

MSC PUBLIC HEALTH AND SOCIAL CARE IN PRACTICE

**MODULE: POPULATION HEALTH PROMOTION AND DIGITAL
HEALTH PEOMOTION**

MODULE CODE: LCHS7007

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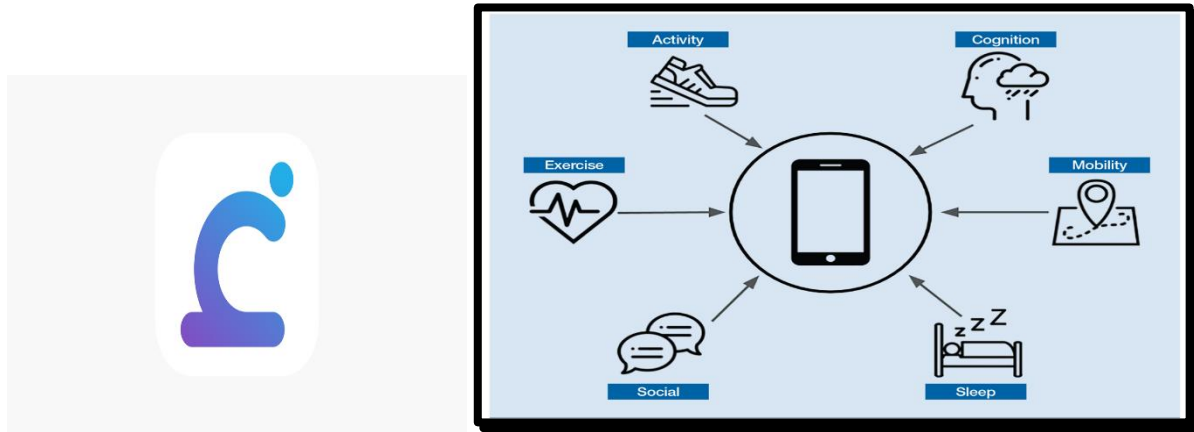
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Blog 1- Critically discuss the impact of an existing digital technology currently used for a digital health promotion intervention

