

Digital Counselling Chatbots in Mental Health Promotion: Promise and Pitfalls

Background

Mental health disorders affect over one billion people worldwide and represent a major contributor to global disability (OECD, 2021). Traditional interventions include community mental health programmes, early-intervention services, and face-to-face counselling (Andrews et al., 2018). Digital public health technologies now include tele-psychiatry, mental health apps, and online CBT programmes (Firth et al., 2019). Digital counselling chatbots AI-driven tools simulating therapeutic dialogue offer accessible, low-cost, and stigma-free mental health support (Heintz et al., 2022).



Behavioural Change Theory: Cognitive Behavioural Theory (CBT)

Digital counselling chatbots use CBT techniques such as cognitive restructuring, guided reflection, problem-solving, and behavioural activation (Gaffney et al., 2019). Chatbots also provide mood-tracking, self-monitoring, and goal-setting prompts to support ongoing behaviour change (Michie et al., 2014). Real-time interaction and repeated practice strengthen the formation of positive coping behaviours over time (Bickmore and Picard, 2005).



Conclusion

Digital counselling chatbots have strong potential to support public mental health promotion at scale (OECD, 2021). They can be embedded into school, university, and workplace health programmes to enhance mental health literacy (Nutbeam, 1998). Researchers can use chatbot data to study behavioural trends, engagement patterns, and long-term intervention outcomes (Heintz et al., 2022). When implemented responsibly, chatbots can contribute to a more equitable, accessible, and digitally enabled mental health system (Free et al., 2013).

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Module: Population Health and Digital Health Promotion (LCHS7009)

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Health Promotion Values and Principles

Health promotion is built on empowerment, participation, equity, cultural sensitivity, and holistic wellbeing (WHO, 1986). Digital counselling chatbots reflect these values by offering personalised, user centred mental health support available anytime (Bickmore and Picard, 2005). Interactive features enhance engagement and empowerment, although cultural relevance, privacy, and inclusivity must be ensured (Cavanagh, 2010).



Expected Outcomes

Integrating CBT into chatbot interventions is expected to improve emotional regulation and coping strategies (Andrews et al., 2018). Digital chatbots may reduce mild-to-moderate anxiety and depression symptoms (Firth et al., 2019). They can increase users' self-efficacy by supporting continuous practice of CBT-based tools (Gaffney et al., 2019). However, outcomes depend on sustained engagement and appropriate referral pathways for severe mental health concerns (Mohr et al., 2017).

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