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Compensation and Community Corrosion: Perceived Inequalities, Social Comparisons, and Competition Following the Deepwater Horizon Oil Spill¹

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Abstract

After disasters, victim compensation programs are typically associated with individual healing and community rebuilding. But post-disaster compensation systems also have the potential to introduce confusion and competition, further fraying the social fabric of communities affected by trauma. To assess the perceived effects of disaster compensation processes on community social relations, as well as the mechanisms that underlie such effects, we turn to the case of the Deepwater Horizon oil spill, after which BP implemented one of the largest compensation systems in U.S. history. Using data from interviews of residents of four Gulf Coast communities, we examine the extent to which this claims process hindered efforts to recover from this disaster. Our data suggest that while BP money helped some residents in the Gulf during a difficult economic time, many interviewees perceived uncertainty, randomness, and unevenness in the compensation process, which led to negative social comparisons and competition among community members. Because of this animosity, we argue that BP's compensation system was a disruptive mechanism that contributed to community corrosion and introduced another source of psychological stress into already traumatized areas.

Keywords

Oil spill; disaster; corrosive community; recovery; compensation; corporations

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Introduction

In response to the massive oil spill in the Gulf of Mexico set off by a catastrophic explosion on the Deepwater Horizon drilling platform on April 20, 2010, BP, acting as the responsible party for the disaster, set aside \$20 billion dollars to compensate affected parties for their economic losses. From those funds, approximately \$12 billion was paid out to individuals, companies, and local governments for losses caused by damages to the Gulf's fragile ecosystem upon which the region's two primary economies—tourism and seafood—depend. Despite this unprecedented amount of funding invested in a compensation program, the claims process itself emerged as a secondary trauma that led to social disruption and collective uncertainty regarding financial recovery from the spill.

In comparison to natural disasters such as floods, tornadoes, or hurricanes, technological disasters like oil spills produce long-term social pathologies caused by uncertainties about the causes of the disaster and prognostications of the overall impact (Erikson 1976 Erikson 1995; Freudenburg 1997; Kroll-Smith and Couch 1991; Picou et al. 2004). These adverse social effects are exacerbated by efforts to assign blame for the event, turning technological disasters into legal battles or “contested disasters” that further undermine community cohesion (Picou and Marshall 2010). While authorities may make promises to victims that things “will be made right” during the recovery phase of a disaster, in practice the rebuilding process can be fraught with stress and conflict. For example, after the Exxon Valdez oil spill, affected communities waited nearly two decades to be compensated for damages, and participation in a lengthy litigation process for payments was found to be a strong predictor of stress and suffering (Picou et al. 2004).

While other studies have demonstrated the deleterious effects of legal battles after disasters, we turn an analytic eye to formal compensation systems and examine how they affect post-disaster community cohesion. Understanding these effects is particularly important for technological disasters, which have been found to be especially traumatic for communities through the deterioration of social relationships (Kroll-Smith and Couch 1989). Further, compensation systems are tasked with the challenge of attaching dollar amounts to losses that cannot easily be quantified—such as losing a way of life—and many only focus on recuperation for financial losses. For technological disaster victims then, not only are losses like stressed social relations ignored in the claims system, but the compensation process may exacerbate the problem, further undermining the social fabric of communities. Consequently, we investigate the effects of post-disaster compensation processes on the social cohesion of affected communities to better understand unanticipated effects, as well as the underlying mechanisms driving such outcomes.

The Deepwater Horizon oil spill (DWHOS) presents an ideal case study for evaluating these effects given the scope and magnitude of its claims system. In this paper, we present results from a multi-year project investigating the long-term individual and community health effects of the DWHOS. By documenting the social disunity that followed the oil spill, we build on extant work that has identified uncertainty, blame, and prolonged litigation as processes by which corrosive communities might emerge, and we compare the impact of compensation programs to these established stressors (Couch and Kroll-Smith 1997; Erikson

1976, 1994; Freudenburg 1997; Marshall et al. 2004; Picou et al. 2004). In particular, our study of four communities along the Gulf coast impacted by the DWHOS investigates how the development of common narratives regarding perceived inequalities in a post-disaster compensation process contributed to the onset of social discord and conflict. Whereas we might expect that a swiftly implemented compensation program would alleviate some individual and community-level stressors, our findings suggest that elements of the post-spill compensation program contributed to additional community corrosion. More specifically, we identify perceived problems with transparency, randomness, and unevenness in the claims process as factors leading to competition and negative social comparisons among coastal residents. In turn, competition and social comparisons exacerbated individuals' stress and contributed to the deterioration of social ties post-disaster. Given that the DWHOS compensation system could serve as a precedent for payout processes in future oil spills or similar disasters, understanding unanticipated effects of compensation systems on community cohesion is important for informing recovery efforts after technological disasters. We conclude the paper by reflecting on recommendations made by impacted individuals for improving the claims process.

Technological Disasters: Damages, Disruption, and Community Corrosion

A disaster represents more than an individual-level trauma; disasters are community-level events that disrupt the social context in which individuals function, resulting in collective traumas (Erikson 1976 Erikson 1994; Fritz 1961; Kaniasty and Norris 2004). Erikson (1995) refers to disasters like the DWHOS as a “new species of trouble” that challenge our society's ability to adequately prepare for and respond to unprecedented levels of scientific and technological uncertainty in both disaster identification and management. Although some disaster researchers question the natural–technological disaster distinction and efforts to neatly categorize such events (Marshall et al. 2004; Picou and Marshall 2007), the DWHOS can be conceptualized as a technological disaster triggered by a failure in the complex interactions between organizational structure and technology which resulted in massive ecological, social, and economic damages for the Gulf of Mexico region.

