Building Community Resilience and Supporting Vulnerable Populations: Social Networks and Community Capacity

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Providing Access to Resilience-Enhancing Technologies Project (PARET)

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PARET Project Research Questions

- What can be done to better serve vulnerable populations to ensure that no person or group is left out of the planning stages of disaster preparation, response, and recovery?

- How can technology be a vehicle that serves and tends to these community members who are often overlooked?

- What role does community capacity building play in these disaster scenarios?

Goals of the WCDM Presentation

- Present a social organization framework as it applies to disaster management
- Focus on building community capacity and leverage points as applied to disaster preparedness
- Discuss implications for supporting vulnerable populations

Community Social Organization (CSO)

- Focuses on how communities work and function
- Provides insight into how to build capacity of community and its members to succeed during times of crisis
- Illuminates multiple layers of community life
- Elevates natural sources of resilience in communities
- Targets desired community results
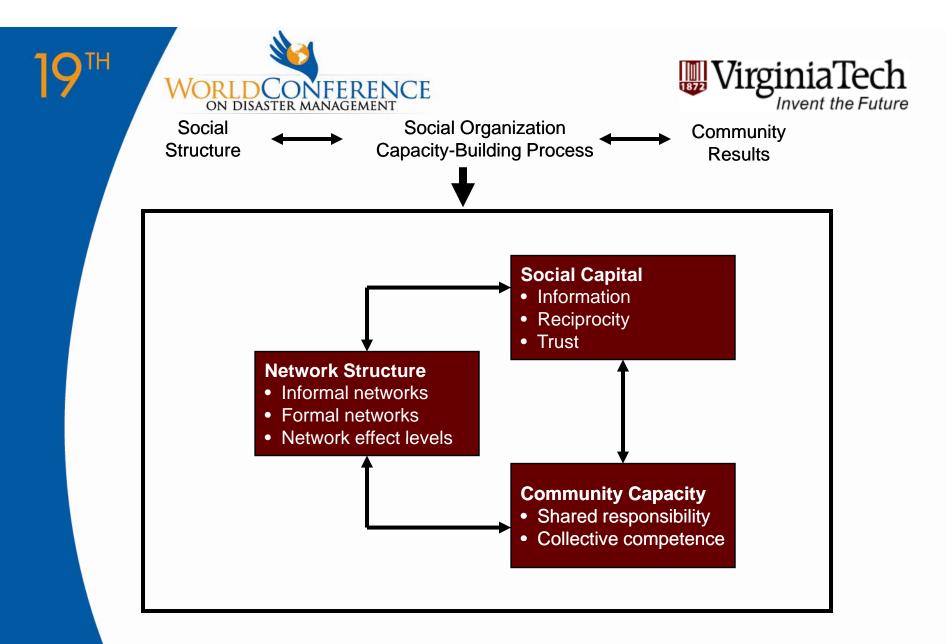
Community Capacity Building

- Community capacity-building efforts often subscribe to the same goals: *to find ways communities can build their resilience, be in greater control of what they experience as a collective, and at the "end of the day," determine that life is improved.*

- Assumptions:
  - Collective efforts of community members increase odds of positive change
  - Communities already possess raw material necessary for a significant degree of resilience

Technology, Disasters, and Vulnerabilities

- Intersections
  - Which technologies hold promise?
  - How can communities be mobilized across the disaster cycle?
  - How can socially excluded groups become included?
- Bringing together a focus on situations (disasters and vulnerability), process (community networks, both formal and informal), and method (technology).
- But bringing people together and motivating them to respond in beneficial ways is neither predictable nor easy (McEntire, 2007).

Social Structure ⟷ Social Organization Capacity-Building Process ⟷ Community Results

Network Structure
- Informal networks
- Formal networks
- Network effect levels

Social Capital
- Information
- Reciprocity
- Trust

Community Capacity
- Shared responsibility
- Collective competence

*Mancini, J.A., Bowen, G.L., & Martin, J.A. (2005). Community social organization: A conceptual linchpin in examining families in the context of communities. *Family Relations: Interdisciplinary Journal of Applied Family Science*, *54* (4), 570-582.

