Perceptions of Recreancy in the BP Deepwater Horizon Oil Spill: A Study of Two Mississippi Coastal Communities

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INTRODUCTION

Residents living along the Mississippi Gulf Coast are familiar with natural disasters. Over the last one hundred years, hurricanes have hit the area every five to ten years (Cumberpatch 2006). Despite such experiences, they were not prepared for problems encountered during the British Petroleum Deep Water Horizon Oil Spill (DWHOS). While the majority of the 560 miles of oiled coastline occurred mostly in Plaquemines Parish, Louisiana, residents in Mississippi (and the other Gulf Coast states) were also forced to confront what Environmental Protection Administrator Lisa Jackson called "The worst environmental disaster in our nation's history" (EPA 2010).

This research used key informant interviews and facilitated groups to examine community response to the oil spill in two Mississippi coastal communities. Specifically, I explored perceptions of recreancy, or institutional failure, in residents' interpretation of the event. Participants discussed numerous themes related to technical competence and fiduciary responsibility. As well, data illuminated the community's role in the notion of recreancy. Race and income were important influences in the ways participants perceived and articulated recreancy. Implications for disaster research as well as local disaster preparedness are advanced.

BACKGROUND

Community Disaster Response

Research has portrayed community disaster response distinguished by the particular origins of risk. According to these studies, residents tend to associate natural disasters with

ecological processes or acts of God (Erickson 1994). Such disasters are perceived to be swift, unexpected, and beyond human control (Fritz 1961). Community members are said to galvanize because human error is not perceived as a root cause; simply said, no one is to blame (Kroll-Smith and Couch 1991; Picou, Marshall, and Gill 2004). Studies have indicated victims find fewer explanations for technological disasters (Fritz 1961). These disasters are met with anxiety, social disruption, and long-lasting feelings of vulnerability and uncertainty (Beck 1999; Erickson 1976; Fowlkes and Miller 1987; Picou et al. 2009). The result is a disintegration of community.

A number of studies have addressed catastrophic marine oil spills as technological disasters. Much of this research examined the 1989 *Exxon Valdez* (EVOS) disaster, which became "a benchmark event in the public perception of technological hazards" (Tierney and Quarantelli 1992:167-173). For example, a study by Dyer, Gill, and Picou (1992) focused on disruptions of cultural norms and traditions in natural resource dependent native communities. Similarly, Palinkas and colleagues (1993:1517) concluded the disaster's, "impact on the psychosocial environment was as significant as its impact on the physical environment." Research also described the disintegration of social support networks, including collective management of resources, which in turn intensified environmental effects (Dyer 1993; Gill and Picou 1999).

Although the technological-natural origins dichotomy contributed to a better understanding of risk at the community level of analysis, a major problem with the approach has been a failure to measure pre-disaster behaviors. As a result, recent studies have noted that little empirical evidence exists to support a clearly dichotomous view of community responses (Flint and Luloff 2005; Gordon et al. 2010; Kumagai, Carroll, and Cohn 2004; Tootle 2007). This research has described the ways place-based vulnerabilities, social interactions, and capacities

explain community disaster response (also see Cutter 2001). These factors influence and are influenced by the complex institutional relationships of communities.

Institutional Relationships and Interpersonal Trust

In his 1984 presidential address to the American Sociological Association, James Short noted the critical importance of exploring the larger institutional context where risks are organized and managed. The institutional context is composed of relationships among, for example, residents, governments, corporations, religious groups, and non-profit organizations. These relationships interact with perceptions of vulnerabilities and experiences to attenuate or amplify perceptions of risk and capacities to act (Gordon et al. 2010; Kasperson et al. 1988).

Trust is integral to understanding institutional relationships and risk. The concept has been described in a variety of ways, including as a personality trait, embedded in interpersonal relationships, and a kind of social organization (for a review, see Shapiro 1987). As Freudenburg (1993:916) suggested, trust was exercised or withheld by principals in an assessment of an agents' performance or "getting the job done." This notion of interpersonal trust serves as a foundation for organic solidarity, or the ties that bind people to one another in society (Durkheim, 1964).

