

Policy evaluations using randomized controlled trials (RCTs) -

Theory, empirical examples and challenges

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In this lecture, we introduce students and researchers to the concept of randomized controlled trials (RCTs). We begin with naïve evaluation techniques, highlight their pitfalls, and then introduce the framework of causal inference. From there, we explain why randomized controlled trials, at least in theory, make it possible to identify causal effects.

Students and researchers are exposed to applications across various domains, including firms, agriculture, health, and education. We then examine two case studies in greater depth. The first is a randomized field experiment in Burkina Faso that compares the impact of cash grants and matching grants on firms. The second is a randomized experiment conducted on Facebook in Indonesia, which tests the effectiveness of different advertisements designed to encourage users to undergo diabetes screening.

While presenting these examples, we also discuss practical challenges that arise in the application of RCTs, including attrition, spillovers, and issues of external validity. Throughout, the workshop is designed to be inclusive and participatory.



I am a Professor at the University of Passau. I am also affiliated with IZA, the DIW, the RWI Research Network and the Abdul Latif Jameel Poverty Action Lab (J-PAL). I studied in Frankfurt and Paris and earned my PhD at Sciences Po Paris. Before joining the University of Passau, I had positions at the World Bank, the University of Göttingen and the Erasmus University Rotterdam. I was a guest professor at the Paris School of Economics and the University of Bordeaux.

I have a strong interest in policies and interventions that can help to solve economic and social problems in lower income countries and to contribute to global poverty reduction and equity. My research covers in particular problems related to health, agriculture, and small firms. I am also much interested in population economics and have done some work on the historical determinants of

the demographic transition in the US, but my main regional focus is on Western Africa and Southeast Asia.



I am a post-doctoral researcher at the Technical University Munich, where I am affiliated with the Professorship of Global Health and the Professorship of Public Policy for the Green Transition. I hold a post-doctoral fellowship funded by the German Research Foundation (DFG Walter-Benjamin Fellowship).

Before I came to Munich, I worked at the Department for Economics, Econometrics and Finance at the University of Groningen (Netherlands) and at the Chair of Development Economics at the University of Passau (Germany) where I also obtained my PhD under a joint doctoral program.

My research lies at the intersection of development economics and health economics and contributes to improving public health and health care systems in low- and middle-income countries. Other strands of my research cover projects related to agriculture economics and microfinance, for example, I am involved in projects revolving around social networks and peer effects in the context of agricultural technology adoption in Indonesia, in an RCT aiming to reduce violence of teachers against children in Tanzania, and in a lab-in-the-field experiment in Bolivia aiming to re-design loan contracts of microfinance institutions.



I am an Associate Professor of Development Economics and Finance at the University of Ghana Business School (UGBS). I am also a JPAL Affiliate Professor at the Massachusetts Institute of Technology (MIT) since June 2024 and hold other research affiliations with the NADEL Center for Development Cooperation at ETH Zurich University and the Chair of Development Economics at the University of Passau in Germany. I have also served as a Guest Professor at the Institute of Development Policy (IOB) at the University of Antwerp, Belgium, teaching a graduate course on Monitoring and Evaluation. I studied at the University of Ghana, the University of Guelph, Ontario, Canada, and the University of Göttingen, Germany.

My research and project interests lie broadly in the areas of development economics and finance (health,

education, agriculture, firms, and labour), experimental economics, and design and impact evaluation of development interventions. My research and projects have taken place in Ghana, Nigeria, Togo, and Liberia. And I have published in journals including Proceedings of the National Academy of Sciences (PNAS), Nature Medicine, American Economic Association (AEA) Papers and Proceedings, World Development, World Development Perspective, Structural Change and Economic Dynamics, Agricultural Finance Review, and the Review of Development Economics.