Community Resilience: Integrating Culture, Networks, and Governance for Disaster Risk Reduction

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Community Resilience

"A process linking a set of adaptive capacities to a positive trajectory of functioning and adaptation after a disturbance"

- <u>Economic Resources</u> (Hobfoll's conservation of resources model)
- <u>Social Capital</u> (Bourdieu's embedded of social resources)
- <u>Information</u> (Comfort's concept of adaptive performance)
- <u>Community Competence</u> (Longstaff on collective problem solving)

Community Resilience as a set of networked capacities

From Norris et al. (2007). "Community Resilience as a Metaphor, Theory, Set of Capacities, and Strategy for Disaster Readiness." American Journal of Community Psychology 41 (127-150)
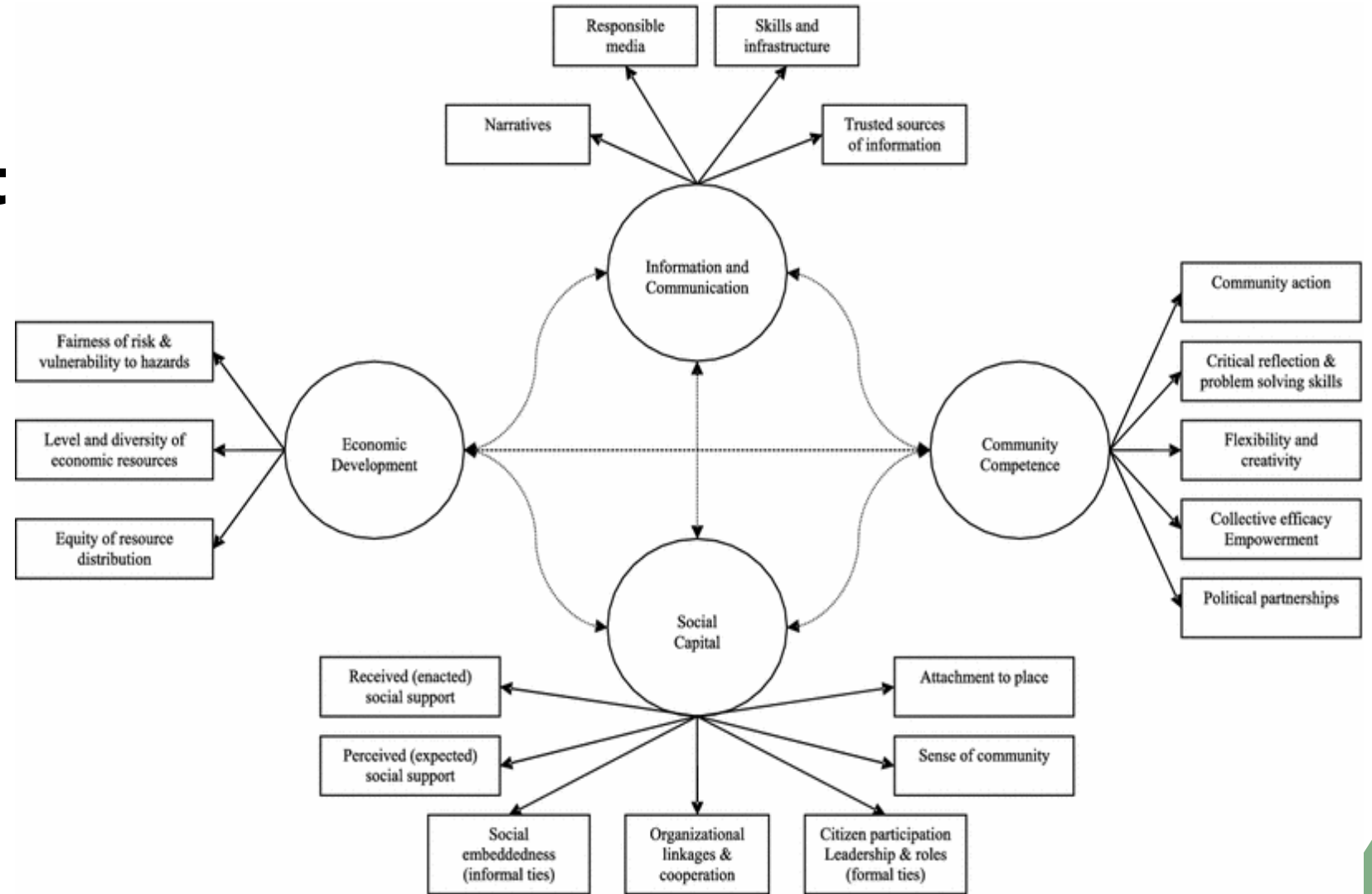
How Can We Measure Community Resilience?

