: Anna.Chiumento@liverpool.ac.uk

KEYWORDS:

- Child and adolescent
- Mental health
- Psychosocial
- School-based services
- Qualitative
- Implementation science
- Theoretical framework of acceptability

Data availability statement:
The data that support the study findings are available from the corresponding author upon reasonable request. Please note that all original data is in Arabic.

Acknowledgements:
The authors would like to thank Dr Manan A. Rabie, Professor of Psychiatry at Ain Shams University and Secretary General of Mental Health and Addiction Treatment, Egypt for her support for this study. We would also like to thank our team of research interviewers, including Dr Noha Sabry, Cario University; Dr Nermin Mahmour Shaker, Ain Shams University; Dr Amira Zaky Abdelaziz, Dr Hadeer Massoud Elshafey and Dr Dalia Ibrahim, GSMHAT. We would also like to acknowledge key Al Obour collaborators Dr Nermeen Moharam, Consultant Psychiatrist at Save the Children; Dr Huda Youssef, Head Psychologist; and Dr Shahinaz Mohamed, Psychologist; as well as all Al Abour affiliated psychologists, teachers, parents, and stakeholders for giving up their time to share their valuable experiences of the SMHP implementation. We would also like to acknowledge the role of all members of the School Health Implementation Network: Eastern Mediterranean Region (SHINE) Collaborative Learning Group for their input into the development of this research. This forum also provided a crucial platform for developing the analysis of data, and time for the authors to develop this manuscript. Finally, we would like to thank Jan Harrison, University of Liverpool, for her support in re-producing the figures.

Author contributions statement:

AC, EG and WH designed the research concept and initial study protocol, which was reviewed and revised in line with feedback from OA and HH. EG, WH, ME, and WEB were involved in data collection, transcription and analysis. AC supported the research team through training and ongoing supervision, and conducted analysis on translated transcripts. OA and HH reviewed English (OA), and English and Arabic (HH), data in analysis frameworks. All authors were involved in meetings to discuss and reflect upon emerging findings and reporting. AC led the writing of the paper alongside WH, EG and ME. All authors provided review and feedback on the manuscript, and approve the final version for publication.

Funding statement:

This study was funded through an award made to AC from the University of Liverpool ODA Research Seed Fund, 2018-19. Funding for investigator time to write this manuscript was provided by the US National Institute of Mental Health (NIMH), Grant No. U19MH109998-01. The funders had no role in the design, conduct, analysis, or reporting of the study.

WORD COUNT: 5,461

ABSTRACT:

Mental health interventions should target critical developmental stages, such as childhood and adolescence; and be embedded into cross-sectoral settings including education. The World Health Organization, Eastern Mediterranean Regional office has developed a school-based mental health program (SMHP), encouraging implementation research to inform its scale-up. We contribute to this by exploring stakeholder acceptability of the SMHP as a key assumption underpinning successful program implementation.

This qualitative study, conducted January to July 2019 in Al Obour, Egypt, explores stakeholder views of SMHP acceptability, the roles of teachers and school psychologists in supporting child mental health, and barriers to SMHP implementation and scale-up. Focus group discussions (n=4) and individual in-depth interviews (n=7) were conducted with 30 stakeholders (parents, teachers, psychologists, and support centre managers). Data were analysed thematically against the theoretical framework of acceptability.

Our results indicate that the SMHP is highly acceptable to teachers, psychologists, parents, and other education professionals. Key findings indicate the SMHP fits with teachers' and school psychologists' values, and highlight the importance of collaboration among these stakeholders for program effectiveness. Program features such as a community-based centre and respect for privacy and confidentiality are recognised to reduce parents' opportunity costs, and influence their affective attitudes, leading to increased engagement. Factors such as teacher burden require additional exploration and strategies to address them as potential impediments to successful SMHP implementation. This qualitative study yields important insights from multiple stakeholders into the acceptability of a school-based mental health intervention, providing support for scale-up of the SMHP in Egypt and the Region.

INTRODUCTION

Evidence shows that half of lifetime mental health disorders have their onset by childhood and adolescence [1-4]. It is recommended to target mental health prevention and promotion interventions at critical developmental stages, such as childhood and adolescence; and to embed mental health interventions into cross-sectoral settings, including education [5]. Delivering programs in school settings, where most children are present, offers opportunities for mental health promotion, access to low-intensity evidence-based care, and referral into specialised services [6, 7]. Schools are viewed as not only a vehicle for academic achievement and intellectual development, but also for building children's mental well-being [8] through early identification and intervention to students displaying early signs of behavioral and emotional problems [9]. Whilst the relationship between stigma and school-based mental health care is complex, there are indications from high-income settings that appropriately designed and implemented services can help to reduce mental health stigma [10] and increase mental health awareness among school professionals, students and their parents [11]. Studies demonstrate that school professionals benefit from structured programs to support student mental health [12, 13]. Recognising this context, child mental health has been identified as a priority in the World Health Organization (WHO) Eastern Mediterranean Regional Framework for Mental Health [14] which specifies the WHOs Comprehensive Mental Health Action Plan 2013-2020 (WHO Resolution WHA66/8) to the Eastern Mediterranean Region (EMR). This prioritisation includes the development, implementation and conduct of research to scale-up evidence-based child mental health programs [14].

School-based mental health services offer significant promise for providing mental health promotion and early intervention to large numbers of students in low- and middle-income countries (LMICs). To support their effective delivery, a clear understanding of how school-based mental health services work in a particular setting is required [15, 16]. To this end, our group developed a regional theory of change (ToC) for the implementation of a School Mental Health Program (SMHP) in the Eastern Mediterranean Region [17]. This identified stakeholder acceptability of the SMHP as a key assumption underpinning successful program implementation. Previous research demonstrates the importance of assessing the feasibility and acceptability of task-sharing mental health interventions in LMICs to identify systemic and contextual factors that may affect implementation and scale-up [see e.g. 18, 19, 20]. Therefore, we conducted a qualitative study exploring stakeholder views of the acceptability of a school-based mental health program in one district of Cairo, Egypt. To our knowledge, this is the first study investigating the acceptability of a school mental health program conducted in Egypt, and in the Eastern Mediterranean Region. We analyse our findings against Sekhon at al's [21] theoretical

framework of acceptability, in the discussion critically considering our experiences of applying this framework in a cross-language study.

School-based mental health services

The evidence supporting school-based mental health services is based largely upon studies in High Income countries (HICs), which suggest they can be effective in reducing the impact of child mental health problems [see e.g. 22, 23, 24], and can feasibly be delivered by teachers and allied school mental health professionals [25, 26]. In low and middle income countries (LMICs) whilst the available evidence is limited, and of lower quality [27], there is evidence of positive outcomes, particularly for universal whole-school based approaches that adopt multi-component mental health promotion and intervention [6, 28, 29]. Evidence relating to program acceptability in LMICs is particularly scarce. Studies in HICs identify that program content is frequently viewed as acceptable to school-personnel such as teachers [25, 30]. Key barriers to effective implementation include acceptability and feasibility-related considerations, including time, resource, and infrastructure limitations, intervention fit to the beliefs of delivery agents about their role and views on children's behavior, and their perception of the anticipated program impact [31, 32]. Important considerations potentially impacting implementation success in LMIC settings relate to the contextual school environment, including classroom sizes and attitudes towards mental health. Given the limited evidence to inform the successful implementation of school-based mental health services in LMICs, there have been sustained calls for conducting robust implementation science research in a range of global settings to guide future research and practice in this field [6, 29, 32, 33]. It is this gap that this paper aims to contribute to by exploring the acceptability of a school-based mental health program in Egypt.

