

# Qualitative Research and Causal Inference

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# Discussion: Regression Lab

# The Diversity of Qualitative Research

- Historical methods
- In-depth interviews
- Focus groups
- Participant observation
- Close reading of texts

# Focus Groups

- Research method devoted to data collection

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- The researcher actively creates the group discussion

# Focus Groups

- Allow in-depth exploration of complex behaviors and ideas

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- Provide fine-grained detail regarding reasons for and scope of disagreement among participants

# Focus Groups vis-a-vis Surveys

# Focus Groups vis-a-vis Individual Interviews

# Project-Level Design Issues

- Standardization

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- Sampling

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- Standardization
- Sampling
- Number of Groups

# Group-Level Design Issues

- Level of Moderator Involvement

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- Level of Moderator Involvement
- Group Size

# When Case Studies Directly Illuminate Counterfactuals

# Threats

- History
- Maturation
- Testing
- Instrumentation
- Instability
- Regression

## **The Impact of the Mariel Boatlift on the Miami Labor Market**

David Card

*Industrial and Labor Relations Review*, Vol. 43, No. 2. (Jan., 1990), pp. 245-257.

ONE of the chief concerns of immigration policy-makers is the extent to which immigrants depress the labor market opportunities of less-skilled natives.

Mariel.<sup>1</sup> Fifty percent of the Mariel immigrants settled permanently in Miami. The result was a 7% increase in the labor force of Miami and a 20% increase in the number of Cuban workers in Miami.

*Table 3.* Logarithms of Real Hourly Earnings of Workers Age 16–61 in Miami and Four Comparison Cities, 1979–85.

<i>Group</i>	1979	1980	1981	1982	1983	1984	1985
<i>Miami:</i>							
Whites	1.85 (.03)	1.83 (.03)	1.85 (.03)	1.82 (.03)	1.82 (.03)	1.82 (.03)	1.82 (.05)
Blacks	1.59 (.03)	1.55 (.02)	1.61 (.03)	1.48 (.03)	1.48 (.03)	1.57 (.03)	1.60 (.04)
Cubans	1.58 (.02)	1.54 (.02)	1.51 (.02)	1.49 (.02)	1.49 (.02)	1.53 (.03)	1.49 (.04)
Hispanics	1.52 (.04)	1.54 (.04)	1.54 (.05)	1.53 (.05)	1.48 (.04)	1.59 (.04)	1.54 (.06)
<i>Comparison Cities:</i>							
Whites	1.93 (.01)	1.90 (.01)	1.91 (.01)	1.91 (.01)	1.90 (.01)	1.91 (.01)	1.92 (.01)
Blacks	1.74 (.01)	1.70 (.02)	1.72 (.02)	1.71 (.01)	1.69 (.02)	1.67 (.02)	1.65 (.03)
Hispanics	1.65 (.01)	1.63 (.01)	1.61 (.01)	1.61 (.01)	1.58 (.01)	1.60 (.01)	1.58 (.02)

*Note:* Entries represent means of log hourly earnings (deflated by the Consumer Price Index—1980 = 100) for workers age 16–61 in Miami and four comparison cities: Atlanta, Houston, Los Angeles, and Tampa-St. Petersburg. See note to Table 1 for definitions of groups.

*Source:* Based on samples of employed workers in the outgoing rotation groups of the Current Population Survey in 1979–85. Due to a change in SMSA coding procedures in 1985, the 1985 sample is based on individuals in outgoing rotation groups for January–June of 1985 only.

*Table 4.* Unemployment Rates of Individuals Age 16–61 in Miami and Four Comparison Cities, 1979–85.  
 (Standard Errors in Parentheses)