Public trust in natural resource organizations – such as British Petroleum and the Department of Interior– is particularly important because resource managers mediate risks within and adjacent to the community. Residents who have less confidence in the institution's ability to fulfill its role are more likely to have increased perceptions of risk (Perrings 1991). These residents are not as likely as those with positive feelings to trust institutional risk assessment and reduction policies (Fowlkes and Miller 1987; Freudenburg, 2001).

In addition, community concern and implementation of risk reduction policies are less likely when agency roles are not clearly defined and communicated. Communities in which residents understand institutional responsibilities across different spheres of public and private life, including the media, non-profit groups, schools, churches, and governments are more likely to display higher levels of interactions and participation (Summers 1986). Clear, concise, and repeated information is essential for effective risk communication (Kumagai et al. 2004; Waugh and Streib 2006). In contrast to technological perspectives of risk (e.g., Starr 1969), this information is not only based on communicating statistical probabilities; it includes other forms of expressing environmental risk through symbols present in residents' daily lives.

Recreancy

Recreancy reflects assessments of the competence of institutional actors to carry out a fiduciary responsibility with citizens. In short, citizens must perceive that institutions can and do carry out their societal roles resulting in a failure to fulfill the merit of trust (Freudenburg 1993). Recreancy stems from the interdependencies of increasingly complex social systems. As a result of the division of labor, citizens of advanced societies

> are dependent not only on the technologies, but also on the social relations that bring them into being, involving whole armies of specialists, most of whom have areas of expertise that we may not be competent to judge, and many of whom we will never even meet, let alone have the ability to control (Alario and Freudenburg 2003:200).

Recreancy is more specific than trust. Trust is an emotionally laden term that involves projection of values ascribed to suitable individual behaviors. In the case of recreancy, there is not necessarily an individual wrong-doer. Rather, institutional failure occurs because the

complexity of the social structure involving countless specialized individuals and institutions increases the risk of a breakdown in technical competency and/or fiduciary responsibility.

Neither is recreancy synonymous with risk perceptions. Recreancy is an important component of risk perceptions. However, risk perceptions emphasize residents' evaluations of the hazard itself, rather than focusing strictly on the societal institutions associated with the hazard. Institutional failure results from insufficient abilities or actions that contradict the values of the perceiver (i.e., technical competence and fiduciary responsibility). In effect, the division of labor can increase vulnerability in cases where obligations are not carried out properly and the wrong-doer cannot be identified.

Few studies have tested the notion of recreancy with empirical observations. One exception is Freudenburg's (1993) analysis of concern over nuclear waste handling in which recreancy explained three times as much variance in levels of concern as sociodemographic and ideological variables. McSpirit and colleagues (2005) investigated relationships between the coal industry, regulatory agencies, and residents following a major disaster in Appalachia. The authors suggested the EPA utilized a regulatory framework that preempted the agency's authority to recover costs associated with health and environmental damages due to mining activities. Recreancy was further pronounced because the bureaucratic process restricted community input into recovery. In another study, Freudenburg and Gramling (1994) found that residents confused the U.S. Mineral Management Service (charged with regulating off-shore drilling) and industry because the agency had used impact statements to justify drilling. This study concluded that after years of disaster-free operation, petroleum production did not seem as disruptive to the environment as originally anticipated, thereby leading to an "atrophy of vigilance" among regulatory agencies and citizens alike (Freudenburg and Gramling 1994:176).

In keeping with these studies, I explore the link between community response to the DWHOS and perceptions of recreancy. Specifically, I examine residents' perceptions of the competence of institutional actors and the belief these actors behave for the best interest of the public. Relevant institutions include BP, federal government agencies, local government, and media. Following a description of the research methods and findings, I discuss the study's implications regarding the community's ability to address risks and hazards.

RESEARCH OBJECTIVES

The overarching objective of this research was to examine the community-level response to the DWHOS in Mississippi. Specifically, this paper examines response by:

(1) documenting residents' perceptions of institutional failures in technical competence and fiduciary responsibilities (i.e., recreancy);

(2) documenting residents' attitudes about the role of the community in holding institutions accountable; and

(3) examining whether or not selected sociodemographics influenced these perceptions at the community level.