During the post-disaster recovery phase, individual-level psychosocial impacts can be amplified by interactions with other social actors (Freudenburg 1997). In contrast to natural disasters which have been shown to bring about community solidarity in the recovery process (Drabek 1986 Drabek 2013; Fritz 1961; Quarantelli 1985), technological disasters situate disaster victims in social, political, and legal contestation over responsibility for adequate recovery efforts. Consequently, victims of technological disasters are likely to become suspicious and cynical towards authorities and each other as narratives of frustration, blame, and uncertainty emerge in everyday conversations among friends and neighbors (Drabek and Quarantelli 1967; Freudenburg 1997; Freudenburg and Jones 1991; Gill and Picou 1998; Kroll-Smith 1995; Kroll-Smith and Couch 1991, 1993; Picou et al. 2004; Ritchie 2004; Ritchie et al. 2013).

Technological disasters disrupt not only individual lives but also the social order, leading to the erosion of trust due to increased competition for scarce resources that occurs over a much longer term and within a less certain environment than post-natural disasters

(Freudenberg 1997). In contrast to the civic unity expected following natural disasters, technological disasters such as oil spills have been theorized to create corrosive communities, whereby disruption of common social patterns is caused by the collapse of the legitimacy of basic institutions entrusted to protect society from major technological failures (Freudenberg 1997; Freudenberg and Jones 1991; Gill et al. 2012; Picou et al. 2004). We posit that one specific set of mechanisms leading to the development of these corrosive communities, particularly in terms of social distrust, are negative social comparisons, both erroneously or accurately perceived. Borrowing from early social psychology, social comparison theory suggests that social disruption after disasters may be intensified by an individual's inclination to make upward social comparisons (Festinger 1954; Wills 1981). Social comparison theory argues that individuals determine social and personal worth based on how they stack up against others. Research in this tradition has found that judgments of distributive equity are based more strongly on social comparisons than on pre-conceived expectations of justice (Austin et al. 1980; Greenberg et al. 2007; Seta et al. 2006). Findings like these imply that as the post-disaster phase unfolds, individuals within impacted communities may begin to compare their own psychosocial and economic damages to others.

Further, lacking the institutionally established response efforts typically available to victims of natural disasters, the socioeconomic recovery operations for technological disasters are characterized by situation-specific litigation and compensation schemes implemented by private responsible parties. These compensation programs and prolonged legal efforts often result in subsequent sociocultural disruptions referred to as “secondary traumas” (Gill 2007; Marshall et al. 2004; Picou and Marshall 2004; Picou 2009; Reid 2013; Ritchie et al. 2013). Gill (2007) defines a secondary trauma as “a blow to the social fabric of a community caused by inadequate responses to an initial hazard event and/or inadequate responses to secondary hazards” (p. 625). A secondary trauma is not simply an extension of the initial onset of mental and community health effects from a disaster, but rather represents a new set of individual and social stressors that exacerbate the initial trauma and social malaise. In that disrupted social context, the introduction of new relationships, such as dependence on the state or a private party for financial support, can lead to unintended consequences. For example, Petryna (2013) describes the post-Chernobyl compensation program in the Ukraine as one of “biological citizenship” where issues of power between individuals and the state became caught up in the uncertainty and scientific complexity of administering health and claims services.

The post-disaster phase of the DWHOS stands out both due to its scale as well as the involvement of a private compensation program, a temporary employment opportunity program, multiple levels of federal and civil litigation involving a complex array of actors, and fluctuating rules and procedures governing the processes. With multiple changes in the governance of the compensation program, competing definitions of compensable loss, and an air of economic uncertainty concerning the future of the Gulf, the various programs were introduced during difficult times in Gulf Coast communities. We argue that perceived problems associated with the compensation process constituted a secondary trauma and contributed to community corrosion in coastal communities already harmed by the direct ecological and economic damages of the oil spill.

Response Efforts in the Exxon Valdez and Deepwater Horizon Oil Spills

Prior to the DWHOS, the worst recorded oil spill in U.S. waters had occurred in 1989 when the *Exxon Valdez* oil tanker ran aground in Alaska's Prince William Sound. Like the DWHOS, the EVOS was a huge economic disaster for the region. Nearly 33,000 fishermen, Alaska natives, landowners, and others whose livelihoods were gravely affected by the spill filed private lawsuits against Exxon in 1989 (Mapes 2008). In addition to criminal fines totaling \$125 million dollars for violations of the Clean Water Act and related statutes, the U.S. District Court for the District of Alaska in 1994 awarded compensatory damages against Exxon of nearly \$287 million and \$5 billion in punitive damages (Barnes 2008). Exxon appealed this ruling, leading to nineteen more years of litigation and ongoing stressors for disaster victims. In 2008, almost 20 years after the incident, the U.S. Supreme Court limited the punitive damages against Exxon to approximately \$500 million. After all was said and done, the average award made to the 33,000 claims was only \$15,000 (Mapes 2008). Thousands of the original claimants died while waiting for their financial claims to be settled (Barnes 2008).

The EVOS also contributed to both immediate and long-term stress and social disruption in affected communities. The ecological devastation and subsequent economic collapse led to high levels of psychological stress and depression among individuals (Palinkas et al. 1992; 1993). At the collective level, social disruption and the erosion of communal bonds were observed in coastal communities in Southeast Alaska (Arata et al. 2000; Picou 2009; Picou and Gill 1996; 2000; Picou et al. 1992). Longitudinal data collected by Picou and colleagues (2004) found that high levels of psychological stress were strongly predicted by whether an individual was a participant in the ongoing litigation. Whereas the trauma of the initial spill resulted in psychological distress, Picou and colleagues argued that the "litigants became vulnerable to a secondary source of trauma, litigation stress" (p. 1514).

