Lecture 23: Observational Research

Outline

• Review
• Finish Applied Research
• Start Observational Research

Review

• When Interventions Harm Study
• Dishion et al. (1999)
• Abstinence Education
• Palmgreen et al. Example
Palmgreen et al. (2001)

- Objective: To evaluate the effectiveness of one television media campaign designed to reduce marijuana use among an at-risk group, high sensation seekers.
- Sensation seeking is a trait associated with the need for novel and intense stimuli and the willingness to take risks to obtain such stimuli.
- Design: 32-month interrupted time series design.

What makes this a quasi-experimental design?

- One or more independent variables are being manipulated but participants are not randomly assigned to conditions.
- What is the textbook threat in this case?
- How plausible is this threat?
- "Quasi-experiments, however, rely heavily on researcher judgments about assumptions, especially on the fuzzy but indispensable concept of plausibility." (Shadish et al., 2002, p. 484)
**Interrupted Time Series Design**

- Extension of the pretest-posttest design
- A stronger argument can be made to eliminate maturation, testing, and history effects
- Can also be used with multiple groups with and without the treatment

**Replicated Interrupted Time Series Design #2 (p. 323)**

- Both groups are exposed to treatment but at different times.
- A stronger argument can be made to eliminate maturation, testing, and history effects

**One-Shot Case Study**

- Single Group Studied Once
- "Such studies have such a total absence of control as to be of almost no scientific value" (Campbell & Stanley, 1966, p. 6).
- Basic to scientific evidence is the process of comparison. There is no point of comparison here.
Observational Research

- Researchers observe and systematically record naturally occurring events
- Characteristics:
  - A. Serves a Formulated Research Purpose
  - B. Planned Deliberately
  - C. Recorded Systematically
  - D. Subjected to Checks and Controls on Reliability and Validity

Kinds of Observational Research

- Ethological Approaches
- Observation Involving Physical Traces
- Systematic Observation
  - Marital Interaction
  - Classroom Interaction
- Manipulations are possible
  - Ethics?

A Focus Theory of Normative Conduct: Recycling the Concept of Norms to Reduce Littering in Public Places

Cialdini et al. (1990)  
* JPSP, 58, 1015-1026 *
Research Question

• Descriptive Norms: “Things everyone does”
• Injunctive Norms: “Things everyone should do.”
• Manipulate state of the environment (Change Descriptive Norm) and observe behavior

Participants

• 139 visitors to a hospital parking lot.
• Manipulation 1: Observe Litterer/No Litterer
• Manipulation 2: Littered Parking Garage/Not Littered Parking Garage
• Placed handbill on windshield
• Dependent Variable: Did person litter?

Percentage Littering by Condition
Clark & Hatfield (1989). Gender Differences in Receptivity to Sexual Offers

Research Question

• How receptive are men versus women to sexual invitations from strangers?
• What happens when a stranger approaches someone of the opposite sex and asks her or him for a date or sexual encounter?
• Studies conducted in 1978 and 1982.

Method

• Confederates approached total strangers that they found attractive. Both studies: N = 96; 50% women
• “I have been noticing you around campus. I find you to be very attractive.”
• Manipulation
  – “Would you go out with me tonight?”
  – “Would you come over to my apartment tonight?”
  – “Would you go to bed with me tonight?”
Kinds of Observational Research

• Observation Involving Physical Traces
• Systematic Observation
  – Marital Interaction
  – Classroom Interaction
• Ethological Approaches
• Others?

Physical Traces

• Look for Physical Evidence of Behaviors of Interest
• Same Measurement Principles Apply – Reliability and Validity
• *Erosion* measures
  – Examples
• *Accretion* measures
  – Examples

Garbology (e.g., Charlin et al., 1990; Sussman & Stacy, 1994)

• Borrowed from Anthropology
• Observing tobacco refuse at schools offers an "impersonal means of gauging school-level tobacco use."
• Advantage: Quick (and Dirty!), Cheap, and Unreactive
Spearman Correlations Across 19 Schools (Charlin et al., 1990) - Cigarettes + Smokeless Tobacco

<table>
<thead>
<tr>
<th></th>
<th>Garbage (2 observers)</th>
<th>School Personnel (n=124)</th>
<th>Self-Report (n=1,368)</th>
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</thead>
<tbody>
<tr>
<td>Garbage</td>
<td>-</td>
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<td></td>
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<td>School Personnel</td>
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</tr>
<tr>
<td>Self-Report</td>
<td>.56</td>
<td>.67</td>
<td>-</td>
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Systematic Observation

- The standard technique…train observers to record behavior following a systematic coding scheme.
- Know the Steps in the Book (page 375-380)

Aggression in the Bar

Graham & Wells (2001)
Method

- Sample: 12 bars in Canada – 60% of patrons were male and many were students at the local university
- 7 Research Assistants recorded 117 incidents “that involved personal violation (insults, unwanted physical contract), behavior that was offensive according to the norms of the place, or a dispute in which the participants had personal investment.”

Highest Level of Aggression by Any One Participant

<table>
<thead>
<tr>
<th>Highest Level of Aggression</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Nonphysical Acts</td>
<td>36.8%</td>
</tr>
<tr>
<td>Medium Physical Acts (pushing, shoving, slapping)</td>
<td>29.9%</td>
</tr>
<tr>
<td>Severe Physical Acts (punching, kicking, brawling)</td>
<td>33.3%</td>
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Gender of Primary Participants

<table>
<thead>
<tr>
<th>Gender</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Males Only</td>
<td>77.8%</td>
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<tr>
<td>Females Only</td>
<td>3.4%</td>
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<tr>
<td>Mixed</td>
<td>18.8%</td>
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### Primary Issue

<table>
<thead>
<tr>
<th>Issue or Reason</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Conflict with Staff</td>
<td>12.8%</td>
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<td>Bar Activities (Games, Dancing)</td>
<td>11.7%</td>
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<tr>
<td>Trouble-Making (Insults, Stealing, Sexual Harassment)</td>
<td>14.6%</td>
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<tr>
<td>Interpersonal/Relationship</td>
<td>11.1%</td>
</tr>
<tr>
<td>Unknown</td>
<td>49.6%</td>
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</tbody>
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#### Trend in BMI of Miss America Pageant Winners from 1922 to 1999

![Graph showing BMI trend over years](image-url)