In Conclusion……………

- *It's all about networks………..and networks are all about connections…………and connections are all about relationships.*

Complexities of Antecedents, Processes and Consequences

- Diversity of pathways
- Diversity of backgrounds
- Diversity of barriers and facilitators
- Diversity in aspirations
- Diversity in receptivity
- Diversity in individuals, families and communities

Two Important "Book End" Questions

- *Are you satisfied with the status quo?*
- <u>*At the end of the day*</u>*, what difference would you like to see?*
- These questions frame the process of building community capacity (changing the shape of shared responsibility and collective competence)
- Leads to moving from *social exclusion* to *social inclusion* of vulnerable citizens

Assumptions About Families

- Are the primary grouped social units in a community
- Are motivated to protect their individual members, particularly those who are less competent, strong, and healthy
- Have characteristics amenable to change and influence but maintain boundaries resistant to the interference of outsiders
- Determine who they will interact with, and weigh the benefits of distance v. benefits of closeness
- Exhibit considerable diversity, as well as convergence

Assumptions About Communities

- As collections of individuals and families, have community boundaries that are visible, as well as those that are not
- Have a life of their own, a personality, and an ability to self-determine
- Have the raw materials for being resilient, though often fail to access those materials in productive ways
- Can dramatically influence what individuals and families experience, from despair to vibrancy, and from stasis to growth, including preparedness
- Exhibit considerable diversity, as well as convergence

Building Community Capacity

- Improve normative everyday life
- Respond effectively to crisis events, including natural and man-made disasters
- Goal: To find ways communities can build their resilience, be in greater control of what they experience as a collective, and "at the end of the day" determine that life is improved
- We locate capacity-building in a social organization framework because it exposes important layers in a community that can support resilience

Social Organization

- Values, norms, processes and behavior patterns within a community that *organize*, *facilitate*, and *constrain* interactions among community members

- Process by which communities achieve their desired results for individuals and families, *including the ability to demonstrate resilience in the face of adversity and positive challenges*

- Social organization includes *networks* of people, the *exchanges and reciprocity* that transpire in relationships, accepted *standards and norms* of social support, and *social controls* that regulate behavior and interaction

* Mancini, J.A., Martin, J.A., & Bowen, G. (2003). Community capacity. In T. Gullotta & M. Bloom (Eds.), *Encyclopedia of primary prevention and health promotion* (pp. 319-331). New York: Plenum.

Social Organization

- A lens sufficiently broad to capture the many nuances of community life
- Addresses challenges that communities face, as well as groups within those communities
- Captures the depth and detail of community processes
- Linked with capacity-building planning (a results management approach)

Social Organization
Structure and Process

- Accounting for structure and process
  - Structure pertains to configuration and composition; interconnecting parts
  - Process involves operations and methods of working; courses of action, functions
  - Process occurs within structural frameworks
  - Processes provide linkage between social structure and effects on individuals and families

Social Organization: Focus on Processes

- Main focus is on processes
  - Networks
  - Social Capital
  - Community Capacity

- Relationships between them
  - Networks provide context for the development of social capital, and for building community capacity

Social Organization: Networks

- Primary ways through which community life is enacted

- Informal networks comprise web of relationships with friends, neighbors, work associates

- Formal networks associated with agencies and organizations

- Voluntary and obligatory relationships

Functions of Informal Networks

- Emotional (to deal with despair and worry)
- Instrumental (to accomplish practical tasks)
- Informational (to achieve better decisions)
- Companionate (to spend time in a context for support)
- Validation (to support feeling worthwhile, competent, and hopeful)
- Contributes the power of interpersonal relationships to the mix

Significance of Formal Networks

- Mission of providing support programs and services
- Are stronger when they are diverse and comprehensive, when outreach is a primary activity, and when specific formal support entities collaborate (solving "silo"-related problems)
- Key role in supporting informal networks
- Contributes specialized expertise to the community resilience mix

Social Organization: Networks

- Network effects levels
  - Action element of our framework
  - Nexus of informal and formal networks
  - First level-within a network
  - Second level-between like networks
  - Third level-between dissimilar networks

- Network configurations provide leverage for achieving results through generation of social capital and production of community capacity

