In Their Own Words: Utilizing Weblogs in Quick Response Research

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Abstract

Weblogs (blogs) emerged in the late 1990s in the form of online diaries where individuals maintain accounts of their day-to-day experiences. However, the usefulness of weblogs in hazards research remains to be investigated. The purpose of this chapter is to reflect on the extent to which the current views portrayed in the literature, with regard to the effects of social vulnerability on disaster response, may be applied in the context of the Hurricane Katrina disaster as captured by weblogs. It is not to provide a comprehensive analysis of vulnerability and response following the disaster. Preliminary findings demonstrate some feelings of discrimination and inequalities were apparent but did not appear to be widespread. This suggests that, perhaps, issues such as gender equality and the needs of disadvantaged members are being adequately supported in certain contexts. The results also highlight the potential of new data sources such as weblogs for quick response research and how they may provide significant insights that complement or substitute traditional research methods that may not be feasible to conduct during the immediate aftermath period.

Keywords: social vulnerability, weblogs, quick response, Hurricane Katrina, research methods

Emerging out of military concerns following World War II, it is not surprising that natural hazards research in the United States has "emphasized order, social control, and predictability . . . consistent with conservative functionalist approaches in sociology of the 1950s" (Bolin et al. 1998). Here, disaster events have been traditionally discussed objectively as natural occurrences that impact human systems (Bolin et al. 1998). Individual victims are then "objectively constituted by common exposure to an environmental force and differentiated . . . only by quantitatively measured 'background characteristics'" (Bolin et al. 1998). It is suggested that this "gender-neutral stance" hides the true organization of social life (Enarson and Morrow 1998) and may distort the individual gender-specific experience of men and women.

With an increased interest in gender studies since the 1960s in many industrialized nations, it is interesting that most research in this area continues to arise from disasters in the developing world. It remains underanalyzed in the context of the United States, with many studies only introducing sex as a binary opposition to contrast the differences of men and women with respect to behavior or psychological stress (Bolin et al. 1998; Enarson 1998). Those studies have largely focused on the issues of women in disasters; the gendered experiences of men have been ignored by male and female researchers, not only in the United States, but throughout the world (Enarson and Meyreles 2004). Nevertheless, a review of existing literature implicitly suggests that differences in gender shape the responses between men and women both "within and outside formal response agencies" (Enarson 1998).

The underlying objective of the present chapter is not to introduce a grand theory or methodology concerning how the gendered experience in disaster situations needs to be accounted. Rather, the purpose of this chapter is two-fold. First, it emphasizes the need for a more holistic and balanced approach to gender analysis as it relates to social vulnerability and disaster risks. Second, it acknowledges the use of weblogs and additional online materials as valuable sources for studying and discussing the role of gender analysis and to document the degree to which these resources augment traditional formal surveys and interview techniques in hazards research. The emphasis of this research is, therefore, placed on providing a balanced view of the experiences of men and women in disaster situations in their own words more than on providing a comprehensive account of all gender aspects pertaining to disasters. To exemplify how this balanced view is to be accomplished using weblogs, a preliminary account of how gender influences vulnerability, response, and recovery in the context of the disaster induced by Hurricane Katrina on the Gulf Coast in 2005 is presented. The investigation leading to this account has been guided by the following two questions: (1) Have ongoing disaster response efforts in the Gulf Coast promoted social integration and support of disadvantaged groups? and (2) Have these efforts promoted gender equity?

This chapter has been structured to reflect the approach we have adopted in utilizing weblogs to seek a balanced view of the gender dimension in the context of the Hurricane Katrina disaster. We first review contemporary work on gender and disaster risks and highlight evidence from the literature in support of our argument regarding the need for a more balanced and holistic gendered analysis. Next, we present the methodology used to survey weblogs and additional internet resources produced during the immediate aftermath period following Hurricane Katrina, based on the above two guiding questions of our investigation. We then present a synthesis of the findings of our investigation, followed by a general discussion of integration issues of gendered perspectives and social vulnerability in disasters.

For the purposes of contextualizing subsequent discussions in this chapter, some important definitions need to be highlighted. "Ongoing disaster response efforts" refers to those activities in the postdisaster phases of recovery and reconstruction. The recovery phase is usually characterized by those activities that allow for the lives of individuals to return to normality, including rebuilding and allocating emergency resources (Fothergill et al. 1999). Though there is some overlap, the recovery phase precedes the reconstruction phase, in which the long-term reconstruction of the community takes place; this may include the processes of rebuilding, replacing lost infrastructure, obtaining financial assistance, and finding permanent housing.

Corresponding Literature

Questions related to disaster response and recovery efforts have been largely limited to areas located within the developing world where marginalized groups are realized to have an "increased and unrecognized burden and suffer higher levels of mortality and morbidity in disasters and emergencies" (Fordham 1998). These impacts are then contrasted with those in developed nations and expected to be proportionately less due to the presence of existing vulnerability reduction programs, including health care systems, high standards of living, political rights, and antiviolence sheltering systems (Fordham 1998; Enarson and Meyreles 2004). Indeed vulnerable populations may be (somewhat) buffered through a state-controlled benefit system in more developed nations, but research suggests that a similar model of disproportionate impact also exists due to underlying social structures that reinforce pre-existing divisions (e.g., gender, class, and race) at all stages of a crisis situation (Fordham 1998). A serious gap seems to exist with respect to this area in disaster response and recovery in more developed nations.

