

**Translating the ToyBox obesity prevention intervention to the Scottish preschool setting:
Adaptation processes and implementation challenges**

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Abstract

Introduction: Childhood obesity rates in Scotland are amongst the highest in Europe, with a reported 23% of 4-5 year olds being overweight or obese in 2016/2017. Interventions which have been effective at improving key obesogenic behaviours in the early years may merit further implementation in Scotland. Therefore, adaptations were made to the ToyBox intervention in order to test its' feasibility in the Scottish preschool setting.

Methods: The ToyBox-Scotland study is a feasibility cluster randomized controlled trial, which compared the adapted ToyBox-Scotland intervention (3 preschools) with the usual Scottish preschool curriculum (3 preschools) in Glasgow over an 18 week period from March-June 2018. A number of adaptations to the structure, content and delivery of the original intervention were made to align with the policies and practices of preschools in Scotland. A process evaluation was conducted alongside the cRCT in order to evaluate fidelity and acceptability of the intervention. This presentation will only focus on the adaptation process undertaken, and the implementation challenges identified through process evaluation.

Results: We involved stakeholders in the adaptation and development of the ToyBox-Scotland intervention. Meetings were held with preschool head teachers. A workshop was conducted with pre-school practitioners, and an experienced pre-school educator trailed out each ToyBox activity with children and collaborated with researchers adapt the intervention. Resulting adaptations to the intervention included: Language changes to the intervention materials, removal of the eating/snacking and water consumption components from the pre-school setting, removal or adaptation of more complex physical activity sessions, and the addition of interactive rather than passive materials to encourage parental involvement. Process evaluation concluded that the intervention was implemented with high fidelity in the preschool setting and was well-received by practitioners. Challenges identified included low study

recruitment rates, loss of accelerometers, and poor compliance with outcome measures (BIA, parental questionnaires and accelerometry).

Conclusion: The original ToyBox intervention was considerably adapted to suit the context-specific aspects of Scottish preschools, which appears to have aided successful implementation of the intervention. The challenges identified will be considered and addressed before progression to effectiveness testing of the intervention.