Enhancing Disaster Resilience Through Evaluation: Exploring Perspectives & Opportunities

Evaluation Café
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The Evaluation Center
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CONTEXT . . .
CONTEXT . . .

- Dissertation research on social impacts of the *Exxon Valdez* Oil Spill
- My “day job”
- Joining the Evaluation Center – “where’s the TIG?”
- Natural Hazards Institute Annual Workshop – Quick Response Grants
- *Katrina* and *Rita*
In its June 2005 report “Grand Challenges for Disaster Reduction,” the National Science and Technology Council's Subcommittee on Disaster Reduction highlights six “Grand Challenges.”


Among the recommended key research requirements is to include social science in assessing resilience.
What can we bring to bear from the field of evaluation that, coupled with disaster content area expertise, has the potential to enhance our understanding and assessment of disaster preparedness, response, recovery, and resilience?
It's going to take some time to get a grasp on it.
Sociological Definitions of Disasters

- From a sociological perspective, what makes an event a disaster is not just physical effects associated with it, such as environmental damage or destruction of a built environment, but people’s awareness of and reactions to it.

- From this viewpoint, disasters are only disasters with respect to their social causes and effects and, thus, cannot be understood apart from their social context.
For example . . .

“[C]ollective stress occurs when many members of a social system fail to receive expected conditions of life from the system.” (Barton 1969:38)

- This conceptualization incorporates
  - Social disruption that ensues following physical impacts of an event
  - Perceptions of crisis situations whether or not they involve physical impacts
  - Political definitions of situations
  - An imbalance in the ability of a social system to meet demands of a crisis situation
Consider disasters – natural and technological – on a continuum, with overlapping qualities, characteristics, and social impacts…
A Comparison of Natural & Technological Disasters

- Etiology
- Physical Damage Characteristics
- Disaster Phases
- Community Impacts
- Human Impacts
Etiology:
Continuum of Deliberateness for Traumatic Events

- Acts of God
- Events Caused by Human Error or Recreancy
- Purposeful, Premeditated Acts
- Natural Disasters
- Technological Disasters
- War, Terrorism

## Etiology

<table>
<thead>
<tr>
<th>Natural Disasters</th>
<th>Technological Disasters</th>
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<tbody>
<tr>
<td>- Rooted in nature; considered acts of God</td>
<td>- Caused by humans</td>
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<tr>
<td>- Often predictable</td>
<td>- Result of technological malfunctions, human error, or “recreancy”</td>
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<tr>
<td>- Not preventable</td>
<td>- Not predicted but perceived to be preventable; identifiable parties to hold accountable</td>
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<tr>
<td>- Associated with perceived lack of control</td>
<td>- Associated with perceived loss of control</td>
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<td>- Widespread sources</td>
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## Physical Damage Characteristics

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<tr>
<td>▪ Visible damage to the built environment (e.g., buildings, roads, bridges)</td>
<td>▪ Uncertainty of extent &amp; nature of the damage; “ambiguity of harm”</td>
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<tr>
<td>▪ Not usually class biased</td>
<td>▪ Biospheric contamination severs the relationship between the environment &amp; community; toxic exposure</td>
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<td>▪ Disproportionately affect working or lower-class groups</td>
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### Disaster Phases

<table>
<thead>
<tr>
<th>Natural Disasters</th>
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<tr>
<td>1. Warning</td>
<td>▪ Do not follow a linear stage model identified for natural disasters</td>
</tr>
<tr>
<td>2. Threat</td>
<td>▪ Difficult to pinpoint a beginning &amp; an end; lack of finality/closure</td>
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<tr>
<td>3. Impact</td>
<td>▪ Communities tend to remain in warning, threat &amp; impact stages</td>
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<tr>
<td>4. Inventory</td>
<td>▪ Secondary trauma emerges (e.g., litigation, relocation)</td>
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<tr>
<td>5. Rescue</td>
<td></td>
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<tr>
<td>6. Remedy</td>
<td></td>
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<td>7. Recovery</td>
<td></td>
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<td>8. Rehabilitation</td>
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Natural & Technological Disaster Stage Models*

