



Commentary

Contributions of experimental approaches to development and poverty alleviation: Field experiments and humanitarian assistance

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ABSTRACT

The work of Nobel Laureates Banerjee, Duflo and Kremer has centered around the use of randomized control trials to help solve development problems. To date, however, few field experiments have been undertaken to evaluate the effects of humanitarian assistance. The reasons may lie in challenges related to logistics, fragility, security and ethics that often loom large in humanitarian settings. Yet every year, billions of dollars are spent on humanitarian aid, and policymakers are in need of rigorous evidence. In this paper, we reflect on the opportunities and risks of running experiments in humanitarian settings, and provide, as illustration, insights from our experiences with recent field experiments of large-scale humanitarian aid programs in the Democratic Republic of Congo.

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In 2018 alone, conflicts and disasters around the world left an estimated 206 million people in need of humanitarian assistance (DI, 2019). Persistent conflict and global environmental change – including coastal flooding, rainfall variability and water scarcity – will likely increase the importance of humanitarian assistance in the decades to come. Despite the popularity of experimental studies to explore the impact of development aid, experiments are more rarely used to evaluate the effectiveness of humanitarian assistance. For example, in their review of studies on cash and “near-cash” transfers in emergency settings, Doocy and Tappin (2017) find that just five out of 108 studies have an experimental or quasi-experimental design (Aker, Boumnijel, McClelland, & Tierney, 2016; Lehmann & Masterson, 2014; Schwab, 2019; Aker, 2017; Hidrobo, Hoddinott, Peterman, Margolies, & Moreira, 2014, see also Puri, Aladysheva, Iversen, Ghorpade, & Brück, 2017).

Nevertheless, over the past few years, there has been a shift in researcher effort and donor funding towards randomized control trials (RCTs) to evaluate humanitarian assistance. For example, the International Initiative for Impact Evaluation (3ie), with support from the UK’s Department for International Development (DfID) and the US Agency for International Development (USAID), recently have funded several RCTs in emergency settings, including Quattrochi, Bisimwa, Thompson, Van der Windt, and Voors (2019).

DfID also currently supports Innovations for Poverty Action (IPA) and the Abdul Latif Jameel Poverty Action Lab (J-PAL) to launch programs in fragile contexts (Edwards, 2018).

There are compelling reasons to use field experiments to learn about the impact of humanitarian assistance. The large number of people that are affected by emergencies and the considerable effort and sums of money that are spent, necessitate careful study from both an ethical and cost-effectiveness perspective. While observational studies provide valuable information in this regard, they do not necessarily estimate a causal relationship between aid and key outcomes, without strong identifying assumptions. Policymakers want answers to questions about what types of interventions to deliver, how to deliver them, and whether there are positive (or negative) impacts. While some of these answers can be extrapolated from development to humanitarian settings, the two contexts differ in important ways. Thus, while RCTs can be used in humanitarian settings, there are particular challenges and opportunities that must be addressed before doing so, as well as modifications to the “typical” RCT design.

This paper illustrates these issues by using insights from two RCTs conducted in one of the world’s largest and most complex humanitarian settings, eastern Democratic Republic of Congo (DRC). In the first study, Aker (2017) collaborated with an international NGO to study the relative effectiveness of cash versus vouchers for internally displaced persons (IDPs). Within an informal IDP camp, households were randomly assigned to receive either cash or a voucher of the same monetary value. While voucher recipients

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changed their expenditures, there were no differences in food consumption or asset ownership between the two modalities. Because cash was less expensive to provide (and markets were available), the study suggests that, from a cost-effectiveness perspective, cash is the preferred aid modality. In the second study, Quattrochi et al. (2019) collaborated with the UN's Rapid Response to Movements of Population (RRMP) program to assess the impact of vouchers for IDPs and host families. Households were randomly assigned to receive either a voucher for essential household items or no voucher. While the vouchers improved adults' mental health and had moderate effects on social interaction and resilience, there were no effects on children's physical health.

Below, we highlight four key challenges for conducting field experiments in humanitarian settings, along with suggestions for future work in this area.

