Disaster Research: Surveying Displaced Populations

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Chapter Outline

• Introduction and Background
  ▪ Defining Disasters

• Challenges in the Design and Conduct of Survey Research
  ▪ Study Design
  ▪ Questionnaire Development
  ▪ Field operations
  ▪ Ethical issues

• Conclusions and Recommendations
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Disasters 101

- Centre for Research on the Epidemiology of Disasters (CRED)
  - Definition
    - 10 or more people reported killed
    - 100 or more affected
    - Declaration of a state of emergency
    - Call for international assistance
  - Categories
    - Geophysical (e.g. earthquakes)
    - Meteorological (e.g. hurricane)
    - Hydrological (e.g. flood)
    - Climatological (e.g. drought)
    - Biological (e.g. epidemic)
    - Technical (e.g. industrial accidents)
    - Complex or Multiple (e.g. Japan 2011 earthquake, tsunami, and nuclear accident)
The Need

• Disasters have increased 200% from previous decade
• 2 billion people affected (2000-2010)
• In 2010 alone 200 million people were affected with costs as high as $100 billion
Unique Aspects of a Disasters that Impact Survey Design and Implementation

**Type**
- Earthquake?
- Tsunami?
- Complex?

**Phase**
- Rescue and relief?
- Recovery?
- Development?

**Severity**
- Scope?
- Size?
- On going?

**Goal**
- Immediate aid?
- Mental health?
- Long term effects?

**Location**
- Infrastructure?
- Political?
- Cultural?
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Competing Interests

Timeliness

Methodological Integrity
The Shoreline of Banda Aceh, Indonesia
June 2004
The Shoreline of Banda Aceh, Indonesia
June 2004 and December 2004
Field Operations: Recruiting and Training Interviewers

- Local interviewers vs. travelling teams
  - Depends on severity of the event
  - Language skills needed
  - Need for interviewer-respondent matching criteria

- Training in the context of a disaster
  - Respondent and interviewer safety
  - Respondent distress
Field Operations: Community Engagement

- Forming partnerships in the local community is vital
  - Travel and access
  - Obtaining records
  - Community leaders can help to develop a cultural context for the field staff
Field Operations: Environmental Hazards

- Affect will depend on type, severity, and location
- Physical, chemical, and biological hazards make data collection difficult post-disaster
Field Operations: Security Issues

- Damaged government buildings
- Government security personnel may be limited or overwhelmed
- Interviewer safety
Field Operations: Logistical Issues

- Maps missing streets or landmarks and boundaries no longer there
- Limited or no communication capabilities
- Incomplete reports
- Inaccessible temporary living centers
- Finding suitable accommodations for interviewers
Ethics: Risk-benefit

- Evaluate risk-benefit
- Respondents may be over burdened with survey requests
- Voluntary consent concerns
- Confidentiality
Ethics:
Vulnerable Persons

• Overall respondents are found to have positive experience with participation
  HOWEVER…

• Vulnerable persons more likely to experience further trauma from recalling events
  ▪ Preexisting distress
  ▪ Younger and older age
  ▪ A history of multiple trauma exposure
  ▪ Social vulnerability
  ▪ Greater physical injury severity
Ethics: 
Respondent Concerns & Expectations

• Respondents may misinterpret intentions of survey
  ▪ Misconception that participation in survey research was a prerequisite for obtaining clinical care
  ▪ Respondents worry that aid or assistance may be taken away or reduced if they participate in a survey
Ethics:
Welfare of Interviewers

- Interviewers or their family members may have experienced event
- Witnessing and hearing respondents' experiences may cause mental or emotional stress to fieldworkers
Conclusions

• **Timeliness vs. Methodological Rigor**
  ▪ Evaluation of the cost-error tradeoffs will take on additional complexity

• **Disaster context will impact every phase of the survey lifecycle**
  ▪ Five characteristics have been found to influence every phase of disaster studies
    • Event type, Severity, Phase, Location, & Goal of the research

• **Future direction**
  ▪ Need greater transparency in approach and methods
Thank you!