CENTER FOR ADVANCED STUDY IN THE BEHAVIORAL SCIENCES

Impact Evaluation Design Lab

Overview

What are the main issues the CASBS Design Lab seeks to address?

The evidence-based policymaking movement has grown substantially over the past 25 years. Government officials, foundations, researchers, and the public are interested in ensuring that social interventions result in intended outcomes and are an effective use of public and private investments. This movement has been facilitated by increases in computing power, the rapid expansion of available data, the ability to link administrative data sets, and methodological breakthroughs in statistical inference.

Randomized controlled trials (RCTs) have been the primary vehicle for the accumulation of rigorous evidence about the causal effects of policy interventions. The rigor of RCTs, and clarity regarding their results, have encouraged this adoption. In turn, the increased use of RCTs in social interventions has spurred methodological development. For example, in the decades since 1980 we have advanced understanding of the use of randomization as an instrument in encouragement designs, the identification and estimation of spillover effects, and of cluster-randomized research designs. However, governments sometimes lack the political will or face significant financial and logistical barriers to randomly assigning participants to a treatment group while withholding promising program interventions from a control group. For example, programs such as Medicaid are equally available to all people meeting certain eligibility criteria, and thus access to such programs cannot be easily randomized. This means that questions regarding the impact of programs affecting millions of people and billions of public dollars have gone without rigorous, causal evaluation.

Fortunately, methodological breakthroughs in the rigorous evaluation of causal effects in nonrandomized studies, often called observational studies, have also occurred over the past 25 years. These research designs—such as matched designs, regression discontinuity, multiple control group designs, and difference-in-difference designs—seek to strengthen causal arguments by using careful choices about what to observe, what to weight, and what to compare with what. These methods allow policy makers and scholars to build evidence about “what works” when randomization cannot be practically applied. And yet, the major institutions and initiatives driving the evidence-informed policymaking movement tend to significantly underemphasize or ignore these approaches.

The timing for a deeper integration of non-randomized approaches into policy evaluation is ripe. Each year, more diverse types of administrative data become available. Public institutions are creating open datasets and integrating data across datasets. Governments are expanding their use of big data analytics and demonstrating openness to data analysis as a tool of governance. As techniques to integrate data and ensure its security and privacy become more common (c.f., recommendations from the Commision on Evidence-Based Policymaking), the amount and types of data available will only continue to increase.

However, the application of non-randomized approaches faces significant challenges. The techniques are often new and quite complicated, use individual-level data that cannot be made publicly available due to privacy protections, and can require a great deal of computing power. Consequently, studies cannot easily be replicated to test the validity and robustness of results. Furthermore, even researchers—much less decision makers and the public—may have difficulty understanding how results from a study were produced. Complicating matters even further, the variety of new approaches and techniques for non-randomized impact evaluation can lead to dramatically different results in analyses of similar policy questions. See, for example, the conflicting results from studies of the impact of the Seattle minimum wage produced by researchers at Berkeley and University of Washington, or the Rialto and DC body-worn camera studies. The result is distrust by the public and policymakers in such studies and methods, and the debate is then driven by whether one agrees with a study's conclusions rather than the quality of the study and methods informing those conclusions. These conditions threaten the growth of the evidence-based policymaking movement itself, as well as the advancement of the field of causal inference, at a time when data, science, and policy should be supporting the rapid advancement of both.

The Design Lab idea grows from a conviction that these challenges can be met and overcome by taking advantage of the latest work in the methodology of causal inference emerging from the social sciences. We expect that the methodology of observational studies, specifically, will advance beyond the basics when methodologists are confronting the real-world complexities of providing evidence for public policy decisions.

Who is currently involved?

The Center for Advanced Study in the Behavioral Sciences (CASBS) has been a leader of interdisciplinary thinking and research since its founding in 1954 (casbs.stanford.edu). Over the past two years, the Center has convened a vibrant group of scholars, practitioners, and funders to discuss how to best advance the craft of causal inference in government settings and in universities. In addition to the select group of invited academic and governmental participants, the current Design Lab is composed of a core team, which will oversee event planning and

logistics, and an advisory committee:

Core Team

Margaret Levi, Sara Miller McCune Director of CASBS and Professor of Political Science at Stanford University

Carrie S. Cihak, 2017–18 CASBS Fellow and Chief of Policy for the King County Executive

Graham Gottlieb, 2017–18 CASBS Fellow and a former political appointee at the United States Agency for International Development

Jake Bowers, 2017–18 CASBS research affiliate and Professor of Political Science and Statistics at the University of Illinois @ Urbana-Champaign

Advisory Committee

Paul Brest, Professor of Law, co-director of the Law and Policy Lab at Stanford University, and former President of the Hewlett Foundation

Bill Congdon, Chief Economist at ideas42

Jacob Goldin, Assistant Professor of Law at Stanford University

Dan Ho, William Benjamin Scott and Luna M. Scott Professor of Law, Professor (by courtesy) of Political Science, and Senior Fellow at the Stanford Institute for Economic Policy Research

Salar Kamangar, a major advisor to Google and former CEO of Youtube

Gary King, Albert J. Weatherhead III University Professor at Harvard University

Jesse Rothstein, Professor of Public Policy and Economics at the University of California, Berkeley and former Chief Economist at the US Department of Labor

James Sullivan, Associate Professor of Economics, Notre Dame and co-founder of the Wilson Sheehan Lab for Economic Opportunities

Jeremy Weinstein, Professor of Political Science and Senior Fellow at the Freeman Spogli Institute for International Studies at Stanford University

The 2018 Design Lab will assemble these and other academic collaborators and evaluators with government practitioners from King County, Washington and Stockton, California who have innovative public policy programs with advanced evaluation needs.

What programs have participated in the Design Lab?

2018

King County's Metro Transit department (based in Seattle, Washington) wanted to test the impact of its innovative low-income fare program (ORCA LIFT) implemented in 2015. King County leaders hypothesize that the program better connects low-income riders to a range of positive outcomes such as employment, education, and health, but these have not been rigorously evaluated.

The Stockton Economic Empowerment Demonstration (SEED) is a basic income pilot program that is about to begin in Stockton, California. The pending initiative has received substantial national attention as one of the first significant universal basic income tests in the United States.