



RCTs as an opportunity to promote interdisciplinary, inclusive, and diverse quantitative development research [☆]



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ABSTRACT

The limitations of Randomized Controlled Trials as a research method have been well documented. Here we highlight one overlooked benefit of experimental research: a well-designed RCT requires in-depth knowledge of local customs and context, which brings researchers to the field and creates opportunities for collaboration across disciplines, between academics and policymakers, and among Northern and Southern researchers. Such collaborations have the potential to greatly enrich development scholarship. We illustrate our point with data from recent published papers in development economics, and conclude that RCTs, as one tool among many, can help promote more interdisciplinary, inclusive, and diverse quantitative development research.

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The advantages and limitations of RCTs in development research have been, and continue to be, vigorously debated (e.g. Deaton & Cartwright, 2018; Young, 2019). One key lesson from the work of the 2019 Nobel laureates is that “thick,” in-depth knowledge of local customs and context is a critical input to rigorous research in modern development economics (Glennerster, 2015). While this trend now goes well beyond experimental methods, RCTs were an important catalyst for it. To design an effective experiment, researchers must often spend months, if not years, in the field to develop interventions that shed new light on key constraints in the process of development or test policies that could relax these constraints. In addition, a nuanced understanding of local context can improve RCTs by minimizing the chance of threats to internal validity – attrition, selection, and post-randomization biases – and maximizing the likelihood that the results will usefully contribute to the broader development knowledge base, i.e. external validity (Woolcock, 2013). Beyond being a precondition of high-quality RCTs, deep engagement in the field also can promote what Weber called *verstehen* – local understanding and

intuition despite being an outsider to a specific context – that enhances researchers’ ability to explore and hypothesize about the mechanisms underlying the causal effects under study (e.g. see Paluck, 2010). A generation of researchers in development economics are thus now more rooted in, and dedicated to, conducting rigorous, creative and policy-relevant field work (Bandiera, 2019).

Though there is still controversy over how much RCT-based research carefully considers the local context in practice (see, for example, the discussion in Kabeer, 2019), we argue that it presents a unique opportunity to promote more interdisciplinary, inclusive, and policy-relevant quantitative research. With their focus on operational policy interventions and often relatively costly and labour-intensive implementation, good RCTs typically require large and diverse teams that reach across cultural, disciplinary, academic-practitioner boundaries.

First, conducting a well-crafted RCT that addresses an important topic in development very often necessitates collaboration between Northern and Southern researchers. Northern partners often have more resources; Southern partners have knowledge about locally relevant constraints to development processes and locally feasible interventions. Although important power imbalances remain, and should be carefully considered,¹ the rise of RCTs

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¹ Beyond normative arguments for equality between Northern and Southern partners, the persistence of power imbalances in research teams has provoked backlash in some countries, such as Indonesia, which has made recent moves toward raising barriers to foreign researchers (see: Rochmyaningsih, 2018).

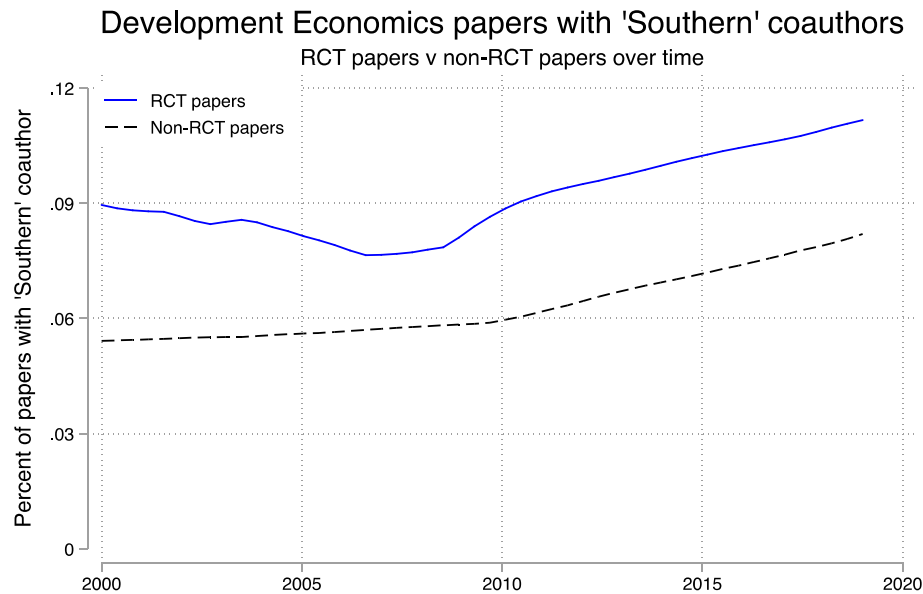


Fig. 1. Source: Web of Science and authors' own calculations. See notes to [Table 1](#) for details about the methodology.

