Bridging the Help-Seeking Gap: Evaluating the Implementation of a Mental Health App, Myloh in Youth Mental Health Services

Jungup Lee*

Department of Social Work and Social Service Research Centre, National University of Singapore, swklj@nus.edu.sg

Natasha Lim Yan Ting

SHINE Children & Youth Services, nicole_liaw@shine.org.sg

Elizabeth Chia

SHINE Children & Youth Services, elizabeth_tan@shine.org.sg

Eric Sng

SHINE Children & Youth Services, eric_sng@shine.org.sg

Despite rising mental health concerns among youths, low help-seeking behavior hinders access to necessary support, potentially leading to long-term consequences. Digital mental health technology offers a way to engage youths reluctant to seek formal help while ensuring youth-centric services. ResiL!ence, a youth preventive mental health service, adopted the Myloh app as an outreach tool alongside traditional interventions. However, research on the adjunctive use of mental health apps in therapy and their impact on engagement remains limited. This study examines Myloh's implementation within ResiL!ence from the perspectives of both youths and practitioners. Using implementation outcome taxonomy, youth users will complete questionnaires, with additional questions on therapeutic engagement for those receiving services. Semi-structured interviews with practitioners will explore Myloh's integration and impact on their work. Findings will inform best practices for incorporating mental health apps into services, ensuring effectiveness based on stakeholder feedback.

Additional Keywords and Phrases: Youth Mental Health, Mental Health App, Implementation, Singapore

1 INTRODUCTION

Adolescence is a vulnerable period, with the onset of most mental illnesses occurring before the age of 14 (WHO, 2021). The current help-seeking propensity and actual help-seeking behavior remains concerning, with the local prevalence of the 12-month treatment gap remaining high at 78.6%, as many cited that they are worried about what others would think (Subramaniam et al, 2019). Institute of Mental Health (IMH)'s latest study also found that 17.8% of the population studied were resistant to professional help, of which 80.9% of the respondents shared that they would cope themselves (Goh, 2021). Delayed help-seeking could have potential long-term implications, with mental health disorders leading to impaired physical, emotional and psychosocial functioning (WHO, 2011). In addition to the current treatment gap, poor engagement in adolescent mental health services could be associated with poorer treatment outcomes (Haine-Schlagel & Walsh, 2015) and is thus of significant concern.

In response to the delayed help-seeking behaviour observed amongst the local population, a preventive mental health service, ResiL!ence, was established with its focus as an outreach service to reach out to youths who may be hesitant to seek help, engaging youths facing mental distress in a youth centric way. Given the advancements in technology, digital solutions present as a unique opportunity to enhance current programmes to better cater to the characteristics of youths. Advantages of digital technology include accessibility, anonymity, and appropriateness for youths (Venning et al, 2021), presenting services as more acceptable to the youth population. Research has also found that mobile mental health applications (apps) have great prospects in supplementing traditional adolescent mental health services by addressing common barriers to treatment engagement (Silk et al. 2020) Thus, in recognition of the potential benefits of digital technology, a mental health app, Myloh was deployed to serve the current objectives of ResiL!ence, as an outreach tool and to increase engagement with those currently receiving service in hopes of increasing effectiveness of services provided.

Myloh which stands for My Life of Hope, is a youth-centric mental health app that aims to promote mental well-being for youth and support those who are in distress. The app consists of features such as psychoeducation-based chat tracks, journaling and goal setting where users are guided to develop pro-social coping skills with the help of AI and technology. The current features thus allow for Myloh to be used as an outreach tool, as youths develop the ability to recognise different symptoms

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* Corresponding author.

and coping skills that serves as a protective factor against progression or development of mental disorders (Boden & Thompson, 2015).

In addition, the objective of Myloh as an outreach tool could serve to address low help-seeking propensity. In a recent COVID task force report, MOH identified the difficulties for users to navigate the mental health ecosystem and search for information (MOH, n.d.). Myloh could potentially bridge the gap as it has a list of resources to equip and help individuals in their mental health.

In efforts to increase therapeutic engagement and effectiveness, it was proposed that Myloh be incorporated into Basic Emotional Support (BES) services, where youths work with a youth worker to manage their mental distress while building on positive mental health. Given that youths have a tendency of infrequently applying therapeutic skills outside of session and have insufficient knowledge of treatment concepts (Becker et al. 2018), Myloh could serve as a prompter to encourage youths to continue practicing some therapeutic skills outside of sessions and provide psychoeducation on the benefits of these therapeutic skills. In addition, mental health apps also be a talking point within sessions which may improve the therapeutic process (Lopez et al, 2019).

1.1 Rationale for Study

While individual features within Myloh have been identified to potentially support youths in strengthening their mental well-being and addressing their mental distress, the perceived implementation of Myloh within the services of ResiL!ence has currently not been studied. Within current literature, the use of mobile applications in support of mental health has been categorised in two different ways, either independently or adjunctively, as defined by its integration into therapy through use with practitioners (Gindidis, Stewart, & Roodenburg, 2020). While previous studies have highlighted the benefits of independent app use in support for an increase in accessibility of mental health support through overcoming barriers to help-seeking (Bakker et al, 2016), few studies have investigated the impact of adjunctive mental health apps, while current research presents mixed findings on the impact of adjunctive use of mental health apps on therapeutic alliance and treatment engagement (Lu et al, 2021). Some studies indicate the importance of practitioner's involvement in introducing the app to clients for them to have a better understanding of the therapeutic purpose and functions within the app (Gindidis et al, 2018; 2020), suggesting the importance in implementation procedures in the efficacy of the app. Given that the objective of Myloh within the ResiL!ence program involves both independent and adjunctive app use, further studies need to be conducted in order to investigate the perspective of clients on the use of the app within services, informing current gaps in the deployment of the app while recognising potential opportunities to maximise its potential use.