The DWHOS has reproduced many of the hardships associated with the EVOS. It caused environmental degradation of marine ecosystems in communities economically dependent on them, including through commercial fishing and tourism, resulting in psychological stress, health concerns, and the decline of social capital (Ritchie et al. 2011). However, unlike the decades of hostile litigation Exxon undertook to limit compensation for victims of the *Valdez* spill, BP implemented a massive compensation process immediately following the DWHOS seeking to meet the needs of the affected populations and reduce the potential pool of class action litigants. But compensation schemes following environmental disasters can be considerably problematic (Neal 1984). For example, mismanaged efforts by the Chisso Corporation to compensate victims of "Minimata Disease" following the discovery of widespread methyl mercury poisoning in Minimata, Japan led to decades of collective action and political protest (Almeida and Stearns 1998). Likewise, victims and their families of the methyl isocyanate leak at Bhopal, India, after being offered paltry amounts of financial compensation, worked for decades to form an international movement to hold Union Carbide legally responsible (Zavestoski 2009). Having learned from these frustrated lessons of the past, BP appeared to be eager to avoid such political and legal challenges by advancing a more immediate compensation system.

Following its identification as the primary responsible party for the oil spill according to the Oil Protection Act, BP hired two independent contractors to operate the claims process and began accepting claims just days after the oil spill began.⁵ Interim payments for many claimants came quickly, designed to replace one month of lost income due to fisheries closures.⁶ From April 25th through August 23rd, BP received 154,000 claims and wrote 127,000 checks covering \$399 million in estimated damages (BP 2010b). Still, BP's claims data from that summer suggest that less than one-third of the total claims submitted were actually fulfilled (Chavkin 2010).

Unresolved and future claims were handed off to the Gulf Coast Claims Facility (GCCF), run by compensation expert Kenneth Feinberg. Charged by President Obama to return fairness and trust to the DWHOS claims process, Feinberg was given a \$20 billion escrow fund by BP to administer independently of BP and its risk management contractors. Feinberg's reputation for overseeing compensation for complicated disasters such as victims of the 9/11 attacks, Agent Orange, asbestos-related cancers, and the Aurora and Virginia Tech shootings preceded his arrival in the Gulf of Mexico, and many frustrated residents looked to the new GCCF to bring clarity and compassion to the claims process. In its first three months, the GCCF issued \$2.6 billion in emergency advance payments to 170,000 claimants (GCCF 2012). Overall, the GCCF operated for eighteen months, distributing some \$6.2 billion to over 220,000 individual and business claimants (GCCF 2012). Feinberg's original stated goal was to convince 90% of potential claimants to accept a final payment from the GCCF and forego participation in any future litigation (Weeks 2012). Of the 579,553 claims received during GCCF's operation, 385,553 (66%) received a final payment or offer of a final payment. 170,649 (29%) claims were either denied, withdrawn, or determined to be insufficient in some manner (GCCF 2012). An additional 110,299 private claimants chose to participate in the ongoing class action lawsuit against BP (Weeks 2012).

In addition to direct payments for lost income, BP provided limited employment opportunities in the Gulf region. Shortly after the spill, BP created the Vessels of Opportunity (VoO) program to hire existing fishing and commercial crews to help contain and clean up the oil. If selected for the VoO program, the daily pay varied between \$1,200 for smaller boats and \$3,000 for larger boats, with crew members paid \$200 per day (BP 2010a). However, BP was widely criticized for making arbitrary decisions about who was deployed and for employing recreational boats for the VoO program rather than prioritizing out-of-work fishing vessels. Like the EVOS, schisms were created within Gulf communities between those willing to take the BP contracts and those who intentionally did not participate or were not provided an opportunity to do so (Gill 1994; Gill and Picou 1998). Ultimately, BP did make several official changes in its program to reduce fraud and prioritize vessels that had spent the least amount of time on the water. Over the course of 2010, the VoO program made approximately \$594 million in payments to vessels and crew and employed approximately 3,500 commercial and charter fishing boats (Upton 2011).

⁵Risk management firms Worley Catastrophe Response, based in Louisiana, and ESIS, which operates globally, were employed by BP. ESIS had worked with BP for 15 years prior to the DWHOS.

⁶Interim payments were made in 30-day increments for relatively small amounts (for example, \$2,500 for deck hands; \$5,000 for boat captains; and \$25,000 for business owners).

In the years following the spill, BP has expressed its own frustration with the compensation system, particularly in the aftermath of the 2012 settlement agreement it negotiated with a committee of lawyers representing plaintiffs still seeking economic damages. The settlement, which was intended to streamline the process, remains contested in court due to allegations brought by BP of widespread fraud and mismanagement at the claims centers. The terms of the settlement replaced the GCCF with a new entity for managing the claims – the Deepwater Horizon Economic & Real Property Claims Center (DHECC) – and outlined an economic formula whereby a business could file a request for compensation if its income dropped in a designated pattern immediately following the spill. But the lack of a requirement of proof that the business's financial losses were caused by the spill resulted in a flurry of new requests for compensation, and some evidence of deceit, corruption and conflicts of interest among management and the DHECC staff has been uncovered by investigators hired by the claims center itself (Freeh 2013).

Thus, despite the substantial and fairly prompt economic aid, the multiple compensation programs enacted under BP, the GCCF, and later the DHECC have been plagued by criticism at multiple levels. The pushback by BP since the 2012 settlement included aggressive advertising accusing locals and their lawyers of taking advantage of too-generous claims policies, resulting in a recharged atmosphere of resentment (Robertson and Schwartz 2014). Satisfaction with post-disaster support can matter substantially for disaster recovery, with positive perceptions of support being associated with improved resiliency (Bonanno et al. 2010; Bonanno et al. 2007; Norris and Kaniasty 1996). Further, dissatisfaction with post-disaster support and the process of disaster aid distribution can lead to negative perceptions of community cohesion and solidarity, with the result that community members who view a compensation process as unfair also view their community as antagonized and fragmented (Kaniasty 2012). The following interviews with individuals affected by the Deepwater Horizon oil spill provide valuable evidence for the extent to which BP's compensation system helped or hindered community recovery from the largest oil spill in U.S. history.

