Hurricane Sandy: Short-Term Emergent Citizens-Based Groups and Aid Mobilization Robert M. Schwartz, Terrence M. O'Sullivan, Chih-Hui Lai The University of Akron

Project Summary

Hurricane/Superstorm Sandy (October 2012) will likely be the second most expensive weather disaster in United States history, behind Hurricane Katrina in 2005. It is very common for citizens and survivors to initially respond to a disaster before established organizations such as local emergency management personnel, FEMA, and the American Red Cross can aid victims. Following the typology from the Disaster Research Center, examining the task and structure of established, expanding, extending, and emergent groups, this research will examine ad hoc and emergent citizen groups that responded to Hurricane Sandy. In the past, many of these informal groups were mobilized by more traditional means of communication such as in-person or by land-line telephones. However, nowadays many communicate by cellular telephones, smartphones, texting, and social networking websites, including Facebook and Twitter.

This study examines the mutual aid and disaster relief by these new citizen groups, along with their collaboration with extending and established groups such as community organizations and faith-based organizations. The research will (1) identify these emergent groups; (2) study their communication methods and their collaboration with other agencies; and (3) describe the type of aid distributed and the roles of these groups in disaster response. Two primary methods will be utilized with the first being field research with interviews of group coordinators and other volunteers. Second, communication media such as Facebook, Twitter, blogs, and other online forums will be retrospectively analyzed for content. The expected results of this study could help establish how new forms of emergent groups aided with new communication technology can enhance community response and recovery which could lead to more resilience for future events.

Intellectual Merit

Analysis of Sandy will help shed light on new, emerging models of citizens' disaster communication, collective motivation for self-help, cooperation, mobilization, and synergy among flexible and adaptable, laterally organized emergent, hybrid (straddling emergent and extending), and extending groups. By uncovering the importance of utilizing technological affordances in disaster response, this study provides a venue of future research on the interplay between civic and technological infrastructures.

Broader Impacts

This project has significant broader impacts on society in regard to disaster preparedness and response. Some of these can be educational along with aiding special populations such as the elderly or physically challenged after a disaster. The discovery of how emergent citizen efforts interact with the affected communities in equipping them with the ability to respond and become resilient can illuminate the interdependence of various levels of social structures. Ultimately this

may lead to insights about how citizen groups can better complement and maximize future aid from other established and expanding organizations such as FEMA and the Red Cross.

Methods

This project employs a *mixed-methods approach*, consisting of *qualitative case study* and some preliminary *quantitative analysis from field data*. Data was gathered from two primary sources: 1) field interviews and 2) internet (emergent groups' websites, blogs, online discussion forums, Twitter, Facebook). – From the field data, participants in the emergent groups and cooperating partners from extending organizations was examined and investigated the primary ways in which they participated and organized through: 1) primarily electronic coordination (online, Facebook, Twitter, etc.); 2) mixed-mode coordination (electronic and in-person at relief sites or Pods); and 3) primarily or exclusively volunteers who joined at PODs (points of distribution). The online data was gathered from retrospective analysis of the Twitter feeds, related Facebook and other internet interaction, which was used to identify the temporal development of the activities these groups were involved in and the relationships among collaborating groups. Ultimately, from these field and online data, a preliminary network was constructed from the connections among those groups and individuals.

Because of the nature of the emergent, ad hoc citizen organization and participation, much of the potential data and availability of informants was ephemeral. The broad scope (and apparent partial overlap) of the various extending and emergent aid groups' efforts during and after Sandy makes it impossible to systematically survey all groups without both greater resources (such as with a follow-up study), but it will be possible to capture ephemeral data on contacts and history of a good portion of what occurred in the immediate days after the disaster, and be able to use that for later, more systematic surveys.

The main purpose of this research is to seek *qualitative* answers on how Hurricane/Superstorm Sandy emergent citizen response worked. The additional purpose was to determine preliminary *quantitative* data on the breadth of these efforts. We used snowball sampling through which initial informants lead us to additional informants. The first priority was identifying key informants and groups that were involved in the early communication, organizing, coordination, assessment, and delivery of emergent disaster aid, and secondarily those who joined later in the process. Preliminary identification of contacts/informants and key operational sites started with traditional media (news reports), new media (emergent groups' websites, email contact, blogs, online discussion forums, Twitter, Facebook), and word of mouth. A list of potential primary informant contacts within emergent and extending groups was assembled, and the research team contacted informants and conducted field interviews that lead to other additional informants and data.

The data was collected from interviews with people involved in what has been determined to be the two key social media-enabled emergent groups: Occupy Sandy Relief and People's Relief, and other major extending group partners that were enhanced by social media such as Red Hook Initiative, the Church of St. Luke and St. Matthew, and Saint Jacobi Church.— Additionally, the interviews uncovered other cooperating and coordinating extending groups working in the Rockaways, Red Hook (Brooklyn), Coney Island, and Staten Island—specific physical

communities that were most affected by Sandy, and among the biggest recipients of emergent group assistance. This field data collection was supplemented with the analysis of these groups' online activities, including their websites and accounts on Facebook and Twitter. Nonetheless, the research was not limited by the geography, since many of these aid efforts were coordinated from central organizers and distribution hubs (such as the "Occupy Sandy" group's three hubs).

Preliminary Results

The research team has made three site visits to the New York metropolitan area and coastal New Jersey, and examined a variety of relevant new and old media data. Transcriptions of the field interviews have been completed and data analysis is in progress.

Collaborations

At this point, this team is working on our own. We are currently exploring collaboration with other researchers on iterations of this and future projects.