<i>Group</i>	<i>1979</i>	<i>1980</i>	<i>1981</i>	<i>1982</i>	<i>1983</i>	<i>1984</i>	<i>1985</i>
<i>Miami:</i>							
Whites	5.1 (1.1)	2.5 (0.8)	3.9 (0.9)	5.2 (1.1)	6.7 (1.1)	3.6 (0.9)	4.9 (1.4)
Blacks	8.3 (1.7)	5.6 (1.3)	9.6 (1.8)	16.0 (2.3)	18.4 (2.5)	14.2 (2.3)	7.8 (2.3)
Cubans	5.3 (1.2)	7.2 (1.3)	10.1 (1.5)	10.8 (1.5)	13.1 (1.6)	7.7 (1.4)	5.5 (1.7)
Hispanics	6.5 (2.3)	7.7 (2.2)	11.8 (3.0)	9.1 (2.5)	7.5 (2.1)	12.1 (2.4)	3.7 (1.9)
<i>Comparison Cities:</i>							
Whites	4.4 (0.3)	4.4 (0.3)	4.3 (0.3)	6.8 (0.3)	6.9 (0.3)	5.4 (0.3)	4.9 (0.4)
Blacks	10.3 (0.8)	12.6 (0.9)	12.6 (0.9)	12.7 (0.9)	18.4 (1.1)	12.1 (0.9)	13.3 (1.3)
Hispanics	6.3 (0.6)	8.7 (0.6)	8.3 (0.6)	12.1 (0.7)	11.8 (0.7)	9.8 (0.6)	9.3 (0.8)

*Note:* Entries represent means of unemployment indicator variable for individuals age 16–61 in Miami and four comparison cities: Atlanta, Houston, Los Angeles, and Tampa-St. Petersburg. Samples are based on individuals in the labor force. See notes to Table 3 for definitions of groups and data sources.

conclusions. First, the Mariel immigration had essentially no effect on the wages or employment outcomes of non-Cuban workers in the Miami labor market. Second, and perhaps even more surprising, the Mariel immigration had no strong effect on the wages of other Cubans. The observed decline in average Cuban wage rates in Miami after 1980 is no larger than would be expected by simply adding the Mariel immigrants to the pool of Cuban workers, assuming that the Mariels earned

# Process-Tracing I: CPOs

- Straw in the Wind Test
- Hoop Test
- Smoking Gun Test

Table 3

## Straw-in-the-Wind Tests

**H1.** Straker's romantic entanglement set chain of events into motion.

**Clues.** A bill from an expensive women's clothing store is found in Straker's pocket, and his wife is ignorant of the clothing in question.

**Inference.** The bill was owed by Straker for an expensive gift to another woman, and Straker may have been in financial difficulty. This could give him a motive for throwing the race.

**Summary.** This promising lead, a *straw-in-the-wind*, lends weight to H1, but is not by itself a decisive piece of evidence.

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**H3.** Straker abducted the horse.

**Clue.** The dog did nothing (i.e., did not bark) in the night during which the horse disappeared.

**Inference.** The person who approached the stable, possibly Straker, was well-known to the dog. This raises questions about why Straker might have gone to the stable. It suggests that perhaps he came to abduct the horse, but does not strongly demonstrate this.

**Summary.** This *straw-in-the-wind* favors H3, but does not confirm it.

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*Table 4*

## Hoop Tests

**H6.** Simpson killed Straker.

**Clue.** Simpson had a potential murder weapon.

**Inference.** This weapon is consistent with the hypothesis, but does not by itself demonstrate Simpson's guilt.

**Summary.** Simpson had a potential weapon, so H6 passes this *hoop test*.

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**H6.** Simpson killed Straker.

**Clues.** Simpson's timid, non-menacing appearance, plus the fact that Straker's "head had been shattered by a savage blow from some heavy weapon."

**Inference.** With a stronger assumption based on his appearance, Simpson could not have inflicted the blow that shattered Straker's head.

**Alternative Inference.** With a weaker assumption, Simpson's appearance raises doubts that he would have committed the murder, but does not preclude it.

**Summary.** With a stronger assumption this is a *hoop test* which H6 fails; with a weaker assumption it is a *straw-in-the-wind test* which casts doubt on H6.



Table 5

## Smoking-Gun Tests

**H2.** The chain of events started in Straker's household.

**Clues.** The household maid brought the stable boy curried mutton, and he was found later to have been drugged.

**Inference.** The curry was served to conceal the opium, which in turn was used to drug the stable boy. When it is clear that the curry could only have been introduced in the mutton by someone in Straker's household, members of his household become inextricably linked to a key causal step.

**Summary.** The clues yield a *smoking-gun* test that confirms H2.

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**H4.** Straker planned to harm the horse.