Social Organization:
Social Capital

- Information, reciprocity, and trust
  - Aggregate of resources (information, opportunities, and instrumental support)
- Arise from reciprocal social relationships
- Results from participation in formal and informal settings
- Social capital observed in actions of civic groups, faith communities, and any number of community-based groups
- Increases odds of achieving results otherwise not attained

Social Organization: Community Capacity

- **Shared responsibility**
  - For general welfare of the community and its individual members
  - Sentiments
- **Collective competence**
  - Taking collective action, confronting situations
- **Assumptions**
  - Concern directed at community as a whole and at particular elements, action is beyond expression of positive sentiments, action is proactive and reactive, action targeted at threats and at normative situations

Social Organization: Community Results

- Consequences of effective social organization: Ultimate targets of intervention and prevention

- Desired results (examples, safety, health and well-being, family resilience, welfare of immigrant and refugee families)

- Community results not owned by any particular group but valued across community; contributed to by collection of groups, entities

- Program results aligned with particular agencies and what they "have say about"

- Identified results assist to determine leverage points for change

- Moves theory from interesting framework to theory of action

- Pragmatically, focus is on *managing results* rather than managing activities; important shift in program development and assessment from shotgun to directed initiatives

Understanding "Community"

- Community can be considered as a place, a target, and a force for prevention
  - Place: Boundaries, resources, and deficits. Peeling back the layers of the community. Uncovers assets and liabilities
  - Target: Identifying community norms, networks, vulnerabilities, and strongholds.
  - Force: Mobilization of community members to enact change; ultimate change agents.

  *Mancini, J.A., Nelson, J.P., Bowen, G.L., & Martin, J.A. (2006). Preventing intimate partner violence: A community capacity approach. *Journal of Aggression, Maltreatment, and Trauma*, *13* (3/4), 203-227.

Resilience

- The term resilience describes a community's or region's ability to effectively prepare for, respond to, and recover from a disaster, including the ability to quickly restore the essential services needed for a full and swift economic and social recovery (CARRI).

- Associated words include: bounce, elasticity, spring, flexibility, suppleness, and buoyancy.

Resilience

- A community that maintains, regains, or established favorable community results over time despite adversity (clear crises) or positive challenges (more normative, everyday life events) is considered to be resilient.

- Building resilience is about establishing and sustaining community capacity.

- Understanding resilience includes: (1) identifying particular aspects of communities that are assets, noting which are especially strong (those moderately so, and those needing attention), (2) a focus on how community members understand and access these assets, and (3) analyses on how community resilience factors or assets have been "tested" in the past.

Resilience

- ABC-X model of resilience*
  - "A" is a circumstance or situation, such as disaster
  - "B" is the existing resources at hand, such as strong community networks and efficient technology
  - "C" is the perception that people have about the situation or circumstance
  - "X" is the result, including being able to respond to a crisis
- "B" and "C" are leverage points, can be influenced by what formal and informal networks do

*McCubbin, H.I., & Patterson, J.A. (1983). The family stress process: The double ABCX model of adjustment and adaptation. *Marriage and Family Review*, 6, 7-37.

Resilience

- Characteristics of a resilient community*
  - Formal networks know their roles prior to a crisis
  - People in the community concur that coalescing is to their benefit
  - Community members rely on social ties during an emergency
  - Trusted information sources convey accurate and efficiently-accessed information
  - The community has diverse resources at its disposal

*Norris, F.H., Stevens, S.P., Pfefferbaum, B., Wyche, K.F., & Pfefferbaum, R.L. (2008). Community resilience as a metaphor, theory, set of capacities, and strategy for disaster readiness. *American Journal of Community Psychology, 41*, 127-150.

Leverage Points and Resilience

- Points where prevention and intervention activities are likely to make a difference, in effect changing what the end-of-the-day looks like

- Networks are primary leverage points
  - They are where people connect

- Leverage points become clearer as communities determine desired results, and take stock of assets and limitations

Leverage Points and Social Organization

- Considering structure and process: which aspects of a community are fluid and open to variability and which are static?

- Community structure: how support services are organized, where they are located, where pivotal community organizations have influence, and ease in contacting and informing vulnerable groups.