The recreancy theorem suggests that residents' understandings and interpretations of the spill were influenced by their trust in institutional capacities and their belief that institutions were acting on behalf of the communities' best interest. In turn, these attitudes influenced motivations to perform collective actions to mitigate the effects of the spill.

METHODS

Site Description

Sites were chosen based on rural and urban populations, race, and income. Since the 19th Century, the Mississippi coast has been a popular destination for tourists and seasonal residents,

particularly from New Orleans and northern Mississippi. Within the last two decades, its coast has become a popular gaming destination. As a result, the majority of residents were employed in services; however, chemical manufacturing, seafood harvesting and processing, and the military were also important employment sectors. The area has been repeatedly devastated by hurricanes, including the major storms of Camille (1969) and Katrina (2005).

Waterville[1] had a population of just over 8,000 residents in 2000. Over 80 percent of residents were white and 17 percent were African American. With a median family income of $41,957, ten percent of families fell below the poverty level, slightly higher than the rest of the nation, but less than the state of Mississippi. Stoneville is a neighborhood in an urban center. In 2000, the city had a diverse population of slightly in excess of 50,000. Stoneville had just over 13,000 residents of which 20 percent were white, 60 percent African American, 15 percent of Vietnamese decent, and 5 percent Hispanic. Nineteen percent of families fell below the poverty level with a median income of $30,852.

Data Collection and Analysis

Data were collected using key informant interviews and facilitated discussions. Key informants are community leaders and other residents knowledgeable about community issues and/or the research topic (Krannich and Humphrey 1986, Luloff 1999). Facilitated discussions consist of 8 to 15 participants taking part in a casual discussion guided by a set of seven questions (Carter and Beaulieu 1992). Interviews informed the administration of facilitated discussions and the latter acted as a validity test for the former (Brewer and Hunter 1989).

Initial key informants were identified after reviewing directories of local leaders and newspaper articles. They were interviewed on July 8 and 9, 2010. Using a modified snowball

[1] Names are omitted to help protect the anonymity of research participants. Community is broadly defined in this paper as place-based social interactions of residents who share characteristics distinct from surrounding populations.

procedure, the initial informants were asked to identify other potential participants (Krannich and Humphrey 1986). The second set of interviews occurred during the first week of August, 104 days after the explosion that started the spill and 17 days following the initial capping of the spill.

[Table 1 about here]

Table 1. Key Informant Characteristics

Sex		**Education**		**Residence**	
Male	20	Less than 4 year degree	7	Lifelong	25
Female	16	Associate or 4 year degree	20	Intermittant or <5 years	4
		Graduate degree	9	10-20 years	5
				Non resident	2

Key informants represented perspectives from environmentalists, elected officials, media, nonprofit resident assistance organizations, commercial fishermen, the tourism industry, the petroleum/chemical industry, nonlocal government agencies, and active residents unaffiliated with a particular group. Eighteen informants were interviewed in each community. As well, an equal number of informants within each category were interviewed in each community. Table 1 describes informants' demographic characteristics.

Participants in the facilitated groups were recruited by resident assistance organizations using phone lists (Carter and Beaulieu 1992). The research design originally called for one facilitated discussion per site conducted on September 15, immediately following the analysis of the key informant data. However, two additional sessions were completed because of low participation in the initial sessions, totaling four sessions overall. Race and gender information were collected to describe participants. In Waterville, the first session consisted of seven

participants (three male, all White) and thirteen in the second session (four male, all White).[2] In Stoneville, six residents participated in the first session (two male, all African American) and eleven participated in the second session (all African American females).

Questions for both methods addressed: (1) description of the community, including important issues and attachments; (2) environmental concerns prior to the oil spill; (3) communication about the disaster between residents, government, and media; (4) definitions of disaster; (5) who was to blame for the disaster and who had responsibility for mitigating future oil spills. Interviews and discussions were transcribed, coded, and analyzed line-by-line for emergent themes (Creswell 1998).

FINDINGS

Technical Competence

Technical competence includes the ability of BP to operate its petroleum exploration and processing activities without failure as well as the regulatory agency's[3] knowledge and ability to properly monitor BP. Thus, the agency must be sufficiently staffed by individuals with similar levels of expertise as BP employees. As well, technical competence involves the capacity of both BP and the regulatory agency to communicate factual information to the public about the risks and specific information about disaster events.

