

An Innovative Way to Evaluate Complex Health Interventions: a Study Protocol for the Jump-in Healthy Nutrition Policy Evaluation Using the Extended Selection Cohorts Design

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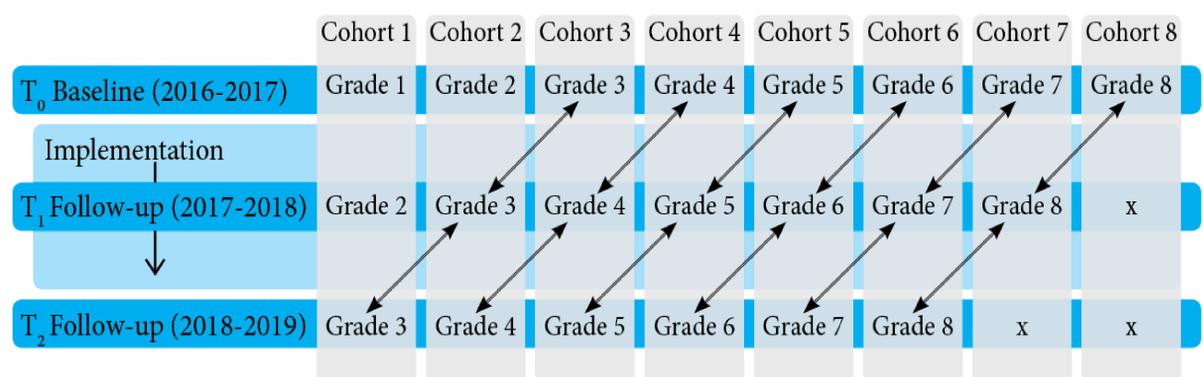


Aim

The current study aims to evaluate the effectiveness and implementation process of the Jump-in healthy eating component.

Effect Evaluation: ESC-design

To study the effectiveness of the Jump-in healthy nutrition policy we utilize a quasi-experimental Extended Selection Cohorts design. This design is suitable when randomization and/or recruitment of control groups is not possible or desirable, but still enables comparison between same-age treatment groups (Olweus, 2005). Within this design every grade is seen as a cohort, in which each cohort is measured three times. Rather than comparing the three measurements within cohorts, measurements are compared to same-age adjacent cohorts (see Figure 1). In this comparison baseline measurements represent the control group and the follow-up measurements represent the intervention group.



←→ Comparison data of intervention groups (T₁ and T₂) and control group (T₀)

Figure 1 Design of effect evaluation of the Jump-in healthy nutrition policy using an Extended Selection Cohorts design (based on Olweus, 2005)

Background & scope

Childhood obesity is associated with a higher risk of early-onset physical health issues as well as social and mental health issues. In Amsterdam over 18% of children suffer from overweight, highlighting the importance of childhood obesity prevention. Jump-in aims to prevent overweight among primary school aged children, among other things by implementing a school-wide healthy nutrition policy in primary schools.

To account for the need for scientific support and the complexity of this multicomponent intervention, we conduct a mixed methods evaluation study. This study includes ten primary schools in Amsterdam with high rates of obesity, which often coincides with a large proportion of children from ethnic minority families and/or families with low socio-economic position.

Measures

We assess dietary habits and its determinants by questionnaires for parents and children (aged 8-12) and photographs of the lunchboxes of children (aged 4-12).



Process evaluation: Mixed Methods design

We conduct a process evaluation to understand under which conditions the healthy Jump-in food policy is effective, which helps to interpret trial outcomes. We collect data on the influence of process indicators, the context and satisfaction with the program.

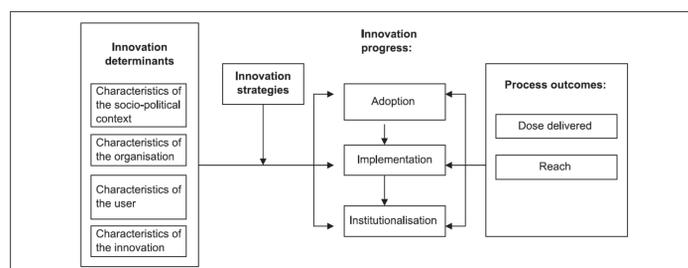


Figure 2 Framework Representing the JUMP-in Innovation Process (De Meij et al., 2012)

Measures

Health promotion professionals, school directors, program coordinators and teachers are interviewed, parents and children are invited to join in focus group discussions, and Jump-in scans are analyzed.