Methods

The scale of the DWHOS provides a unique opportunity to comparatively assess the emergence of corroding communities in the Gulf of Mexico. For the DWHOS, the National Institutes of Health funded several large university consortia through the National Institutes of Environmental Health Sciences to investigate a broad range of effects from the toxicological to the sociological. Five states were affected by the spill, and data presented here represent the authors' work through one of the consortium's studies of communities on the eastern Gulf of Mexico from Alabama's coastal towns through the Florida panhandle. Fishery closures across the Gulf led to high levels of unemployment in the community, as did the sharp declines in tourism due to reports of oil contamination in the news. Morris et al. (2011) documented significant increases in mental health problems in this study region immediately following the spill at levels on par with the effects felt closer to the spill's epicenter. For this project, we utilize data collected from field sites in four counties located on the Gulf Coast: one in Alabama (Baldwin County) and three in Florida (Escambia, Franklin, and Levy Counties).

Although less directly impacted by coastal oiling than Louisiana, the indirect effects of the spill on the tourism and seafood industries were substantial and thus present an opportunity to explore the impact's long-term effect in nearby communities. Our four counties represent areas not typically associated with the oil industry. Florida bans drilling in state waters, instead choosing to invest primarily in tourism, which makes up one of the largest sectors of the economy, bringing in 67 billion in revenue (Florida 2011). Likewise, the coastal areas of Baldwin County have few contacts with the offshore oil industry. Thus, given these areas' reliance on factors like pristine beaches to attract tourists, it is particularly vulnerable to the risks of oil spills, while not benefitting from the economic production of offshore drilling. This makes Florida a particularly interesting case study for the Deepwater Horizon oil spill, yet one that has been studied far less than Louisiana.

With the goal of assisting in the community recovery process, we utilized community-based participatory research (CBPR) to identify key research questions and appropriate methodologies. CBPR prioritizes shared decision-making in all stages of the research process, altering the traditional relationship between researcher and research participant (Israel et al. 1998). Increasingly, researchers investigating environmental health problems are employing CBPR methods to enhance data quality and develop translational tools to improve overall community health (O'Fallon et al. 2000). Our approach to CBPR involved identifying four community partner organizations in each of our field sites and developing a cooperative plan for investigating the impacts of the DWHOS on individual and community health. Community organizations representing impacted economic sectors, such as seafood harvesting or social services, were sought out and queried about their interest in participating in the project. With input from the larger consortium's community advisory board, we solicited input from a wide range of organizations and worked directly with two seafood associations (representing Levy County and Baldwin County) and two community service groups (one in Franklin County and one in Escambia County). These partner organizations assisted in the development of appropriate research questions, methodological approaches and instruments, and data interpretation.

One of the initial tasks undertaken using CBPR was to “map” community stakeholder groups—from business and political leaders to seafood workers—within each community. Community partners worked with investigators to identify core economic, political, and social stakeholder groups. In these resource-dependent coastal communities, seafood and tourism represented the largest stakeholder groups. Between November 2011 and April 2012, 20 focus groups varying in size from four to ten participants were conducted. Semi-structured questions asked focus group participants to discuss the nature of local resiliency to disasters and the overall impact of the DWHOS on their communities. Results from these focus groups helped shape the development of semi-structured questions for individual stakeholder interviews, from which data on social comparisons concerning the compensation process were drawn.

Following the focus groups, key stakeholder interviews were conducted with individuals representing a variety of business, political, and civic interests in the four communities, with an emphasis on workers in the seafood and tourism industries. Recruitment began in December 2011, roughly 20 months after the initial spill. Interviews, lasting on average

between one and two hours, were conducted by a member of the academic research team in the participant's home or office, or in a quiet public area. Semi-structured interview questions guided 103 participants through their initial reactions to news of the spill to their efforts to emotionally and financially recover. Interviews were digitally recorded and transcribed verbatim, with personal names, places of employment, and other identifying features removed to maintain respondent confidentiality.

Analytical Strategy

Interviews were initially sorted for discussions of the compensation process following several readings by the research team. Interviews lacking any mention of the compensation process were excluded. Discussions of the compensation process, including the VoO program, were then identified as either “positive” or “negative.” Seventy-eight percent (n=81) of the interviews discussing compensation cast the process in a negative light. Once sorted, we engaged in inductive analyses incorporating phenomenological and grounded theory approaches (Creswell 2009; Glaser and Strauss 1967). Among the negative portrayals of the compensation process, we found a common theme of social comparisons resulting in conflict among residents. We then searched for statements that provided insights into key themes concerning the processes and mechanisms by which social ties in the community corrode. After identifying eight to ten possible themes, we narrowed down the themes by identifying areas of overlap and theoretical consistency.

Results

In our interviews, Gulf Coast residents described frustration and distrust for BP's system of compensation and the subsequent GCCF, including perceptions that it was arbitrary, unjust, and uncertain. While the four communities have unique characteristics and emphasize different themes about the oil spill in other respects, all were remarkably similar in criticizing the DWHOS compensation system. Respondents frequently portrayed the compensation process as uncertain, confusing and arbitrary, which in turn generated social comparisons and competition that resulted in a corroding community environment and hindered the recovery process. The sections that follow present the common narratives regarding the multiple compensation processes of the DWHOS, including those under BP, VoO, the GCCF, and the DHECC. They paint a vivid portrait of how these community members tried to make sense of their stressful environments and awaited fulfillment of U.S. Congressional Representative Edward Markey's (D-MA) promise that “the citizens of the Gulf will be made whole” (U.S. GPO 2010).

Randomness and Confusion with the Claims Process

Of all the dissatisfaction expressed with the compensation process, the most prominent was the perceived randomness regarding which claims were accepted and paid. This randomness served to both highlight attitudes about the subjectivity of claims decisions and exacerbate perceptions of unfairness. Stories abounded of people going in to file a claim and receiving different outcomes from their friends, family members, and coworkers with identical statements of hardship. As one oysterman from Franklin County recounted,

I called in, and my dad called in. We were gonna make an appointment to come up here. For some reason, they made his appointment two days later. Well, I went ahead the next day. He went the next day, and he got denied the \$5,000, and I got the \$5,000. But that was the last day. That was the cutoff day.

