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## The Effect of Smileys As Motivational Incentives on Children'S Food Choices: a Field Experiment in European Primary Schools

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# The Effect of Smileys as Motivational Incentives on Children's Food Choices: A Field Experiment in European Primary Schools

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#### EXTENDED ABSTRACT

This study investigates the efficacy of a simple, motivational incentive—a smiley stamp—in promoting vegetable and salad consumption among primary school children.

Incentives are given to induce a behavioral change in the short term and potentially form habits in the long term (e.g., Becker and Murphy 1988). Whereas their short term effect is as predicted by behavior modification theories—an increased probability of the behavior on which it is contingent—an incentive may actually generate one of three possible outcomes (List and Samek 2014). The incentive may initially modify behavior, which then bounces back to baseline after incentive removal (standard economic theory); the incentive effect may remain even after the incentive is removed (habit formation theory), the observed behavior may fall below baseline after incentive removal because of a crowding-out of intrinsic motivation (selfdetermination theory; Deci, Koestner, and Ryan 1999). Whether an incentive is successful depends on how much an individual enjoys the activity, values the incentive, or cares about his/her image vis-àvis self or others (Benabou and Tirole 2006). Incentives must also be awarded for a concrete, easily understandable task that is simple to measure (Angrist, Bettinger, and Kremer 2006).

We conducted a field experiment in 10 primary schools in five European countries using one control and one treatment school per country. The six-week experiment was split into three two-week periods before, during, and after the experimental treatment. Treatment was a smiley stamp for choosing a portion of vegetables or salad. Data was measured on individual level. In the control group, there was no treatment and no stamp card; we measured choice, consumption and waste on aggregate level.

Pretreatment, we measured no differences in vegetable and salad choice and consumption or in waste between the treatment

and control schools. However, during the treatment period, in all five countries, we observed a significant increase in both choice and consumption, but also in waste. Postintervention, the differences between the treatment and control schools decreased but nevertheless remained significant. Country differences were observed. No significant age or gender differences were found.

This study thus demonstrates that low-cost motivational incentives such as a smiley stamp can be used across different countries to motivate school children to increase their vegetable and salad consumption and make healthier eating choices. It also underscores the high relevance of context for behavioral change.

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