**Natural Disasters**
- Warning
- Threat
- Impact
- Rescue
- Inventory
- Remedy
- Recovery
- Rehabilitation

**Technological Disasters**
- Warning
- Threat
- Impact
- Rescue
- Inventory
- Remedy
- Recovery
- Rehabilitation

* Couch 1996.
## Community Impacts

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>“Therapeutic” or “altruistic” community emerges; communities experience “post-disaster utopia” &amp; “amplified rebound”</td>
<td>“Collective trauma” &amp; emergence of a “corrosive community”</td>
</tr>
<tr>
<td>Collective definition of the situation; “community of sufferers”</td>
<td>“Outsiders just don’t understand”</td>
</tr>
<tr>
<td>“Lifestyle change”</td>
<td>No collective definition of the situation; individuals forced to create their own</td>
</tr>
<tr>
<td>Outsiders offer assistance</td>
<td>Role ambiguity</td>
</tr>
<tr>
<td></td>
<td>“Lifestyle change” &amp; “lifescape change”</td>
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<td></td>
<td>Grassroots responses</td>
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Stress & Collective Trauma

- Collective trauma following technological disasters results in social disruption.
- Social “fault lines” exist in every community – these are exacerbated in stressful situations, especially long-term stressful situations.
Corrosive Community

- A phenomenon referred to as a “corrosive community” tends to emerge following technological disasters.
  - Social disruption
  - Uncertainty
  - Lack of consensus
  - Who should be held responsible for a disaster
- “Outsiders just don’t understand.”
Recreancy

- Technological disasters raise questions about blame & responsibility.
- Recreancy refers to a situation when some person(s) and/or organization did not properly “do their job.”
- Technological disasters give rise to feelings of recreancy & loss of trust in “the system” – there are identifiable parties to hold accountable.
Social Capital

- There are many forms of capital – e.g., financial, physical, human, & natural resource.
- Social capital refers to “social networks, the reciprocities that arise from them, & the value of these for achieving mutual goals.”
- Social capital is about trust, associations, & norms of reciprocity among groups & individuals.
- Like “The Golden Rule.”
- What role(s) does social capital play in different phases of a disaster? What are the impacts of a disaster on social capital?
Secondary Trauma

- Secondary impacts of technological disasters (also referred to as secondary trauma) are correlated with chronic stress among individuals & communities – e.g., protracted litigation & survivor relocation.
### Human Impacts

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<th>Natural Disasters</th>
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<tr>
<td>- Short-term psychological &amp; sociological stress</td>
<td>- Long-term, chronic psychological &amp; sociological stress</td>
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<td>- Long-term negative health outcomes</td>
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Consider *Katrina* . . .

- Poor response by FEMA
- Inadequate preparedness by local and state officials
A “different disaster,” depending on location along the Mississippi/Louisiana Gulf Coast

- Prolonged dislocation of evacuees
- Uncertainty about re-establishing neighborhoods and community
- Issues regarding insurance, litigation, compensation
- The “blame game”
- Impacts on other communities around the country
<table>
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<tr>
<th>NATURAL DISASTER</th>
<th>TECHNOLOGICAL DISASTER</th>
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<tbody>
<tr>
<td>“Act of God”</td>
<td>“Act of Humans”</td>
</tr>
<tr>
<td>Often warning prior to impact</td>
<td>No warning prior to impact</td>
</tr>
<tr>
<td>Destruction of built environment</td>
<td>Destruction of ecology</td>
</tr>
<tr>
<td>Immediate Federal legislated response</td>
<td>Protracted legal response</td>
</tr>
<tr>
<td>Impacts are primarily short-term (6 months – 2 years)</td>
<td>Impacts are long-term (3 – 15 yrs)</td>
</tr>
<tr>
<td>Community recovery through emergence of “Therapeutic Community”</td>
<td>Failure of community recovery through emergence of “Corrosive Community”</td>
</tr>
<tr>
<td>Closure &amp; certainty; community security reestablished</td>
<td>Lack of closure; community uncertainty &amp; fear of the future persist</td>
</tr>
<tr>
<td>Improved community preparation for future natural disasters</td>
<td>Continuing secondary trauma &amp; social vulnerability</td>
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Challenges of Conducting Disaster Evaluation/Research

- Ethical considerations
- Research design considerations
  - Coordination issues with other social scientists
  - Limited/dated baseline data
  - Sample population
  - Cultural considerations – within U.S. and globally
  - Funding
An Example: Disasters Emergency Committee Report

“The revisions to the DEC evaluation report have led to suggestions that the DEC evaluations are not independent. However, as someone who has carried out evaluations for the DEC, I would argue that in the past the evaluations have been independent as the evaluators had the assurance that their reports would be published. I understand that for the DEC Tsunami Evaluation the evaluation team were told that the decision to publish would rest with the DEC board. This does not promote independence as evaluation teams are then forced to consider how to balance objectivity with the desire to avoid being so critical that the report will not be published.” ~ John Cosgrave
Building on Extant Research . . .

