

THROUGH THE EYES OF YOUTH:
SENSEMAKING AND COPING FOLLOWING THE 2010 BP OIL SPILL

by

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Through the Eyes of Youth: Sensemaking and Coping Following the 2010 BP Oil Spill

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This qualitative study explores narratives of youth affected by the BP oil spill in Bayou la Batre, Alabama, focusing on adolescents whose parents worked in commercial seafood and/or shipbuilding industries. The research draws on 40 face-to-face, in-depth interviews with youth; 40 informal interviews with adult informants (educators, and community leaders, mental health professionals); and more than 100 hours of participant observation. Findings contribute to our understanding of ways in which youth experience, make sense of, and cope with disasters, particularly in the case of technological disasters. Although many studies have focused on the ecological, economic, and social effects of technological disasters such as the BP oil spill on adults, few have specifically investigated the impacts of these events on children.

Using an ecological-symbolic theoretical perspective, and drawing heavily on the sociological studies of children and disasters, I present an in-depth look at youth's post-disaster experiences. Specifically, findings explore youth's early perceptions concerning how the spill might affect themselves, their families, and their community in the more immediate aftermath of the spill, as well as their observations regarding how the actual impacts unfolded in the year following the disaster. Study results suggest that the concept of lifestyle change is a useful framework for examining disruptions of everyday routines and patterns that occurred in the aftermath of the disaster. This research focuses on two core lifestyle changes: ways in which changes in interviewees' parents' jobs affected the amount of time families spent together and how the closure of the Gulf of Mexico shifted family-centered recreational time. Lastly, findings highlight coping strategies (blame, distraction, and emotional processing) that youth employed in dealing with the disaster and its implications.

This dissertation is dedicated to the youth of the Bayou,
who shared their wisdom and invited me into their community.

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CHAPTER I

INTRODUCTION

THE BP OIL SPILL

On April 20, 2010 the *Deepwater Horizon* rig exploded 41 miles off the coast of Louisiana, causing 11 deaths. Over the course of nearly three months, more than 4.9 million barrels of crude oil were released into the Northern Gulf of Mexico. The *Deepwater Horizon* BP oil spill¹ led to the closure of 88,522 square miles of the Gulf or 36 percent of federal Gulf waters (NOAA Fisheries Services 2011). In the aftermath of the largest marine oil spill in U.S. history, lessons learned from decades of social science research on community impacts of the 1989 *Exxon Valdez* oil spill and from other environmental disasters suggest that communities along the Gulf are likely to experience economic and social upheaval for years to come (Gill and Picou 1998; Arata et al. 2000; Ritchie et al. 2011).

Although many studies have focused on the ecological, economic, and social effects of technological disasters such as the BP oil spill on adults, few have specifically investigated the impacts of these events on children. This is a qualitative study of youth affected by the BP oil spill in Bayou la Batre, Alabama, focusing on youth aged 12 to 18 whose parents were tied to the commercial seafood industry and/or the shipbuilding industry. Findings revealed here contribute to our understanding of ways in which youth experience and make sense of disasters (Anderson 2005; Peek 2008; National Center for Disaster Preparedness 2010; National Commission on Children and Disasters 2010), particularly in the case of technological disasters.

¹ Throughout the course of this dissertation, the disaster is interchangeably referred to as the BP oil spill, the oil spill, BP oil disaster, etc.

Several pre-existing environmental issues were further exacerbated by the BP spill, for example, the loss of coastal wetlands due to factors such as erosion and storm damage; erosion of coastal barrier islands; and threats to overfished species including grouper, red snapper, and mackerel (Mabus 2010). Problems resulting from climate change, including rising sea levels and ocean acidification, make it more difficult to sustain efforts to restore the Gulf (Mabus 2010). The effects of the BP oil spill have also been intensified by previous disasters, from which many Gulf communities had not fully recovered at the onset of the spill. In just the previous decade many communities along the Gulf faced the horrifically devastating impacts of Hurricane Katrina (2005) and other damaging hurricanes such as Ivan (2004), Rita (2005), Gustav (2008), and Ike (2008). Furthermore, Gulf Coast communities are facing the financial crisis that is severely affecting the nation as a whole.

The Gulf is central to range of industries, including seafood harvesting, oil production, offshore leases and royalties, and tourism. In 2010 the five Gulf states combined (Texas, Louisiana, Mississippi, Alabama, and Florida) harvested approximately 1.3 billion pounds of commercial fish and shellfish valued at \$639 million (U.S. Environmental Protection Agency 2011). The Gulf is also home to eight of the top twenty fishing ports in the United States based on dollar value, as well as four of the top seven ports based on weight value (U.S. Environmental Protection Agency 2011). Additionally, the Gulf of Mexico is the source of more than 40 percent of the U.S.'s natural gas and offshore crude oil (U.S. Energy Information Administration n.d.). Every year the federal treasury earns approximately \$4.5 billion from offshore leases and royalties in the Gulf (Mabus 2010). The Gulf's tourism industry brings millions of people to the Gulf Coast and yields more than \$30 billion annually (Oxford Economics 2010). According to the *Long-Term Recovery Plan after the Deepwater Horizon Oil Spill* report, in 2008 before the

spill tourism, commercial fishing, and oil and gas drilling industries made up approximately 10 percent of the total private employment opportunities along the Gulf. Among the three, 587,000 of these jobs were in tourism; 75,000 in oil and gas drilling; and 16,000 to 26,000 in commercial fishing (Mabus 2010).

