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A Mobile Application Featuring Advances in Immersive Augmented Reality Interventions to Support Depression Patients

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Abstract

Depression is a global mental health concern that affects millions of people worldwide. Traditional treatment methods, though effective, may encounter obstacles such as stigma and limited resources. In response, mobile mental health apps have gained popularity due to their convenience, accessibility, and potential for personalized care. Advances in Immersive Augmented Reality (AR) have shown the potential in supporting interventions for depression patients. By leveraging the capabilities of AR, these interventions aim to enhance traditional treatments and provide accessible support to a wider population of patients. This paper introduces "ConnectWell", a high-end mobile app that harnesses the power of AR to revolutionize depression management. ConnectWell transcends conventional app functionalities by seamlessly integrating AR-based patient-therapist communication, guided meditation, group therapy sessions, skill-building exercises, and coping strategies. A state-of-the-art AI-powered chatbot augments the app's capabilities, offering continuous personalized support, guidance, and resource sharing. Additionally, the app is thoughtfully integrated with compatible smartwatches to monitor users' physiological data, enabling real-time mood assessment and tailored interventions. The app serves as a supportive and compassionate virtual friend, providing positive responses and guidance whenever depression patients need someone to talk to and seek help. Utilizing the full potential of these mobile applications for supporting depression patients necessitates a thorough investigation into the adoption and dissemination of AR in conventional clinical practice. The paper concludes with a call for further research and development to investigate the feasibility and benefits of haptic-enhanced AR in mental health interventions.

Keywords: *Mobile application, Immersive augmented reality, AR-based interventions, Depression, Real-time monitoring*