Speed. Much of the effort to undertake RCTs is at the design stage. Obtaining funding, deciding upon the types of interventions and randomization strategy, and collecting data often take months (if not years) of careful planning. However, in emergency settings, things have to move quickly, for a variety of reasons. In Quattrochi et al. (2019), for example, there was only a two-week window between the RRMP program's decision to intervene and the distribution of vouchers. In Aker (2017), the funding cycle of the interventions similarly required quick decisions. Despite the urgent nature of assistance, many humanitarian contexts are characterized by their long duration, and aid organizations have often operated in these contexts for years. In eastern DRC, the implementation partners in both studies had been operating in the country for over 20 years, with the necessary infrastructure and staff in place. Thus, while researchers and implementation partners had to move quickly – making rapid decisions about the interventions and randomization design and implementing the study within a one-year period – the existing infrastructure facilitated this process. **This suggests, RCTs in humanitarian contexts are more likely to succeed when conducted with an existing implementing partner with significant experience in the particular setting.**

Ethics. Conducting any type of research in humanitarian contexts can raise different ethical issues than those found in traditional development contexts (Cronin-Furman & Lake, 2018), some of which are specific to RCTs. The key consideration is that of targeting and vulnerability; while many development programs may target the poor, beneficiaries in humanitarian settings are often extremely vulnerable. In such contexts, critical starting questions are: Should research be conducted at all? If yes, is an RCT appropriate? Can the research justify having a control group, i.e., a group without any assistance? Quattrochi et al. (2019)'s research design had such pure control group. While the RRMP program was designed to provide aid only to the most vulnerable households within a community, the research team secured additional funds to treat more households, randomly assigning the next-most vulnerable households to vouchers or nothing. Aker (2017)'s research design, on the other hand, assigned households to different types of aid modalities. Here the implementing agency had funding to provide aid to all IDPs. This design implied that the study assessed the relative effectiveness of each modality – rather than the impact of the modality on its own. Overall, these examples suggest that the decision to have a pure control group (or none) should be based upon the implementing organization's existing program, as well as the level of vulnerability of the target population.

Partnerships. Any type of research – and especially an RCT – requires close cooperation between the research team and the implementing organization, in order to build trust, develop a common language and shared goals, and design of the study. A key (and sometimes the most contentious) element is the use of random assignment, as opposed to specific selection criteria. Cooperation

can be much more challenging in a humanitarian context, since operations are urgent and unpredictable and high staff turnover may weaken institutional memory and complicate trust-building. Partners may reasonably wonder why research is being conducted, and why a randomized design is being used. In both studies, several steps were taken to address these challenges. First, the research did not add to the burden of program staff. The studies fit within standard implementation design. Second, Quattrochi et al. (2019) hired a dedicated research coordinator to remain in close contact with the two intergovernmental agencies, four international NGOs, and three data collection teams involved in the study. Third, in both cases, the research team built partnerships with organizations, rather than with individuals inside the organizations, and ensured open communications with all parties. **Especially in humanitarian settings, building close partnerships is essential, and research teams must make sure that the research is not getting in the way of delivering humanitarian aid.**

Data. Data collection is a significant undertaking in any type of RCT, requiring extensive piloting, testing, training and execution. Deciding what questions to ask, how to ask them, of whom and for how long are often key considerations. Humanitarian aid – especially cash transfers and vouchers – can have impacts on a variety of outcomes, thereby making it difficult to focus on a narrow subset of indicators. Yet the uncertain nature of emergencies, as well as the vulnerability of the populations, requires restraint in this regard. In Aker (2017), the research team decided to limit the duration of the survey to about an hour, and used proxy measures for welfare – such as assets and food security – as opposed to a full consumption and expenditure module. In addition, the research asked questions about households' experiences, but avoided more sensitive questions to avoid invoking traumatic experiences. **With data collection in humanitarian settings, shorter surveys are often better, with less intrusive questions, and using secondary data is key – when possible.**

As the recent Nobel Prize in economics attests, RCTs have made a tremendous contribution to our understanding of development interventions. While not appropriate in all contexts, there are opportunities to use RCTs in humanitarian settings, as long as researchers understand the special and unique considerations and implications.

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