Disaster Recovery After Hurricane Sandy: 
CoPE-WELL Study in New York City

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ABSTRACT

On October 29, 2012 Hurricane Sandy hit New York City. Meeting the needs of the hardest hit areas required neighborhood-level decision-making across the entire city (NYC, 2013). Twenty-two months after the storm, recovery efforts are ongoing. One of the primary goals of this study is to apply scientific findings to assist New York City interests in learning from the effects of the storm. Funded by the U.S. Department of Health and Human Services, the Composite of Post-Event Well-being (CoPE-WELL) study aims to identify pre-event and post-event factors that influence community recovery. A team of researchers from the New York City Department of Health and Mental Hygiene, John Hopkins University, and the Disaster Research Center at the University of Delaware has, for the past two years, been developing the CoPE-WELL model to test hypothetical factors that may influence the recovery process. The CoPE-WELL study entails a telephone survey among households in Staten Island, Brooklyn, Manhattan, Queens, and the Bronx, focus groups with local nonprofits and government actors, and a secondary data analysis of county level data. This afforded a unique opportunity to develop a more robust theory of recovery as well as provide empirically based insight on the factors that contributed to community recovery in New York City after Hurricane Sandy. The results of these analyses will be used to inform the John Hopkins University’s systems dynamics model designed to predict recovery processes over time. This model will be used to identify possible interventions that stimulate recovery after a disaster.

This aspect of the study focuses on the role nonprofits and community based organizations (CBOs) play in emergency management and how they managed the pressures in the environments they operate. The study explores the operations within and between nonprofits and

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CBOs in terms of their capacity, flexibility, and how they relate to the multi-organizational environment in which they work.

**Developing a Theory of Recovery**

Community recovery can be defined in general terms as “the process of restoring, rebuilding, and reshaping the physical, social, economic, and natural environment through pre-event planning and post-event actions” (Smith and Wenger, 2006; p. 237). Historically there have been many controversies surrounding the priorities and strategies of community recovery after a disaster. Disaster researchers have been seeking more effective and consistent ways to inform disaster recovery efforts using empirically tested benchmarks (Cutter, 2008; Subcommittee on Disaster Reduction, 2005). In the past, governmental agencies and researchers have used various techniques to establish benchmarks for recovery. However, there are still gaps in our knowledge of how the pre-event context can shape recovery and how various governmental and nongovernmental interventions can influence an existing context composed of overlapping social, economic, political, natural and engineered forces. Little is known about how interventions may produce intended results and unintended consequences; outcomes are often realized in long-term effects and trends and data are limited to post-event measures.

**The Concept of Emergence**

One of the challenges to understanding disaster recovery in terms of an applied theory is the number and volume of response activities within the community that emerge under unique circumstances. These activities were not planned, but must work within the purview of a bureaucratic institutional environment. The bureaucratic top-down approach to managing disaster is often criticized for its inflexibility in an environment that requires adaptive and flexible responses and for its inability to reach those that are most in need (Smith and Birkland, 2012). In contrast, the extraordinary circumstances of a disaster and the complexity of the interlinked environments that are affected carry with them unknowns that require actions beyond what is or what can be planned. Emergent activity functions as a stopgap providing assistance where the public sector lacks the means and the private sector lacks the incentive. Despite more recent efforts to incorporate response activities that emerge in the community with the planned activities of official actors, coordination still poses a problem and the informal and formal in some ways still operate parallel to one another. Past research has identified some of the different types of emergent activity as well as some of the attributed conditions, but how to maximize emergent activity by including it in formal organized responses still lacks expertise.