Macro Analyses – County Level Measurement

From Bergstrand, Kelly, Brian Mayer, Babette Brumback, and Yi Zhang. "Assessing the relationship between social vulnerability and community resilience to hazards." Social indicators research 122, no. 2 (2015): 391-409. (cited 193 times)

Legend

- Other
- SOVI, -CRI < 25%
- SOVI < 25%, -CRI > 75%
- SOV > 75%, -CRI < 25%
- SOVI, -CRI > 75%
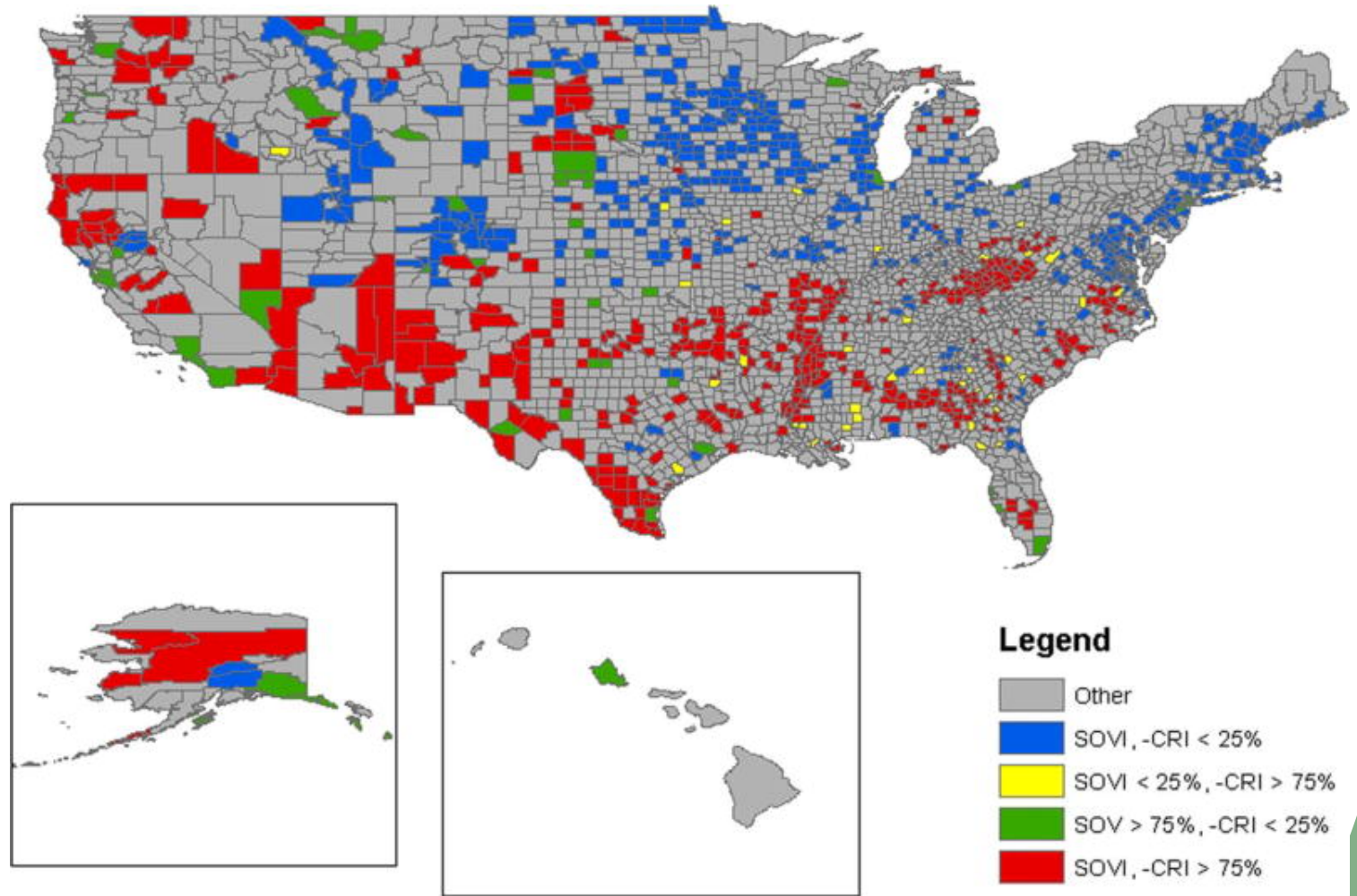
How Can We Measure Community Resilience?