Key informants and group session participants were asked who they thought was responsible for the oil spill and its impacts. The objective of the question was to explore blaming and attribution. Unsurprisingly, nearly all respondents said BP was directly responsible ("That was strictly the oil company" / "BP accepted all responsibility" – group session in Stoneville)

[2] I believe attendance improved for the follow up sessions due to better scheduling and more aggressive recruitment than for the initial sessions.

[3] The Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE), formerly known as the Minerals Management Service, is an agency of the U.S. Department of the Interior.

and the federal government was to blame for failure to provide oversight ("The government should have stepped in and done something right away" – nonprofit employee in Waterville). However, analysis of the conversations in their entirety reveals more complicated perceptions of responsibility and recreancy.

In both communities, key informants and group session participants indicated community level interpretations of the DWHOS were consistent with research on the Exxon Valdez Oil Spill in aspects of technical competence. Study participants consistently described the major relevant institutional actors – BP, the regulatory agency, the media, and scientists – as having similar objectives. According to participants, these objectives translated to "greed and politics" (session in Stoneville). An activist in Stoneville said:

> Fifteen to twenty years ago the laws changed to allow a few people to own all of the media so whatever we get right now is their spin on whatever's going on. They own TV, radio, and newspaper. Guess who owns stock in BP. Guess who's in Washington… The government, the news media, and BP, they're all part of this problem.

The quote plainly illustrates a lack of differentiation in participants' discussions about the major actors involved in the oil spill event. Through the interviews and, particularly during group sessions, I was forced to clarify the subjects to whom participants were referring.

The tendency to conflate the roles of the various actors is tightly interwoven with a failure in fiduciary responsibilities because residents perceived a conflict in the values of the regulatory agency and media, who have the task of protecting the public. However, the theme explicitly shows the extent to which the two features of recreancy are closely intertwined in residents' perceptions of disaster response. Conflation led to perceptions of misinformation or

suppression of information about the risks and the event. Paradoxically, while residents conflated the relevant institutional actors, they perceived that the institutions failed to properly mitigate the disaster impacts and disseminate information about the hazard. Essentially, the institutions were seen as lacking the necessary competence to perform their roles. Another quote by a Stoneville group session participant illustrates.

> They say the oil was gone, but I don't believe it. There's still a fear of the seafood…I just believe that there has to be some kind of negative impact on the seafood, with all of that oil and the vastness of the Gulf, and somebody said, there ain't this, there ain't that…I don't care, I'm stickin' to pond grown catfish. It's a phobia. I'm like, ten years down the road somebody's gonna say, 'You shouldn't have ate that fish, that shrimp. They say it's gone, but I know it just don't disappear, it went somewhere. I don't care about whatever they put in there [dispersant]…. A marine biologist came in and said it was fine, but I don't know if that man was paid by BP!

Participants from both communities were uncertain about the lingering effects on seafood, petroleum on the ocean bottom, and future effects of the dispersants. Stoneville participants expressed far greater levels of concern and distrust of expert-driven information than Waterville.

Although several Waterville key informants applauded the actions of the county Emergency Response Center (EOC), discussion group participants suggested other response agencies and BP failed to adequately inform residents. One of the group session participants argued that: "What frustrated me at the [daily] EOC meetings was that every week there was a new representative from BP, a new Coast Guard person, and so each week we had to start all over." This quote underscores other discussions about misinformation. Waterville participants

noted residents' familiarity with disaster preparedness. Several key informants and group session participants commented that residents were adept at absorbing and understanding meteorological information and "we use this information to make up our own minds" [about the severity of the storm]. However, such a strategy was inadequate to address the oil spill event because "they [institutions] kept shifting the information; no one was on the same page." Key informants complained that they received no information regarding how they could protect themselves and their families from the effects of the oil spill.

One active resident in Waterville said she designed and constructed her own boons to capture the oil entering her property on the water. She was forced to do this when the oil easily flowed through the government-issued boons. Another key informant, a commercial shrimper, said he could smell oil from his home but was told by the state environmental agency that it was "just someone in the neighborhood mowing the lawn." Such perceptions indicate agencies lost residents' trust due to a failure to properly manage the response and address concerns related to the spill.