Although accusations of fraud marginally occurred among participants, disbelief that claims perceived to be accurate and deserving were denied greatly outweighed reported feelings that compensation funds were being misappropriated. In a similar fashion, a realtor from Escambia County described the inequality in what he witnessed in the claims process:

It was not a well-planned process on what they did, there was no uniformity in it. I had realtors that worked for me that basically do the same amount of sales every year; one would go in and get fifteen thousand dollars, the other would go in the next day and get paid twenty thousand dollars. There was no uniformity at all; I talked to a lot of the shrimpers and seafood folks and they had the same problem, they would go in and one of them would make fifty thousand and the other would make seventy-five and there was no rhyme or reason why one did better than the other.

Many people attributed this randomness to the whims of the individual claims processors; as one manager of beach vacation rental property in Franklin County explained, “it just depended on who you got, on who your adjuster was.” Of course, it has been difficult to determine how much control individual adjusters truly held, but what we do know is that this perceived subjectivity, including its pervasive sense of arbitrariness and the disputes it triggered about whether or not successful claimants were deserving, caused substantial discord within these communities. A shrimp boat operator from Baldwin County described it this way:

It has died down tremendously but there was an awful lot of, “I hear so-and-so got this much from the claims process and I don't understand why I couldn't get at least that much.” That was the disastrous part of the claims process in my opinion. It was not transparent and it did not appear to be fairly administered. It was kind-of like a crap shoot, if you happened to get the right claims person that you went to talk to then you probably would get a quick and maybe even an overpayment than what you were. If you happened to get the wrong person or go at the wrong time or go to the wrong office or for some reason not represent yourself in a particular way than you might get completely screwed. You had crewmen on the same boat, I remember we had two crewmen on the same boat that shared the same trips for the last five years. They shared the same everything. I'm going to make the numbers up but they were vastly different relatively speaking; one guy got \$5,000 and the other guy got \$12,000. How can that possibly be? Again, it was this sense that no one was really in charge, nobody had a handle on how things ought to be.

One of the recommendations that came up repeatedly was the need for more transparency on the part of BP about how evaluations of claims and compensation amounts were made. Many felt this would have eased the stress associated with witnessing fellow community members spending large sums of money while their own claims were tied up or denied.

Among some political leaders, there was also a sense that this random inequality created a new problem for their communities, independent of the actual oil spill. A city official from Franklin County described how and why, in their attempts to help, BP actually made the problem worse:

It was the influx of money that BP started throwing into the community without any logic, rhyme, or reason. I guess they were trying to do what they could as quickly as possible to alleviate the problem without coming in and talking to the local officials about what the problems were; that caused more problems than anything... In their efforts to help they created more problems for this community.

One of the lessons that can be drawn from this narrative, one that was also learned after the EVOS, is that poorly managed responses can actually impede rather than assist community recovery in the aftermath of human-induced environmental disasters. In the end, while the resources BP did provide no doubt helped some individuals and businesses pull through, the perceived inequity in how they were distributed created a second order problem of jealousy and relative deprivation that drove a wedge between people and obstructed recovery.

A Zero-Sum Game: Competition in the Claims Process

Throughout the interviews, the early days of the BP compensation process is described as a cash bonanza of free-flowing claims being processed immediately. Interviewees note that BP was “handing out checks left and right;” “dishing out \$5,000 to every Tom, Dick, and Harry that walked inside;” and that people could “go down there and get your free money.” However, while at first there seemed to be an infinite pool of money, over time the compensation process became more stringent. The shift from the BP claims offices to the new GCCF offices changed the claims process, exacerbated confusion, and led some people to view one person's successful claim as detrimental to their own. For example, one seafood company owner in Baldwin County stated, “Even though it was BP's money you thought, well if BP spends up too much of their money on this kind of garbage then they are not going to have money left over to pay me for my real losses or to clean up the environment and do real cleanup.”

Given the perceived randomness and uncertainty of the compensation process, people inevitably began making negative social comparisons between what they and other individuals or businesses received. Rumors of “spillionaires” flocking to the Gulf, a term coined following the EVOS for individuals and businesses perceived to profit from federally-paid cleanup efforts, exacerbated perceptions of unfairness and the feeling that “outsiders” were being paid funds instead of the actual oil-spill victims. Moreover, real differences in allocated claims had real effects regarding which businesses were able to stay open or expand, and which were forced to limit expenses or even close. Frustrated comparisons were frequently made between those who were “successful” in negotiating the claims process and those who were not.

This perception led to another frequently noted discrepancy, which was that employees were compensated generously while the claims of the businesses that employed them were ignored. As one woman who worked at a university in Escambia County explained: “One thing that I saw several times was where employees of a business were getting these huge

checks but the business itself being denied their claim.” Economic insecurity across all socioeconomic classes was already high in the wake of the spill. This discrepancy between businesses and workers in the claims process—real or simply perceived—was another cause of disaster-induced social strife in the communities. A businesswoman from Franklin County described the social impact of the unequal compensation experiences between employees and employers this way:

You would hear stories of a waitress in Atlanta getting \$20,000 because she used to work in a restaurant down here and then the restaurant wouldn't get anything. They were not paying the businesses; they still haven't paid the seafood industry businesses, like all the main houses that were most affected. Yet employees and waitresses, people who were the employees yet the business wouldn't get anything. The bad thing about that is there is no business to come back to it, it's been closed up. It's not exactly what happened to the restaurant next door but I have had many conversations with him and he is like, “I can't get a dime out of them, yet my waitresses have gotten \$40,000.” How does that make them feel when they can't even make \$30,000 or 40,000 in four months? There was a lot of emotional turmoil and I think a lot of people just stuffed it.

According to this respondent the perceived injustice of the compensation method, especially among individuals who resided part of the year out of town, was a situation that caused a great deal of emotional turmoil.