Social Network Analyses: Modeling the Ties Facilitating Adaptive Capacities

- Puetz, Kyle, and Brian Mayer. "Pipes or Prisms? Personal Networks, Network Mechanisms, and Formal Support Receipt in the Wake of the Deepwater Horizon Oil Spill." *The Sociological Quarterly* (2020): 1-22.

LEGEND:

Blue=Leader, Red=Maybe Leader, Black=Not a Leader
Sized by Betweenness (Brokering)

Police Chief

Stakeholder 1

City Commissioner

VP Bank

Stakeholder 2
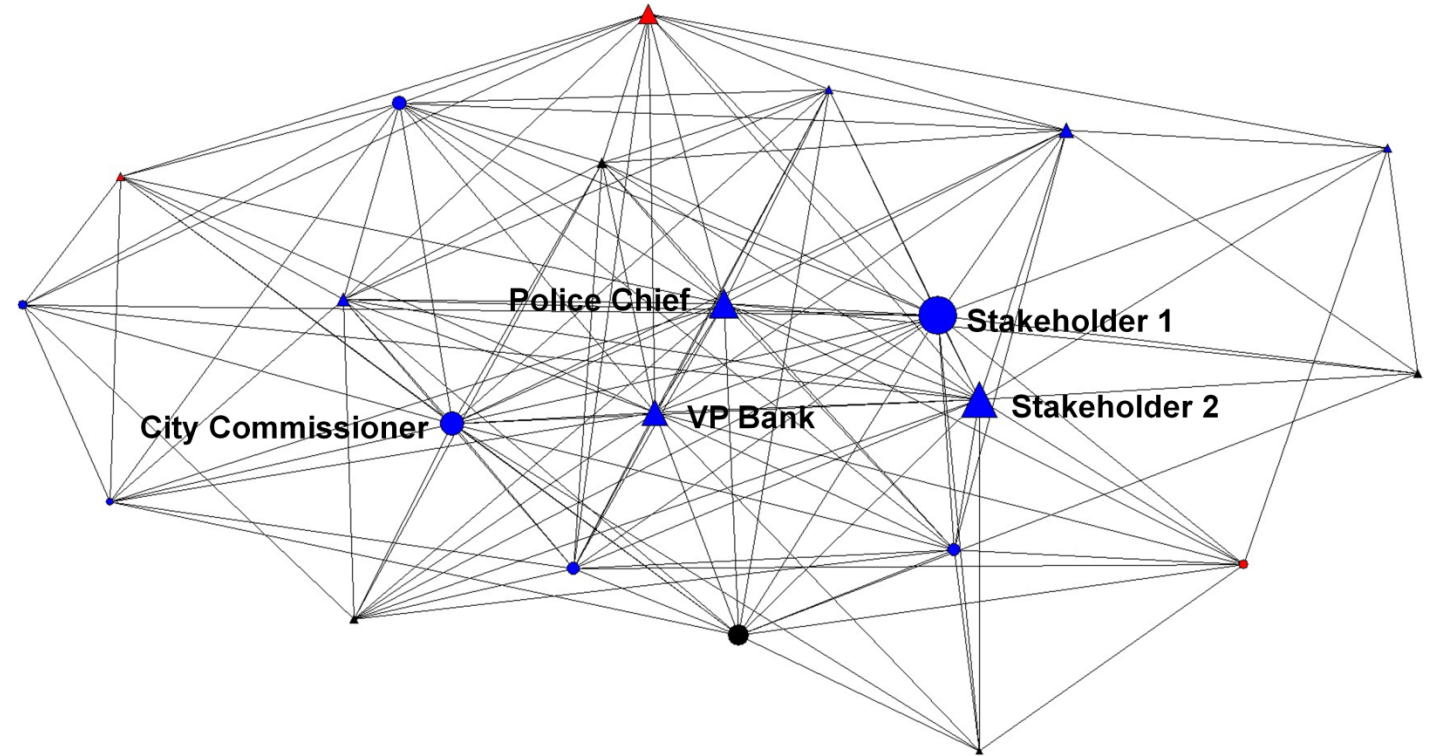
How Can We Measure Community Resilience?