Fiduciary Responsibility

Perceptions of the failure of fiduciary responsibility were evident in residents' perceptions of the inappropriate relationship between regulatory agencies and industry. In turn, trust in both institutions declined and may take decades to fully recover. One Stoneville group session participant overtly accused the regulatory agency of "listening to BP [about the immediate impacts of the spill] instead of investigating it for themselves like they should have…. Eventually they sent someone down there." A commercial fisherman in Waterville suggested, "Let's face it; most of the government regulatory agencies are in the pockets of the business they regulate." During the group session in Waterville, participants had this to say:

> The federal government was very lax in the monitoring of offshore drilling. Halliburton, the rig owner, BP, they were running shortcuts, cutting off safety devices and everything else with dollar signs in their eyes. And the regulations were letting them get away with it. The federal government didn't monitor.

Unfairness was one of the strongest themes that emerged from both communities. Unfairness was associated with the failure of fiduciary responsibility in that relevant institutions were unable to address the best interests of all segments of the public using a balanced and objective approach. For many key informants, and participants in all group sessions, the BP claims process was the epitome of inequity: "So many people are benefitting from it, and they weren't affected, so you question their intentions anyway" (activist, Waterville). During such a discussion, a group session participant suggested, "you sign away your life [by accepting the claim] and then ten years down the road you get sick, but you can't sue them [BP]…. Because they [BP] put that [the waiver in the claim] out there like that, there must be something wrong."

Two other issues of unfairness emerged from the data. When discussing institutions' efforts to distribute information to communities, residents in Stoneville commented that BP had held several meetings with the local Vietnamese population. Despite attention paid to this vulnerable population, the rest of the community had had little access to BP. Unlike Waterville, these residents reported their county did not consistently provide public EOC meetings. When asked if they had any information from emergency response, one group session participant said:

> No, because BP was handling all of it. There was some focus groups targeting Vietnamese fishers because they lost everything they had. Even many of those individuals haven't yet received an answer to their claims. And if they went to work for BP, they were told afterwards that they couldn't file a grievance. And a

> lot of them can't even speak English. In my opinion, it was just damage control. They addressed them directly because 80 percent of [that] population was directly affected and so they cater to them to quiet the situation and then everyone is oblivious.

Specifically addressing relationships with local government, Waterville expressed trust in their local officials, while Stoneville key informants believed their local government was largely inept at disaster response. Residents from both communities believed there was little local government could do because they were getting the same "run-around" as residents.

Failure of fiduciary responsibility was extended to the media. Residents from both communities complained media stories were unbalanced. Key informant data illustrates frustration that the media, focusing on the catastrophic consequences of the spill, consequently painted a negative picture of the community. A commercial shrimper and Vessel of Opportunity contractor from Waterville illustrated this:

> It's not so much that the media is doing a bad job. But maybe they don't cover it the way they should. It's an environmental catastrophe – you just can't say it didn't happen. Now the main impact for us has been economic. So it would be good if they could feature some of the other attractions here other than the beaches.

It is important to note that, like this informant, not all participants blamed the media for misrepresentation. A few argued that media depictions should highlight the seriousness of the catastrophe while featuring the community's resiliency and diversity of assets. The media chose to bring certain elements of the event to the table while ignoring those that were important to residents.

Facilitated groups discussed their perceptions of the media as portraying community interests in a slightly different way. In particular, Stoneville participants discussed media attention initially attenuating the severity of the spill. As the event progressed, they perceived the media magnifying the implications as the event continued.

> At first, it did not seem that is was as critical, it was made light of. Then all of a sudden you got millions of gallons of oil spilled into the bay. Everybody was saying something different and with radio and the newspaper, it was like mass hysteria.

The quote illustrates the inability of the media to reign in information and make clear and direct statements enabling residents to better understand the event. According to residents, the media failed in its fiduciary responsibility to the public. This is especially troubling because residents from Stoneville said they received the majority of their information via national television.

