Younger Minds: Co-development, Adaptation, and Pilot Study of a mental health and substance use app for secondary students

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Introduction
- As a key transitional stage when many mental health and substance use (MHSU) problems emerge or worsen, secondary school represents an important setting for early detection and intervention.
- Digital tools can serve as an accessible and evidence-based method of early intervention, given the prevalence of technological use among this demographic.
- One such existing digital tool is Minder, a mental health and substance use e-intervention developed for university students, which demonstrated effectiveness through an RCT (N=1,489).1

Methods
- In total, 121 stakeholders participated in project events and sessions to provide input on their MHSU needs and the adaptation.
- 108 students and 13 staff from 12 schools (private, public, and alternative) across British Columbia participated in sessions totaling 66 hours.
- Types of sessions included Stakeholder Engagement Sessions (SES), a Student Advisory Committee (SAC), a Minder Feedback Survey, and Winter/Summer/Fall Placement Programs.
- Participants discussed MHSU needs, user-tested the Minder app, and provided input on possible adaptations.
- Pilot implementation study approved in 8 school districts, research team has launched at 22 secondary schools to-date.

Research Objective
To adapt the Minder app for secondary students, co-develop new content using feedback from qualitative focus group sessions, and implement an app pilot study.

Minder Home Page

Welcome
Pick an island below to get started

Adaptations
1. New & Adapted Content
- Adapted language to be more accessible to younger secondary students
- Shorter chatbot scripts
- More videos
- 18 new chatbot scripts, 14 new videos, 11 new summary documents
  - Vaping & Caffeine
  - Overdose
  - Body image
  - Bullying
  - Social media
  - Deinfluencing
  - FOMO & Social Comparison
  - Assessing motivations for substance use

2. Services
- Utilized MyHEARTSMAP triage survey
- Resources restricted to BC-wide youth-specific services
- Protocol to detect child neglect, abuse, or harms, in compliance with MCFD reporting requirements

3. Community
- Redesigned Community: now an anonymous Reddit-like forum for students to post MHSU questions
- All posts and comments must be pre-approved by research team
- Questions answered by trained peer coaches
- Examples of questions submitted:
  - How to tell someone I disagree with them in a non-confrontational way?
  - How do I finish homework without procrastinating?
  - How can I tell someone that they talk too much in a way that isn’t rude?

Pilot Study
- The adaptations are being assessed in a two-week pilot study launched in March 2024.
- 22 secondary schools across 8 B.C. school districts have participated to-date.
- Participants recruited using a combination of booths and class visits at schools.
- Baseline and 2-week follow-up surveys (including K6 and K10) measured mental health literacy and self-efficacy.
- Follow-up qualitative focus group meetings allowed for more detailed student feedback.
- Participants’ input on their MHSU needs, in addition to feedback on the Minder app, will contribute to a more effective adaptation of the digital tool for secondary school students.

Discussion
- It is essential to ensure that mental health e-interventions are properly adapted for their target populations using co-development as these tools become more prevalent1. MHSU psychoeducational content must address more recent trends such as social media use, body image, and the prevalence of e-cigarettes3.
- Including limited, moderated social tools may increase student interest

References
1. Vereschagin et al. (2024). Effectiveness of the Minder Mobile Mental Health and Substance Use Intervention for University Students: Randomized Controlled Trial. Journal of Medical Internet Research. 26(5), e287.