Child mental health services in Egypt

Egypt is a lower middle-income country lacking adequate child and adolescent mental health (CAMH) services [34], with less than one percent of Egypt's total health expenditure spent on mental health in the period 1990-2013 [35]. In 2019, Egypt had 23.5 million students aged 4-18 years, representing 20% of the Egyptian population [36]. The burden of mental health problems among children and adolescents in Egypt is largely unknown, however, most health facility-based studies suggest it is high [37, 38]. Like in most LMICs, challenges with providing CAMH services in Egypt relate to low levels of human resources including mental health specialists, financial strain, and the centralisation of mental health services in large institutions in or near big cities [39] [40, 41]. Compounding these access barriers is a lack of community and preventative services, with no user or family associations to support navigating access to mental health service systems, or treatment for mental health problems [42].

Whilst Egypt has a limited number of mental health specialists, there are health professionals and school psychologists that, with additional training, can fill the mental health services delivery gaps for children and adolescents attending primary and secondary schools. Ninety-seven percent of primary and secondary schools in Egypt have either a part- or full-time health professional, but only 1% of these are trained in mental health, and less than 20% of schools have mental health promotion and prevention activities [42]. The country has a long history of providing educational psychology services, originating in 1929, with a school psychology program established in 1934 [43]. Today, the Ministry of Education hosts a department responsible for the recruitment, training and supervision of school psychologists, following a model that prioritises counselling and psycho-educational assessment that does not cover the identification and prevention of mental health disorders. In a 2008 study, Egyptian school psychologists reported that the greatest proportion of their work was counseling, providing direct services, and primary prevention programs (25%, 19%, and 17% of their time respectively); with the rest of their time spent on administration (10%), psycho-educational assessment (9%), staff consultation (7%), family consultation (6%), and providing staff in-service trainings (5%) [44]. Prior to the SMHP implementation, staff at the Al Obour Psychosocial Support Centre participating in this study informed us that the primary focus of school psychologists was administrative work, and making school visits to provide supervision to teachers or deliver targeted services to children identified as having specific learning or mental health needs.

The WHO EMRO School Mental Health Program

A flagship WHO EMRO initiative was the design and implementation of a School Mental Health Program (SMHP) designed for EMR country contexts. The SMHP is a manualised intervention informed by developmental, behavioural, social and cognitive theories. It focuses on mental health prevention and promotion, fostering a positive culture of wellbeing in schools, tiered interventions applicable to classroom settings, and early identification and referral for specialised support [45, 46]. The SMHP adopts a task-sharing approach [47, 48] where the delivery of mental and psychosocial healthcare is shared with education sector professionals including teachers, school health professionals (nurses, social workers), and school psychologists, with ongoing supervision and support from mental health specialists. The SMHP aims to support education sector professionals to enhance their understanding of: the importance of mental health promoting schools; child development; age–appropriate behavioral management strategies; warning signs of child mental health problems, including distinguishing these from emotional distress; and referral pathways into specialized services. The SMHP has been contextually adapted through an iterative process of translation from English to Arabic; expert adaptation to the Egyptian mental health and educational systems, including developing referral pathways; and feedback from an initial cohort of teachers trained in the program,

leading to further language adaptations to reflect to the Egyptian Dialect. The SMHP implementation in Egypt commenced in a pilot-district of Al Obour, Cairo.

STUDY DESIGN

This exploratory study, conducted between January and July 2019, collected routine data to indicate the uptake of mental health services, and applied qualitative methods to explore stakeholder views of programme acceptability, perception of teachers and school-psychologists roles in supporting child mental health, and barriers to successful programme delivery.

Study setting

The study took place at Al-Obour city, selected due to an existing partnership between the General Secretariat of Mental Health and Addiction Treatment (GSMHAT) leading SMHP implementation in Egypt, and Save the Children who since 2017 have worked in Al Obour building the capacity of school psychologists to respond to child mental health needs.

Al-Obour City is located in the Qalyubia Governorate, 35 kilometres north-east of Cairo, and has approximately 250,000 residents. It is one of 16 new urban areas in Greater Cairo designated as an industrial zone and houses a number of factories. Although there is a well-developed primary health care system in Al Obour, there remains a lack of mental health services, with the nearest specialised service 23km away at Al-Abasiaa hospital.

Our research targeted 55 governmental schools in Al-Obour City (20 preparatory, 20 primary, and 15 secondary schools). Our SMHP implementation partner is the Al Obour Psychosocial Support Center established in April 2018 under the supervision of the Ministry of Education, Al Obour Directorate, and funded by Save the Children. All services provided at the Al Obour centre are free, with psychologist's time funded by the Ministry of Education, a factor which could maintain SMHP sustainability. The Al Obour Psychosocial Support Centre is physically located in a primary school, and programmatically linked to other government schools in Al Obour City. Two full time mangers and 21 part-time school psychologists provide services through the centre, alongside their core roles in their respective schools. The centre has four rooms for evaluation and psychotherapy, and two halls for meetings and training.

The SMHP implementation in Al Obour involved Psychiatrists from the GSMHAT [EG and WH] training Al Obour psychologists in the SMHP manual and providing ongoing supervision. These psychologists then implemented the SMHP in the schools in which they were based, involving cascade trainings to teachers, targeted interventions with individual students identified by teachers for additional support, and onward referral for additional services offered by the Al Obour centre (e.g. speech and language

therapy) or to GSMHAT for specialised support (e.g. diagnosis, medication, and psychotherapy). The psychologists also developed a child mental health awareness-raising session based upon SMHP content that was delivered to parents attending the Al Obour centre. On average, 3,000 sessions based on the SMHP are conducted monthly at the centre, for example, between 1st May and 11th June 2019, 3,105 sessions were conducted comprising behavioural psychotherapy; social skills and self-esteem improvement; speech therapy; and sessions targeting developmental improvement.

Study procedures

Interview guides

Focus group discussion (FGD) and individual in-depth interview (IDI) guides for SMHP stakeholders (teachers, psychologists, Al Obour psychosocial support centre managers, and parents) were developed. Guides covered the following themes: understanding of the SMHP; acceptability and appropriateness of the SMHP intervention model; feasibility of SMHP delivery; and experiences of SMHP training and implementation in schools.

Training and supervision of data collection team

AC provided research training and supervision, in collaboration with senior GSMHAT staff [EG and WH]. A 3-day qualitative research methods training covering key principles of qualitative interviewing, ethical considerations, data transcription, and thematic analysis was held in January 2019, attended by GSMHAT staff and their partners at Ain Shams, Beni Suef and Cairo Universities, a number of whom had previous qualitative research experience. The researchers involved in this study were all mental health professionals or academic researchers, and included those training and supervising SMHP implementation. Research methods training included piloting Individual interview and FDG guides, allowing collaborative refinement of questions and research team skills development. Ongoing in-country and online meetings continued throughout the study period. A second in-country visit by AC in June 2019 facilitated joint initial thematic analysis of data, development of a brief report, and dissemination events sharing study findings with local partners. Following these, all co-authors participated in additional data analysis and in-person and online co-publication writing sessions.

Participants

FGD and IDI participants included psychologists, teachers, Al Obour Centre managers, and parents (see Table 2 for participant characteristics). We adopted a convenience sample approach, with participants meeting the inclusion criteria: (1) adults over 18 years able to provide written informed consent; (2) psychologists, teachers or stakeholders involved in SMHP training, supervision, or delivery; OR (3) parents attending the Al Obour Centre with children receiving individual or group sessions, or attending parental mental health awareness sessions; and (4) willing to speak to the

research team. All 23 Psychologists and 2 Stakeholders employed at the centre were informed about the study, with 16 Psychologists and both stakeholders agreeing to participate. Psychologist allocation to FGD or IDIs was determined by availability and convenience, and Stakeholders were interviewed individually. Parents were approached at the Al Obour Centre and invited to participate in a FGD, with subsequent snowball sampling to reach contacts of FGD parents for IDIs. Finally, Psychologists informed teachers about the study, with those expressing an interest provided further information by the research team, and invited to attend an IDI or FGD depending on their availability.