Surveys, Interviews, Focus Groups, Photovoice: Understanding the Role of Cultural Capital

- Morris Jr, J. Glenn, Lynn M. Grattan, Brian M. Mayer, and Jason K. Blackburn. "Psychological responses and resilience of people and communities impacted by the Deepwater Horizon oil spill." *Transactions of the American Clinical and Climatological Association* 124 (2013): 191.

- Clarke, Hannah E., and Brian Mayer. "Community recovery following the deepwater horizon oil spill: Toward a theory of cultural resilience." *Society & natural resources* 30, no. 2 (2017): 129-144.

- Thompson-Dyck, K., Mayer, B., Anderson, K. F., & Galaskiewicz, J. (2016). Bringing people back in: crisis planning and response embedded in social contexts. In *Urban Resilience* (pp. 279-293). Springer, Cham.

- Bergstrand, K., & Mayer, B. (2020). "The Community Helped Me:" Community Cohesion and Environmental Concerns in Personal Assessments of Post-Disaster Recovery. *Society & Natural Resources*, *33*(3), 386-405.

- Mayer, Brian, Katrina Running, and Kelly Bergstrand. "Compensation and community corrosion: perceived inequalities, social comparisons, and competition following the Deepwater Horizon oil spill." In *Sociological Forum*, vol. 30, no. 2, pp. 369-390. 2015.

- Mayer, Brian, Lorencita Joshweseoma, and Gregory Sehongva. "Environmental risk perceptions and community health: arsenic, air pollution, and threats to traditional values of the Hopi Tribe." *Journal of community health* 44, no. 5 (2019): 896-902.

How Can We Measure Community Resilience?

Modeling the 'Activation' of individual & community attributes to adapt

From Abramson, David M., Lynn M. Grattan, Brian Mayer, Craig E. Colten, Farah A. Arosemena, Ariane Bedimo-Rung, and Maureen Lichtveld. "The resilience activation framework: A conceptual model of how access to social resources promotes adaptation and rapid recovery in post-disaster settings." The journal of behavioral health services & research 42, no. 1 (2015): 42-57. (cited 224 times)

