

The Potential of Virtual Reality Technologies to Improve Adherence to Weight Loss Behaviors

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Abstract

A significant proportion of the global population is obese, foreshadowing an epidemic of chronic disease. Self-monitoring (of diet, exercise, and body weight), decreasing energy intake, and increasing energy expenditure are robust predictors of successful weight loss. However, few individuals consistently practice these behaviors, making long-term weight loss and maintenance unlikely. Technologies afford unique opportunities to overcome barriers and increase the reach of traditional obesity interventions. In this article, we introduce ENGAGED, a technology-enhanced modification of the Diabetes Prevention Program designed to improve adherence to weight loss behaviors. Using a treatment implementation framework, we suggest how virtual reality technologies might further improve the delivery, receipt, and enactment of ENGAGED to maximize patient impact.

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Abbreviations: (DPP) Diabetes Prevention Program, (ENGAGED) E-Networks Guiding Adherence to Goals in Exercise and Diet (VR) virtual reality

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