Living the Disaster

Despite the scarce literature related to developed nations, our review of available studies recognizes some patterns relating to issues of emergency response and recovery efforts, including questions of social integration, support, and gender equity. With respect to the responses of individuals living the experience, Enarson and Scanlon (1999) suggest that little research has been done on understanding evacuation or other disaster actions as explicitly "gendered social experiences" (Enarson and Scanlon 1999). Of the literature that has described this, (e.g., Fothergill 1996; Anderson and Manuel 1994; Johnston and Johnson 1989), studies found significant gender differences in perceptions of risk activities before, during, and after the disaster, as well as in reactions to stress. Typically, "these differences are attributed (whether explicitly or implicitly) to gender role expectations and socialization" (Alway et al. 1998). In their study of Canada's Red River flood of 1997, for instance, Enarson and Scanlon interviewed Red River Valley couples who both evacuated and had caregiving responsibilities for others to capture a "his and her" disaster experience (Enarson and Scanlon 1999). After analyzing the stories they obtained, the researchers concluded that the men and women were more alike than different before, during, and after flood evacuation. This was largely due to a shaping of the experience by the local flood subculture, as well as other socioeconomic factors (e.g., class, ethnicity, etc.). When differences did arise, however, the researchers found they were deeply embedded in gender differences, "not only in gender-segregated disaster work but in gender power" (Enarson and Scanlon 1999), an inequality that arose due to embedded gender relations that privileged the voices and actions of men in a crisis situation (Enarson and Scanlon 1999).

Emergency Response Agencies

In emergency response, women tend to work outside of the boundaries of formal disaster agencies. Research in the United States, for instance, has described the efforts of women in forming short-lived coalitions to respond to social needs of communities (e.g., Neal and Phillips 1990; Enarson and Morrow 1998). These groups have been generally found only to appear in the case of widespread disasters that dismantle the pre-existing social structure and challenge the existing disaster relief network's ability to adapt to meet the needs of the community in crisis (Wilson and Oyola-Yamaiel 1998). More often, women organize into groups based upon pre-existing informal network structures. These less formalized groups have been largely discounted or ignored by industry, the media, and public policy makers, however, due to perceptions of group members as only "concerned mothers" or "a bunch of hysterical housewives" (Neal and Phillips 1990).

A gendered division of labor also appears to indirectly affect the roles of men and women in disaster response and recovery efforts. Since women's roles have been

traditionally related to caring and nurturing, their use as a resource in emergency management situations at all levels has historically been overlooked. Even when women participate in emergency management positions, they tend to reside outside the "old boys network" and "their ideas may be overlooked or perceived as suggestions rather than orders" (Scanlon 1998). This is potentially problematic since those male-dominated groups, viewing the disaster through a male-tinted lens, may fail to address specific needs of women (Enarson 1998). Because disaster planners are generally male, it may be easily assumed that women's time and emotion may be utilized for work as caregivers, as "much as they assume male physical strength, access to tools and home maintenance skills" (Enarson 1998). Because these assumptions have not generally been articulated or empirically tested, researchers need yet to consider these areas in order to completely understand how the gendered division of labor affects the emergency response and recovery processes.

Gendered Experiences of Men

A review of the literature imparts an image of a disaster in which women face increased vulnerabilities because of the "arrangements of societies that result in their poverty, political marginalization and dependence on men" (Anderson 1994). This is of notable importance, but, by its very nature, research pertaining to gender should reflect differences between and among women and men. Because a greater number of female researchers have heeded previous calls to research pertaining to the "gendered terrain of disaster," the gender-specific experiences of men have, until recently, remained largely unexplored (Enarson and Morrow 1998; Enarson and Meyreles 2004).

Interest is growing; since the late 1990s, a number of researchers have begun to explore the gendered experiences of men. These perceptions are seen in couples-focused research, including Alway et al.'s study of gender and disaster among heterosexual couples before, during, and following the Hurricane Andrew disaster, (Alway et al. 1998) and Enarson and Scanlon's (1999) study of the gendered patterns of flood evacuation among heterosexual couples in Manitoba's 1997 Red River Valley flood. Interviews of 100 Australian farmers, men and women, were also conducted separately by Stehlik et al. in order to identify "themes of difference" and conclude that gender is still a relevant variable in studies of the social impacts of disaster (Stehlik et al. 2000).

Further, the studies that have explored the gendered experiences of men predominately relate to those experiences of men in developed nations. According to Enarson and Meyreles (2004), one significant exception may be found in the developing world, the investigation by Enrique Gomáriz. Though this investigation analyzes

the situation of men only as a part of a "more profound analysis of women's vulnerabilities and capacities" (Enarson and Meyreles 2004), it found men were more likely to lose their lives following the Hurricane Mitch disaster due to a gendered division of labor that "accorded men risky places, tools, and tasks" (69).

Weblogs versus Traditional Data Collection Methods

The present research draws upon the personal experiences of survivors and relief workers as they were published on the Internet. The adoption of an Internet-based survey to carry out this investigation was motivated by two primary factors. First, financial constraints prohibited a "quick response" trip to the Gulf Coast region during the immediate aftermath phase following the hurricane. Secondly, we had an interest in attempting to explore nontraditional methods in capturing the gendered experiences of individuals following a disaster situation.

Compared to a decade ago, researchers now have instant access to vast quantities of information about our world: from disasters and weather events, to demography, economic and social conditions, and culture. New Internet resources, including Wikipedia and online articles, supplement and (oftentimes) replace not only the traditional browsing of library shelves but also the way "facts" are collected and documented. Although information found in these resources is often intertwined with commentaries, personal notes, and other kinds of "noise" that present a challenge for researchers, valuable information may be obtained. The potential for utilizing the Internet as a tool for data collection, analysis, and dissemination is immense and provides some advantages over traditional methods of data collection (i.e., face-to-face interviews, distributing questionnaires, etc.). This is particularly valid in such cases as quick response research when data are often of ephemeral nature and need to be documented in a time-sensitive manner.