Economic Impacts

The closure of large segments of Gulf waters resulted in a range of direct and indirect economic impacts, particularly for the seafood industry. Comparing the 2009 and 2010 seafood landings for shrimp, one of the most sought after species in the Gulf, there was a 27 percent (over 35 million pounds) decrease (Upton 2011). In Alabama alone, shrimp landings decreased by 56 percent (Upton 2011). In addition to a decreased supply of Gulf seafood, there has also been a decreased demand due to consumer perceptions about post-spill seafood safety. One study conducted by marketing research company MRops reported that 23 percent of consumers polled nationally have reduced their seafood consumption following the spill (McGill 2011). Overall, 70 percent reported concern about whether seafood is safe for consumption in the aftermath of the spill (McGill 2011). Regardless of the scientific evidence, research shows that consumer perceptions have affected consumption habits, which in turn negatively affect the seafood market (Ritchie et al. 2011).

Conversely, in the aftermath of the spill some local Gulf residents have profited from what researchers have referred to as “the money spill,” or the short-term economic boom sparked by the large sums of money spent on the spill cleanup efforts (Ritchie et al. 2011). Some residents were able to profit considerably from working on the cleanup initiative. However, both research and media accounts document the frustration that local residents harbored about the

politics associated with getting cleanup work through the Vessel of Opportunities Program, the main driver in the cleanup initiative (Murtaugh 2010; Ritchie et al. 2011).

Furthermore, while some local residents also obtained reimbursement for lost wages by filing claims with the Gulf Coast Claims Facility, many residents still await claim monies. As of February 2012, the Gulf Coast Claims Facility had processed more than 1,050,518 claims and paid out more than \$5.9 billion to approximately 570,000 individuals and businesses (Gulf Coast Claims Facility 2012). However, many claims have still gone unfilled, and many Gulf Coast residents contend that the process is unfair, inconsistent, slow, and lacking in transparency (Helgoth 2011; Schwartz and Schrope 2011). In March 2012 BP proposed a \$7.8 billion settlement, an effort intended to replace the \$20 billion fund that was previously being distributed by the Gulf Coast Claims Facility under the leadership of government-appointed administrator Kenneth Feinberg (Deepwater Horizon Claims Center 2012), and many individuals have continued to await compensation funds. Most recently, BP pled guilty to 14 criminal charges and will pay \$4 billion in penalties. The organization will also face a civil trial, in New Orleans, Louisiana where it may face civil fines of \$5 billion to \$21 billion under the Clean Water Act (Krauss 2013).

Environmental Impacts

With 1,053 linear miles of oiled shorelines combined with the millions of barrels of oil dispersed throughout the Gulf waters, it is difficult to determine what the long-term environmental impacts may be. In just the six month time span following the disaster, more than 8,000 marine mammals and sea turtles were found dead or injured (National Wildlife Federation n.d.). Rescue crews and wildlife managers have observed the short-term effects of the spill in

oil coated birds and sea turtles, mammals with ulcers and internal bleeding that likely stem from ingested oil, and dying deep sea coral (National Wildlife Federation n.d.). The spill also caused damage to the coastal ecosystem that sustains wildlife, filters polluted waters, and provides protection by soaking up floodwater from seasonal storms (Gordon et al. 2011).

Before the spill, the Gulf of Mexico was one of the most biodiverse oceanic water bodies on earth, and home to over 15,400 species such as shrimp, whales, manatees, crabs, coral reefs, turtles, and a range of fish species (Felder and Camp 2009). There is much uncertainty surrounding how the nearly 200 million gallons of spilled oil and the 1.84 million gallons of dispersants have affected this complex ecosystem (Tunnell 2011). Organisms' exposure to oil and dispersants may have affected food availability, changed migration patterns, and disrupted life cycles and will likely continue to affect these conditions (McGill 2011). In sum, it is nearly impossible to predict accurately the time of recovery or environmental impact of the BP spill, because impacts are not always immediate and can vary tremendously over time (Tunnell 2011). It will likely take years to fully understand complex and multifaceted effects of the spill, and impacts are likely to be highly contested.

Social Impacts

The government plan *America's Gulf Coast: Long-Term Recovery Plan after the Deepwater Horizon Oil Spill* states that in the aftermath of the disaster there have been growing concerns regarding job loss and the "perceived loss of the Gulf's distinct culture and way of life" (Mabus 2010:51). The report also pointed toward the importance of ensuring that the needs of "at risk individuals and populations" would be met, including the elderly, children, and individuals with limited English proficiency. A number of studies have explored the social and

psychological impacts of the BP oil spill on the general public, as well as on those populations deemed at risk.