Table 1: Focus group discussion (FGD) and Individual in-depth interview (IDI) interview participant characteristics

FGD participants			
No. conducted	**Category of participants**	**No. of FGD participants**	**Characteristics**
1	Parents of children receiving support at the psychosocial support centre	6	• Age: 25-45 years • 5 housewives, 1 psychologist • 1-3 children each Mental health problems of children included: behavioral symptoms, inattention and hyperactivity, developmental delay & lack of social communication
1	Teachers trained by psychologists in SMHP	4	• Years of experience: 5-18 years • 3 working in experimental schools*, 1 in governmental school
2	Psychologists trained in the SMHP & delivering the service	6 in one FGD 7 in the second FGD	• most had >10 years experience as psychologists • Working in both experimental & governmental schools
IDI participants			
No. conducted	**Category of participants**	**Characteristics**	
2	Parents of children receiving support at the Al Obour centre	- Age: 30 and 40 years - Both had a university degree & are housewives - 3 or 4 children Mental health symptoms of children: intellectual disability and behavioral symptoms	
2	Teachers trained by psychologists in SMHP	- Years of experience: 15 and 30 years - 1 working in an experimental school, 1 in a governmental school	
1	Psychologists trained in & delivering the SMHP	- >10 years experience - Working in both experimental & governmental schools	

2	Stakeholders	- One is head of the Al Obour center, responsible for the supervision of all psychologists in Al Obour educational directorate with 25 years of experience. - The second is an MHPSS consultant for save the children with 15 years of experience.

** experimental schools are public schools with low fees where all education is undertaken in English*

Interview Procedure

Data was collected over 3 visits to the Al-Obour center and included 4 FGDs and 7 IDIs. All FGD and IDIs were digitally recorded for subsequent transcription and analysis. FDGs lasted 1-1.5 hours, involved up to 7 participants, led by 3-4 researchers: one leading the questions and probing whilst others monitored group dynamics. IDIs lasted 30-60 minutes and were led by 1-2 researchers: 1 asking questions and probing whilst the second observed.

During the study the FGD and IDI questions and probes iteratively evolved in line with participant responses and emerging data discussed in de-briefings between interviewers and observers, acknowledging the evolving trajectory of inductive qualitative research in which meaning and understanding is built-up through interaction with participants [49]. Adaptions to the guides included for example asking what SMHP content they felt was essential for each stakeholder to know; exploring parents experiences of Al Obour Centre services; and gathering view of teacher and psychologist collaboration.

Transcription and Data Analysis

Interviews were transcribed and analysed in Arabic to minimize the loss of meaning and depth of participant's narratives [50, 51]. A sub-section of FGDs and IDIs were translated into English to allow AC to review key themes emerging from the data. Inductive analysis was driven by the data [52] and involved stages of: familiarization, identifying codes and developing a coding framework, coding to the framework, and identifying overarching themes and illustrating quotations. Following initial inductive coding, wider literature was revisited and the theoretical framework of acceptability (TFA) [21] was identified as a productive framework for exploring dimensions of acceptability relevant to the SMHP implementation in Al Obour. Notably, the TFA captured many themes in our qualitative IDI and FGD guides, and our original inductive codes, facilitating deeper analytic exploration and interpretation of our data. This approach builds on other qualitative studies that have applied this framework [53, 54]. To apply this framework the data was revisited and re-coded against the TFA domains of acceptability. As others have experienced [55] aspects of our data did not readily fit into the TFA. We consider the TFA as an analytical framework for qualitative data exploring intervention acceptability in the discussion.

All analysis was conducted in Arabic by the Egyptian research team, and in English by AC, with ongoing discussions about emerging themes to ensure contextual understanding of meaning and attention to researcher reflexivity [56]. Discussions explored for example the impact of the female gender of the research team and participants; and the insider and outsider perspectives from different members of the research team on the Al Obour Centre activities [57]. This process rendered explicit assumptions brought to data collection and analysis by the research team, thereby enhancing reflexivity and attention to the explicit rather than latent meaning of participant narratives. The Egyptian team also reviewed the English language transcripts to ensure congruence of analysis across the two languages, whilst accepting that in multi-language research 'it is only possible to get as close to describing a phenomenon as language will allow' [58]. For the purpose of reporting key quotes have been translated into English, with the original Arabic quotes provided for native Arabic speakers (please see Table 3).

Ethical considerations

Ethical approval was obtained from the GSMHAT Ethical Review Committee, and the University of Liverpool. All participants provided written informed consent, including to the reporting of anonymous quotes. Prior to conducting interviews and FGDs, principles of voluntary informed consent, anonymity, and confidentiality were reinforced, and data management procedures outlined.

RESULTS

The qualitative data is reported according to the theoretical framework of acceptability [21] which includes domains of ethicality, affective attitude, burden, opportunity costs, perceived effectiveness, self-efficacy and intervention coherence (see figure 1 and table 2). This study was conducted during stakeholder participation in the intervention, meaning we captured participant views of concurrent and retrospective acceptability, and did not explore prospective acceptability prior to intervention roll-out. Each domain of the TFA is discussed in turn, with results presented across all stakeholder groups to allow comparisons.

Figure 1: Theoretical framework of acceptability [21]:

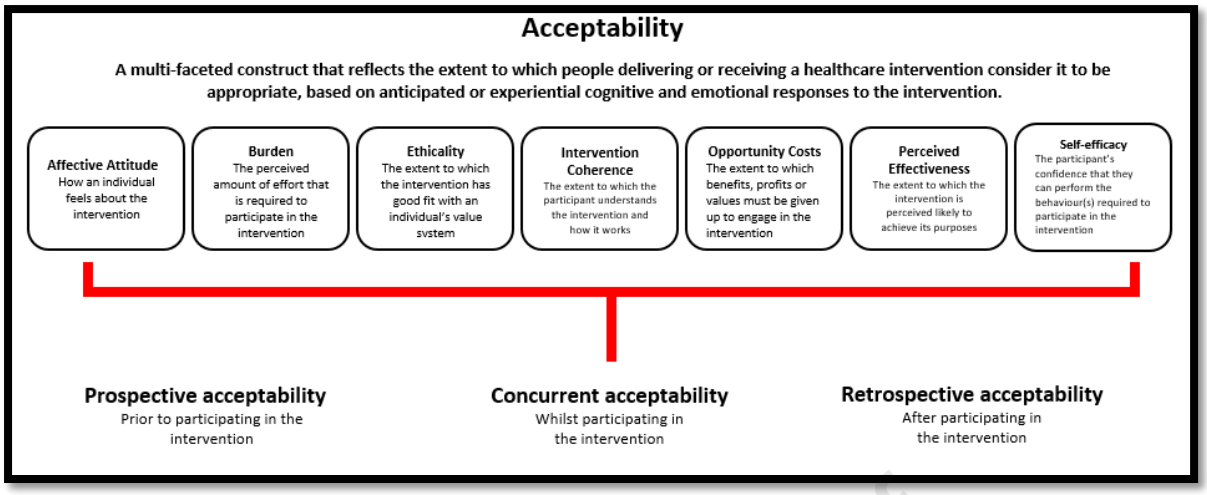

Table 2: Acceptability of SMHP by key stakeholders in Egypt

1. Affective attitude

Affective attitude, defined as "how an individual feels about taking part in the intervention" [21] was explored by asking about participant experiences of SMHP training and intervention delivery or interactions with the Al Obour centre.

Teachers expressed that the SMHP training was interesting and delivered in a way that they found engaging, encouraging them to want to learn. One stakeholder also recognised a sense of motivation from teachers after successful training from psychologists. Parents foregrounded positive feelings after engagement with the service, following initial concerns about how they would be treated due to it being free, and acknowledging the importance of staff prioritising confidentiality. These parental views suggest that prospective acceptability of the SMHP was initially negative due to concerns about the lack of cost and that confidentiality may not be maintained, but following engagement, their affective attitude towards the SMHP shifted as the behaviours and actions of service providers overcame these concerns. Psychologists didn't directly reflect on their own affective attitude.

