

# Individualized Self-learning Program to Improve Primary Education: Evidence from a Randomized Field Experiment in Bangladesh

By

Yasuyuki Sawada\*

*University of Tokyo*

An Le

*University of Tokyo*

Minhaj Mahmud

*BIGD, BRAC University*

Mai Seki

*JICA Research Institute*

Hikaru Kawarazaki

*University of Tokyo*

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## **Abstract**

This paper reports the results from a field experiment that tests the effectiveness of the globally popular Kumon learning method on improving cognitive and non-cognitive abilities of disadvantaged pupils in Bangladesh. Using a randomized control trial design, we study the impact of this individualized self-learning approach among the 3rd and 4th graders studying at BRAC non-formal primary schools. The results suggest that students of both grades in the treatment schools showed substantial and significant improvement in cognitive test scores after 8 months, compared to students in the control schools. In terms of non-cognitive abilities, the results show positive and significant impacts on a majority of measures such as motivation and perseverance. With regards to the aggregated non-cognitive indexes such as the Rosenberg's self-esteem scale, Children's Perceived Competence Scale (CPCS), and Grit Scale, the estimates also show positive and significant treatment effects among the particular group having low-initial non-cognitive abilities. Moreover, the results suggest that the growth in non-cognitive abilities provide foundations of development of cognitive abilities. Interestingly, we also find that the Kumon learning method facilitates teachers' assessment ability, mitigating the stereotyping in case of student evaluation. Overall our results suggest wider applicability of a properly designed non-formal education program in solving the learning crisis in developing countries.

\* Corresponding author: Faculty of Economics, the University of Tokyo