Challenges of collecting survey data on the Mississippi Gulf Coast after Hurricane Katrina: an in-depth interview study of survey team members.

ABSTRACT

The purpose of this paper is to offer a brief description of the unique context faced by a team of researchers collecting survey data on the Mississippi Gulf Coast four months after Hurricane Katrina (see Swanson et al. this issue for more information on the larger study). Based on in-depth interviews with survey team members, we discuss several challenges faced during data collection: locating subjects, soliciting subjects' participation, and collecting completed surveys. We conclude by discussing the methodological implications of these challenges.

INTRODUCTION

Although studies of disasters and their aftermath usually include a discussion of methods and data, few studies have examined the actual process of gathering data after a disaster (for an exception see Killian 1956/2005). In the area of disaster research, there is a growing focus on methodology. Researchers recognize that the context of a disaster and its aftermath can pose unique methodological challenges to a study. For instance, the difficulty of recruiting subjects and guaranteeing the safety of data collectors may be heightened (Knack et al., 2006). As a recently edited volume on the methods of disaster research notes, although the actual methods used by disaster researchers are not unique, their application in the field needs to be better studied and understood (Stallings, 2002).

The purpose of this paper is to offer a brief description of the unique context faced by a team of researchers collecting survey data on the Mississippi Gulf Coast four months after Hurricane Katrina. The NSF-funded study had two objectives:

1. to gather pre- and post-Katrina information on housing and population; and

2. to distribute to coastal residents a self-administered, 115-item questionnaire to collect retrospective information on the roles that social and kinship networks played in sustaining a respondent's well-being after Hurricane Katrina (see Swanson et al. this volume for specific information on the NSF-funded study and preliminary analysis of results).

Over a one-week period in early January 2006, the team of researchers went door-to-door handing out questionnaires and arranging with respondents a time to return for the completed questionnaire. In doing so, they had to 1) locate subjects on designated blocks and 2) gain subject's consent to participate. Both of these activities posed unique challenges to team members as described below.

METHODS

The data discussed in this paper were collected via in-depth interviews conducted by the two authors with eighteen members of the NSF-funded research team after the primary data collection period for the NSF-funded study was over. This interview study was designed to better understand the subjective experiences and challenges faced by the survey team members who gathered data in a disaster context. The NSF-study research team consisted of twenty-one researchers, two of whom were the authors of this paper. After receiving IRB approval, the two authors approached the other nineteen team members by phone or in-person requesting permission to interview them about their experiences in the field during data collection period of the NSF-funded study. Of these nineteen team members, only one could not be scheduled for an interview. All interviews with NSF-study research team members who agreed to participate took place between late January and March 2006. Depending on the team member's location, the interviews were either done in person or by phone. This paper also draws on the ethnographic observations of the authors, both of whom were members of the research team.

CHALLENGES OF DATA COLLECTION

Although the following list of challenges is not exhaustive, it does encompass some of the major issues with which the research team had to deal.
Locating Subjects. One unique challenge of doing a survey in a disaster zone is that the disaster often dramatically changes the landscape such that normal navigation and standardized procedures become problematic.

For example, team members were given a list of census blocks and instructed to systematically locate and give questionnaires to residents still residing in those blocks. First, arriving at the designated area was problematic in that the hurricane had destroyed one of the main arteries into the study area--parts of HWY 90 and the Bay of St. Louis bridge. As the project's "home base" was by necessity located in Biloxi, at one of the few hotels still operating, the drive to the Waveland/Bay St. Louis area took much longer than usual, leaving less time to canvass the blocks. Teams only went out during daylight hours due to safety concerns. Once in the study area, missing street signs and other landmarks made locating specific blocks in the study area difficult. Several team members reported relying on local residents to orient them. Team members might also finally locate a designated block only to find that no structures remained standing. Although some pre-canvassing of census blocks was done in November prior to the start of data collection in January, the short time frame to implementation of the NSF-study and the large number of census blocks in the sample made pre-canvassing every block unrealistic.

Second, if structures were found, canvassing a block and finding subjects could be problematic. Team members had to be constantly aware of hazardous field conditions--debris, ruptured gas lines, dogs, and insects, among others. Often team members had to scout around houses or other properties to locate possible temporary housing such as FEMA trailers which were not always visible. The unusual experience of walking on foundations, peeking into windows for clues about whether a house was occupied, and the general need for a more vigorous "search" of the property to find trailers or tents introduced a heightened concern among the volunteers that they might be invading people's privacy. Some team members suggested that this led them to experience emotional exhaustion and some distress (1).

Team members were also instructed to call back to each potentially habitable house two additional times if subjects could not be initially located. Although standard procedure, team members acknowledged that a lot of time was spent going back to houses of unclear habitation status.