2. Burden

Burden is defined as "the perceived amount of effort that is required to participate in the intervention", including burdens upon time, cognitive effort, or expense [21].

Psychologists, teachers, and parents identified several burdens faced by teachers in schools, including class sizes, a large curriculum to deliver in restricted time, low financial incentives, and everyday life stresses outside the classroom. These were all recognised to present burdens upon teacher time and effort to integrate the SMHP into their routine classroom activities. Conversely, psychologists identified that they have the time and contact with teachers and parents to implement the SMHP. A FGD with teachers also raised aspects of the school culture that presented burdens, notably attitudes

towards mental health from school principals and other teachers. Stakeholders focussed on the teachers' cognitive burden in the SMHP training, identifying that teachers found the training materials too technical, with teacher requests for simple and direct messages that they could integrate into their classrooms.

3. Ethicality

Ethicality refers to "the extent to which the intervention has a good fit with an individual's value system" [21]. This was applied to the congruence of the SMHP and Al Obour centre with values of inclusivity and confidentiality; and the fit with the teachers' educator role, and psychologists' role supporting student mental wellbeing.

All participants felt that schools offered an appropriate setting for the SMHP, emphasising values of inclusivity. Psychologists and teachers recognised how delivering the SMHP in schools supports efforts to destigmatise mental health, with teachers emphasising the importance of everyone having shared knowledge about how to support student mental wellbeing. A stakeholder also identified efforts to make the Al Obour Centre accessible to parents, with a Facebook page, parent trainings, and groups for talented children highlighted as strategies to enhance Centre inclusivity. Finally, one parent highlighted the value of confidentiality, describing the trust she placed in psychologists to maintain privacy about a child's problems, which encouraged engagement.

Teachers discussed how the intervention fits with their educator role, recognising that supporting child mental health is an integral component of supporting student attainment. Relatedly, parents foregrounded teachers and psychologists working together to support child mental health, highlighting the value of joined-up care. A stakeholder echoed this, emphasising that SMHP implementation required clear role descriptions and training programs for teachers and psychologists that fit with existing perceptions of teacher and psychologist roles.

4. Opportunity costs:

Sekhon et al [21] define opportunity costs as "the extent to which benefits, profits, or values must be given up to engage in an intervention" (p.97), drawing upon health economics literature. Participants explored this aspect of the SMHP acceptability in the least depth.

A stakeholder underscored how the Al Obour Centre had been established to overcome the opportunity costs of accessing mental health services, notably travel and treatment costs. Psychologists and teachers felt that delivering mental health services in schools offered a way to reach large numbers of students without presenting significant opportunity costs, which in turn may

encourage accessing mental health services. One psychologist shared how a parent invited their friends and neighbours to the service, suggesting the centres accessibility facilitated engagement.

Conversely, a teacher recognised the opportunity cost they faced in implementing the SMHP, identifying that SMHP delivery required giving up time currently spent delivering private lessons.

5. Perceived effectiveness

Effectiveness as defined by Sekhon at al [21] incorporates both anticipated and experienced effectiveness, capturing the "extent to which the intervention is perceived *to* OR perceived *to be likely to* achieve its purpose" (p.95 – emphasis added). In this study both aspects of effectiveness were explored concurrently as some participants had experience of delivering the intervention, whilst others had only received SMHP training or experienced indirect impacts, for example on students in their classroom.

All participants reflected that the SMHP was suited to addressing the mental health and behavioural problems of students in Egypt. The SMHP was seen to be particularly effective at raising teacher awareness about student mental health, providing classroom strategies for teachers to implement, and promoting collaboration between teachers and psychologists. Collaborative working was emphasised by a stakeholder who felt that the SMHP effectiveness depended upon complementary roles of teachers, parents, and psychologists. Psychologists also appreciated the SMHP content on bullying and violence for expanding their knowledge and skills to respond to these. A parent said that she felt encouraged by the support she had received from the Al Obour Centre, identifying that she felt the psychologists were effective in addressing her son's needs.

However, teachers felt the length of the training needed to be extended and include follow-up, suggesting that to effectively implement the SMHP more time was required for embedding knowledge and skills. A stakeholder also reflected on the SMHP training approach, championing teacher's practical application of skills as being important for effectiveness. Finally, a teacher identified that she learned about the Al Obour Centre and its services through Facebook, suggesting that to effectively reach target audiences additional outreach may be needed.

6. Self-efficacy

Self-efficacy entails "the participant's confidence that they can perform the behaviour(s) required to participate in the intervention" [21], clustering elements of personal control over motivation, behaviour, and social environment, with confidence in the capability to perform a specific behaviour [59-61]. In this study, self-efficacy is considered to relate to the perceived capability of the

psychologists and teachers to deliver the SMHP as planned and is considered from both the self-perceptions of teachers and psychologists, and the perceptions of other participant groups.

Psychologists' self-efficacy is reflected in confidence in their abilities to train teachers in the SMHP, and in delivering care in collaboration with teachers, two key behaviours for successful intervention delivery. Psychologists also expressed confidence in delivering psychoeducation trainings to parents and responding to their questions. Teachers identified their self-efficacy in identifying children who may be struggling, and their confidence in approaching psychologists to support students. Notably, one teacher explicitly recognised the *"bounds of my knowledge and my interaction"*, highlighting her role expectations and self-efficacy to recognise when to make referrals. A parent who spoke about being referred to the Al Obour Centre by a teacher reinforces this finding. Finally, stakeholders identify the psychologists' self-efficacy and confidence in their ability to contextually tailor the intervention to the Egyptian school setting.

7. Intervention coherence

Intervention coherence encompasses "the extent to which the participant understands the intervention, and how the intervention works" [21], capturing face validity of the intervention to the delivery agent or those receiving the intervention. This domain seeks to capture "an individual's understanding of the perceived level of 'fit' between the components of the intervention and the intended aim of the intervention" [21].

Teachers expressed intervention coherence most clearly, highlighting their understanding of the importance of early intervention and timely onward referrals to support child mental health. One teacher reflected a broader understanding of the SMHP aim to raise mental health awareness, ensuring that mental health support for students is recognised and supported. Psychologists highlighted the importance of specialist services for students with additional educational support needs, again emphasising collaborative working as a core aspect of how the SMHP works. One parent identified *"behaviour…irritability and anger problem….always stressed"* as why her child was involved with the Al Obour Centre, demonstrating good understanding of the problems the SMHP aims to address. Other parents highlighted the Psychologists role in supporting students both inside schools and at the Al Obour centre, with one parent emphasising delivering services in school settings for ensuring students feel *"normal"*. Stakeholders again mentioned the importance of contextual adaptation of the SMHP for ensuring the fit between the intervention components and the setting in which it is delivered. They also provide a clear explanation of SMHP aims: to equip teachers to identify and refer students requiring support, and to increase awareness about student mental wellbeing.

DISCUSSION

Our application of the TFA to qualitative data exploring experiences of pilot implementation of a school-based mental health program contributes to our understanding of the pathways to successful program implementation. This addresses a recognized gap in the school-based mental health literature, seeking to engage with the value of practice-based evidence from real world settings to inform further program implementation and potential scale-up to other settings [33]. Here, we discuss high-level recommendations for factors to consider when implementing a school-based mental health program in a LMIC setting, positioning these in light of the Regional ToC developed to guide SMHP implementation in the EMR [17]. We then identify specific recommendations to enhance the design, implementation, and future evaluation of the SMHP in Al Obour, and potentially wider LMIC settings. Finally, we also offer methodological reflections on the application of the TFA in this study, and study limitations.

