SIEF Strategic Impact Evaluation Fund

NEWSLETTER

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Everything but the results

In pre-analysis plans, researchers conducting randomized control trials can specify what kind of analyses they will do and how they will measure outcomes before they see their data. Meant to improve research transparency and credibility, these plans are becoming more common (see here for Ben Olken's overview of the benefits and costs of doing pre-analysis plans in the field of Economics, here for Ted Miguel's lecture on innovations in open science, and here for a recent blogpost by David McKenzie on how these plans have been used in practice). Recently, researchers working on the SIEF-supported early literacy EMERGE evaluation in Kenya have posted their plan. This evaluation will measure the impacts of providing storybooks to households along with training on dialogic reading for parents. It will also test whether offering storybooks in children's mother tongue is more effective. Pilot results have already been published and presented in an earlier seminar.

Adaptive experimentation

Researchers working on an evaluation in SIEF's nimble portfolio also had to provide details of their experiment in a research protocol they prepared for the Ministry of Health in Cameroon to get approval for their study, which will test different approaches for improving contraceptive counselling. In very accessible language, the protocol describes the team's plans for using machine learning techniques to conduct an adaptive randomized control trial. In conventional trials, the proportion of subjects assigned to each treatment arm is pre-specified before the randomization and remains fixed throughout the trial, and this proportion is usually determined by power calculations. An adaptive experiment, however, starts out like a convention trial, but after a pre-specified period of data collection allows treatment assignment to evolve to achieve two goals: maximizing learning about the effectiveness of different treatment arms and maximizing the welfare of subjects. As the trial progresses, researchers will increase the likelihood that a person will be assigned to a treatment that is beneficial to them. "Adaptive trials can thus declare a 'winner', or best performing arm, with greater confidence than a static experiment for a given sample size or experiment duration."