

Assisting People with Intellectual Disability to Self-manage Healthy Lifestyle Choices

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Introduction

In Ireland and Northern Ireland, approximately 60% of adults are either overweight or obese¹. The prevalence of obesity and overweight adults is predicted to reach around 70% by 2030². Individuals with intellectual disability (ID) are one particularly vulnerable population who are at risk of becoming overweight and obese^{3,4}. The rate of obesity in people with intellectual and developmental disability is generally higher than that in the general population⁵. Traditional approaches used to promote weight management within the ID population have had limited success to date⁶. A variety of factors have been suggested as likely to increase the risk of obesity in people with learning disabilities, many of which are considered to be modifiable antecedents to obesity that can be targeted to improve health, increase quality of life and reduce the health care costs associated with supporting people with obesity⁷. Current research also indicates that a multi-component approach is required to produce significant impacts in the area of weight management with an ID population⁸. Assistive technology provides the potential to provide multi-component interventions that can promote change in health related behaviours to manage weight.

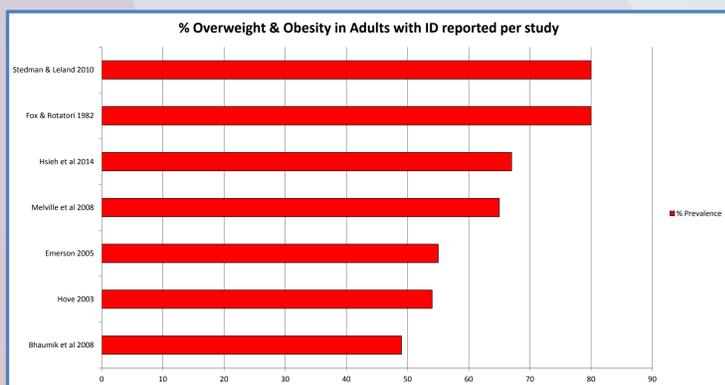


Figure 1: Rate of overweight & obesity as reported in studies from 1982 to 2014

Objectives

The overall goal of this research project is to target modifiable factors that influence obesity through the utilisation of app based assistive technology combined with self-management interventions which incorporates the use of empirically validated behavioural interventions to provide an ID specific weight management system. The combination of technology and behavioural intervention specifically designed to support individuals with ID will enable users to identify and track target behaviours associated with health, wellbeing and diet, modify their behaviour in relation to these domains, and receive reinforcement for improvement in the target areas. Phases of the study will be: (1) a qualitative study with focus groups identifying environmental variables that inhibit healthy lifestyle choices; (2) development of an information and training sequence to increase healthy behaviours and self-management through using Assistive Technology; (3) Implementation of a treatment plan incorporating Assistive Technology using a multiple baseline design; and (4) analysis and dissemination of results to various audiences including people with ID and their carers. The behavioural intervention packages created will be of use to the community supporting people with ID after the project has finished.

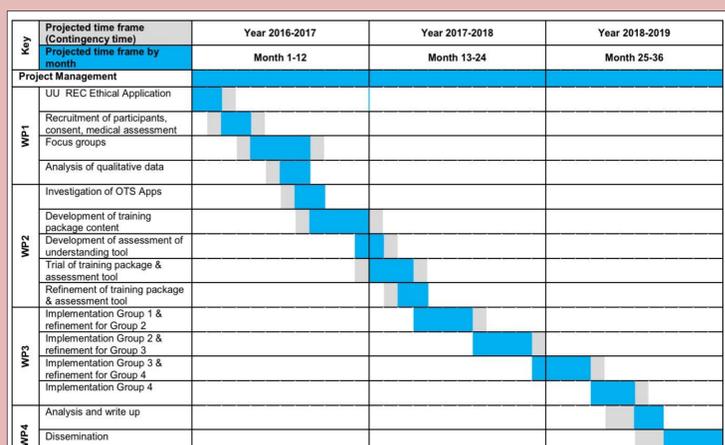


Figure 2: Gantt chart depicting project work plan including monthly projected time (blue) and contingency time frame (grey)

Current Work Streams



Systematic Review

- The goal is to review the efficacy of weight reduction interventions for adults with intellectual disabilities
- Examine intervention components
- Examine specific review questions

Focus Groups

- To provide people with an ID an opportunity to voice their requirements from AT in relation to weight management
- 4 groups of 6 participants who meet the inclusion criteria
- Thematic analysis of focus group discussion

Diet & Exercise

- Enhanced Stop Light Diet
- Dynamic Dudes

App Development

- Current Considerations:
 - Incorporating focus group outcomes
 - user registration
 - Setting targets
 - Data uploading
 - Android, iOS, Windows, or all

Moving forward

The research project is still in its first year. The objectives for the next 6 to 12 months include completing the current work streams, develop and test the first iteration of the healthy lifestyle app, finalise the education and training component for people with ID and their support circle, and begin implementation of the intervention with the first cohort of participants. The end goal is to provide an accessible healthy lifestyle app that is accompanied by a manual type education and intervention package that can be utilised to support people with ID to manage their health & weight.

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