How effective is community physical activity promotion in areas of deprivation for inactive adults? A pragmatic observational evaluation of the 'Active Herts' physical activity programme

Howlett, N., Trivedi, D., Troop, N., Jones, A., & Chater, A.

Introduction

Systematic review and meta-analysis
A systematic review and meta-analysis of randomised controlled trials of physical activity interventions for healthy inactive adults showed changes in physical activity up to a year after intervention and highlighted several behaviour change techniques (BCTs) that were associated with effective interventions (e.g. Action planning, Prompts/cues; Howlett, Troop, & Chater, 2018).

Drawing upon theory
Behaviour results from sufficient Capability, Opportunity, and Motivation (COM-B; Michie, van Stralen, & West, 2011). Capability (ability to create habits, action planning, self-monitoring) and Motivation (intention, self-efficacy, exercise self-identity) were found to be important drivers of moderate-to-vigorous physical activity (MVPA; 50% variance explained; Howlett, Schulz, Troop, & Chater, 2017).

The Active Herts programme
The Active Herts programme (Howlett, Jones, Bains, & Chater, 2017) implemented the most effective BCTs (highlighted from the review) and evaluated key drivers of MVPA (from the COM-B analysis) as secondary outcomes. This evaluation allowed analysis of whether physical activity increased and why from a theoretical perspective.

Method
Participants
Inactive adults (N = 435) residing in four Hertfordshire localities (Watford, Broxbourne, Hertsmere, Stevenage), with additional cardiovascular disease risk factors and/or mental health issues.

Design
In two areas programme-users received a BCT booklet, consultations, a booster phone call, motivational text messages, and signposting to 12 weeks of exercise classes (standard group). In another two areas programme-users also received 12 weeks of free tailored exercise classes, with optional exercise ‘buddies’ (enhanced group).

Deliver training
Four Get Active Specialists received training on obesity, mental health, and behaviour change. An additional two-day workshop and quarterly boosters were led by AC, and covered motivational interviewing, behaviour change therapy, and health coaching.

Fidelity
Get Active Specialists were video-recorded to gauge baseline skills and then asked to audio-record random consultations and reviewed the audios at quarterly sessions with the trainers (AC, NH). Consultations were scored with the Motivational Interviewing Treatment Integrity coding scheme (Moyers, Martin, Manuel, Miller, & Ernst, 2010) and a checklist of BCTs.

Analysis
Mixed ANOVAs analysed changes in physical activity, sporting participation, sitting (primary outcomes), mental wellbeing, health perception, life satisfaction, and COM-B measures (secondary outcomes). Secondary analyses explored whether COM-B measures predicted MVPA at baseline, 3, and 6 months, and changes at 3 and 6 months using path analysis (Figure 1).

Figure 1: Theory of behaviour (change) explored in secondary analyses

References