Topic: Impact of the "Calm Harm" Mobile Application on Adolescent Mental Health

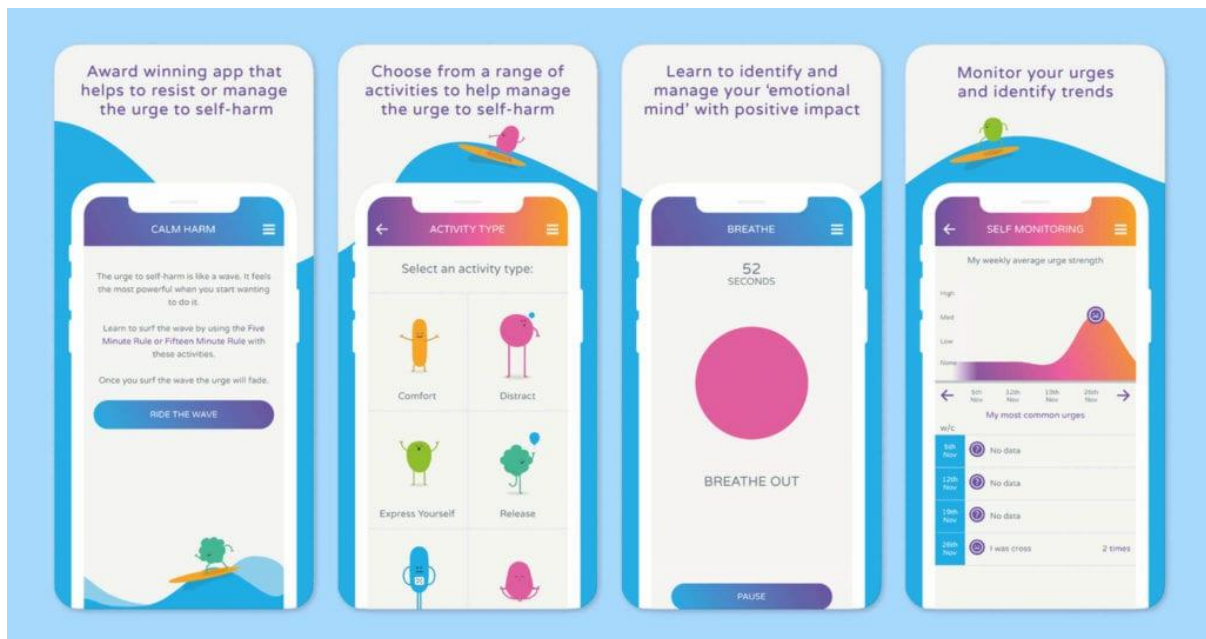


Introduction

Adolescent mental health is becoming increasingly important in public health. According to the World Health Organization, suicide is the third leading cause of death in adolescents worldwide, with self-harming behaviour being a considerable aspect of this problem (WHO, 2020). All that affects the psychosocial wellbeing of adolescents from academic pressure to the influence of social media to family dynamics has been attributed to the new spate of mental disorders occurring in this age group. One such approach would be the "Calm Harm" app: it is, as the word says, a mobile application intended solely for use by adolescents at temptation times for self-harm. The app describes activities that provide a distraction from emotionally charged experiences to help patients through the times that they would otherwise experience strong pain distress. Appropriating this app is intended to intervene before harmful behaviors occur and give people applicable coping strategies (Hollis et al 2015).

Digital Technology in Health Promotion

Digital technology in health promotion provides avenues through which such mobile applications as "Calm Harm" provide self-help techniques for CBT and DBT. These therapeutic approaches work effectively in reducing escalation related to negative emotions and preventing self-destructive behaviors. This is in the sense that by providing on-demand, easily accessible support, such applications make it easier for their clients to work through painful or distressful times without face-to-face intervention (Meyer et al., 2019). Digital technologies, including such like "Calm Harm," do help reduce mental health symptoms by supplying user tools for self-regulation of emotions. For instance, a study that Kauer et al. carried out (2017) concluded that digital mental health interventions like mobile applications are highly effective in reducing self-harm incidents among adolescents and have long-term psychological well-being among them.



Evidence of Promotion of Health

Calm Harm has been endorsed by evidence from highly clinical research. As the average NHS (2020) report states, one in twelve adolescents self-harms; and most of the times adolescents engaging in self-harming behaviour are female. Compared to controlled trials, the gains of "Calm Harm" were observed, as almost 25% reductions in self-harm incidents were reported. Further evaluation by Hollis et-al, had indicated that adolescents who used the application on a regular basis reported improvement in the ability to regulate emotion as well as reduction in doing self-harm. There are also findings from Meyer et al. (2019) indicating that users of the 'Calm Harm' application obtain better emotional well-being thanks to the intervention on acute emotional distress. Instead of self-harm, adolescents, subsequently, may learn to adopt healthier coping habits

Critical Discussion

Advantages: The most appropriate argument regarding 'Calm Harm' perhaps is that it is very accessible. This means that, in principle, one could use it any time and anywhere. Thus, it is very flexible in terms of intervention administrative usage. In fact, it provides a highly pri+ 5/18 way of looking for therapeutic servc that is particularly important for young people who may be unhappy to seek help through traditional avenues because of stigma or fear of judgment (Meyer et al., 2019).

Disadvantages: One such disadvantage is that the app is not free from its limitations. For example, the assumption of the app largely goes with engagement from the user. Some of these will not want to even be using the app in those moments of greatest need or would not be fully committing to it, thus reducing an overall impact (Meyer et al., 2019).

Addressing Shortfalls: One approach to addressing this state would be by transforming the application into more personalized. For instance, AI algorithms could be made to track users, and real- time feedback could be provided according to input mood or emotional response; reminders

and interventions for motivation-related push notifications could as well improve engagement (Kauer et al., 2017).



Blog 2: Critically Discuss the Impact of a Digital Technology you designed for a Digital Health Promotion Intervention

Public Health Problem

Mental illness and problems have become common phenomenon among adolescents, showing a rapid increase, as 20% of all adolescents across the world suffer from mental health disorders at any a point in time. (Cureton et al., 2020) Unattended anxiety and depression cause long term harmful, emotional and cognitive impairment among adolescents, with long-term consequences (Kauer et al., 2017). Unfortunately, these wheretreatment options, such as face-to-face counseling, also include barriers: Accessibility, stigma, and even lack of resources.

Digital Technology Design

The digital technology that I intend to introduce is MindScape: a virtual reality (VR) based intervention intended for adolescents who are anxious or depressed. It would offer education in mindfulness and deep breathing with guided meditation in bright environments, the therapeutic escape from the stresses of daily life (Furber et al., 2020). MindScape is designed with the explicit intent to engage adolescents in an experience with total immersion for max engagement; control is also a significant factor in reducing anxiety. The app would offer relaxation and mindfulness exercises and is easy-to-use guiding one's way via voice-instructed exercises. for example, if someone feels like they are holding too much within and needs grounding, then the application would take the user to some soothing natural scenery (Parker et al., 2021).