as a methodology has created opportunities for mutually beneficial North-South partnerships in development economics. To provide evidence, we examine authorship trends on publications in development economics from 2000 to 2019 in general interest and top field journals.² For RCT and non-RCT studies, we examine the share of papers that include at least one co-author based at an institution in the Global South.³ While this is preliminary evidence that warrants further investigation, the findings below are suggestive. Among development economics papers, collaborations with co-authors based in the Global South are on the rise but still rare ([Fig. 1](#)). According to conservative coding decisions, only 10% of all published papers in development economics in 2018 featured a collaborator based at an institution in the Global South.⁴ It is worth noting, however, that papers involving RCTs were about 3.6 percentage points more likely to include co-authors from developing countries for the 2000–2019 period ([Table 1](#)). This difference is more pronounced among development articles in general interest journals than development economics field journals. Recognizing the benefits from strong North-South partnerships, a number of research organizations

specializing in RCTs have invested considerably in training and capacity building workshops in the Global South⁵ ([Duflo, Dupas, & Kremer, 2015](#)).

Second, RCTs also can benefit from and foster collaborations across disciplines and research methods. Researchers that are trained in quantitative methods often read a plural set of academic papers to understand the local context and typically rely on qualitative work (e.g., interviews, focus groups) to design interventions and formulate survey questions. One example is the mixed-methods approach to evaluating the “Graduation Program” pioneered by the Bangladesh Rural Action Committee (BRAC) and scaled up around the world.⁶ Although still far from the norm, some researchers also complement quantitative evidence from RCTs with qualitative evidence to interpret results and shed light on mechanisms. In a recent example, [Bergman, Chetty, DeLuca, Hendren, Katz, and Palmer \(2019\)](#) prominently features qualitative data from interviews alongside evidence from an RCT to better understand the barriers inhibiting low-income households from moving to better neighbourhoods. Because empirical research in economics is essentially quantitative, the use of mixed-methods lends itself to collaboration with disciplines that have more expertise in qualitative approaches. In our data ([Table 1](#)), RCT-based papers are about 2.6 percentage points more likely to involve a co-author from an academic department outside

² We start in 2000 because, as [Duflo \(2016\)](#) points out, before then there were no RCTs in development published in top economics journals.

³ Details of the methodology and coding decisions can be found in the notes to [Table 1](#). We view both sets of estimates as a likely lower bound because of missing author institution data and because we have chosen conservative coding rules to limit the identification of economists working in non-economics departments.

⁴ The contributions of Southern research partners extend well beyond the by line: implementation partners, field coordinators, managers, and enumerators are all pivotal to the success of RCTs, but these individuals seldom appear as coauthors. Moreover, publishing in English-language academic journals is often not a priority for researchers in developing countries ([Alejandro, 2019](#)). However, the presence of a coauthor from a Southern institution can represent an important signal of a meaningful North-South partnership. This is particularly the case because economics tends to have fewer coauthors than many other disciplines, from psychology to the natural sciences, so authorship is an informative signal of engagement in the research project. That said, the 10% figure noted above should be interpreted as very much a lower bound if one wanted to estimate the full range of contributions by Southern partners in published development economics papers.

⁵ For instance, the Jameel Abdul Lateef Poverty Action Lab (JPAL) and Innovation for Poverty Action (IPA) offer a suite of frequent workshops for researchers and practitioners interested in learning about randomized evaluations. JPAL also hosts a series of online courses in development economics and data analysis called the MITx MicroMasters Program in Data, Economics, and Development Policy, which is taught by leading development economists, including two of the Nobel laureates, and available at discounted prices for learners from development countries (who comprise 70% of the nearly 29,000 students who have enrolled to date). The Center for Effective Global Action (CEGA) hosts the East Africa Social Science Translation (EASST) Collaborative that has hosted over 700 researchers, students, and policymakers at 8 EASST summits across East Africa, with EASST Fellows having trained over 1000 researchers and policymakers in impact evaluation. The BRAC-CEGA Learning Collaborative brings research staff from the Bangladesh Rural Action Committee to UC Berkeley and has run co-led impact evaluations of four BRAC programs. Evidence in Governance and Politics (EGAP) has similarly hosted 11 five-day-long training workshops across the developing world.