Figure 2: Regional Theory of Change map (reproduced from anonymised [17]:

When considering our findings against our Regional ToC (see figure 2) it is notable that our findings echo many core preconditions. Across the data all participants reflect a clear understanding of the aims of the SMHP, and the behaviours required for its successful implementation. Our findings emphasise the importance of cross-sectoral collaboration, and engagement, among teachers, psychologists and parents to meet the needs of children; and of the appropriate use of existing human resources to deliver mental health care in schools – in this case Egypt's school-based psychologists and the Al Obour centre. These confirm assumptions around the availability and motivation of personnel to implement the SMHP through task-sharing approaches, and provide additional contextualization to SMHP intervention adaptations – such as trainings aimed at increasing parents' mental health awareness. Another finding reflected across the data is the importance of inclusivity in program design and implementation evident in statements about schools and the Al Obour Centre being inclusive and destigmatised environments. It is also reflected in positive statements about the task-sharing model inherent to the SMHP, although emphasis is placed on clear role definitions and expectations, as well as accessible referral when needed. Additionally, strongly reflected in parents' views is the importance of ensuring confidentiality.

As a pilot site in Egypt for SMHP implementation, this study has shed light on factors identified as important for enhancing the acceptability, and therefore the successful implementation, of a school-based mental health program that may be transferrable to other settings. We recommend that subsequent SMHP evaluations continue to explore features of collaborative care and potential

implementation strategies to enhance this element of the SMHP program, such as clear role definitions. This recognises the value of a multi-faceted approach to mental health promotion and intervention that integrates universal and targeted strategies in a collaborative care model that respects the demands on different professions [6, 7, 62]. Our data provides encouraging self- and other-perceptions about intervention delivery competency, effectiveness, and fit between the intervention and professional role expectations that have been highlighted as important factors in the acceptability and feasibility of task-sharing mental health care [20, 32]. Findings also suggests the importance of addressing potential burden and opportunity costs that may act as barriers to intervention engagement, notably for teachers faced with large class sizes and curricula as well as competing demands on their time and energies. The proximity and low costs to access the service are identified as facilitating engagement. These are key parameters for successful intervention delivery for future studies to build upon when designing and implementing school-based mental health services.

This study suggests the SMHP is highly acceptable to teachers, psychologists, parents, and other education professionals. This reflects the findings of another SMHP pilot study conducted with teachers in Pakistan [63]. The program aligns with the values and culture in schools and is perceived as effective in raising awareness about child mental health, and building teachers' efficacy in addressing students' common emotional and mental health problems. Further, the co-location of mental health services in schools is perceived as relevant for reducing the opportunity cost for accessing mental health services, contributing to the de-stigmatization of mental health problems when privacy and confidentiality issues are well-addressed. Our study does however highlight the need for sustained outreach to target communities to ensure awareness about the service and how to access it, overcoming access barriers [42]. In the future design of school-based mental health services the need to maintain privacy and confidentiality cannot be overemphasized, especially when services are free of charge as potential beneficiaries may perceive the lack of cost as indicating low quality and being less likely to maintain privacy and confidentiality. Hence, school-based mental health services must have clear protocols to assure privacy and confidentiality, and effectively communicate these to teachers, parents and students. The design of school-based mental health services can further be improved by implementing strategies to lessen the burden for teachers and professionals providing the services. For instance, simplifying the training materials, providing job aids, and streamlined protocols for addressing common mental health problems in schools may help. In addition, such programs should consider financial or qualification incentives to compensate teachers and others for increased demands upon their time; or an expansion of their roles and responsibilities to incorporate task-sharing child mental health programs.

Reflections on applying the Theoretical Framework of Acceptability:

The TFA developed by Sekhon et al (2017) enhanced our conceptualisation and exploration of factors that comprise the multi-faceted construct of acceptability. However, as a framework to apply to qualitative data we experienced challenges in distinguishing between some domains which are inter-related and overlapping. For example, challenges to successful SMHP delivery faced by teachers such as large class sizes could have been coded to the domain of burden (as the large class size require additional effort to implement the intervention), or under the domain of self-efficacy (as an environmental factor affecting the confidence of teachers to perform the behaviours required to implement the intervention). We have sought to specify our application of each domain in the context of this study to enhance the rigor of our analysis and remain transparent about our application of the TFA, whilst recognising the inter-related nature of the domains. It is possible that these challenges may have been augmented as a result of our retrospective application of this framework at the analysis stage; and our inclusion of multiple participant groups reflecting both self- and others-perceptions of acceptability. We also highlight the complexity of the TFA terminology that makes it difficult to interpret by native and non-native English speakers alike. Finally, we consider that there are wide structural factors relating to intervention acceptability in the SMHP context, such as stigmatising attitudes, which are not well captured within the TFA.

Limitations

While the results of this study are promising, several limitations should be recognised, including that this study only captures concurrent and retrospective acceptability. An enhanced approach would explore acceptability prospectively to inform intervention development and implementation, with follow-up cycles of learning and evaluation against the TFA to understand how perceptions of intervention acceptability may evolve over time. As a qualitative study the results are not intended to be generalizable to other populations and settings. The Al Obour site as a peri-urban setting in Cairo does limit the applicability of results to settings without the infrastructure supporting SMHP implementation such as school psychologists, a psychosocial support centre, and the availability of referral into specialized mental health services. We also note the limited data on challenges or barriers faced in SMHP implementation or affecting the acceptability of the SMHP intervention. This may suggest social desirability in participant responses, potentially founded upon the power dynamics between the researchers and participants which can be pronounced in Egyptian society [64]. Finally, translating the data into English for the purpose of reporting may mean nuances in participant's responses could have been lost. This limitation is mitigated by the involvement of multiple bi-lingual team members able to verify the accuracy of translation and data analysis, and the provision of quotes in the original language (see Table 3).

CONCLUSION

This qualitative study has yielded important insights into the acceptability of a school-based mental health intervention from the perspective of multiple stakeholder groups. It provides support for continued delivery and scale-up of the SMHP in the Egyptian setting and other LMICs, identifying specific factors such as teacher burden and opportunity costs that require additional exploration and strategies to address as potential impediments to successful intervention implementation at local levels. Efforts to integrate mental health promotion, intervention, and specialist referral have been highlighted as particularly important to school-aged children and teachers experiencing the negative mental health impacts of Covid-19 [45], and we recommend the SMHP as one such intervention appropriate to Egypt and potentially other EMR and LMIC settings.