CONCEPTUAL FRAMEWORK OF RESILIENCE ACTIVATION
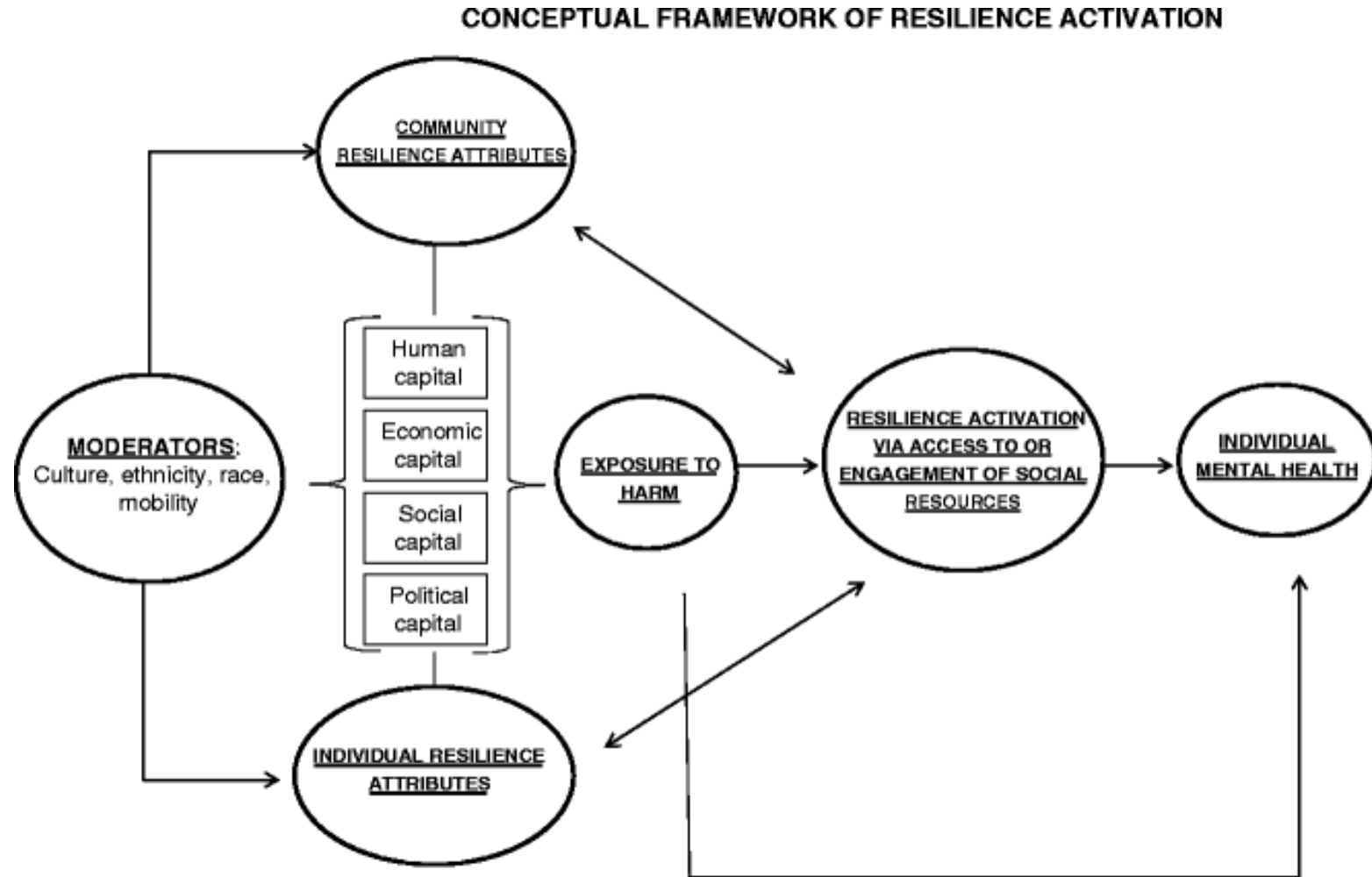
Key Findings & Future Directions

- As a metaphor for understanding the flows of capitals between individuals and communities, *Community Resilience* lets us evaluate (and improve) disaster preparedness & recovery
  - Emphasis on social justice and equity in adaptive capacities
  - Disasters are always local, community engagement is essential
  - Gaps in organizational networks are inevitable, emerge at worst times
  - Planning for community resilience begins with local engagement and networking