Another source of tension between business owners and employees stemmed from BP's VoO program, which paid seafood workers to clean up oil and prohibited them from working during this time. Since most oystermen and fishermen are self-employed, this created a lack of seafood coming to market, even in areas unaffected by oil. Similarly, the compensation process provided individuals with large sums of money that sometimes resulted in people choosing not to work even when they could. One individual from a family seafood business in Baldwin County described the ripple effect of seafood employees not working:

Some of the fishermen made more money in a short stretch of time than they would have made fishing so there was the old “spillionaire” feel to some people that got almost, not rich overnight but they got a tremendous infusion of cash overnight. The way that money was sloshing around in the economy created some false situations. The fact that there was a lack of suppliable oysters for us; Apalachicola was an example for us, we couldn't get oysters out of Apalachicola even though they were wide open, they never got closed due to the oil over there.... The fishermen somehow qualified over there and they got people who might not earn five thousand dollars in a month got a check for five thousand dollars so they didn't work for a couple of weeks. That took all of this harvesting power out of the system and everybody downstream began to starve in the same way down here.

Moreover, tourist industries that rely on boats and their crew, such as fishing charters and sight-seeing tours, were also affected by people who chose to accept VoO funding in lieu of working. An employee of the Chamber of Commerce in Franklin County states, “Others were gone, they were going to go look for oil. Then you'd have tourists calling saying, ‘I'd

like to book a guided fishing trip' and we didn't have anybody to take them out." Thus, another way the compensation process led to social divisions between employers and workers was that it negatively affected businesses in need of inventory and workers.

Yet another perceived inequality in the compensation process that emerged was competition between businesses. Some businesses received compensation earlier than others and could afford to purchase additional inventory, placing them at an advantage over those businesses that did not receive immediate compensation. One owner of several businesses in the retail and food industries in Franklin County described this process:

What had happened in the community was that a couple of restaurants had gotten theirs immediately so they expanded, hired employees, gave raises and things like that so the competition became more difficult because of that. My next door neighbors by the store and across the street from me got their money and were able to beef up their inventory while I still haven't got my money. I have had to close my stores because of it.... It was business against business, friends against friends and that was how it was perceived. It was no one's fault here that we got it or they got it or anything but it's contentious the way people perceive it.

Thus, differences in how fast businesses were compensated had the unintended consequence of creating growth opportunities for some businesses while constraining others. Such perceived inequalities in compensation contributed to an atmosphere of frustration and intensified competition following the DWHOS.

Ultimately, the most common reaction among Gulf Coast residents to the claims process was discontent, which could be found in every segment of society. This is highlighted by the fact that there were those who held opposite views about the relative success and deservingness of businesses and workers in receiving compensation. In the minds of some of these individuals it was the workers, not the businesses or seafood company owners, who were unfairly overlooked by BP and the GCCF at the claims centers. A pastor in Franklin County reported this assessment of the situation:

Some people felt that they didn't get paid as much as they should have, some people are still thinking about that. They are opening up a new claims center on Monday. A lot of people felt that these are the people that are working in the seafood industry, the workers, not the owners. I think the owners got their money, they have millions of dollars I believe. The ones that are working didn't feel like they got a fair shake.

In the absence of specific information about how BP's compensation decisions were made, individuals were left to interpret the events unfolding through their own situations and biases.

Corroding Communities: Keeping up with the Joneses' Claims

The small and close-knit nature of Gulf coast communities is a feature that is frequently noted as beneficial for communities in the aftermath of natural disasters, as people come together to help each other out. However, in the case of the DWHOS compensation process, being well-connected to other community members was actually a detriment since it made it

relatively easy for people to find out, inaccurately or accurately, who was receiving how much compensation. Interviewees stressed how fast compensation information traveled through the gossip mill and created divisions in the community. An office manager of a fishing charter company in Franklin County explained, “I think it's because everybody is related and they are all in each other's business and so they know what somebody else is getting or doing so there is a lot of jealousy and backbiting. It was terrible; I just wanted to stick my head in the sand [laughs]!”

One consequence of the corrosive effects of reactions to the compensation process is that people began bickering and fighting about money, causing some individuals to reduce how much they socialized, leading to further isolation during an already stressful time. Thus, disputes over compensation not only led to immediate negative feelings but also seemed to have an overall dampening effect whereby some people felt less willing to interact with other community members. One owner of a marketing company in Franklin County describes the difficulties during this period:

I worked really hard and was compensated pretty well for it—but it was very isolating because there was such animosity in the community that you just didn't want to go out because you didn't know who was angry about what. I'm not much of a socializing person but we really did not go out in public at all during this whole thing. It was just difficult to get into a social conversation about BP. You just didn't want to talk about it anymore. I had a job to do and I was tired of apologizing for taking BP compensation and it was just really isolating.

During the course of our interviews, this sentiment came up frequently and the resentment and anger toward individuals who filed successful claims was palpable, as exemplified by this fifth generation clammer from Levy County:

There's people that claim they were clam farmers in this town, never worked in the business their entire life. Ain't never touched nothin. They're drunks, most of em, and they got \$25,000 checks. You see that and you go, “What am I doin' wrong?” That's what makes you mad.... I'll tell you how bad it's got. Last year I had to start seeing a psychiatrist. That's how bad it's got. You watch these people and they thieve and they crook and they do this and they do that, and you try to do the right thing, and you just get stepped on, but that's part of it, I reckon.

Responses like this also reflect that perceived fraud was another force contributing to community dissatisfaction, although fraud was typically seen as a failure of BP and the GCCF to better police the claims process. Clearly, residents who witnessed claims being made that they judged to be undeserved just added to their anger. Moreover, the community ramifications of the claims process, where one individual's choices were seen as affecting others, led to moral evaluations of people's decisions. One director of an organization in Franklin County notes:

I'm not trying to be judgmental on who got in line and stuck their hand out but at the same time there is this inequity of the person who kept oystering the entire time while all of his buddies were earning \$5,000 a month and he wasn't getting

anything. He kept the economy going, so you see the inequity in it. They feel stupid because they didn't take advantage of it. But they took the moral high ground.