Researchers have documented some of the problems associated with more traditional social science research methods. This includes Taylor (2005), who noted problems associated with very small sample sizes, nonrepresentative samples, the timing of research studies, biases associated with the experimenter and data collector, and applicable costs. Several of these problems may be resolved through what Taylor (2005) refers to as Internet-Mediated Research (IMR). For example, assembling a large and diverse sample may be less difficult and costly utilizing online resources (e.g., electronic mail programs and online survey techniques). Opponents of IMR often note the technique's difficulty in controlling the study environment, the self-selected nature of participant sampling (and hence increasing the risk of obtaining a nonrandom, nonrepresentative sample of the general population), as well as an inability to directly monitor individual participants. However, many of these aforementioned weaknesses may be avoided by taking

precautionary measures. Further, these perceived disadvantages are likely advantages in some studies, including the present research in which an unstructured, uncontrolled narrative of the disaster experience is required to obtain a more insightful account of differences and similarities as individuals experienced the immediate impacts of a disaster.

Research Methods

In obtaining the data, "first-hand" and "second-hand" experiences from relief workers were gathered from 15 weblogs, 4 published stories in newspapers and magazines, and 3 published accounts from aliveintruth.org (an all-volunteer, grassroots organization that maintains a publicly accessible database of direct oral and written accounts of those involved in the Hurricane Katrina disaster). First- and second-hand accounts from survivors were drawn from 12 weblogs, 24 published stories from aliveintruth.org, and 6 published accounts from newspapers and magazines. Due to the time sensitive nature of the data, stories were collected in the immediate aftermath of the Hurricane Katrina disaster during the period of October to December 2005, with additional updates obtained through March 2006. The research attempted to minimize the use of second-hand accounts whenever possible to account for, as much as possible, the direct experiences of individuals. Data were primarily obtained using the key phrases "personal experience and Katrina" and "first hand experience and Katrina" in a search of weblogs and websites using Google's blog search engine (http://blogsearch.google.com/) and the Google search engine (www.google.com). Publications were selected from those found by the Internet search engines and read for relevancy. After determining whether the content directly related the experiences of Hurricane Katrina survivors and relief workers, we then performed a more detailed reading in which the writings were carefully examined for particular key words and phrases, including "prejudice," "gender," "relief," "discrimination," "equity," and "equality." Specific content related to the treatment of survivors in shelters, by volunteers, and their perceptions of treatment, including that demonstrated by the military and by community members in areas where survivors were evacuated, were also noted to determine the existence of patterns across the groups. Stories were drawn from both men and women between the ages of 18 and 90 years old, from a variety of socioeconomic classes; individuals were primarily of either African American or Caucasian race. Because much of the data was obtained from Internet weblogs, it is possible that this sample does not represent the entire population of the Gulf Coast region.

Because the research has drawn directly upon the written accounts of individuals, and (to a great extent) their own words, which color and enhance their experienc-

es, the following reflections will often utilize the exact language of individuals in order to attempt to reproduce these experiences in the context of disaster response, relief, and recovery efforts. In utilizing these stories, we have only included emphasis in brackets where necessary to provide clarification. As it was stated or described in the source, through words or images, the gender, approximate age, and race of the individual (if known) has been included in addition to the individual's name. This has been done to better establish patterns across the various disadvantaged populations.

Reflections on Hurricane Katrina

In reading and analyzing the first- and second-hand experiences of volunteers and survivors of Hurricane Katrina, several patterns appeared evident. The stories published by and about individuals volunteering with smaller relief agencies generally showed enthusiasm in helping hurricane survivors. These accounts appeared to show no bias or discrimination toward individuals of various economic, social, or gendered groups; it appeared that individual volunteers and organizations, especially smaller ones from outside the region, were attempting to best support these disadvantaged groups.

Relief Workers' Experiences

In attempting to garner assistance to survivors Melissa1 (female) states on Monday, September 5, 2005:

> It is incumbent upon ALL OF US to assist in whatever way we can . . . Not all of us can give money, or volunteer a lot of time but every one of us can elevate our thoughts above issues of race, poverty, hopelessness and helplessness to give these displaced thousands less resistance while they rebuild new lives for themselves in the wake of Katrina . . . The law of reciprocity works like this: The Folks of the South, for better or worse, have always been a people, color is no barrier here, of outstanding hospitality. Some may have had experiences as individuals where this does not bear out. As a generality, a broad sweeping stereotype, a categorization—the South has been the Home of Hospitality. Therefore it is our job to reciprocate in kind and be hospitable to those who are in need. (McGuire 2005)

Though Melissa was not directly involved in the volunteer efforts, this same outlook was seen in writings from other, directly involved individuals, including in an account by Ziggi, a volunteer working to provide wheelchair repairs in Baton Rouge, Louisiana, following the disaster. After returning on September 28, 2005, Ziggi writes:

> It was an amazing experience that left a lasting impression on me. I had all along thought of this disaster in terms of this massive and destructive act of nature. It is in fact a much different thing. It is very much about people. The clients we worked with were unbelievable. All were people with a disability or in many cases multiple disabilities . . . All were kind to each other and showed concern, helped each other, had patience, and made the best of it. (Ziggi 2005)

Jon M. (male, Caucasian), a registered nurse and International Medical Corps volunteer assigned to the St. Charles Parish Health Center following Hurricane Katrina noted that the

> hardest challenge to overcome in any humanitarian effort is the personal feeling of not being able to do enough . . . The successes are easily measured by the smiles and true gratitude given to us by people who have lost everything. This, after providing them with what seems to us as very little but to them is of dire importance. (Mason 2005)

Some relief volunteers appeared to go beyond their responsibilities. Caroleeena (female, Caucasian) attempted to garner support from the online community, to get Alan, a hurricane survivor living in a Raleigh, North Carolina, shelter, employment as a carpenter: "He is driven to create a new life here [in Raleigh]. He wants work. He strikes me as someone who would work his ass off. If anyone has work, I would be happy to put you in contact with him" (Caroleeena 2005).