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	مجموعة المشاركين			
المجال	منظور الاخصائيين	منظور المعلمين	منظور الوالدين	منظور المسؤلين
الموقف العاطفي: "كيف يشعر الفرد حيال المشاركة في التدخل" *(Sekhon et al, 2017, p.96)*		" انا شخصيا استفدت جدا.. انا كنت جايه التدريب مش مهتمه.. الموضوع, لفت انتباهي جدا, اول ما سمعته حطيت موبايلي على جنب و ابتديت اركز. انتوا بتقولوا ايه؟ الموضوع دة مهم جدا, مهم جدا لدرجة انه شد انتباهي."(*FGD*)	" فعلا كنت الاول حاسه انه مكان مجاني يعني مفيهوش خدمة محدش حيستقبلني يعني ايه اروح مكان مجاني هل حيتقبلوا ابني هل حيتقبلوني انا هل لو عنده مشكلة حينفع اتكلم فيها كنت خايفه من النقطة دي بصراحه الاول بس جيت و اتكلمت و انبسطت جدا " (*FGD*) "محدش عارف انه بياخد جلسات الوحيد الي عارف هو مدرس الفصل"(*FGD*) " انا كنت خايف في الاول عشان عندي تجربة وحشة في مكان قبل كدة, الاخصائين قالوا ان محدش هيعرف حاجة"(*FGD*)	**"**[المعلمون] متحمسون للغاية لأن الأخصائي النفسي قدم [التدريب] بطريقة مناسبة و تجذب الانتباه *2 (IDI)*
العبء: "مقدار الجهد المتصور المطلوب للمشاركة في التدخل" ، بما في ذلك الأعباء من الوقت ، والجهد المعرفي ، أو النفقات. *(Sekhon et al, 2017, p. 96-97).*	" عندنا الوقت في المدرسة و التواصل مع المدرسين و العيلة " (*FGD*) " المدرسين مضغوطين باعداد الطلاب الكبيرة و المنهج و الوقت ضيق جدا"(*FGD*) " البرنامج مناسب جدا للمدرسين بس لازم نزود مرتبات المدرسين, بيواجهوا ضغوطات كتيرة برا المدرسة و المنهج	" احنا بنشتغل بحوافز قليلة جدا و بعض العائلات صعب الشغل معاهم,.. و دة بيحط عبء اكتر."*(IDI)* " الصعوبات و الضغوطات الي بتتعرض لها المدرسين, زي المشاكل المادية الي بتظغط عليها و متطلبات الحياة. كل دة بيزود الضغط لما بتتعامل مع الطلاب في الفصل"*(IDI)*	" الفصل فيه من 60 ل 70 طالب و مدرس واحد بس ؟ "(*FGD*)	**"**الاخصائيين حسو أن السلايدز كانت ثقيلة جدًا في المحتوى بحيث لا يستطيع المدرسين استيعابها بالكامل **".** 2(**IDI**)

	كبير و مشاكل تانية و لازم نشتغل على ده" *(IDI)*	" كان في حجات مش واقعية في التدريب, صعب تطبيقها في الحياة الواقعية, صعب اننا نغير الثقافة, مديرة المدرسة ذات نفسها مش مقدرة التدريب, فبعض المدرسين مبتجيش اصلا "(*FGD*)		
الاخلاق : "مدى ملاءمة التدخل لنظام القيم للفرد" *(Sekhon et al, 2017, p.97)*	" بتساعد في تقليل الشعور بالحرج, الاهالي دلوقتي عارفين صحة ابنهم النفسية و دة ظاهر في زيارتهم للمركز" (IDI) "مين يقدر يتعامل مع المشاكل السلوكية في المدرسة؟ الاخصائيين "(IDI)	" الوجود جوا المدرسة سهل اوي و بيقلل من الاحساس بالمرض"(IDI) " كمدرس نجاح الطالب هو جزءمن نجاحي, بس لو الطالب نفسيا مش كويس دة هيتعارض مع اهدافه "(*FGD*) " الطالب بيتعامل مع عمال النظافة لحد مدير المدرسة, فلازم المؤسسة كلها تكون متدربة" (*FGD*)	" الاخصائيين و المدرسين لازم يعرضوا خدمات الصحة النفسية المدرسية, و عشان المدرسين بيقضوا معظم الوقت مع الطفل لازم يساعدوا الاخصائيين "(IDI) " لازم الاخصائيين و المدرسين يتعاونوا مع بعض " (*FGD*) " في المدرسة القديمة, لو قلت حاجة للمدرسة هتقولها قدام الطفل و كل الناس هتعرف بس مع الاخصائية انا قلتلها قبل كدة و هي فاهمة " (*FGD*)	" المركز عنده حساب على الفيسبوك عن الانشطة بتاعتنا الي فيها مش بس معاملتنا مع الطفل الي بيعاني من اضطراب نفسى لكن كمان تدريب الاباء و جروب للطلاب الموهوبين و انشطة تانية "(IDI)2 " المهمة الاساسية او مهام الوظيفة بتاعة الاخصائيين و المدرسين هي استقبال التدريب المطلوب الذي بنقدمه كنسخة مختلفة. (IDI)1
تكاليف الفرصة: "إلى أي مدى يجب الحصول على الفوائد أو الأرباح أو القيم للانخراط في التدخل" *(Sekhon et al, 2017, p.97)*	" من منظور الاهل ان المكان مناسب مقارنتا بالخدمات التانية البعيدة.(*FGD*) " بعد مخلصنا تدريب الامهات , ولي امر جه, اليوم التاني جاب معاه ولي امر تاني , المرة الي بعدها جابت جارتها معاها " (*IDI*)	" المدارس مكان معتاد للاطفال " *(FGD)* " الخدمات الكويسة دي مبتكلفش اي حاجة و دة هيشجع الاباء عشان يخدوا الخدمة"(*IDI*) " متقوليش هنقعد في دواير, كل الوقت الفاضي الي المدرسين عندهم بيدوا فيه حصص خاصة "*(FGD)*		" السبب ورا المركز دة ان مكنش فيه خدمات للصحة النفسية بسعر مناسب للناس, في مرضى مكنوش معاهم فلوس المواصلات"**(IDI)**
الفعالية المتصورة:	" البرنامج مناسب جدا للمشاكل السلوكية الي بنشوفها في مصر "(*IDI*) " البرنامج بيغير المدرسين, في الاول اي مشكلة كانت بتتصنف كسلوك سيء بس	" دور البرنامج مهم و الاخصائيين بيعلمونا حجات كتير نعملها في الفصل و حتى في بتنا مع ولادنا و متعاونين جدا"(*IDI*)	لما المدرس بيعرف حالة زي ابني بيكون متفهم, و بياخد باله منه لما حد بيدايقه"(*FGD*)	" كل الي بيتعاملوا مع الاطفال في المدرسة و الاباء لازم يتدربوا على

"إلى أي مدى يُنظر إلى التدخل أو يُنظر إليه على الأرجح على أنه من المحتمل أن يحقق غرضه" *(Sekhon et al, 2017, p.95)*	دلوقتي المدرسين يقدروا يفرقوا بين العادي و الغير عادي "(IDI) " التنمر و العدوانية مش هنعرف نتعامل معاهم لو مدربناش المدرسين كويس"(IDI)	" محتاجين وقت اكتر, وعدد المحضرات تزيد و متابعة" " التدريب لازم يكون لايام كتير متتالية"(*FGD*) قريت عنه في على الفيسبوك و اكتشفت ان المكان هنا.. و انه بيرحب بالناس الي مش في المدرسة لو حد نفسيا مش كويس بياخدوه و بيتابعوا معاه"(*FGD*)		البرنامج عشان مهدش يهدم دور التاني"(**IDI** 2) " لما بندي التدريب للمدرسين الجزء العملي لازم يكون الجزء المهم"
الفعالية الذاتية: "ثقة المشاركين في قدرتهم على أداء السلوك (السلوكيات) التي تتطلب المشاركة في التدخل" *(Sekhon et al, 2017, p.95)*	" المدرسين كانوا متشجعين عشان احنا وصلنا المنهج بطريقة حلوة, و التشجيع دة زاد بعد متعاملوا مع طفل بالتعاون معانا و النتيجة كانت حلوة. "(*FGD*) " بنعمل بتدريب الاهالي جوا و برا المدارس, و في نادي العبور... الموضوع كان مثير للاهتمام, كل واحد كان عندوا اسئلة كتيرة. " (IDI)	" لما بيكون في حاجة بتكلم مع الاخصائية و بقولها تخلي بالها من الطالب دة لاني حاسة انه عندوا بعض الاضطراب, و عشان اكون صريحة هي فعلا بتهتم اكتر و بتقولي (اه فعلا, انا عارفة و بحاول معاها فعلا)(*FGD*) " لما بتعامل مع طالب ... مع قدراتي و الي اعرفه و بفشل فالنهاية.... في الحالة دي مبقاش عارف اسيطر عالوضع فبحولوا لاحد الاخصائيين ." (*FGD*)	" مدرسة بنتي.. قالتلنا نروح المركز و قالتلي انها اتحسنت و طلبت مني اني اكمل."(*FGD*)	" لما الاخصائيين طبقوا البرنامج بنفسهم, زودوا شوية نشاطات لاجزاء حسوا انها المفروض تتظبط.. و كمان بسطوا المنهج اكتر. " (IDI)1
تماسك التدخل: "مدى فهم المشارك للتدخل ، وكيف يعمل التدخل" *(Sekhon et al, 2017, p.96)*	" كل حالة , في حالات مميزة منها الموهوبة, المتاخرة و حالات دمج , الاخصائيين لازم يكون ليهم دور, و المدرسين و الاهالي. (*IDI*)" (حالات الدمج: طلاب محتاجين دعم تعليمي زيادة) (*FGD*) " المدرسين ابتدوا يسالوا عن نصائح و ساعدونا كمان" (FGD)	حالته او حالتها مينفعش توصل لمرحلة اني اضطر ابعتها لاخصائية... لازم اكون معاه من الاول ."(*FGD*) " لو المدرس عالج المشكلة قبل ميروح للاخصائي المشكلة هتقل."(*FGD*) " لو بدانا في تحسين حالة الطالب النفسية الموضوع هينعكس على المجتمع كله ."(IDI)	" انا باجي عشان اخد جلسات عشان سلوكه و غضبه الغير مفهوم, علطول مدايق و مضغوط."(IDI) " الاخصائية راحت المركز عشان تتابع التطور لحد ما ابني رجع المدرسة تاني." (*FGD*) " الاطفال الي عندهم مشاكل لازم يكونا جوا المدرسة و مدعمين عشان يحوا انهم عاديين." (*FGD*)	" التعديل الي حصل من الاخصائيين لما طبقوا التدريب للمدرسين عشان يزودوا سهولة التدخل. "(**IDI**) 2 " لو وصلنا للنقطة ان البرنامج متطور جدا و طبقناه مع المدرسين جوا المدرسة, و بقى عندهم القدرة انهم يحولوا كل الحالات الي محتاجة تدخل, زي الاطفال العنيفة او المفرطين في

