

# Scaling Up What Works: Experimental Evidence on External Validity in Kenyan Education

## Description

[Tweet](#)

Centre for Global Development Working Paper 321 3/27/13 Tessa Bold, Mwangi Kimenyi, Germano Mwabu, Alice Ngũgũ, and Justin Sandefur

[Available as pdf](#)

### Abstract

The recent wave of randomized trials in development economics has provoked criticisms regarding external validity. We investigate two concerns—heterogeneity across beneficiaries and implementers—in a randomized trial of contract teachers in Kenyan schools. The intervention, previously shown to raise test scores in NGO-led trials in Western Kenya and parts of India, was replicated across all Kenyan provinces by an NGO and the government. Strong effects of short-term contracts produced in controlled experimental settings are lost in weak public institutions: NGO implementation produces a positive effect on test scores across diverse contexts, while government implementation yields zero effect. The data suggests that the stark contrast in success between the government and NGO arm can be traced back to implementation constraints and political economy forces put in motion as the program went to scale.

**Rick Davies comment:** This study attends to two of the concerns I have raised in a recent blog ([My two particular problems with RCTs](#))—(a) the neglect of important internal variations in performance arising from a focus on average treatment effects, (b) the neglect of the causal role of contextual factors (the institutional setting in this case) which happens when the context is in effect treated as an externality.

It reinforces my view of the importance of a configurational view of causation. This kind of analysis should be within the reach of experimental studies as well as methods like QCA. For years agricultural scientists have devised and used [factorial designs](#) (albeit using fewer factors than the number of conditions found in most QCA studies)

On this subject I came across [this relevant quote from R A Fisher](#):—

*“If the investigator confines his attention to any single factor we may infer either that he is the unfortunate victim of a doctrinaire theory as to how experimentation should proceed, or that the time, material or equipment at his disposal is too limited to allow him to give attention to more than one aspect of his problem.”*

*“Indeed in a wide class of cases (by using factorial designs) an experimental investigation, at the same time as it is made more comprehensive, may also be made more efficient if by more efficient we mean that more knowledge and a higher degree of precision are obtainable by the same number of observations.”*

And also, from Wikipedia, another Fisher quote:

*“No aphorism is more frequently repeated in connection with field trials, than that we must ask Nature few questions, or, ideally, one question, at a time. The writer is convinced that this view is wholly mistaken.”*

And also

## Category

1. Uncategorized

## Tags

1. context
2. external validity
3. RCT

## Date

16/05/2026

## Date Created

02/04/2013

## Author

admin