



Encouraging children's fruit and vegetable intake at primary school; the role of parents

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Background

Children's consumption of fruit and vegetables is insufficient. The school is an ideal setting to encourage fruit & vegetable (F&V) intake among children. However, little is known about the role and views of parents when they are responsible for the provision of foods at school, which is the case for primary schools in The Netherlands.

Objectives

- 1) To obtain insight into the motives, perceptions and behaviours of parents regarding the snack provision for their child's morning break at school.
- 2) To investigate attractiveness of various strategies to increase children's F&V consumption during the morning break at school.

Methods

A digital survey was distributed to parents via 90 schools in The Netherlands. The main topics in the questionnaire were: motives for the type of morning snack, perceived barriers and benefits of eating F&V at school, and parental attitudes and behaviours regarding F&V provision. A Principle Component Analysis was done to find underlying dimensions. Chi-square, ANOVA's and Spearman correlations were used to analyse the data.

Results

The survey was completed by 1141 parents, mainly mothers (89%) of Dutch origin (93%). The children were 7.4±2.3 years old (range: 4-12 years). When children bring F&V to school, this was usually one type (82%) and most parents prepared this in the morning (86%).



Motives

Health, feelings of control, and child preferences were the most important underlying motives of parents for the type of morning snack.

Effect of age

The older the child, the less frequent parents provided F&V for the morning snack, and the less often they agreed with the statement that their child should eat F&V 5 days a week during the morning break at school. Possible explanations for this trend are the following findings: When children were older,

- 1) 'Health' became a less important motive;
- 2) Parents reported more product-related barriers such as limited shelf life, F&V turn easily brown, eating F&V gets messy in classroom;
- 3) Parents reported more social resistance such as child asks for other snacks, classmates are negative about F&V.

Barriers & facilitators for providing F&V for morning snack

- There was a negative relationship between experienced barriers and parental F&V provision ($p \leq 0.001$).
- There was a positive relationship between expected benefits (child learns good habit, gets sufficient nutrients for growth) and parental F&V provision ($p < 0.001$).

Strategies to increase children's F&V consumption

Figure 1 shows that parents like activities at school, a teacher as role model, and a convenient & attractive box for supporting F&V intake. Furthermore, parents were neutral regarding a paid subscription programme, where F&V would be delivered at school 5 days a week. About a third (38%) would be willing to pay for such a F&V subscription and a subscription of 2-3 days a week was preferred.

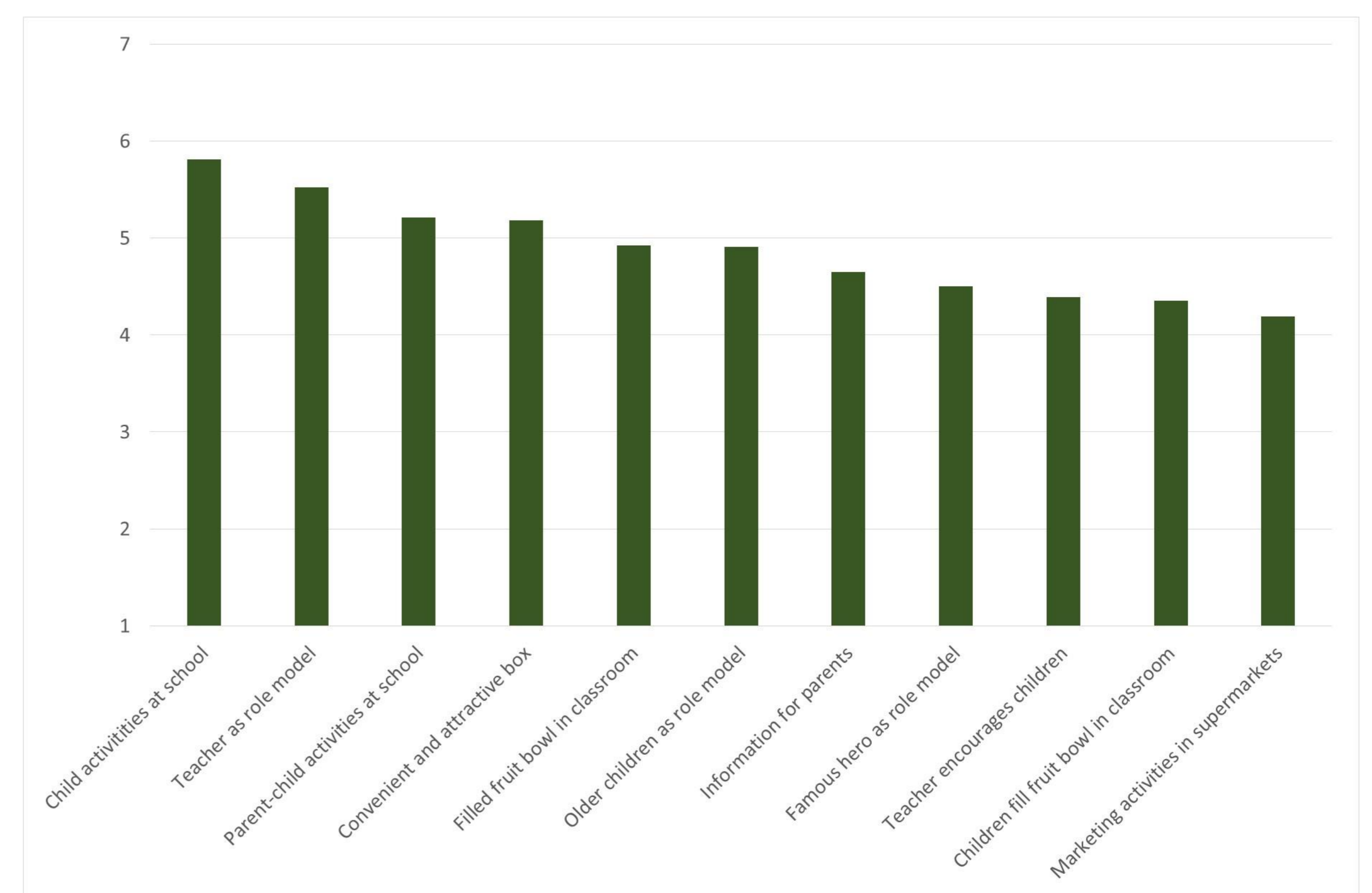


Figure 1 Parent-reported average scores for attractiveness of strategies to increase F&V consumption at primary school (1=not at all attractive; 7=very attractive)

Conclusions & implications

- The F&V situation was more desirable for younger children, so school-based interventions should also focus on the older children of primary school to support a healthy F&V intake.
- F&V provision was significantly related to perceived barriers and to expected advantages of eating F&V. This implies that these need attention in interventions stimulating F&V provision at school.
- In the next phase of this project, different strategies will be tested for their effectiveness to increase F&V consumption at school.

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