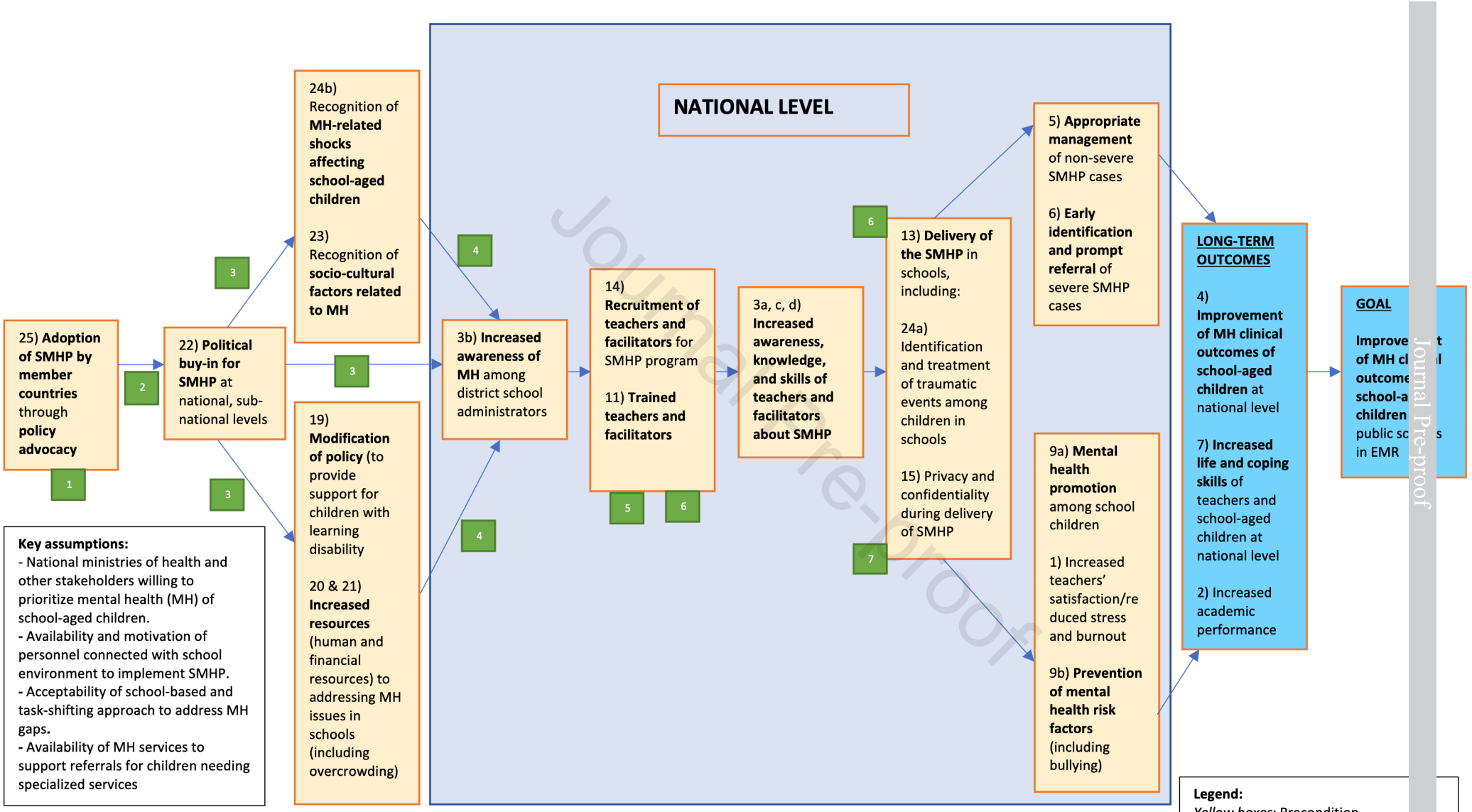
				الحركة, البنات الي عندهم افكار انتحارية.. في الحالة دي هنكون قادرين نزود الوعي."(*IDI*) 1

Domain	Participant group			
	Psychologist	**Teacher**	**Parent**	**Stakeholders**
Affective attitude: *"how an individual feels about taking part in the intervention" (Sekhon et al, 2017, p.96)*		*"I personally benefitted a lot….I was coming to the training…uninterested……The topic, it grabbed my listening first, I mean, I heard it first and then I put down the phone, and started paying attention to her then, 'what are you saying', this topic is very interesting and it was so interesting that it attracted me." (FGD)*	*"I was afraid because it is free if they will treat me well and understand me but I came and talked and I am happy for that." (FDG)* *"…no one knows that he goes for sessions the only one knows is the class teacher." (FGD)* *"I was afraid first as I have bad experience in another place, psychologist talked to me and said no one will know." (FGD)*	*"[teachers] are highly motivated because the psychologist delivered [training] in proper and interested way." (Stakeholder 2, IDI)*
Burden: *"the perceived amount of effort that is required to participate in the intervention", including burdens upon time, cognitive effort, or expense. (Sekhon et al, 2017, p. 96-97).*	*"…we have the time in school and contact to both teachers and parents" (FGD)* *"…the teachers are loaded by the big number of student and the curriculum, also the tight time" (FGD)* *"Program is very suitable to teachers but we have to add the teachers needs, they face a lot of stressors outside the school and they*	*"we work with low financial incentives and also some families are difficult to work with the students, …these add more burden." (IDI)* *"…the struggles and pressures [teachers are] handling, like finances pressuring her, and the demands she faces in her own life. All these (…) cause her pressure when interacting with*	*"class have 60 or 70 students with only one teacher" (IDI)*	*"[the psychologists] felt the slides were too heavy in content for teachers to grasp all of it." (Stakeholder 2, IDI)*