Gaining Subjects' Participation and Consent. Once subjects were located, team members had to solicit their participation in the survey. As Lindsay (2005: 120) argues, while this process is usually presented as objective and predetermined, in reality it is "shaped through interactions with participants in the field." By January 2006, the relationship between coast residents and local, state, and national governments and organizations was becoming strained. Residents had filled out multiple forms for FEMA and their insurance companies for, in some cases, very little return. Several team members reported that residents seemed "formed-out" and were less likely to participate if they thought the survey was connected to the state or national government. Although the written protocol instructed the research team to simply introduce themselves as representatives of the University of Mississippi, many team members found that additional clarification was needed to convince potential subjects that the team was not associated with any other state or federal agency. While most survey research precedes under the assumption that official sponsorship by the government increases survey participation, a context in which "officials" have been discredited may require more careful analysis of this assumption (Quarantelli 2002). On the other hand, team members also indicated that some individuals expressed gratitude that someone was listening to them. They may have seen the survey as an avenue to voice concerns they believed no one else was heeding.

One event that may have created more support for the survey was a WLOX TV news spot done on the project toward the middle of the week. Several team members reported that residents indicated having seen the spot and wanted to participate. At least one team member reported that one subject who had refused to participate the day before, changed his mind due to the TV spot. In a context where there is a high level of suspicion of people asking them to fill out forms, TV spots could help by clarifying researchers' goals and affiliations even before they knock at the front door (for an alternative view see Quarantelli 2002).

Another barrier to gaining participation according to team members was that many residents indicated a lack of time to fill it out due to rebuilding. Most team members found that the original plan of locating subjects in the morning, handing out the questionnaire, and picking it up several hours later was not going to be feasible due to the length of the survey itself (approximately one hour to complete) and the fact that residents had more pressing issues to address. However, they also found that if they arranged with a respondent to pick up the questionnaire the next day, giving them more time to fill it out, the respondent may or may not be there and may or may not have left the questionnaire in the designated spot. One team member gave a survey to a man whose home had been reduced to a slab. He told the team member that he would leave the completed survey on a chair sitting on the middle of the concrete foundation, but did not end up doing so. The physical destruction of the hurricane removed some of the "normal" places people might feel comfortable leaving a survey and made arrangements for retrieval complicated. One positive aspect of residents' rebuilding, however, might be that more residents were home during the day light hours instead of at work.

Although team members were very cognizant of the need to get people to participate and to follow standardized procedures, they were also aware of the emotional, psychological, and physical issues with which coast residents were coping. Several team members reported not wanting to push subjects to participate given the scope of what they had already been through. Team members stated that they wanted to be as little of a burden as possible to residents, to not interrupt their work and add
to their distress. Because of this they did not try to "press" or "convince" residents to participate after an initial refusal (2). At the same time, some of the team members reported that building rapport required a careful negotiation of the assumption that surveyors should be completely objective, and value-neutral observers. They explained that some of the coastal residents wanted to discuss controversial and pervasive political issues, especially the response of FEMA and insurance companies to the plight of residents affected by Katrina. Team members who obliged felt that it increased the likelihood that people would participate.

CONCLUSIONS

Overall, team members reported that they felt they were fairly successful in locating subjects and gaining their participation. At the same time, the experience could be very frustrating and emotionally draining. They reported being careful to follow the standardized rules of the research project, while modifying the rules as needed (3).

This study contributes to the small but growing literature on the process and context of collecting data after a disaster by suggesting several methodological areas that warrant consideration. It is important to understand in what ways the physical destruction of a landscape may require adjustments to sampling techniques. For example, if time does not allow more thorough scouting trips to the area to confirm where residents and houses still remain, research teams may need more training on how to find neighborhoods and streets no longer marked by street signs or other landmarks. It is also important to consider and investigate how this physical destruction impacts the physical and emotional experiences of research team members in such situations. Last, although it is often argued that potential subjects are willing to participate in research studies after a disaster (Quarantelli 2002; Bourque, Shoaf, and Nguyen 2002), it is important to further explore how disaster conditions affect individuals’ likelihood to participate in a survey and what techniques researchers actually use to gain informed consent and participation in these situations.

REFERENCES


Lindsay, J. 2005. Getting the numbers: the unacknowledged work in recruiting for survey research. Field Methods, 17: 119-128.


Footnotes

1. The subjective or emotional experience of the researcher is an issue usually glossed over or treated in discussions of "bias" in reports of survey and other "objective" research studies. For some exceptions, see Shumsky (1962), Glass and Frankiel (1968) and Lindsay (2005). As Glass and Frankiel (1968) note, "the notion that as researchers we can turn off our emotions ... is a heritage which the social sciences have carried along from the physical sciences ... it is a view which does not well agree with what we know of human behavior." (P. 78)

2. Quarantelli (2002), in his history of the Disaster Research Center (now at the University of Delaware), notes that decisions such as whether to press for a particular interview or to seek information about some sensitive topic were made in the field and based on the team's judgment of how pressing the subject would affect the team's reputation and ability to make future contacts (p. 109).

3. For example, although there was a written protocol that the principle investigators gave the team members to read to potential subjects, introducing the survey and requesting consent to participate, team members quickly learned that reading the protocol word by word was problematic. For example, one potential subject told a team member that she did not need to
keep repeating the word "Katrina" as everyone knew what the name of the hurricane was.

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