**Clue.** Unusual, surgical knife found with Straker.

**Inference:** The knife is interpreted as *exceptionally unusual*—establishing intent to harm.

**Alternative Inference:** The knife is interpreted as *somewhat unusual*, suggesting, but hardly confirming, intent to harm. It might possibly be a coincidence.

**Summary.** If the knife is *exceptionally unusual*, it is a *smoking gun* that



*Table 7*

## Auxiliary Outcome

**H5.** Straker practiced in preparation for injuring the horse.

**Clue.** Lame sheep.

**Inference.** Straker used the sheep to practice a delicate operation with his surgical knife—which he planned to use for inflicting an undetectable injury to the horse. The inference is not that the sheep's lameness is a step in the central explanatory chain; rather lends further support to Holmes's understanding of that chain

**Summary.** The lameness is a *straw-in-the-wind* that favors H5 without confirming it.

# CPOs and the Potential Outcomes Framework

## Bayes' Rule

$$P(H|E) = \frac{P(E|H)P(H)}{P(E|H)P(H) + P(E|\sim H)P(\sim H)}$$

# Examples

- Brady on Florida 2000
- Tannenwald on the Nuclear Taboo

# Bennett and Checkel's Standards

- Cast the net widely for alternative explanations
- Be equally tough on the alternative explanations
- Consider the potential biases of evidentiary sources
- Take into account whether the case is most or least likely for alternative explanations
- Make a justifiable decision on when to start

# Bennett and Checkel's Standards

- Be relentless in gathering diverse and relevant evidence, but make a justifiable decision on when to stop
- Combine process tracing with case comparisons when useful for the research goal and feasible
- Be open to inductive insights
- Use deduction to ask: "if my explanation is true, what will be the specific process leading to the outcome?"

# Measurement's Contribution to Causal Inference

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- Can causal inference be done correctly if  $T_i$  is miscoded?
- Can causal inference be done correctly if  $Y_i$  is miscoded?

# Qualitative Approaches to Measurement

- Cases and concepts
- Attention to tensions between and limits of sources
- Attention to subjectivity
- Breadth of information
- Expert Judgment

# Qualitative Approaches to Measurement

Example: Fourcade on the professional structure of economics

# Process Tracing 2: Following Causal Flows

# Example: Stokes on Fujimori

# Example: Prasad on Reagan

# Finding New Variables

# Cross-Case Comparison

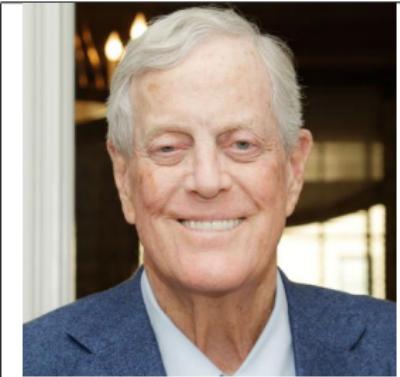
For causal inference from a paired comparison of case  $i$  with case  $j$ :

$$Y_{i,t} = Y_{j,t}$$

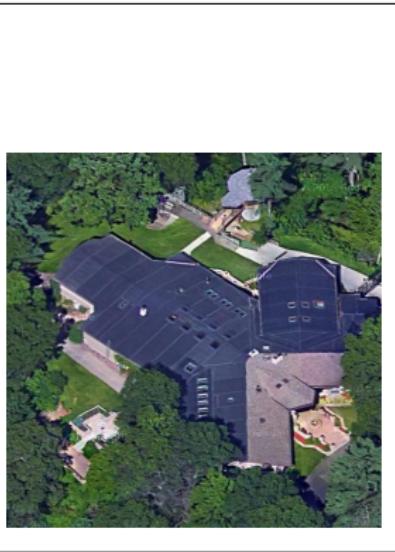
$$Y_{i,c} = Y_{j,c}$$

*...the label “comparative method” has a standard meaning within... the social sciences more broadly: it refers to the methodological issues that arise in the systematic analysis of a small number of cases, or a “small N.”*

—David Collier, 1993









- Conceptual innovation and clarification

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- Prevalence of key causal capacities

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- Theorybuilding about moderation

# Common Assumptions

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- Key links in process-tracing chain are genuinely causal
- Events in this case reflect broad causal principles
- In comparative analysis, the dependent variable is measured comparably