In this view, taking compensation was not just an economic decision but a moral one as well, and was viewed as having implications for the general health of the business community.

Throughout the interviews we heard frequently that the payment process exacerbated community divisions. Because technological disasters are by nature unplanned events, it is difficult to collect baseline data for later comparison purposes that would allow causal analysis about whether the claims process was responsible for the community infighting after the spill or whether such discord was already present. That said, there is evidence that levels of stress and disunity among social relations increased after the compensation process. Psychological research in our study area reveals a significant spike in mental health problems from a baseline depression rate of 9% in Florida and 13% in Alabama (CDC 2008) to levels in 2010 and 2011 ranging from 25% to 50% of individuals reporting depressive symptoms (Grattan et al. 2014). In our own data, the interviewees indicate that high levels of community stress and conflict were not a pre-existing phenomenon. This is perhaps best illustrated by a local government official in Franklin County who states:

We were at a point in time where it seemed everything was clicking, the community was doing fine, everybody was working on the same page to tackle different problems but all of a sudden we had this man-made disaster come here and it seemed like the community started drifting farther apart, it wasn't that cohesiveness that had existed initially. That was what I observed.

Moreover, many affected residents pinpoint social conflict as emerging from the compensation process, as illustrated in this passage from a social services worker in Alabama:

It was the claims process that divided a lot of people. Not really the disaster itself but when it came to the financial part of the claims process that's when it just pitted family member against family member, neighbor against neighbor, coworker against coworker. That's where you saw a lot of friction.

And while no community is perfect, and certainly community divisions existed prior to the spill, the interviews suggest that people's social stresses were uniquely amplified in response to this disaster. Instead of pulling together to get through the crisis as had happened in the past, the introduction of competition for BP's resources led to noticeable social fracturing and stressed relations. An owner of a graphic design business in Franklin County captures this sentiment particularly well:

When hurricanes happen and when bad things happen to this community, in the past it's been my experience that it has pulled people together—there is nothing to gain by exploiting the situation. It has just brought out the best in people. I will tell you that I have seen the BP experience bring out the worst in people. It has had the opposite effect. It has divided, in my opinion, this community to more than a significant degree because it brought competition and jealousy and some of the ways that the money was administered maybe wasn't perceived as the most

equitable way to administer some of that money. You have people that are equally as deserving—that one gets it and one doesn't. That has created a lot of conflict in the community.

These interviews suggest that these were not competitive, envious communities that would have perceived injustices and problems in any compensation system introduced to them. Rather, these were areas used to experiencing and recovering from natural disasters that faced unique social challenges following the oil spill and subsequent compensation system.

In sum, the negative feelings about compensation were widespread and affected both weak ties as well as close family members. A director of the Chamber of Commerce describes the compensation process as something that “could have split apart long term friendships,” and another interviewee notes that she “heard issues about where neighbors were pitted against neighbors.” A seafood restaurant manager from Levy county predicted that “there's gonna be some long-lasting effects that aren't so good—negative effects from people receiving that money.” Such sentiments indicate that community members felt that characteristics of the BP compensation process, in particular perceptions that it was random, unequal, and unclear, may have actually obstructed some aspects of recovery in the Gulf Coast communities in the months after the oil spill occurred.

Discussion

From our interviews, the corrosive nature of the compensation processes, above and beyond the initial impact of the spill, is evident. With billions of dollars pouring into Gulf Coast communities from BP, the GCCF, and the DHECC, the compensation processes did play a significant role in helping people and businesses recover from their economic losses. However, with the lack of transparency in determining just how much BP or the GCCF would compensate individuals and businesses, residents felt themselves pulled apart rather than together by the claims process during what were already difficult times. In this way, the compensation system mirrored other processes, like litigation, found to disrupt communities and contribute to corrosion post-disasters (Couch and Kroll-Smith 1997; Freudenburg 1997; Marshall et al. 2004; Picou et al. 2004). Specifically, we find that confusion, unevenness, and randomness in the claims process generated negative social comparisons and competition, which in turn stressed social relations.

For his part, Kenneth Feinberg, whose management of claims processes in other cases had been seen very positively (Partlett and Weaver 2011), advised caution when interpreting the perceived unfairness of BP's compensation system. Amidst accusations that his claims process was unfair, often leveled by area residents with the support of their local politicians, Feinberg explained that his general strategy for implementing any successful public compensation system is to be generous and get money out the door as quickly as possible (Andrews 2012). However, he defended the rejection of a number of suspicious or poorly documented claims filed by disgruntled Gulf Coast residents declaring “I will not pay claims that can't be proven, that lack proof, that are not substantiated. I won't do it!” Ultimately, with over 4,000 cases being prosecuted for fraud (Andrews 2012), Feinberg cautioned

residents, “Don't always believe everything you've heard from your next-door neighbor” (Schwartz 2011).

Data from these interviews are not meant to provide a systematic analysis of whether or not there were fraudulent claims or if the actual distribution of funds was mismanaged, although other research suggests that this was indeed occurring (Freeh 2013). Rather, we argue that what is important is that *perceived* problems and inequalities in the compensation process caused stress and anxiety for community members and thus hindered post-disaster recovery. Such perceptions fueled corrosive relationships in an already uncertain and difficult time. These perceptions were real in their effects. People seemed genuinely confused about the claims process and viewed BP as not treating claimants fairly and equitably. As one retired volunteer from Franklin County explained it: “There is a communication problem; people would file a claim and they wouldn't provide sufficient information so it would be sent back. Well, the people would get pissed off and say ‘well they just don't want to pay me because they are a bunch of crooks and just want to keep the money’.”

