

Observation

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Some example scenarios...

- A student wants to know whether studying with music enhances test performance
- A school superintendant wants to know how using computer-directed math tutoring affects kids' learning of math
- A policymaker wants to know whether a merit pay system will lead to better teaching overall
- A startup entrepreneur wants to know what kind of app to build that will fill a market niche and earn money

Observational Study Types

Quasi-Experiments

Natural Experiments

Observational Studies

- Quantitative Methods
- Qualitative Methods

Quasi-Experiments

Within group – single measure (?)

Within group – pre- and post- measures

Between groups – nonrandom assignment [Non-Equivalent Groups Design, NEGD]

Regression-discontinuity (R-D) designs

Proxy pretests

Types of Behavioral Data

Voluntary (e.g. Piaget)

Involuntary (e.g. Fantz)

Natural Experiments – based on policy boundaries

Matched jurisdictions with different policies (e.g. state insurance defaults across Pennsylvania and New Jersey)

Discontinuities in policy on a continuous variable (e.g. laws based on being over or under a certain exact age)

Lottery assignments by policy (e.g. housing assignments)

Negative results on a priori significant predictors (e.g. out of towners tip the same as locals)

Quantitative Methods of Observation

– sources of data

Census data

Comparative data across places, groups, or times

Historical data

Internet research

Unobtrusive real-life measures

- Trace measures
- Content analysis

Secondary data

Qualitative Observation Methods and Data

Surveys (written and oral)

Interviews

- Structured
- Unstructured

Direct observation

Document analysis

Case studies

Focus groups

Ethnography

Participant observation