



Evidence and
Implementation
Summit 2023
9–11 October

Melbourne, Australia & Online



Behavioural and Implementation
Science Interventions
Yong Loo Lin School of Medicine



Centre for
Evidence and
Implementation

www.eisummit.org

[@EISSUMMIT2023](https://twitter.com/EISSUMMIT2023)

[#EIS2023](https://twitter.com/EISSUMMIT2023)

#172 - A comprehensive characterisation of implementation determinants from a pilot trial of the Appetite Toolbox in Singapore.

Presenting Author

Dr Keri McCrickerd^{1,2}

Affiliation

Centre for Behavioural and Implementation Science and Interventions (BISI), Yong Loo Lin School of Medicine, National University of Singapore, Singapore.

Singapore Institute for Clinical Sciences, Singapore.

Country of residence

Singapore.

Objectives/aims

The Appetite Toolbox (ATB) is a teacher-led intervention comprising books, classroom activities, and mealtime practices designed to promote eating regulation skills among children attending preschool childcare in Singapore. In a recent pilot trial, teachers reported the ATB to be acceptable, appropriate, and feasible in their context. This work describes how the Consolidated Framework for Implementation Research (CFIR, 2022) was used to i) characterise teachers' implementation experience, ii) quantify and prioritise barriers and facilitators to implementing the ATB with a rating rule and iii) consider the utility of the rating rule to guide future implementation efforts.

Methods

Implementation was evaluated as part of a pilot effectiveness-implementation trial of the ATB with teachers of 3–6-year-old children, across six childcare centres in three locations in Singapore, and run by a single central operator. Twenty teachers delivered the ATB to over 300 children over six weeks either as part of a study group (n=11) or a waitlist control group (n=9). The teachers identified as female, were aged 22 to 60 years old, and had 2 to > 10 years of preschool teaching experience. Implementation determinants were explored in focus group discussions held at the participating childcare centres at the end of the intervention. Fifteen of the 20 teachers participated in the discussions which were audio-recorded and transcribed



Evidence and
Implementation
Summit 2023
9-11 October

Melbourne, Australia & Online



Behavioural and Implementation
Science Interventions
Yong Loo Lin School of Medicine



Centre for
Evidence and
Implementation

www.eisummit.org

[@EISSUMMIT2023](https://twitter.com/EISSUMMIT2023)

[#EIS2023](https://twitter.com/EISSUMMIT2023)

verbatim. The CFIR informed the development of the discussion guide and a comprehensive codebook. The five CFIR domains (innovation, inner setting, outer setting, individual characteristics, implementation process) and 30 constructs were included in the codebook and used in a template analysis, where constructs were further characterised by emerging content themes. A rating rule combining quote valence (+/-/mixed), strength (0-1-2) and agreement was applied to each CFIR construct and content theme by two main coders. Once rating consensus was reached, the distribution of ratings was contrasted within and across CFIR domains to estimate their discriminate ability.

Main findings

The template analysis and emerging content themes provided a comprehensive evaluation of factors contributing to implementation outcomes reported by teachers in the ATB pilot trial. Most content ratings were distributed across the 'innovation', 'inner setting' and 'individual characteristics' domains. Using a rating rule based on number of contributing quotes, rather than number of contributing discussants, was more discriminating and better reflected the variations in the content strength and valance described qualitatively within CFIR constructs. Overall, this work suggests that application of a rating rule can provide a succinct characterisation of influential implementation factors within and across CFIR domains and complements the in-depth qualitative analysis.