⁶ See the discussion of the project methodology in [Hashemi and de Montesquiou \(2011\)](#) and [Banerjee et al. \(2015\)](#) for a summary of results across several countries.

Table 1
RCTs and Collaborations in Development Economics.

	'Southern' Coauthor			Non-economist Coauthor		
	All Dev.	Gen. Dev.	Dev. Field	All Dev.	Gen. Dev.	Dev. Field
RCT Paper	0.036** (0.015)	0.069*** (0.016)	0.029 (0.020)	0.026*** (0.007)	0.007 (0.013)	0.034*** (0.008)
R ²	0.002	0.025	0.001	0.005	0.000	0.008
Observations	2960	680	2280	2960	680	2280
Mean Dep. Var.	0.062	0.024	0.074	0.012	0.015	0.011
Number RCTs	286	97	189	286	97	189

Notes: Data from Web of Science including all records for 2000–2019 from top development economics field journals (*Journal of Development Economics*, *World Bank Research Observer*, and *World Bank Economic Review*) and top general interest economics journals (*American Economic Review*, *Econometrica*, *Journal of Political Economy*, *Review of Economic Studies*, *Quarterly Journal of Economics*, *Journal of the European Economic Association*, *Economic Journal*, *American Economic Journal Applied Economics*, and *Review of Economics and Statistics*). Papers involving RCTs were identified by searching title, abstract, and keywords for variants of the term 'randomized controlled trial' or 'experiment' (then excluding 'natural', 'quasi', and 'lab' experiments). 'Southern' coauthors were identified by searching the author address list for each article for country names included in the World Bank's list of low- and lower-middle-income countries. Non-economist coauthors were identified by searching the author address list for each article for the following keywords: 'Dept Anthro', 'Dept Social', 'Dept Politsci', 'Dept Global Health', 'Public Health', 'Dept Psych', and 'Trop Med'. The level of non-economist and Southern coauthors are an underestimate due to missing address or department information, but such measurement error should not be systematically different for papers involving RCTs. Development papers in general interest journals were identified by searching title, abstract, and keyword for 'poverty', 'poor', or 'Africa'. These estimates should be taken as suggestive and will need to be confirmed with more comprehensive research. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

of economics, and this difference is driven by development field journals.⁷

RCTs also bring together academics and practitioners/policy-makers from governments, NGOs, and international organizations who share an interest in credibly estimating the causal effects of development programs (see, e.g., Duflo et al., 2015; Pomeranz & Vila-Belda, 2019). An important and often overlooked spill-over of the RCT movement in development is that it has led many governments and other policy stakeholders to think more carefully about evidence when designing, testing and evaluating their policies.⁸

In sum, we argue that an underemphasized potential by-product of the growth of quantitative field research in general, and RCTs in particular, is the increase in opportunities for multi-disciplinary and North-South collaboration. While our evidence is just suggestive, it indicates that efforts within economics to improve the methodological rigour and sophistication of RCTs could go hand-in-hand with continued increases in the pluralism and inclusiveness of research in development economics. This could, in turn, further enrich the quality and relevance of such scholarship. RCTs are one tool among many; they cannot easily address many critical topics in development. By bringing researchers to the field, however, they create opportunities for new collaborations that represent an important shift in the way knowledge is generated and used in development economics research and practice.

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⁷ As noted below Table 1, the level of interdisciplinary collaborations is almost certainly an underestimate because we limit our definition to academic departments in which economists are unlikely to be working to minimize the risk of 'false positives' (economists working in non-economics departments). However, we see no reason why such mismeasurement of the level would impact our estimate of the difference between RCT and non-RCT papers.

⁸ Although one may also wonder how much governments learn and benefit from such collaborations, a recent study of municipal governments in Brazil finds considerable demand for research findings among policymakers as well as adoption of policies found effective by evaluations (Hjort, Moreira, Rao, & Santini, 2019).