School Meals, Educational Achievement and School Competition: Evidence from a Randomized Evaluation

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**Abstract**

This paper examines the effects of subsidized school meals on school participation, educational achievement, and school finance in a developing country setting. We use data from a program that was implemented in 25 randomly chosen preschools in a pool of 50. Children’s school participation was 30 percent higher in the treatment group than in the comparison group. The meals program led to higher curriculum test scores, but only in schools where the teacher was relatively experienced prior to the program. The school meals displaced teaching time and led to larger class sizes. Despite improved incentives, teacher absenteeism remained at a high level of 30 percent. Treatment schools raised their fees, and comparison schools close to treatment schools decreased their fees. Some of the price effects are due to a combination of capacity constraints and pupil transfers that would not happen if the school meals were offered in all schools. The intention-to-treat estimator of the effect of the randomized program incorporates those price effects, and therefore it should be considered a lower bound on the effect of generalized school meals. This insight on price effects generalizes to other randomized program evaluations.

**Gender Connection**

Gender Informed Analysis

**Gender Outcomes**

Gender disaggregated school enrollment, attendance, performance; nutrition.

**IE Design**

Clustered Randomized Control Trial (Clustered at school level)

**Intervention**

A Dutch NGO, ICS, organized and funded the provision of a school breakfast in 25 schools, randomly chosen from a pool of 50 schools. The breakfast consisted of a cup of porridge that contained 422 calories.

**Intervention Period**

2000-2002; breakfast was provided every day starting in April 2000

**Sample population**

The sample is comprised of 50 schools, 25 of which received the intervention. The targeted population is children between 4 and 6 who live within walking distance of the school. The survey covered all siblings aged 4 to 6 of children who are currently in school. In 2000, 3176 participants were matched to a child in the baseline survey, in 2001 the number was 2988.

**Comparison conditions**

The study compared the 25 treated schools to 25 control schools who did not receive the nutritional intervention. All of the schools did receive prior interventions of teacher training and school supplies.

**Unit of analysis**

Child Level
**Evaluation Period**

A baseline survey was implemented starting in February/March 2000; there were school attendance check through July 2002.

**Results**

The school feeding program had a positive significant impact on school participation (treated students participated in school 35.9% of the time versus 27.4 for the comparison group). The program led to a significant improvement in test scores, but only in schools where teachers were more experienced at the onset of the program. There was no impact on cognitive abilities. The program led to a significant improvement in the weight of boys, but no improvement in the height or weight of girls. The increased participation led to overcrowding, but had no impact on teacher absenteeism. Also, the school meals displaced teaching time.

**Primary study limitations**

Some students from comparison schools transferred into treatment schools. Additionally, comparison schools changed their prices in response to the program.

**Funding Source**

Reference(s)


**Link to Studies**