	have big curriculum and other problems and have to work on teacher wellbeing" (IDI)	*the students inside her class." (IDI)* *"There were some unrealistic stuff [in the training], stuff hard to implement on the ground in real life"; "It is difficult to change the culture"; "the principle of the school is not convinced about the value of the training, so some teachers could not attend the training" (multiple quotes from FGD)*		
Ethicality: *"the extent to which the intervention has a good fit with an individual's value system" (Sekhon et al, 2017, p.97)*	*"It helps in decreasing the stigma, the parent [is] now aware of the child mental health and that appear by their visits to the centre." (IDI)* *"…Who can deal with behavioural problems in school? (…) Psychologists" (IDI)*	*"…being inside a school [is] more accessible and less stigmatizing" (IDI)* *"…as a teacher student success is a part of my success, but if the student is psychologically not well this will interfere with his achievement." (FGD)* *"The student interacts with everyone…the cleaning workers as he enters the school to the principal. So this entire organisation needs to be trained." (FGD)*	*"Psychologists and teacher should introduce school mental health services, as teachers spend all the time with the child so teacher should help the psychologists." (IDI)* *"Teacher and psychologist should cooperate." (Parent, FGD)* *"…[at] old school if I…said something to the teacher she may say it in front of the child and everyone will know about his problem. But [with the] Psychologist I told her before and she understand." (FGD)*	*"[The centre has] an account in facebook about our activities which include not only dealing with child with mental disorder but also parenting training and group for talented students and other activities." (Stakeholder 2, IDI)* *"…the main tasks…or job descriptions of [psychologists and teachers] receiving the training require that we tailor a different version of it." (Stakeholder 1, IDI).*

Opportunity costs: *"the extent to which benefits, profits, or values must be given up to engage in an intervention"* *(Sekhon et al, 2017, p.97)*	*"…parents view about location is suitable comparing to other services which are far away." (FGD)* *"…after we made the parents training a parent come, and the second day she bring another parent with her, and the day after she bring her neighbor...." (IDI)*	*"Schools are normal communities for children." (FGD)* *"…this unique services cost nothing and these encourage the parent to seek services." (IDI)* *"...don't tell me…sitting in circles, all the free time that teachers have they give private lessons" (FGD)*		*"The reason behind…this centre was that there was no mental health service at an affordable cost for…people [experiencing poverty] …the patients that couldn't afford even the transportation." (Stakeholder 2, IDI)*
Perceived effectiveness: *"extent to which the intervention is perceived to OR perceived to be likely to achieve its purpose" (Sekhon et al, 2017, p.95 – emphasis added).*	*"Program very suitable to [the] behavioural problems we're seeing in Egypt" (IDI)* *"SMHP helps, it changes [teachers], before any situation was perceived as misbehaviour but now [teachers] can differentiate between normal and abnormal." (IDI)* *"Bullying and violence if we didn't receive the training we wouldn't be able to deal with this problems in right way, or make teachers to deal in right way." (IDI)*	*"it has a big important role and the psychologists…teaches us a lot of things to do in our classes and even in our home with our children, and they are very cooperative." (IDI)* *"we need more time, number of lectures to increase, and follow up" (FGD)* *"…the trainings should be several consecutive days." (FGD)* *"I read about it….on Facebook…and found out that it is located here…and that it welcomes cases [from outside the school] if someone is psychologically unwell…they take them and follow-up with them." (FGD)*	*"When teacher knows a condition like my son he is understanding…and take care of him when someone annoys him." (IDI)*	*"…all who deal with children in school and parent have to be trained on the program so no one will ruin the role of the others." (Stakeholder 2, IDI)* *"When we give the training [to teachers] the practical part should be the main part." (Stakeholder 2, IDI).*

Self-efficacy: *"the participant's confidence that they can perform the behaviour(s) requires to participate in the intervention" (Sekhon et al, 2017,p.95)*	*"[teachers] were motivated because we delivered in interested way, and this motivation increase after dealing with some student with cooperation with us and the result were good" (FGD)* *"We conduct parent training inside and outside the schools, and in Al Obour club…the subject was interesting, everyone has a lot of questions." (IDI)*	*"…when there's something, I speak to the [Psychologist] and I tell her to keep an eye out on this student because I think he may have a disorder, and to be honest she does take interest and cares, and tells me 'Yeah, I know, I've been trying'." (Teacher, (FGD)* *"When I communicate with a student….within the bounds of my knowledge and my interaction and in the end I fail…in that case I don't know how to handle it and then send him/her to the [psychologist]." (FGD)*	*"My daughters' teacher…told us to go to centre and told me she improved and ask me to continue." (FGD)*	*"…when [Psychologists] came to apply [the SMHP] themselves, they added some activities to parts that they felt needed to be a bit more developed…, and they also simplified the materials." (Stakeholder 1, IDI)*
Intervention coherence: *"the extent to which the participant understands the intervention, and how the intervention works" (Sekhon et al, 2017, p.96)*	*"Every case … there are special cases like gifted and delayed and inclusion cases*, the psychologists must have a role, and…teachers and parents." (IDI; *inclusion cases: students with additional educational support needs)* *"Teachers start to ask us for advice and to help us" (IDI)*	*"…his/her condition shouldn't reach the stage of an illness for me to refer to a therapist…I must get him/her from the start." (FGD)* *"…if the teacher treats the problem before it goes to the therapist it will lessen." (IDI)* *"…if we start to establish psychological wellbeing in the student this will reflect on the whole society." (IDI)*	*"I came to take sessions because of his behaviour and irritability and anger problem, he is always stressed." (IDI)* *"…the Psychologists came to the centre to know the update and to follow up till my child return back to school." (FGD)* *"Children with problems must be inside school and supported to feel that they are normal." (FGD)*	*"Modification done by psychologists when they gave the training to teachers of SMHP training to increase intervention coherence." (Stakeholder 2, IDI)* *"…if we reach a point where the…program is well-developed and implemented by the teachers inside the school, and they have the ability to refer all types of cases that need interventions, such as...violent children…with hyperactivity…girls with suicidal behaviours and self-harm…in that case…we're able to bring awareness." (Stakeholder 1, IDI)*



Key assumptions:
- National ministries of health and other stakeholders willing to prioritize mental health (MH) of school-aged children.
- Availability and motivation of personnel connected with school environment to implement SMHP.
- Acceptability of school-based and task-shifting approach to address MH gaps.
- Availability of MH services to support referrals for children needing specialized services

Examples of strategies (green boxes):
1) High-level engagement activities by WHO regional advisor for MH at country level.
2) Formulating cross-sectoral implementation team.
3) Convening of stakeholders and engagement activities by cross-sectoral implementation team.
4) Identifying and addressing MH-related shocks and socio-cultural factors related to MH by stakeholders and implementation team.
5) Training of teachers and facilitators on SMHP and life-coping skills.
6) Contextual adaptations for SMHP e.g. establishing primary mental health center in Egypt, synchronizing timing of teachers' training with academic calendar in Pakistan.
7) Intervention adaptations to SMHP e.g. addition of targeted intervention module on learning difficulties to the SMHP in Egypt, prioritizing teachers to provide screening (and counselors to deliver targeted interventions) in Iran.

Legend:
Yellow boxes: Precondition
Blue boxes: Long-term outcomes/g
Green boxes: Strategies
Alphanumerical order of preconditions/outcomes: Ranking of the relative importance of preconditions/outcomes needed to achieve the goal by the regional workshop participants, with #1 being the most important, then #2 and so on.

HIGHLIGHTS:

- Assessing acceptability helps identify contextual factors affecting intervention implementation.
- Drivers of a school-based mental health program acceptability include maintaining privacy and confidentiality, and accessibility.
- Stakeholder role clarification is important for enhancing acceptability.
- Potential impediments to acceptability include teacher burdens, and mental health stigma.
- Structural factors, such as stigmatizing attitudes, are not well captured in acceptability frameworks.

Declaration of interests

☒ The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

☐ The authors declare the following financial interests/personal relationships which may be considered as potential competing interests: