

Advanced Methods in Impact Assessment Workshop
8-12 May 2017
WorldFish HQ, Penang, Malaysia

Day 1: The Problem of Cause and Effect: How to Create Knowledge through Impact Assessments

- 8:00 Meet in lobby of Hotel Equatorial for shuttle to WorldFish HQ
- 9:00 Meet in WorldFish conference room for official program opening
Opening introduction by Dr. Blake Ratner, Director General of WorldFish
Statement of Workshop goals and acknowledgement of donor support by Dr. Mary Arends-Kuenning
- 9:30 Session 1A: Introduction to *ex post* impact assessment by Dr. Arends-Kuenning
Topics: What are impact assessments?
Why do we need impact assessments?
Why is it important to get things right – cautionary tales
- 11:00 Morning coffee/tea break with snacks
- 11:30 Session 1B: The challenge of establishing a causal effect by Dr. Kathy Baylis
Topics: The Fundamental Problem of Causal Inference
Casual inference as a missing data problem
Solutions to the problem: Randomization, Matching, Instrumental Variables, etc.
- 13:00 Lunch Break
- 14:30 Session 1C: Data workshop by Dr. Jeffrey Michler
Topics: Introduction to Stata and R
Comparison of treatment and the role of confounding factors
- 16:00 End of day, shuttle back to Hotel Equatorial
- 19:00 Welcome reception and dinner for all participants at Golden Phoenix in Hotel Equatorial

Day 2: Constructing an Appropriate Counterfactual: Randomized Control Trials (RCTs) & Matching

- 8:30 Meet in lobby of Hotel Equatorial for shuttle to WorldFish HQ
- 9:30 Session 2A: The structure and design of RCTs by Dr. Michler
Topics: Why use RCTs?
How to design a randomized experiment
Concerns with randomization
- 11:00 Morning coffee/tea break with snacks.
- 11:30 Session 2B: Why match and how not to do it wrong by Dr. Baylis
Topics: Different methods of matching participants and non-participants
Necessary assumptions needed to apply PSM and what to do when these fail
Introduction of the issue of heterogeneity
- 13:00 Lunch Break
- 14:30 Session 2C: Data workshop by Anna Josephson
Topics: Determine if an RCT “worked” and measure the impact
Establish the appropriate counterfactual using matching
- 16:00 End of day, shuttle back to Hotel Equatorial

Day 3: Measuring Program Impacts: Difference-in-Difference and Instrumental Variables (IVs)

- 8:30 Meet in lobby of Hotel Equatorial for shuttle to WorldFish HQ
- 9:30 Session 3A: How to construct a Diff-in-Diff estimator by Dr. Arends-Kuenning
Topics: Conducting single difference evaluation and what this method misses
How to construct the Diff-in-Diff estimator

Potential violations of assumptions or hurdles to measurement

- 11:00 Morning coffee/tea break with snacks.
- 11:30 Session 3B: Using Instrumental Variables (IVs) to identify causal effects by Dr. Michler
Topics: What is an IV and how does it work?
Finding a good IV and how to identify a bad IV
Calculating the LATE
- 13:00 Lunch Break
- 14:30 Session 3C: Data workshop by Ms. Josephson
Topics: Calculate the ATE and LATE
Develop an IV and test for validity
- 16:00 End of day, shuttle back to Hotel Equatorial

Day 4: Challenges to Identification of Causal Effects: Panels, Spillovers and Heterogeneity

- 8:30 Meet in lobby of Hotel Equatorial for shuttle to WorldFish HQ
- 9:30 Session 4A: Causal identification using panel data estimators by Dr. Baylis
Topics: Panel data models: Pooled, Fixed, Random, Correlated Random, etc.
Spillover and network effects
Introduction to spatial econometrics
- 11:00 Morning coffee/tea break with snacks.
- 11:30 Session 4B: Moving beyond the average treatment effect by Dr. Arends-Kuenning
Topics: Regression discontinuity design
Measuring distributional effects
Accounting for heterogeneity
- 13:00 Lunch Break
- 14:30 Session 4C: Data workshop by Dr. Michler
Topics: Implement a variety of panel data estimators
Regression discontinuity design
- 16:00 End of day, shuttle back to Hotel Equatorial
- 18:00 Field trip to historic George Town for street food dinner

Day 5: Survey Design, Data Collection, and Challenges to Identification

- 8:30 Meet in lobby of Hotel Equatorial for shuttle to WorldFish HQ
- 9:30 Session 5A: Survey design and data collection by Ms. Josephson
Topics: Introduction to computer aided personal interview (CAPI) software
The costs and benefits of using CAPI software
Using ODK to build a survey
- 11:00 Morning coffee/tea break with snacks.
- 11:30 Session 5B: Survey Challenges and Challenges to Identification by Dr. Michler
Topics: Sampling Methods for
Violations of the standard assumptions
External validity and internal validity
- 13:00 Lunch Break
- 14:30 Session 5C: Building a survey in ODK by Anna Josephson
Topics: How to use ODK Build by Ms. Josephson
Using Excel to build an ODK survey
- 16:00 End of day, shuttle back to Hotel Equatorial