Responsibility of the Community

Both data collection instruments asked participants if anything could be done to prevent technological disasters like the oil spill in the future. The open-ended question intended to explore responsibility for risk mitigation and the possibility that communities contribute to recreancy through an "atrophy of vigilance" (Freudenburg and Gramling 1994). Instead of eliciting reflection on the community's role, responses immediately focused on the federal agency. Participants in the facilitated discussion in Waterville responded to the question in a highly emotional way:

> The government needs to monitor everything very closely / The government should ensure that we have plans in place / The oil industry just can't be trusted so the federal government has to watch them / These are coastal waters and so the

> government should step in/ We run to Haiti and Indonesia with all this equipment and help and we don't help the [Gulf] coast / The oil company is in charge of cleanup, but maybe it should be the government.

Despite overwhelming consensus that BP instigated the event, study participants rarely discussed this institution's responsibility to improve technology and safety procedures, focusing instead on the regulatory agency. Although informants placed much of the blame on regulatory agencies, they continued to ascribe full responsibility for risk mitigation to federal government. As well, not a single study participate advocated a ban on offshore drilling in the Gulf and most were opposed to the federal government's drilling moratorium in the aftermath of the DWHOS. This indicates their perceptions of recreancy, while potentially long-lasting, did not result in a total denial of the activity that originated the risk.

Exploring further, I asked if the community could do anything to mitigate the *effects* of future events. Participants in all group sessions and key informants from Waterville suggested that there was little residents could do, failing to note how they could influence the socioeconomic and cultural implications of the event. Group session participants in Waterville reflected the general response, "There was nothing we could have done. It [the oil spill] was too big for us and Katrina had already knocked us down too far."

To explain this perception, study participants noted several problematic issues in the communities' relationships with extralocal institutions and the disaster response process. For instance, residents in Waterville described a highly capable local government and emergency response team: "I think we assume that they [government] must be taking care of the problem because we haven't heard much complaining" (business leader). This perception was reinforced

by daily EOC updates. However, there was little effort to involve residents in community-wide activities to address indirect effects of the spill. A participant in a group session commented:

> We're concerned that we're so overextended with free money [distributed by the Federal Emergency Management Agency following Katrina] that we're dependent on it – we tend to just let the government do everything around here.

Other participants perceived local action as inhibited through a failure of the institutions to call on residents for assistance. Group session participants noted the participation of extralocal volunteers, including from outside the state, but they felt the potential for local volunteers was largely ignored. One participant from a Waterville group session said opportunities to volunteer in the community were rare even before the spill, and there was no formal call for volunteerism to address its impacts. Other participants noted the lack of information on potential volunteer activities.

In addition, participants commented that because the media, BP, and the government seemed to focus primarily on the ecological impacts of the spill, residents never considered helping to address social impacts. Further, many participants expressed frustration over BP's authoritative clean-up response. A journalist in Stoneville said: "BP wanted to limit involvement from the people affected by the spill in order to maintain as much control as they could." Although these explanations address immediate relief rather than recovery, they highlight the institutional relationships which led to a failure of local entities to take responsibility for risk mitigation.

There were, however, some exceptions. A social worker in Waterville and several nonprofit leaders in both communities immediately followed my question with responses suggesting they believed the public should play a role in risk mitigation. A case in point is the

social worker's comment that "we need to be more vigilant of our government and demand that it protect us from companies that are only interested in the bottom line."

When pressed further, the participants in the group sessions began to realize their communities' role in mitigating risk.[4] Participants in one Waterville session applauded when a participant said, "Community members should demand to be informed about monitoring what goes on in the Gulf because it's our backyard." Stoneville participants noted residents must be attentive of government and industries because they had been deceived so often in the past. One participant said, "What people can do at a local level is protest, scream as loud as they can to make things better. At the end of the day, power concedes nothing without the demand."

Sociodemographics

I searched for patterns of responses based on rural/urban residency, gender, race, and income during analysis of the qualitative data. Specifically, addressing the concept of recreancy, gender and residence seemed to have little influence on participants' responses. In isolated cases, respondents suggested that men were more likely than women to continue fishing and consume seafood after the spill. This interacted with race: African American men were concerned about the long-term toxic effects on seafood. Although it did not directly play a critical role in recreancy, residence influenced risk perceptions due to Waterville's sparse population.