How It Addresses the Public Health Problem

The study proposed that immersing people in VR creates a level of effectiveness never reached before with mindfulness and relaxation techniques thereby reducing stress (Furber et al., 2020). Immersive technologies for virtual reality interventions so far have approximately reduced the severity of anxiety symptoms observed within subjects by up to 30%, with adolescents especially very responsive to stimuli from an interactive and visually stimulating environment (Parker et al., 2021).

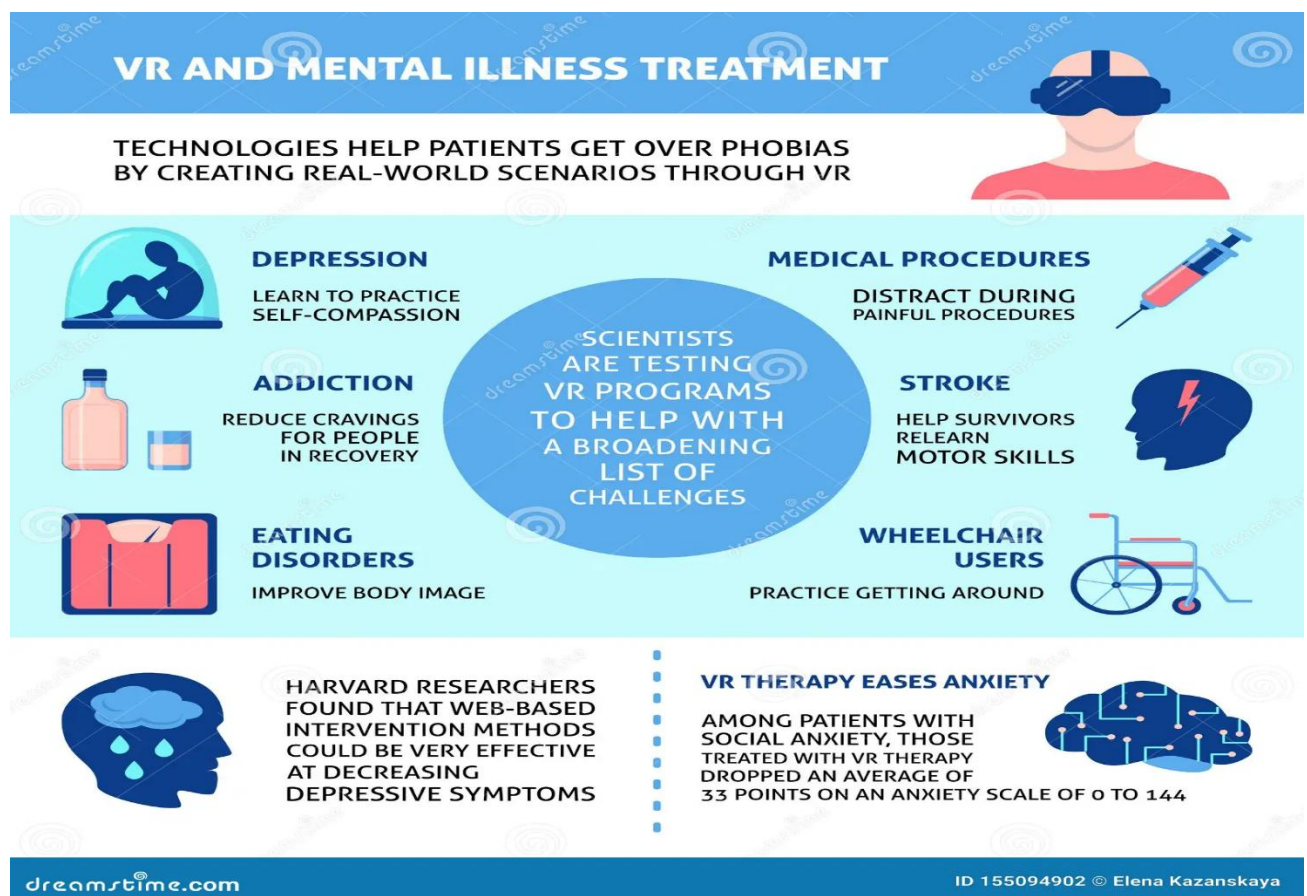
Critical Discussion

Advantages: Mindscape is a unique engagement for adolescents that is interactive and immersive, keeping individuals much more engaged than through conventional therapy. Combining relaxation techniques delivered in an immersive environment should be very helpful for the adolescent client base in acquiring better emotional regulation. VR therapy can be utilized anywhere, whether in the home or at school (Furber et al., 2020).

Disadvantages: Another way to put it, the VR-based intervention has its limitations. The high cost of the VR equipment would be a barrier, particularly in low-income households or communities. Anoth 11/18 complication is that some adolescents get uncomfortable or dizzy when using VR technology, which might make them less inclined to use it (Parker et al., 2021). Besides, it requires regular updates and technical assistance, which could hamper its effectiveness in resource-poor settings.