Ginger (female, 33 years old) and a male companion, Av, from Alabama, ignored requests by the Red Cross telling individuals not to bring supplies into the area, and instead write checks,

> As we found with other hurricanes, this really doesn't work so well if you are already in the area and are able to help, because the Red Cross can't get to everybody and well, neither does the government. If you live in Seattle and want to help hurricane victims, then yes—write a check. But if you live in a neighboring state or are far enough away so that you have the means to bring help to people, that's really a good thing. People suffer if not. I know the Red Cross would hate to hear someone say that, but that's been my experience. Neighbors get there, and know the area, best. (Ginger 2005)

Having previously experienced hurricanes, Ginger and Av directed supplies to smaller communities, including Biloxi and Ellisville, Mississippi, as they "heard after Hurricane Ivan that smaller, less-known communities hurt more because aid

wasn't directed at them at all" (Ginger 2005). In Ellisville, these two relief workers were escorted by the local police to a school to distribute supplies:

> While we pulled up to the school, he [the Ellisville police chief] told the people there on his speaker to get in a line to receive supplies. No sooner had we turned off the engine now that we were in an adjacent parking lot, but there were more than a dozen cars already in line. We gave them everything we had. They were *so* appreciative. It was like being in a dream where a hundred things are going on but you just stand there watching, not knowing what to say. All I could make out was "God bless y'all." Unbelievable. The police chief said to everybody in line, "I want y'all to know this isn't the government, this isn't from FEMA. These people drove here from Alabama." Nobody from the government or the Red Cross had been there [by Saturday, September 3rd]. We left and I rolled down the window and said, "do y'all need us to be here again tomorrow?" and he said that absolutely, they do. (Ginger 2005)

Other relief volunteers related similar experiences, including one relief worker who "escorted an evacuee family (two parents, five kids) around the [Astro] dome to sneak them in so they could search for their relatives" (Ingold 2005a) and a nurse who "put out an SOS for a computer" in her attempt to better organize patients at Kelly Air Force Base in San Antonio, Texas (Brizollara 2005).

Not all the experiences of volunteers were positive. Nearly all were distressed about the amount of disorganization they encountered when trying to deliver their services to those in need. Kate I. (female, Caucasian) a volunteer working in the Houston Astrodome reported in a post dated Thursday, September 8, 2005:

> I'm so sick of how rule-based we've become, so obsessed with bureaucracy. It's completely nuts and proving to add more disaster to existing disaster. Even the Red Cross falls prey to The Rules, but at least they have an excuse since they are volunteer-driven. (Ingold 2005b)

This attitude is continued in her report dated Friday, September 9, 2005:

> Speaking of FEMA, they're busy making life more difficult for many here in Houston, just as the Red Cross and the local community are getting more and more organized and helpful to evacuees. Part of the parking lot has been cordoned off for FEMA, who seem much more concerned with snacking and looking important in their secluded 2nd floor hallways (no longer open to evacuees, btw) than actually working. All of the makeshift federal offices at the dome close down precisely at 5, regardless of how

> many people are still standing in line waiting (often for hours and hours) to talk to someone about housing, unemployment, insurance, or whatever the hell FEMA is in charge of. In order for the bureaucracy to maintain itself it must obey all the rules, and the rules say that they work from 9 to 5 and not a minute later, no matter the need or situation. (Ingold 2005c)

A second-hand account in a weblog from Benjamin P. (male) of Provo, Utah, provides a similar perspective. According to John D. (male), in order for his friend to be a volunteer with FEMA, it was necessary for him to "complete this class before being sent into the disaster area." The schedule for the first week of "this class," included training in sensitivity issues. The first week of the course concentrated on diversity awareness, harassment awareness, profiling avoidance, GLBTQA (gay, lesbian, bisexual, transgendered, questioning, and asexual minorities), and liability issues. It included an orientation to a variety of topics that appeared to educate individuals on promoting social integration and equitably supporting disadvantaged groups, including providing volunteers with basic Spanish language instruction and awareness of sexual harassment issues, training to prevent "oppression and discrimination toward orientational minorities," and a "one-hour written test to screen volunteers for Islamophobia." It is worthwhile for all volunteers to undergo this type of training to ensure the equitable delivery of goods and services, but this writer found the amount of training to be excessive, concluding that "bureaucracy always sucks. The government is so bloated that it takes forever to do anything" (Peisch 2005).

