

Development of eHealth-Based Behaviour Change Support for Young Adults Using the Nine Principles Framework



Anna Worthington¹, Nicola Gillies¹, Rajshri Roy¹, Andrea Braakhuis¹

¹ Department of Nutrition and Dietetics, University of Auckland, NZ



WHY did we do this?

- Nutrition-related randomised controlled trials (RCTs) are key in informing dietary guidelines to enhance population health and wellbeing
- These RCTs frequently require participants to change dietary behaviours to answer the research question, but often support to change these behaviours is overlooked in the study design
- Behaviour change frameworks provide a systematic way of developing interventions to improve population health e.g. the Nine Principles framework (1)
- Using these frameworks in the design of RCTs has the potential to **enhance participant adherence**, improve research validity and decrease resource waste (2)
- However, implementation research is needed to **demonstrate how to effectively incorporate behaviour change frameworks** into nutrition-related RCTs

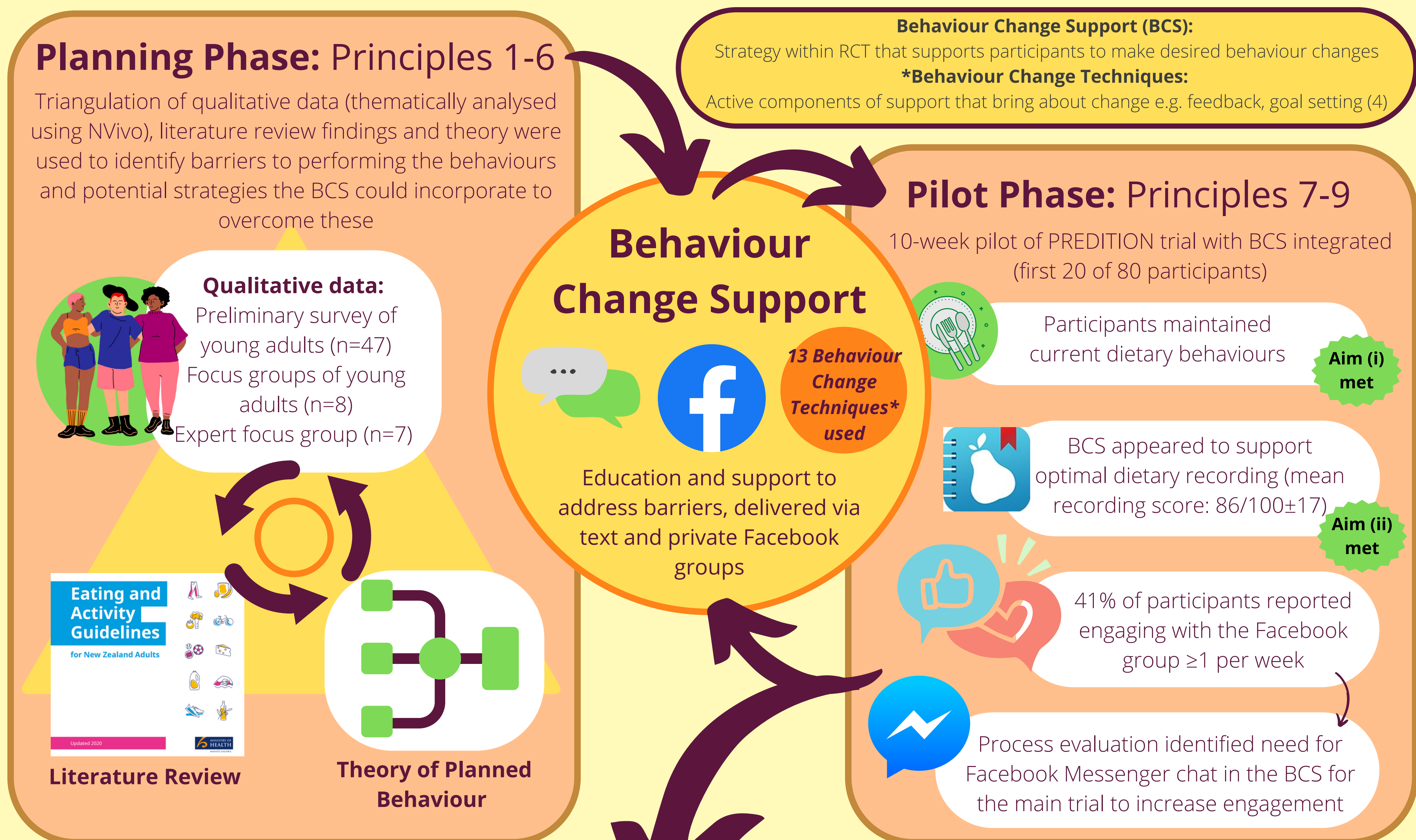
WHAT did we do?

- We used the Nine Principles framework to develop Behaviour Change Support (BCS) for the Protein Diet Satisfaction (PREDITION) trial
- PREDITION Trial: Two-arm parallel RCT of 80 young adults looking at how a diet containing pasture-fed red meat or non-meat alternatives for 10 weeks affects blood biomarkers of health (e.g. Long chain fatty acids in red blood cells) (3)
- Targeted behaviours participants needed to change during the PREDITION trial: **eating healthily** and **dietary recording**
- Electronic health (eHealth) was the pre-determined main mode of delivery given study resources

AIM

Describe the development of a user-centred, theory-based eHealth behaviour change support (BCS) programme to enhance young adults' (20-35 years) adherence to the behaviours of (i) eating healthily and (ii) recording dietary intake on a smartphone app, when participating in a RCT

Process of using the Nine Principles framework



Key Learnings

Using a behaviour change framework underpinned by theory and user-centred design to develop **BCS is a promising, systematic way to enhance adherence** in RCTs. This has the potential to provide more robust research to support dietary recommendations for population wellbeing. **Further practical support is needed** to guide researchers who are unfamiliar with behaviour change science through this process.

References

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