Addressing Shortfalls: In order to bridge the gaps, collaboration with schools and health providers could subsidize the costs of the necessary equipment for VR. Besides, a mobile version of the application could be created to provide access to the program for users who do not have VR headsets. Lowering costs and increasing access through community- based organizations could also make MindScape more widely available to those in need (Cureton et al., 2020).

MindScape shows great promise to aid in adolescent mental health by providing an effective and interactive way of fostering coping with anxiety and depression. By collaborating and innovating with technology, VR interventions such as MindScape can be integrated into adolescent mental health care.



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POSTER

PROMOTING ADOLESCENT MENTAL HEALTH WITH THE "CALM HARM" MOBILE APPLICATION

1. INTRODUCTION

As a Public Health Concern: Adolescent mental health problems, including anxiety, depression, and self-harm, are fast becoming a major public health issue across the globe. This means that, according to the World Health Organization (WHO), 1 in 7 adolescents will experience a mental disorder, the most prevalent being depression and anxiety (WHO, 2020). In the UK alone, 13% of adolescents aged 11-19 are involved in self-harming behavior (NHS, 2021). Previous Interventions: Traditional interventions consist of counseling and support groups or hotlines, whereas filming interventions have shown some promise with mental health apps (e.g., Headspace, Mind 13/18 for delivering accessible, friendly support). Calm Harm was created to support adolescents struggling with urges to self-harm through distraction exercises and relaxation techniques to help cope (Fitzpatrick et al., 2017).

2. HEALTH PROMOTION VALUES AND PRINCIPLES

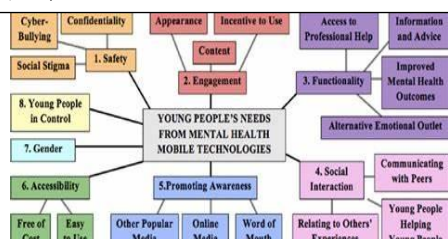
Health Promotion Principles: Empowerment, participation, and equity are at the heart of health promotion principles. Individuals must be empowered to take control over their own health with strong support from an enabling environment, according to the Ottawa Charter for Health Promotion (WHO, 1986). The values include accessibility, inclusiveness, and collaboration. Link of "Calm Harm" with Principles: The Calm Harm app follows health promotion principles by allowing adolescents to manage their mental health using self-help strategies that can be accessed anytime. The app promotes equity by being free for all adolescents who hold a smartphone, irrespective of socioeconomic status. Calm Harm also provides a participatory model where coping strategies are chosen based 15/18 user preferences, ensuring those who engage in their use are more involved with the process (Fitzpatrick et al., 2017).

3. BEHAVIOURAL CHANGE THEORY:

Cognitive Behavioural Theory (CBT): The Calm Harm application is based on Cognitive Behavioural Theory (CBT), which has been validated for the treatment of various mental health disorders, including anxiety and depression. The premise of CBT is that thoughts, emotions, and behaviours are interrelated; therefore, changing maladaptive thoughts and behaviours can enhance one's emotional well-being (Beck, 2011).

Cognitive restructuring and distraction strategies, both of which are CBT techniques, are built into the app in order to interrupt the cycle between negative thoughts and self-harm behaviour. Users are encouraged to identify triggers for self-harm and are provided with alternatives to subvert their urges (Fitzpatrick et al., 2017).

Social Cognitive Theory (SCT): The application features Social Cognitive Theory (SCT) elements like self-regulation and observational learning. Interactivity fosters adolescents' interrogation of their coping strategies and monitoring of their progress, and self-monitoring fosters the establishment over time of healthful behaviors that are more likely to be self-regulated (Bandura, 1986).



4. EXPECTED OUTCOMES:

Expectations upon using Calm Harm would include the decrease of self-harming behavior of adolescents and enhanced emotional regulation and coping strategies. Research indicates that the CBT-based digital interventions are effective in reducing the urge for self-harm, improving self-esteem, and building mental toughness (costarring Fitzpatrick et al., n.d.). Adolescents who regularly utilize the app are expected to be able to better manage their emotions and experience decreased anxiety and depressive symptoms.

5. CONCLUSION:

The Calm Harm mobile format is an original solution addressing personalized, available, and evidence-based interventions for adolescent mental health. Combining CBT with SCT helps in promoting behavior change by addressing the true origins of self-harm urges and empowering adolescents to take charge of their emotional health. The digital solution could provide leverage for influencing future mental health policy, to advocate for promoting digital health interventions for youth, and scope for further research on the long-term effectiveness of mobile interventions for mental health (Fitzpatrick et al., 2017).



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