This attitude appeared especially prevalent among individuals working as volunteers within larger organizations, including Major John (male, Caucasian), serving in the National Guard, and Brian B. (male), a Red Cross volunteer. Major John writes:

> The biggest problem was trying to unite "54 little armies" . . . under a single command, and with a single direction. Each State's command authority (Governor and Adjutant General) was the ultimate say so on when units came and went. When we ended up with too many transportation units, for example, some were withdrawn by their State. We struggled to keep up with what units were present and who was commanding or supporting which units. (Major John 2005)

Both men related they felt a "sense of purpose and significance" (Brian B. 2005) in doing menial tasks in order to help others in need, but Brian B. specifically discussed the need to ensure proper organization within the relief agency, as well as other agencies (e.g., FEMA, AFL-CIO, and HUD), in helping individuals rebuild their lives:

> Quite frankly, on an organizational level, the efforts. . . left something to be desired. It's not that we [the relief workers] didn't want to help, and it's not that we didn't have help to offer, but the actual process of delivering that help was chaotic . . . My last day at the shelter [September 16, 2005] was the FIRST day it was visited by a FEMA official. It was Wednesday or Thursday of LAST WEEK [September 14 or 15] when a representative of the AFL-CIO showed up. (Brian B. 2005)

This attitude was not lost on those who remained in the Gulf Coast Region, especially within the city of New Orleans, awaiting immediate relief and evacuation after the hurricane made landfall. Upon his evacuation of New Orleans, Jordan F. (male) a New Orleans resident and editor of Left Turn, an activist publication, described the scene in one refugee camp on the I-10 freeway near Causeway:

> I traveled throughout the camp and spoke to Red Cross workers, Salvation Army workers, National Guard, and state police, and although they were friendly, no one could give me any details on when buses would arrive, how many, where they would go to, or any other information. I spoke to the several teams of journalists nearby, and asked if any of them had been able to get any information from any federal or state officials on any of these questions, and all of them, from Australian tv to local Fox affiliates complained of an unorganized, non-communicative, mess. One cameraman told me "as someone who's been here in this camp for two days, the only information I can give you is this: get out by nightfall. You don't want to be here at night."
>
> There was also no visible attempt by any of those running the camp to set up any sort of transparent and consistent system, for instance a line to get on buses, a way to register contact information or find family members, special needs services for children and infirm, phone services, treatment for possible disease exposure, nor even a single trash can. (Flaherty 2005b)

Survivors' Experiences

Besides observations about a lack of social integration and support, the stories of survivors reflected feelings of humiliation, anger, fear, and inequality, and had them questioning whether "the lack of support [by the government] was deliberate" (Homan 2005). Attending a conference in the French Quarter, paramedics Larry (male) and Lorrie Beth (female) found themselves in New Orleans after the storm came ashore. After one failed attempt to leave the city by bus, the paramedics, along with a group of 200 or so others, attempted to walk the Pontchartrain Expressway and cross the greater New Orleans bridge where they had been told

by a New Orleans police commander that buses would take them out of the city. They reported:

> As we approached the bridge, armed Gretna sheriffs formed a line across the foot of the bridge. Before we were close enough to speak, they began firing their weapons over our heads. This sent the crowd fleeing in various directions. As the crowd scattered and dissipated, a few of us inched forward and managed to engage some of the sheriffs in conversation. We told them of our conversation with the police commander and of the commander's assurances. The sheriffs informed us there were no buses waiting . . . We questioned why we couldn't cross the bridge anyway, especially as there was little traffic on the 6-lane highway. They responded that the West Bank was not going to become New Orleans and there would be no Superdomes in their City. These were code words for if you are poor and black, you are not crossing the Mississippi River and you were not getting out of New Orleans. (Bradshaw and Slonsky 2005)

Unable to remain in her house any longer, Carol Y. (female) spent five days at the New Orleans Convention Center awaiting rescue.

> In was hard, hard, hard out there in New Orleans because even the police got their families out ahead of time. The mayor got his family out ahead of time. Bush [the president] wasn't there so he don't know what the hell went on in New Orleans. The only thing he did was give the orders to shoot to kill. We not no animals. So I can understand you want to keep control of the people, but why have those people draw guns on children? Women with babies in their stomachs. Every time you look around we breaking and running, trying to get into the Convention Center and they're drawing guns on people like that. I mean, it don't make no kinda sense. It didn't, it really didn't. (Carol Y. 2005)

Debora J. (female, 48 years old) and her ten-year-old daughter remained in the city of New Orleans for five days without food or water. After seeing children and elderly people die, as well as murders and rapes, and feeling like a prisoner, Debora J. described the day when the troops finally came. Rather than a reaction of relief, however, she reported one of frustration and anger:

> [This experience] was the most horriblest experience I have ever seen in my life . . . on the fifth day . . . They fly in in their helicopters. The first thing they dropped into us was boxes of cigarettes. Not food. Not water. Boxes of cigarettes. Two hours later they drop us water. They dropped it. And half of it burst open cause they was so high up when they dropped

> it. Two hours after that they drop us some army food in a box we got to pour water in to heat up. We was hungry, we had no other choice. It [the experience] was horrible . . . I think the government failed us. I think the mayor failed us, I think the government failed us. I think our president failed us. They can't give us enough money to replace what they took. The can't. (Debora J. 2005)

Having no money and no working vehicle to leave the city before the storm, Antoinette Seven (female) and her family walked in neck-deep water to make their way to the convention center where they had been told that a bus would transport them out of the city. Here, Seven saw babies "piled up in the bathroom dead," a girl raped, and several men murdering the alleged rapist. All the while,

> the police lock us in there [the convention center] and pointed guns at us. They made us kneel and then lie face down while they held the guns over us . . . Babies was dying and I couldn't help. Old people was falling down dead. We told the police babies was dying and they said "So what? What the fuck can we do? They're dead." The news got us out. Not the National Guard, not the Mayor, not Blanco, the news people is the only ones who got us out. Channel 26 got me out. They got me out in they helicopter. Channel 26. The rest of them was there to kill us. (Antoinette Seven 2005)