**Understanding Emergence Through Nonprofits and CBOs**

The connections nonprofits and CBOs have within a given local context provides some perspective of the front line of the disaster where emergent phenomena are prevalent. Nonprofits and CBOs work in environments where they must manage an influx of volunteers, and donations and a lack of planning. At the local level, their experiences expose the interconnectedness and
dependencies revealing lifelines and gaps in recovery. They can tell us more about grass root links between survivors and government in that they often address needs unmet by government programs and, in some cases, act as a liaison or advocate for survivors. They often partner with government, actors in the private sector, and other nonprofit organizations and CBOs through exchanges of funding, resources, information, and perspectives. As such, their experiences within the dynamics of the institutional environment where they work provide valuable insight on what works and where improvement is needed in connecting public need with assistance.

The purpose of this aspect of the CoPE-WELL study is to learn more about the role nonprofits and community based organizations (CBOs) play in emergency management and how they managed the pressures in the environments where they operate. The study explores the dynamics within and between nonprofits and CBOs in terms of their capacity, flexibility, and how they relate to the multi-organizational environment. We are interested in how nonprofits and community-based organizations (CBOs) coalesce and work together with formal actors and emergent groups active in disaster. We are interested in the pressures that influence these groups and to what degree they were prepared to manage these pressures in response to Hurricane Sandy. We would like to know more about their decisions in multi-organizational environments, the degree they employ written plans, and the ways they improvised.

**Methods**

Working closely with the New York City Department of Health and Mental Hygiene, we identified different nonprofit and CBOs involved in emergency management after Hurricane Sandy in five of the six boroughs of New York City in the communities of: Upper East Side, Manhattan; Lower East Side, Manhattan; Far Rockaways, Queens; Red Hook, Brooklyn; and Staten Island. The organizations were identified via the Internet where we consulted the websites of organizational hubs established to connect services and volunteers. In some cases we were referred to other organizations or learned of the organization by their reputation. We then created a list of various organizations and asked them to participate in a focus group. We determined the role each of these organizations served in disaster management activities and their experience in the institutional environment in which they operate. We asked them to describe the types of services they provide/d in the community, assess the level of preparedness of their organization and the clients they serve, explain how information and resources were exchanged, describe the types of groups and community involvement that existed before and emerged in response to Sandy, and to describe the challenges working in this context. In addition we asked for an assessment of ongoing needs of their communities’ still in the recovery process twenty-two months after the storm.

**Preliminary Findings**

Discussions centered around the conditions of the community that facilitated and impeded networking, acquiring resources within these organizational contexts, ongoing issues in the community, what was planned, what was improvised, what worked, and what could be done to improve preparedness for the next event. Responses varied among the participating communities. Some expressed the need for better communication among the different actors involved at the
borough level, yet many described how the disaster provided a platform for many to work together toward common goals. Much of the fragmentation described seemed to occur between the City of New York and these organizations in response and recovery activities. Few if any described a mutually beneficial relationship with actors at the municipal level. There seemed to be less conflict between the New York State Office of Emergency Management and the organizations that maintained a working relationship with the agency. Most organizations’ perceptions of Federal relief programs came from the perspective of their clients rather than from direct interaction.

Conclusions

Many participants suggested the need to streamline the application processes of government programs by connecting agencies through shared information systems. Many organizations, particularly those involved in response activities, expressed the need to improve coordination between the public and nonprofit sectors with information, incident action planning, and funding. While some groups expressed deeper-seated conflicts stemming from a lack of political representation of their community’s needs, most comments focused on the logistical challenges of conducting operations when communication and transportation systems were down. It was suggested that the city invest in auxiliary systems that would allow some basic functions. For example, many of the organizations that provided services during the response phase of the disaster were incapacitated due to the inability to find working gas pumps while the city’s electrical grid was inoperable. Future research will focus more on understanding the interconnections undergirding infrastructure and organizations, their supporting policy regimes, and resource dependencies.

Acknowledgement

This research was funded by a grant from the US Department of Health and Human Services (Grant # HITEP130007, James Kendra, Jonathan Links, and Sarah Sisco, principal investigators). The views presented here do not necessarily reflect the views of the funding agency or the New York City Department of Health and Mental Hygiene.

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