Based on our interviews, several suggestions emerged regarding how the compensation system could be improved to help avoid social disruption and community corrosion after similar events in the future. Among the primary recommendations were increased transparency in how claims decisions were made, clear guidelines that resulted in a more equitable distribution of funds to similarly affected claimants, and better communication between BP and local communities about the paperwork necessary to file a claim. A news anchor from Pensacola suggested that BP should have provided a document written in simple terms explaining who was eligible for compensation and who was not. Fundamentally, it was this lack of access to reliable information and clear, standardized guidelines for compensation that seemed to cause the most damage to the communities in their attempts to reconcile the effects of the disaster, apply for temporary relief, and then move on with their lives.

Herein lies the problem with compensation processes: while on the one hand introducing remuneration is vital for sustaining communities struck by disasters and responsible parties should pay for their serious mistakes, compensation money is likely to be accompanied by disputes and conflict about how the funds are distributed. This divisiveness adds an extra problem for communities already reeling from the deleterious consequences of a disaster. This process has also been seen in natural-technological disasters like Hurricane Katrina during which insurance claims and government aid were contested and distributed unequally (Bevc et al. 2010). Ultimately, any introduction of compensation systems in such events is likely to contribute to an ability to blame a human target for the suffering and economic disruptions they cause, which has been found to be one of the primary mechanisms that leads to community corrosion (Freudenburg 1997; Marshall et al. 2004).

However, putting disaster relief money in the hands of an entirely independent entity could mitigate this problem to some extent. In the case of the DWHOS, the GCCF and the DHECC were created with this awareness in mind, and BP was reportedly willing to hand off the claims process. Some interviewees suggested local government would be a better distribution center, based on the rationale that local governments would know where the

money needed to go. Removing control over funds allocation from any association with the offending entity would potentially allow some local autonomy, encourage community members to play an active role in the recovery process, and result in a more community-oriented rather than individually-oriented recovery.

Conclusion

The DWHOS was the largest maritime oil spill in U.S. history. Beyond its ecological devastation, the spill's social, economic, and cultural impacts will be long-lasting, with many dimensions of its effects on coastal communities yet to be determined. BP responded to the ecological and socioeconomic damage by providing the largest economic compensation program in U.S. history. These compensation efforts, unprecedented in scale, involved hundreds of thousands of individuals and businesses. Unfortunately, the perceived randomness, lack of transparency, and resulting negative social comparisons from the process led to a corrosive effect in the community. Rather than being drawn together to overcome adversity, people experienced frustration, competition, distrust, and envy due to perceived disparities in how compensation funds were distributed.

Communities may corrode in the face of uncertain environmental risks and unknown socioeconomic futures. Conducting research while this process of corrosion is ongoing can be challenging and has the potential to further exacerbate stressors and tensions (Kroll-Smith and Couch 1990). Utilizing the CBPR approach can be an effective tool to both mitigate some of the potential for additional stressors for participants and ensure that benefits from the research process are shared between academics and community members. Our work has sought to examine the role of negative social comparisons and competition as potential mechanisms leading to the onset of a corroding community. We aim to advance our understanding of how such social disruption might be avoided or ameliorated in the case of future technological disasters while empowering our community partners with skills and knowledge to be better prepared in the future.

Some types of social comparisons may be unavoidable any time outside money is introduced into small communities, and it is likely that the money BP did distribute along the Gulf coast prevented, at least temporarily, deeper economic damage to the region and was thus an important part of its recovery. Still, lessons learned from both the EVOS and the DWHOS indicate that disaster compensation processes could be improved. Increased transparency in the compensation system may have helped the stress and frustration generated by such negative social comparisons, and interviewees frequently called for easy-to-understand guidelines that were clearly communicated to community members and administered in a standardized and non-arbitrary way. Making the claims process more transparent, fair, and comprehensible to the public could reduce both uncertainty as well as feelings that some people were unjustly reimbursed, resulting in bitterness among community members.

While creating clearer guidelines could benefit systems designed to compensate individuals, another suggestion for improving future responses to similar environmental and economic catastrophes is to invest more at the community level in recovery. Government entities were also eligible to participate in BP's claims process, but compensation was limited to the direct

costs of removing oil, net losses of tax revenues, and operational expenses in the response effort—all net of other funds received from BP during the crisis. Municipalities, counties, and state agencies received roughly \$1.5 billion dollars from BP for their services in responding to the spill. Yet compared to the \$10.5 billion returned to individuals and businesses, little investment was made in restoring community well-being through providing long-term mental health services, social services, or other community-enhancement programs.

Being able to recover after disasters depends not just on compensating individual losses but also community losses such as healthy local economies, civic engagement, social ties, and functioning social services, making it important to design recovery efforts to maintain and improve the well-being of the community (Bonanno et al. 2010; Norris et al. 2002). Such community support and interventions could lead individuals to think holistically in terms of the needs and goals of the community, which in turn could potentially increase unity and cohesion. In the case of large environmental disasters like oil spills, investing in local programs and providing funds to smaller governing bodies might reduce community infighting and allow people in the damaged areas more control over the process of rebuilding what was lost. Passed in 2012, the Resources and Ecosystems Sustainability, Tourist Opportunities, and Revived Economics of the Gulf Coast States Act (the “RESTORE Act”) promises to do just that. The act establishes a Gulf Coast Restoration Trust Fund which will consist of 80% of all administrative and civil penalties paid by the responsible parties for the DWHOS. Similarly, a portion of the medical claims settlement paid by BP goes towards the Gulf Region Health Outreach Program, which aims to train community health workers and build local community capacity for future disaster responses. Both of these interventions seek to place more control over the recovery process in the hands of local stakeholders.

While the intent of BP's compensation process was to stabilize the threatened Gulf Coast economies, its implementation brought about a secondary trauma that may have been avoided if the social and cultural contexts in which they were to operate had been better taken into account. With new oil exploration projects being developed in deeper and more remote locations, it is imperative that just as lessons were learned from the EVOS, the DWHOS serves as a reminder that the socioeconomic impacts of disasters are greater than the sum of their parts.

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