These stories of injustice were not limited to the women and their families. Soldier Man (male, 46 years old, African American), Ed B. (male, older, Caucasian), and Larry (male) described the period of time they waited in New Orleans to be evacuated. All described feelings of fear and frustration toward law officials and other personnel. Waiting a "week, or two weeks" for a helicopter to evacuate him, even though he saw them flying around, Soldier Man related his belief that racism was prevalent among the immediate rescue workers:

> I can't believe, lived and born in America all my life, I can't believe how wicked people could be. I know there's a time coming for a change in this world because the people in America was racist, sir. We waited a mighty long time for a helicopter to come and pick us up. They was flying around . . . I served my country all my life. I never was a racist man. I love everybody. I work all my life in New Orleans, help anybody . . . white, black, Chinese, Filipino, Jew, because God had told us to love. (Soldier Man 2005)

Evacuated to the Superdome before leaving New Orleans for Austin, Texas, Ed B. describes his experience with some National Guard personnel:

> And so the next day, they got all these National Guard trucks outside, and the next day wasn't too bad because we just decided to stay outside [the Superdome]. The day after that, about twelve trucks are leaving. I walked over to one of the trucks and asked the guy, I said, "Are you leaving?" He pulled his gun out, he said, "Get away from the truck." National Guard. I said, "Whoa, wait a minute, man I'm just—I don't—" It freaked me out, I didn't know what to think. (Ed B. 2005)

Unable to reside within his apartment complex following the hurricane, Larry (male), his family, and a group of upstairs neighbors, made their way to the New Orleans Convention Center, where they found "nightmarish conditions"; he took it upon himself to confront individuals attempting to accost the group. As related to a volunteer, within a few days,

> word started to spread among the crowd that they weren't being rescued because they were all contaminated and were considered a threat to others. During the last night they were there, an explosion was heard nearby, the sky was full of smoke and they could see several fires burning around them. They had heard planes overhead. The people in the center believed that the US government was bombing the city to eradicate their disease potential. He decided that night that when daylight came he had to seek shelter elsewhere.

Finding an abandoned house, Larry went back to the convention center and got the rest of the group, they now numbered two men, three women, and thirteen children. He and the other man found an office building, previously broken into, where they found several bottles of water and food items from a vending machine, as well as a machete on the street. He and the other man then took turns "sitting outside the front door with the machete to be sure the women and children were protected." The following day, Larry's friend found a large lot filled with eighteen wheeler trucks, and the two men stole a truck and returned with their group to the Convention Center, where Larry was

> again [horrified] by what he saw, bodies around, most not even covered. Many of the people he approached were afraid to come with him. He estimated that maybe close to a hundred people finally left with them in the truck. They managed to get to a place where they saw planes landing and flying out. He said that their little group of eighteen along with about thirty others was put on a Navy jet. They didn't know where they were going until the plane was in flight. Then they were told that they were being brought to Austin. (Larry 2005)

Survivor stories appeared to generally support those conditions reported by the US media at the Super Dome and New Orleans' Convention Center, but some noted a disconnect in how the information was being conveyed, perhaps contributing to a lack of social integration and support in the immediate relief efforts. This included the "looter/finder distinction" in describing black and white individuals removing items from New Orleans' retailers immediately following the hurricane (McClure 2005). Reporting from the Houston Astrodome, Bookman (male, African American) writes

> The people of N.O [New Orleans] are being stereotyped by how they look & the things that happened prior to Katrina.. . . I just Want to let the world know . . . WE ALL AIN'T VIOLENT PEOPLE! That looting Stuff was a One Time Thing . . . Infact we were laughting (sic) at them also. (Bookman 2005)

These types of differences in media presentation were further reflected in the reports of several survivors and relief workers, one of which agreed with a friend writing:

> The media is the handmaiden of the devil. It is. There has been a tragedy of immense proportions in the United States; one which in geography, loss of life and economic impact dwarfs 9/11 [2001]. And true to form, every media outlet and every reporter are salivating at the opportunities for criticism, and the hope that some even greater catastrophe will befall those who have already suffered so much. (Sporklinger 2005)

An email written by Robert LeBlanc (male) was posted on several blogs, titled "The Positive Stories Must Get Out"; the author relays his personal experience in the immediate New Orleans' rescue operation:

> In my opinion, everything that is going on in the media is a complete bastardization of what is really happening. The result is that good people are dying and losing family members. I have my own set of opinions about welfare and people working to improve their own lot instead of looking for handouts, but what is occurring now is well beyond those borders. These people need help and need to get out. We can sort out all the social and political issues later, but human beings with any sense of compassion would agree that the travesty that is going on here in New Orleans needs to end and people's lives need to be saved and families need to be put back together. Now. (LeBlanc cited in Mid-South's Response to Katrina 2005)

Finally evacuated to regions outside the hurricane affected area, survivors' comments generally appeared positive in the support they received from individuals, community members, volunteer organization, and shelters. Bookman, writing from a makeshift computer lab in the Houston, Texas, Astrodome constructed a list of things to do in the Astrodome, where he appears to amusingly describe his living conditions:

> Too Many Sandwiches? DON'T EAT THEM!
>
> Too Much Water/Soda? Don't Drink It!
>
> Ever Get Bored? Keep Walkin'!
>
> Tired Of Walkin'? SIT DOWN!! GO TO SLEEP . . . WAKE UP AND START WALKIN AGAIN!
>
> Thats all you can do in this place. We dont have any cars. Nobody wants to eat the sandwiches. its like a "Too Much To Eat" Buffet. we have sandwiches, Snacks, and Drinks all over the place . . . they make lunch & dinner daily. (Bookman 2005)