- Community process: how organizations function, whether they collaborate with other organizations, how information flows between formal and informal groups, whether they are trusted by the community.

- Community capacity: how shared responsibility is fostered, demonstrating accomplishments collectively.

Social Vulnerability

- Vulnerability describes pre-event, inherent characteristics or qualities of systems that create the potential for harm or differential ability to recover following a crises or hazard event (Cutter, et al., 2008, p. 2).

- Social vulnerability is associated with economic, social, cultural, and/or political conditions that can limit available resources and response capacity of any social unit at any stage in a disaster cycle (Bolin & Stanford, 1998).

Social Vulnerability

- Vulnerable groups may be lower on *human capital* (knowledge, education, literacy, experience, health, and physical abilities), *political capital* (social and political influence associated with being a member of a dominant group), *social capital* (immersion in social networks and relationships), and *economic capital* (purchasing power). Note: capital varies within and between vulnerable groups.

- Vulnerability can lead to social exclusion, which may place a person outside of mainstream community activity.

Social Vulnerability

- Some people are infused with capital of all types, while others struggle from lack of capital, making them especially vulnerable to the effects of hazards.

- If segments of a community are especially vulnerable, then the overall resilience of the larger community is compromised.

- Vulnerabilities are often clustered, rather than occur in isolation, therefore causing some individuals, families, neighborhoods, communities and nations to be highly vulnerable (Colten, Kates, & Laska, 2008).

Social Vulnerability

- Groups of people who are more likely to have disaster response difficulties include;
  - the poor,
  - minorities (including race, gender and class),
  - those with disabilities,
  - elderly people,
  - those who are less educated,
  - immigrants,
  - migrant or seasonal workers,
  - new residents,
  - tourists,
  - renters,
  - and people who live alone and/or are isolated from family and friends, such as the homeless

Social Vulnerability

- FEMA (2008, p. 4) defines vulnerable community members as "*populations whose members may have additional needs before, during, and after an incident in functional areas, including but not limited to: maintaining independence, communication, transportation, supervision and medical care.*"

Social Vulnerability

- *Essential to effective emergency and disaster management is well-grounded knowledge about the community, including the extent to which vulnerable groups reside there, the geographical locations where they tend to cluster, and the specific nature of their vulnerabilities, including their potential needs in an emergency response**

*Morrow, B.H. (1999). Identifying and mapping community vulnerability. *Disasters, 23* (1), 1-18.

Social Vulnerability

- Formal network information sources:
  - Social and health service agencies
  - Utility companies
  - Clinics
  - Faith-based organizations
  - Neighborhood associations
- Informal network information sources:
  - Friends, neighbors, loose connections

Resilience, Community Capacity, and Technology

- Information Technology can educate a population months prior to an event, inform a population about a risk immediately beforehand, and provide updates during and post disaster

- Information Technology is the critical subsystem within an interdependent network of social, political, and technological systems that can increase community resilience.

The Role of Technology

- Build social capital and community capacity by enabling and enhancing connections through social networking (reinforce connections and relationships).

- Provide educational information to citizens that they can readily access at any time via an Internet connection or physical viewing.

- Help emergency managers plan and manage resources.

- Locate people in relation to hazards via tools such as geographic information systems vulnerability maps.

The Role of Technology

- Provide emergency alerts and warnings, including targeted messages.
- Facilitate response, including evacuation.
- Connect responders through a wireless communications network.
- Direct responders accurately and efficiently.
- Keep track of medical information.
- Deploy resources.
- Provide recovery information and assistance.
- Document the recovery process.
- Generally: connect people and systems

Technology and Resilience

- Technology alone cannot ensure community resilience
- But it can function well as one enabler for the social organizational structures and processes that underpin community capacity
- Other factors come into play: trust in government, ability of citizens to take action, resources available to citizens, experience with "false alarms", and having survived a previous disaster

Technology Selection

- Technologies selected should:
  - Be readily deployable to vulnerable populations
  - Use an all-hazards approach
  - Have utility throughout all disaster phases (planning, preparedness, response, recovery)
  - Involve three tiers of the community to maximize network functions
    - Emergency managers and first responders
    - Broader community (NGOs, faith-based networks, other experts in the formal community)
    - Individual community members (families and households; the informal community)
- Account for diversity among vulnerable groups (one size does not fit all)