Unsurprisingly, income was interwoven with comments about race, making qualitative distinctions between the two difficult. Race and income were particularly important as evidenced in comments made by residents of Stoneville, which was populated primarily by African Americans and low income residents. As mentioned previously, Stoneville residents appeared more skeptical of expert-driven information (i.e., failure of technical credibility) than their white,

[4] A description of the communities' assets and capacities goes beyond the scope of this paper. See Gordon and Luloff (forthcoming) for a discussion.

middle-income counterparts in Waterville. Asked specifically if race played a role in the degree to which people believed scientific information about the oil spill, Stoneville residents alluded to failures in fiduciary responsibility, saying that whites would have more information, and therefore, were more likely to trust expert opinions:

> Like we were talking about before, we're often left out of the loop when it comes to knowing what's going on with the government. But in places like [name], which has mostly Whites, their elected officials talk to them and they're involved in meetings…"

Participants expressed similar perceptions about authorities' failure to listen to them versus more well-off citizens.

Although the data do not enable an association between race and the definition of disaster, it is worth noting that Waterville residents typically considered the oil spill an accident. By contrast, Stoneville participants thought of it as a disaster. The discrepancy may be partly explained by past injustices involving race relations between the city, manufacturing industries, and the local community. For example, participants of the Stoneville group session listed a number of grievances concerning drinking water contamination and dumping. Residents believed that local and state officials refused to take their grievances seriously after complaining:

> There's a terrible smell in back bay, we think from the seafood processing / The faucet water is all brown and you can't see through it; I called public works, but no one gave me an explanation / I have to put bleach in my bath water because I'm afraid / It's causing a lot of allergies and breathing problems, especially with the older people.

They believed these problems would have more likely been resolved had the victims been white. The data indicate that residents of the low income, largely minority community more intensely experienced the collapse of trust in industry and government actors. The oil spill only confirmed their perceptions.

DISCUSSION

Not yet fully recovered from the devastation of Hurricane Katrina, the Mississippi Gulf Coast confronted an environmental disaster never before experienced in recorded history. Due to geography and oceanic processes, the ecological impacts of the oil spill appeared to impact the Mississippi coastline to a lesser degree compared to Louisiana. Nevertheless, the BP Deepwater Horizon Oil Spill of 2010 affected the ecology and social fabric of the study communities. The event also caused residents to examine their communities' relationships with industries, government agencies, and the media.

Studies on community response to oil spills, and disaster research more generally, have highlighted the dichotomy of technological and natural hazards. Natural hazards lead to therapeutic response; technological hazards lead to corrosive response (Fritz 1961). However, the distinction tends to over-emphasize the origin of the risk, while neglecting aspects of the disaster emerging from interactional processes. Addressing this bifurcation, Flint and Luloff (2005:404) noted "The reality that communities are complex, undiminished in the face of risk, is too often ignored."

Using data from key informant interviews and facilitated group discussions, this study explored community response to the oil spill vis-à-vis the concept of recreancy. The notion of recreancy is useful to gain a better understanding of the social fabric of risk; that is, the impersonal interactions, cultural processes, and social institutions that influence relationships

between communities and their environment. Recreancy involves failings in technical competence and fiduciary responsibility resulting in an inability to fulfill obligations of societal trust (Freudenburg 1993). The ways institutions approach measurement, communication, and mitigation of risks are inherent in recreancy. Characterized by increasingly complex societal arrangements and expanding social networks, modern societies demand trust as a critical ingredient to their continued functioning. When trust is eroded through recreancy, it becomes more difficult to assess and manage risks at both the local and extra-local levels (Fowlkes and Miller 1987; Freudenburg 2001).

My objectives for the research were to (1) document community perceptions of institutional failures in technical competence and fiduciary responsibilities; (2) explore attitudes about the role of the community in holding institutions accountable; and (3) examine the influence of sociodemographic factors. Regarding the first objective, residents clearly blamed BP's technical failure for causing the spill and the regulating agency as incapable of properly monitoring extraction of the resource. Along with the media, the institutions were seen as incapable of supplying accurate information to the public or properly addressing important technical aspects during the response process. Although responses clearly were not therapeutic, neither did the event materialize as strictly corrosive community responses largely due to previous impacts from Hurricane Katrina.