- Consideration of longstanding research efforts, e.g.,
  - Disaster Research Center, University of Delaware
  - Natural Hazards Research Center, University of Colorado
  - Hazards Reduction Center, Texas A&M University
  - Other exemplary research institutions throughout the world
Additional Leaders in the Disaster Arena . . .

- Response, emergency management, and humanitarian assistance organizations, e.g.:
  - American Red Cross
  - International Red Cross
  - WorldVision
  - UNICEF
  - ALNAP – Active Learning Network for Accountability and Performance in Humanitarian Action
  - InterAction
Activities in Progress:

- Proposal to the American Evaluation Association to establish a Topical Interest Group (TIG) in Disaster and Emergency Management Evaluation (DEME)
- ListServ established – Disaster Eval
- Facilitating communication between interested entities
- Involvement in other arenas (e.g., Heifer, NOAA)
- Developing a comprehensive literature review of pertinent work
- Considering the value/need for Guiding Principles for Disaster and Emergency Management Evaluation
- Proposal to develop an issue of *New Directions in Evaluation*
DEME Purpose:

The DEME TIG seeks to improve the understanding and practice of community resilience in disaster and emergency situations through effective monitoring and evaluation practice. Toward this end, it seeks to facilitate communication and support professional monitoring and evaluation activities that enhance disaster and emergency preparedness, response, and recovery through sharing of evaluation approaches, issues, practices, concepts, and theories related to disasters.
DEME Goals:

- Improve understanding of ways in which effective evaluation practice can enhance disaster preparedness, response, recovery, and resilience.
- Generate theory and knowledge about effective human action in the context of disasters.
- Encourage exemplary evaluation practice related to disaster preparedness, response, recovery, and resilience.
DEME Goals:

- Improve understanding of and ability to negotiate/address challenging social, political, and physical contexts in which disaster-related evaluations are conducted.
- Improve use of evaluation findings with respect to evaluation preparedness, response, recovery, and resilience.
The Social Science Research Center (SSRC) at Mississippi State University held a Katrina Summit on November 18-19, 2005.

This Summit brought together 18 scholars with experience in disasters, hazards, and risks.

These scholars included displaced individuals from New Orleans universities.

Scholars came from various disciplinary backgrounds including sociology, psychology, political science, anthropology, geography, and clinical counseling.
SSRC Katrina Summit

- The Summit used Decision Support Laboratory (DSL) technology to facilitate a series of electronic focus group activities.
- These activities sought to achieve consensus on criteria to guide post-disaster Gulf-Coast social science research and disaster research in general.
- A major outcome of the Summit was development of a set of “Gems;” principles for guiding disaster research.
Katrina Summit “Gems”

1. Does the research contribute to vulnerability reduction, socio-ecological sustainability, and disaster resilient communities?
2. Does the research contribute to establishing baseline data (e.g. psycho-social, demographic, economic)?
3. Does the research contribute to policy development?
4. Does the research contribute to emergency management practices?
5. Does the research contribute to comparative analysis (e.g. time, location, social groups)?
Katrina Summit “Gems”

6. Does the research inform individual and community recovery?

7. Is the research conducted and disseminated in a timely manner?

8. Does the research contribute to stakeholder participation, collaboration, involvement, and empowerment?

9. Does the research contribute to new knowledge on understudied disaster related issues?
A Call for Dialogue . . .

What can we bring to bear from the field of evaluation that, coupled with disaster content area expertise, has the potential to enhance our understanding and assessment of disaster preparedness, response, recovery, and resilience?
Disaster Eval ListServ:

http://ritchieconsultants.com/mailman/listinfo/disaster_eval_ritchieconsultants.com