Individuals living at the convention center in Austin, Texas, related similar stories. Miranda B. (female, 38 years old, African American) and Joyce W. (female), both survivors evacuated from New Orleans said the people and the hospitality in Austin had been wonderful and both had been treated with respect (Miranda B. 2005; Joyce W. 2005). Entering the city by plane or bus, many survivors related specific stories of kindness and support by local citizens, who appeared to have helped many integrate into the city. Two among these stories are:

> Temporarily I met a real nice guy, I wish I could remember his name because he's a great human being, and he took a liking to me. Something about it, he could see I was New Orleans, and could see I was a little bit older of a guy. Anyway, he got me a little four or five day thing, working for a graphic place which is paying cash. (Rene K., male, 51 years old, Caucasian) (Rene K. 2005)
>
> Christine and Jerry and Joe [three individuals from Austin], they were there for me from day one. Everything I needed, they were there for me. That's my family too. There's a bad apple in every bunch, but they got some good people through those doors [in the Austin community]. (Rickey B., male, 44 years old, African American) (Rickey B. 2005)

Discussion

In exploring the writings' of survivors and relief workers, several patterns became apparent. Individual stories do often appear to be reflective of their gender, such as a greater concern for the care of young children, particularly young girls, by their mothers and other adult women awaiting evacuation. Though males, residing in head-of-household positions, also appeared to feel a personal responsibility and concern for the care and well-being of their "families," especially those they perceived to be in a more vulnerable position, including the sick, elderly, women, and young children. "Family" here is a term used loosely, as many of the writings reflected a change in the structure of the family as the disaster progressed, with many individuals assuming head-of-household positions for individuals they had not previously met, including Joe N. (male) who described the death of one of these individuals following their evacuation from the New Orleans area:

> And we get to the first command center. And the lady's [the elderly lady from their group] on the neutral ground. (Which is the median, you call it here.) She's dead. She died, the lady with the bag [a catheter]. The lady who we kept alive for seven days. Who they [rescuers] took first! Who, if they'd have took her the day before, she might be with us today. An while we're comforting Diane, the daughter [of the elderly woman], and telling her, "She's in a better place, baby, she's not in pain anymore." (Navis 2005)

The experiences of residents returning to cities within the Gulf Region to begin the reconstruction process, also appeared to be highly gendered; this was related in how the female friend of one writer, Rose (female), "sweet [talked] a National Guardsman into letting her into New Orleans and going to her house" following Hurricane Rita (Rose 2005). Once within the city, however, it was reported that many women felt little comfort in their return:

> The demographics of New Orleans have changed in gender as well as race. The thousands of contractors and laborers that have arrived from across the country—in addition to National Guard, police agencies, security guards, and other workers—are overwhelmingly male. Because most schools are closed, there are few kids below 17 or their families. Women I know who have returned report feeling uncomfortable and unsafe. (Flaherty 2005a)

The writings of relief workers also appeared gendered, with many women reflecting a greater emotional connection towards survivors, compared to the writings of men who appeared to emphasize their connection to the survivors through "do-

ing" activities. This connection by men is described in the experience of Brian B. (male), a Red Cross volunteer, writing:

> It will be a long time before I'll forget the sense of purpose and significance I felt doing something as menial as emptying trash cans, or the satisfaction I got from guiding someone through the process of applying for assistance. People are better off thatn [sic] they were before we entered one anothers' lives. That's not something I can usually say after a day at the office. (Brian B. 2005)

These words contrast to those of female relief workers, including Caroleeena (mentioned previously), who related her experience talking with Alan, a hurricane survivor, at a Raleigh, North Carolina, shelter:

> After the long tense night, my nerves were frayed and this man's story, this man's emotion (he didn't even cry . . . just teared up) set me to bawling—I mean full out, snot snorting, red nose, swollen eyes crying. I guess it was the pressure . . . Alan just patted my shoulder, waited for it to pass. (I felt like an idiot. I was supposed to be comforting him!?!) (Caroleeena 2005)

Meg B., a nurse working at Kelly Air Force Base, relayed her emotions when she would find time to take smoking breaks with the residents of the hangar:

> One of the patients, a sweet old man who is 80 years old named Rock who had been one of the group of smokers outside during the wee hours of the morning at 1536 the last few nights was there . . . He was overjoyed to see me and I was to see him. (Brizollara 2005)

Before her return to San Francisco, she gave them all her address and "[made] them swear to write . . . when they [got] settled" (Brizollara 2005).

A few exceptions appeared regarding the inequitable treatment of women in the months following the Hurricane Katrina disaster. Brian B. noted that he had

> heard a few people, both bloggers and non-bloggers, make comments to the effect that the relief efforts are in vain because it will just turn the evacuees (who are all single mothers, according to these same comments) into welfare recipients. Kiss my white volunteer ass. I've been around these people for a week. And while it's possible that my shelter was non-representative, I can tell you that most of the evacuees *I* encountered were families, and MOST of them wanted jobs as much as they wanted immediate aid . . . To be sure, there were some who seemed

> interested only in the checks they could get from the Red Cross or FEMA. (Brian B. 2005)