Responses indicated public assumptions that the agency and industry were colluding in efforts to extract the petroleum resource. BP, the agency, and the media were seen as promoting their own interests instead of protecting residents through their failure to properly represent the story and the communities. According to residents, the values of the institutions were essentially the equivalent in terms of profit-making and political goals (see also McSpirit et al. 2005).

Perceptions of inequity during response activities reinforced judgments of a failure of fiduciary responsibility. Local governments were essentially seen as disconnected with the spill and therefore absolved of any potential for recreancy.

The communities' perceptions differed in several ways. They were split in their perceptions of degree of recreancy on the part of BP. Residents of Waterville defined the event as an accident, implying the petroleum corporation's technical competency continued as marginally trustworthy because of the "understandable" complexities involved in resource extraction. By contrast, Stoneville defined the event as a disaster. For these residents, BP and government experts could provide no suitable explanation for the technological failure or offer predictions about unknown impacts in the future. Past experiences in this community related to income and race suggest a widespread distrust of large industries and government. Unsurprisingly, the majority white community of Waterville did not perceive that race influenced institutional relationships and differential risk experiences.

In their study of the Exxon Valdez Oil Spill, Freudenburg and Gramling (1994) noted the evolution of an "atrophy of vigilance" as regulators and Alaskan residents became accustomed to operations of the petroleum industry. Similarly, Gulf Coast residents expressed an inability to have mitigated the risk of the event; instead, full responsibility for mitigation was placed on the government agency while also implicating the agency in recreant behavior. The communities contributed subtlety to the recreancy of the institutions, thereby reinforcing notions of the interactional processes of the social fabric of risk. Pressed further, group session participants acknowledged the locality's role in monitoring the risks in their backyard. Research participants from Stoneville were particularly expressive about a collective responsibility for risk mitigation.

IMPLICATIONS

While future investigation must address a variety of contexts and communities, this research illuminates several implications for the study of recreancy. For example, resident perception of recreancy means that the relevant institutions no longer merit the same degree of public trust as before the behavior occurred. As Thomas and Thomas (1928:571) famously posited, "If [people] define situations as real, they are real in their consequences." Regardless of legal or technical evidence suggesting otherwise, the subjective perceptions of situations attribute distrust and incompetence to various institutions throughout the social fabric of risk. Along with past negative experiences, local societies will assess institutional failures during the oil spill resulting in further erosion of trust.

As well, the data highlight the closely intertwined nature of technical competence and fiduciary responsibility, particularly regarding communication of risk and disaster response information. It is therefore necessary to analyze the concepts independently and as interacting variables. Sociodemographics played an important role, illustrated by different interpretations of recreancy in the two communities. This conclusion highlights the dynamics of localities, the importance of social structure, and fallacy of approaching recreancy merely from the perspective of the agent rather than the principals. Further, this suggests future research must examine recreancy on a continuum, depending on the community context and risk/disaster characteristics.

Policy implications of this study include the need for continued work to better communicate disaster response and risk as well as scientific uncertainly of the future impacts of a disaster. Although numerous pronouncements from the hazards research make this idea a cliché, the data in this study suggest risk managers continue to have difficulty balancing their roles as experts and the critical need to clearly inform the impacted population. Perceptions of

recreancy evolve from initial knowledge of the incident to communication about current harms, future risks, and opportunities for resident involvement in mitigation. Communication in the disaster relief phase should be immediate and transparent to partially deflect quickly growing perceptions of recreancy. Curbing recreancy in the period immediately following a disaster can mean the difference between effective response at multiple levels of society and failure, which further wears down public trust in the institutions managing the response.

A holistic perspective on risk and disaster response does not approach communication as unidirectional. Rather, authorities must openly invite residents to participate in defining and monitoring risks and engage residents in active learning (Waugh and Streib 2006). Such activities occur as an ongoing process in disaster resilient communities in the form of pre- and post-disaster education, organization, and development of local social interactions through purposive activities (Gordon et al. 2010; Wilkinson 1991).

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