In addition to investigating the perspective of youths, the view of practitioners towards the use of mental health apps within their scope of work could provide insights into the efficacy of adjunctive use of the app. A recognised barrier towards adjunctive app usage is the slow uptake by practitioners (Torous & Haim, 2018), yet few studies have investigated practitioner's attitude towards technology (Pierce et al, 2016). Given that practitioners involvement could be key in influencing the outcomes of the implementation of digital technology such as Myloh within their therapeutic work with youths, it is crucial to understand their attitudes and barriers faced in the deployment of the app.

1.2 Research Questions

To understand the perspectives of practitioners and youths in the implementation of the Myloh app within services and its impact on therapeutic alliance, the following study aims to investigate the following research questions:

1. How do youths perceive the implementation of the Myloh application in support of their mental health?
2. How do practitioners perceive the implementation of Myloh within their work processes?
3. How does incorporation of a mental wellness app such as Myloh improves treatment engagement using the REACH framework?

2 METHODOLOGY

2.1 Guiding Framework and Taxonomy

To address the first two research questions on practitioners' and youths' perception on the implementation of the Myloh app, the taxonomy of implementation outcomes developed by Proctor et al (2010) is adopted. Implementation outcomes is defined as the "deliberate and purposive actions to implement new treatments, practices and services" (Proctor et al, 2010), serving as indicators of success of the implemented program and as possible key intermediate outcomes in relation to effectiveness of

service (Rosen & Proctor, 1981). As the Myloh application has been deployed by ResiL!ence for just over a year, investigating the implementation outcomes could serve as early indications of the program success. With reference to the taxonomy developed by Proctor et al, implementation outcomes identifying acceptability, adoption, appropriateness, feasibility, fidelity, penetration and sustainability would guide the scope of the study.

To address the third research question, REACH conceptual framework (Becker et al., 2018) which describes five domains of treatment engagement which consist of Relationship, Expectancy, Attendance, Clarity and Homework guides the treatment engagement evaluation for both practitioners and youth. Relationship refers to the therapeutic alliance between practitioners and youths (Shirk & Kraver, 2011), expectancy addresses beliefs on treatment efficacy, attendance refers to the youth's participation in services provided, clarity aids youths understanding of the basic emotional support process (Shuman & Shapiro, 2002), while homework reflects in session and out of session participation in the relevant tasks (Nock & Ferriter, 2005). The REACH conceptual framework provides a multidimensional perspective in the measurement of treatment engagement, providing a comprehensive insight into how the adjunctive use of Myloh within the therapeutic process could impact engagement with clients.

2.2 Design

A multi-method evaluation study will be conducted to best evaluate the treatment engagement and the user experience through implementation outcomes for the Myloh application and its integration into the ResiL!ence Programme. In view of the small sample size of practitioners and a need for deeper professional insight, a qualitative approach of 1-1 interviews with practitioners will be taken to evaluate the treatment engagement and implementation outcomes. With the new launch of an updated interface and multiple partnerships with schools this year, there will be a larger number if active users of the app. It would be appropriate to analyze this population using a quantitative method using the mode of online surveys.

2.3 Sampling

All Social Work practitioners under ResiL!ence (n=4) and youth users of Myloh that consist of BES clients, outreach participants, interns and volunteers of ResiL!ence (n=100) are the target populations of the study. The study criteria of the youth participants would be a requirement of a minimum of 3 logins which means each participant has to have opened the app 3 unique times to use the application. Only youth within the age range of 12 to 25 will be allowed to participate. This is aligned with ResiL!ence's target youth population served. Non-identifiable demographic data will be gathered for meaningful analysis of our implementation outcomes and treatment engagement. Such data consists of biological sex, age (in ranges), stream/academic life stage, school environment (mixed schools or single sex schools), diagnosis (whether clinically diagnosed or not), types of disorders (mood disorder, anxiety disorders, personality disorders, psychotic disorders, eating disorders, trauma-related disorders, substance abuse disorders) and methods of how they were onboarded (through school, self-initiated, through BES). Further elaborations on ethical considerations will be mentioned later in ensuring data remains non-identifiable.

2.4 Study Participants and Recruitment Strategy

2.4.1 Youth Participants

ResiL!ence has a database of Myloh users' emails where they will email users to participate in our online survey. Upon successfully completing the survey, a $5 grab voucher will be rewarded to each participant through a sure win lucky draw. This is in line with ensuring that the participants remain anonymous. More details can be found in the ethical considerations. For youth who are in our BES service, youth workers will prompt their clients to participate in the survey.

2.4.2 ResiL!ence Social Workers

Researchers will schedule one-to-one interviews with the social workers and conducted face to face or virtually. The interviews will be recorded and transcribed.

3 DISSEMINATION AND UTILIZATION PLAN

The main purpose of the proposed research is to understand how practitioners and youths perceive the implementation of the Myloh app within ResiL!ence, informing current practices of deploying the app as part of independent or adjunct use during BES. Current processes in place will thus be adapted based on the findings from the study to ensure greater implementation success, youth and practitioner satisfaction and potential impact of the app in supporting the mental health of youths. Findings

from this study could also serve to provide insights on the implementation of digital technology such as mobile applications in the mental health service through understanding the needs and preferences of youths as well as the challenges and experience of practitioners.

In efforts to disseminate findings from the study, research findings will be published in a peer reviewed journal one to two years after the completion of the research. Findings will also be shared at local conferences, organisationally hosted research sharing sessions opened to staff, interns, volunteers and community partners.

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