Initially, some inequalities were seen in the Houston Astrodome, as the "displaced [were] marked with bright pink hospital wristbands" (Ingold 2005d), leading to some "stigmatization." Within a few days, however, it was reported that relief workers and survivors were being marked by the Red Cross to reduce the stigmatization (Ingold 2005a). Another story regarding inequitable treatment was featured on RainbowNetwork.com, a news site for GLBTQA individuals, where it was reported that a transgendered survivor, using a shower in a relief shelter's women's restroom, had been jailed for six days in Texas. The individual claimed that "she simply was trying to take a shower in the facility she felt most comfortable using" (D'Amboise 2005). Incidents of inequitable distribution of supplies were also noted to have occurred, including a second-hand account from Meg B., whose colleague told her that a

> Red Cross volunteer told [the colleague] to be careful about distributing supplies because "some of these people are hoarding" . . . [but the colleague] had the presence of mind to tell her that these people have lost EVERYTHING they own. So what they take some supplies not immediately needed; most of it sits in a storage room undistributed anyway. (Brizollara 2005)

One republished, unverifiable account reported "widespread reports of racism and discrimination in Red Cross shelters, especially in Lafayette, Lake Charles, and Baton Rouge." With one doctor from California reporting to Red Cross volunteers that shelter administrators were abusing evacuees and they also

> expressed contempt for the sheltered populations. Dental abscesses abounded and when several cases of small individual cases of Scope were donated, Red Cross staff was told not to distribute it because "they will drink it and get drunk." (Escobedo quoted in Risama 2005)

As evidenced by the personal stories of relief workers and survivors themselves, if these attitudes did exist, they were most likely to have been limited to individual cases, and were not widespread throughout the communities to which Gulf Coast residents were evacuated.

In general, individuals of both genders appeared to experience similar feelings in their situations, including fear, frustration, and resentment towards the inequitable relief and lack of support by local, state, and federal organizations, including police officers, military personnel, and administrative officials. Relief workers ap-

peared to express similar frustrations with the lack of organization, overabundance of bureaucracy and rules that restricted their ability to help, particularly within the larger relief organizations. Contrastingly, survivors of both genders generally expressed optimism, joy, and relief toward individual volunteers, relief agencies, and members of local communities where they appeared to be receiving equitable assistance in the weeks following their evacuation from the Gulf Coast region.

Conclusions

The recent disaster caused by Hurricane Katrina in the United States, and the subsequent course of events that have shaped the disaster in affected cities along the U.S. Gulf Coast have revealed a striking example of physical and social vulnerabilities in "western" cities in their worst case scenario (Rashed et al 2006). The disaster has strongly challenged, or at least showed the need for revisiting, some popular views that are frequently portrayed in the literature either in an implicit or explicit manner. For example, the idea that "inhabitants of less developed countries [are] more likely to die from hazards than those in more developed ones" Bankoff 2004, or the emphasis on development as an exclusive means to reducing risks (UNDP 2004). The Katrina disaster demonstrates that individuals in developed countries are also prone to death from natural disasters in the absence of sound preparedness plans, and other mitigation activities, including public awareness and community-based strategies, are as important to risk reduction as are development approaches. Likewise, the current focus in the analysis of disaster vulnerability, response, and recovery appears largely to be shaped by the popular image of the suffering woman and the degree to which women are disproportionately affected by natural disasters as a result of their gendered status in society. While the purpose of this chapter is not to argue against this view, the message we have intended to deliver is that this kind of generalization, particularly in regard to traditional gender roles, may sometimes be misleading or not apply in all disaster contexts.

After reading and analyzing first- and second-hand accounts of relief workers and hurricane survivors—64 different individuals—it was apparent that perceptions are colored by gender. However, the experiences of men and women appeared more similar than not, with the majority of inequality reports appearing during the immediate rescue, response, and relief efforts of individuals awaiting evacuation in urban areas, particularly New Orleans. Once individuals had been evacuated outside of the disaster area, their writings indicated equitable and adequate relief opportunities were generally available within relief agencies for these disadvantaged groups. Initial findings demonstrate some feelings of discrimination and inequalities were apparent; however, these feelings were not found to be widespread. This suggests that, perhaps, gender equality and the needs of disadvan-

taged members are being adequately supported in certain contexts; individual researchers should carefully consider these contexts when advancing theories based upon existing literature.

The results also highlight the potential of new data sources such as weblogs for quick response research and how they can provide significant insights that complement and sometimes substitute traditional research methods that may not be feasible to conduct during the immediate aftermath period. By carefully utilizing weblogs and other online resources that draw on the direct experiences of individuals, multiple narratives may be quickly constructed about a disaster as these experiences are posted in real time from a potentially diverse sample size. Though arguably some data may be lost through the process of not "being there," particularly what may be obtained through direct observations, the integration of online materials, particularly weblogs, prove valuable in several research activities. These include establishing initial patterns, constructing research questions, providing additional sources of reflection, and allowing for the collection of data when time and finances may be limited or research sites inaccessible due to their size, stability, or remoteness.

Natural events will continue to occur, and "human action can either increase or reduce the vulnerability of societies" for potential disasters (Sequeira 2001). While this perspective does not offer a panacea, it is important to recognize that all individuals may be deemed vulnerable, regardless of gender. Because gender relationships shape how social vulnerabilities occur and the effects of subsequent disasters, it is imperative that each perspective be equally incorporated. Through the use of weblogs, as well as additional online materials that directly relate the personal experiences of affected individuals, researchers may obtain time-sensitive data in a less intrusive and costly manner. With the incorporation of new methods of data collection, as well as the inclusion of dual perspectives in the literature and the development and planning processes, context dependent plans may be established to better embrace the existing relationships within a particular place. In the development of these types of activities, societies may begin to reduce the occurrences of disasters, ensure social equity, and move toward sustainable development (Sequeira 2001).

Notes

1. Where real names were not available, screen names were used.

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