

IZA/DFID/AERC Short Course on Evaluation of Training Programs

Hotel Hilton Nairobi, Kenya
December 14 – 15, 2013

Organizers: David Lam (University of Michigan and IZA)
Isaac Mbiti (Southern Methodist University)
Janneke Pieters (IZA)



Program

Saturday, December 14

8:00 – 8:15

Introduction

Isaac Mbiti (Southern Methodist University)

Marco Caliendo (University of Potsdam and IZA)

Pamela Jakiela (University of Maryland)

Owen Ozier (World Bank)

Teaching Assistants

Teaching Team Bios

Overview of Main Materials/Resources

Mostly Harmless Econometrics (Angrist and Pischke)

Impact Evaluation in Practice (WB publication by Gertler et al.)

8:15 – 9:15

Pamela Jakiela (University of Maryland)

“What is an Impact Evaluation?”

IE vs. M&E – the goal(s) of impact evaluations, internal vs. external validity
False counterfactuals – program impacts vs. selection effects and time trends
The potential outcomes framework
Causal inference

9:15 – 10:15

Owen Ozier (World Bank), **Pamela Jakiela** (University of Maryland)
“Difference-in-Difference Estimation”

What is a diff-in-diff?

When does it overcome the problems of false counterfactual evaluations?

15–20 minute group breakout session:

Group introductions

Pencil & paper exercise in which use “data” from student test scores before and after the introduction of a new “treatment” in treatment and comparison schools; students calculate the pre-vs-post estimate, the non-random selection estimate, the diff-in-diff estimate, and then the magnitude of the selection bias and time trend effects

Discussion of results from group exercise

Common trends assumption – when diff-in-diff estimation goes wrong

10:15 – 10:45

Coffee / Tea Break

10:45 – 11:45

Pamela Jakiela (University of Maryland)
“Randomized Evaluations”

Theory of randomized evaluations

How randomization can go wrong: Small samples, control group contamination

ITT vs. TOT estimates

Variations on a theme: Encouragement designs, randomization in the bubble

11:45 – 13:00

Teaching Assistants-led Breakout Session

Group work (in Stata) on diff-in-diff and RCT problems using real data sets

Last 20–30 minutes devoted to discussion of “answers” and groups’ questions

13:00 – 14:00

Lunch

14:00 – 15:15

Marco Caliendo (University of Potsdam and IZA)
“Matching I”

What is (Propensity Score) Matching?

Estimating the Propensity Score

Overlap and Common Support
Choosing a Matching Algorithm

15:15 – 15:45 **Coffee / Tea Break**

15:45 – 16:30 **Marco Caliendo** (University of Potsdam and IZA)
“Matching II”
Assessing the Matching Quality
Effect Estimation
Combining Matching with other Methods

16:30 – 17:45 **Teaching Assistants–led Breakout Session**
Group work (in Stata) on the implementation of matching estimators using real datasets and the ado–package psmatch2

17:45 **Day 1 Wrap Up** (plus extra time in case we get behind schedule)
Review of key points from Day 1, overview of Day 2
Open discussion with students (impact evaluation, research careers, etc.)

19:30 **Dinner**

Sunday, December 15

8:00 – 9:00 **Isaac Mbiti** (Southern Methodist University)
“Instrumental Variables”
What are Instrumental variables? How and why they work? Where do instruments come from?
Two Stage Least Squares and Wald estimator
LATE interpretation of IV– including returns to schooling examples
Using IV to resolve (non) compliance in RCTs
Common mistakes with IV

9:00 – 10:15 **Teaching Assistants–led Breakout Session**
Group work (in Stata) on IV estimation problems using real data sets

Last 20–30 minutes devoted to discussion of “answers” and groups’ questions

10:15 – 10:45 **Coffee / Tea Break**

10:45 – 11:45 **Owen Ozier (World Bank)**
“Regression Discontinuity Designs”
Basic concept: similarity around the cutoff
Method issues and examples: Manipulation, density/support, bandwidth, power
Conceptual issue: Local average treatment effect: Especially clear for RD

11:45 – 13:00 **Teaching Assistants–led Breakout Session**
Group work (in Stata) on RD estimation problems using real data sets
Last 20–30 minutes devoted to discussion of “answers” and groups’ questions

13:00 – 14:00 **Lunch**

14:00 – 15:00 **Isaac Mbiti (Southern Methodist University), Owen Ozier (World Bank)**
“Practical Issues Evaluating Training Programs”
Choosing research question and the outcomes of interest
Identifying data requirements, planning data collection
Choosing the sample
Power calculations

15:00 – 15:30 **Coffee / Tea Break**

15:30 – 16:30 **Teaching Assistants–led Breakout Session**
Group work on planning an impact evaluation

16:30 – 17:30 **Isaac Mbiti (Southern Methodist University), Pamela Jakiela (University of Maryland), Owen Ozier (World Bank)**
“Practical Lessons from Actual Impact Evaluations”



Feedback on group work

17:30

Concluding Remarks

Isaac Mbiti (Southern Methodist University)

Pamela Jakiela (University of Maryland)

Owen Ozier (World Bank)

19:30

Dinner