The Range of Technologies

- Electronic government (eGov)
- Community technology centers (CTCs)
- Telephone notification
- Cell phone message notification (voice and SMS)
- Sirens/loudspeakers
- Television
- Radio (AM/FM/Weather)
- 311 Systems
- Internet-based GIS

Building Community Capacity and Managing Results

- In this framework "results" are significant
  - Disaster preparedness results
- Results management is a program planning and implementation scheme that parallels social organization and capacity-building
- Key point for prevention and intervention programs: *Program activities are ONLY useful to the extent they are TIED TO RESULTS* (change in behavior, knowledge, attitudes)

*Mancini, J.A., Huebner, A.J., McCollum, E., & Marek, L.I. (2005). Evaluation science and family therapy. In D. Sprenkle & F. Piercy (Eds.), *Research methods in family therapy* (pp. 272-293). NY: Guilford.

Results Management Steps

- Assessment of family and community needs and assets, including those of informal and formal networks; negative and positive community characteristics should be exposed

- Determination of desired community results (example, better informed individuals and families); "owned" by the community and by various groups, neighborhoods, and organizations

- Determination of desired program results (what formal networks have say over); what will be different as a result of this program?

- Development of programs and activities

- Assessment of alignment of reaching desired results with programs and activities

- Reassessment of the "status quo" and the "end of the day"

Characteristics of Results Management

- Focus on link between results and activities
- Results are clearly defined and serve as program direction guides
  - *At the end of the day*
- Focus also on what indicates results are being achieved
  - How do we know people are better informed?
- Continue activities that can be clearly tied to desired results
  - Is there good and logical alignment?
- Process is energized if there is *dissatisfaction with the status quo* and if there is clarity about the *end of the day desired results*

In Conclusion…………..

- *It's all about networks……….and networks are all about connections…………and connections are all about relationships.*
- At the end of the day, what are elements of social organization and building community capacity?
- Implications for preparing vulnerable citizens and communities to fare better in the face of disaster

Community Capacity-building elements

- Who we know
- How well we know each other
- How close we feel to them
- Our experience with them
- What we expect of them
- What we do together of importance
- Quality of life in our communities
- Strength of informal networks
- Keeping vulnerability at the center of the equation

- Nature of efforts to improve community life
- How programs and professionals help families and communities
- How we can sustain what is good and helpful
- The best way to bring about change
- Shared responsibility and collective competence

Implications for Supporting Communities

- Need to account for barriers to technology: availability, affordability, accessibility, and acceptability

- Recognize community diversity in all its forms

- Recognize promising advances in technology utilization: broadband service is expanding, cell-phone and computer hardware is more affordable, certain technology is less complex (Jitterbug), text-messaging more common

- Identify and discuss innovative practices: program in Tennessee provides free cell phones to poor citizens; City of Miami and Microsoft team to provide computer instruction to older adults; Charleston, SC citizens are connected through 100 neighborhood associations and track those with special needs; in Portland, ME, hearing-impaired citizens are provide with special pagers and radios

Implications for Supporting Communities

- Broad principles:
  - Know the vulnerable populations in the community
  - Recognize the importance of transmitting clear and concise messages repeatedly through multiple channels, in order to account for vulnerable population diversity
  - Infuse disadvantaged communities with computer technology, so that everyone is "plugged in"
  - Mobilize community networks
  - Understand, exploit, and use technology to enable the "power" of a community
  - Use technology to foster collaborations between seemingly diverse community groups and organizations
  - Be intentional about sustaining vulnerable community readiness as a normal part of everyday community life

Implications for Supporting Communities

- Ultimate goal in hazard response and in building community resilience is to assist people in mobilizing their available capital in order to respond effectively.

- For many of the most vulnerable, network social capital is a most important resource.

- Though technology is not the panacea for social ills and disparities, when it involves having informed citizens who can fend for themselves and for others during a crisis, it emerges as a linchpin on connecting people and organizations that support them.

- Technology application, through community social organization, becomes a primary ally in building resilience, especially for vulnerable members of the community.

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