A study conducted by Columbia University's National Center for Disaster Preparedness (2010), based on more than 1,000 interviews with residents of Louisiana and Mississippi in the months following the spill, revealed that more than 40 percent of adults living within ten miles of the Gulf Coast reported experiencing direct exposure to the spill or clean-up efforts. Of this group, 40 percent reported physical symptoms including respiratory problems and/or skin irritation. In terms of economic impacts, 8 percent of study participants reported job loss and one in five households said they experienced a drop in income following the spill (National Center for Disaster Preparedness 2010). Study participants also discussed overwhelming concerns with finding reliable and trustworthy information sources to obtain oil spill recovery-related information, and many were displeased with BP, local government, and the federal government. Furthermore, one-third reported that their children experienced physical symptoms or mental health distress as a result of the disaster (National Center for Disaster Preparedness 2010). A follow-up study conducted by National Center for Disaster Preparedness in 2012 revealed that negative spill-related impacts persist in Gulf communities and many families continue to face mental and physical health issues as well as challenges with economic pressures. Additionally, many study participants reported observing increases in substance abuse, teen pregnancy, homelessness or inadequate housing in the long-term aftermath of the disaster (National Center for Disaster Preparedness 2012).

Another study conducted by sociologists from Louisiana State University two months after the onset of the spill also revealed a variety of negative impacts on Gulf Coast residents. Respondents reported that their self-rated stress levels more than doubled in the aftermath of the

disaster (Lee and Blanchard 2010). Moreover, eight out of ten respondents reported concerns about how they and their family members, friends, and community members would secure their economic futures. Due to these economic concerns some residents may be forced to move, even though 80 percent of respondents have lived in their current communities for at least 20 years or for their whole lives (Lee and Blanchard 2010). Stress related to the spill has also led to major negative impacts on the daily activities of coastal residents. Nearly half of respondents reported that worries or concerns associated with the disaster have prevented them from being able to take care of family or friends in the manner that they would like to (46%), from sleeping well at night (46%), and from focusing on their usual jobs or work tasks (43%) (Lee and Blanchard 2010). Additionally, Lee and Blanchard (2012) found that those with greater community attachment, including individuals working in seafood and/or oil industries whose resources are most greatly threatened, are more likely to experience higher levels of stress.

A Gallup Poll conducted approximately four months following the onset of the disaster found that residents in Gulf Coast counties experienced a decline in emotional health, reporting a 25.6 percent increase in clinical diagnoses of depression in the period after the oil spill (Witters 2010). Although the poll results do not necessarily show that the oil spill directly caused increased depression, there was no significant increase within comparable inland counties in Gulf states or in non-Gulf states. Similarly, a telephone study conducted with a random sample of South Mobile County residents in the aftermath of the spill revealed high levels of initial psychological stress, comparable to those experienced by residents who experienced the *Exxon Valdez* oil spill (Gill et al. 2011). This study found that the strongest predictors of increasing event-related stress were exposure to oil, economic loss, concerns regarding future economic loss, family health concerns, and ties to ecosystem resources. The National Domestic Violence

Hotline also reported that between April and June of 2010, immediately following the spill, there was a 13 percent increase in monthly calls from the Gulf Coast states and a 21 percent increase in calls from Louisiana alone (Mabus 2010).

HISTORICAL CONTEXT: BAYOU LA BATRE, ALABAMA

This research specifically focuses on the impacts of the BP oil spill on Bayou la Batre, Alabama, also known within the community as “the Bayou.” While communities in other Gulf States such as Louisiana were heavily studied following the BP oil spill, the impacts of the disaster in Alabama were often overlooked. However, the Bayou provides a unique context for examining youth’s experiences with this environmental disaster, particularly considering the community’s compound experiences with past disasters as well as other social complexities further discussed below.

As a renewable resource community (RRC) defined by its “primary cultural, social, and economic existences are based on the harvest and use of renewable natural resources,” the Bayou was heavily affected by the BP oil spill (See Figure 1) (Picou and Gill 1996: 881). The RRC concept builds upon the ecological-symbolic perspective in disaster research and environmental sociology, a framework that explains the ways in which long-term social and psychological stress are associated with technological disasters (Kroll-Smith and Couch 1991a). The Bayou is an RRC that is especially vulnerable to environmental disasters such as the BP oil spill because of its economic ties to the Gulf. This small town consisting of about four square miles is considered the seafood capital of Alabama, providing much of the fish, shrimp, oysters, and crabs sold within the state and also exporting its seafood to other states and countries. In addition to seafood processing, the city relies on supporting industries that have also greatly suffered as a

result of the oil disaster, including shipbuilding operations, marine repair and maintenance shops, and marine supply shops.

Figure 1. Map of Bayou la Batre, AL in Relation to Spill Epicenter



Bayou la Batre is located in the southwestern region of Mobile County. Sixty percent of its approximately 2,500 residents are White, 23 percent are Asian/Asian American, 12 percent are African American, 3 percent are Latino residents, and the remaining 5 percent are predominately of mixed race (mostly White and Asian/Asian American or White and African American) (U.S. Census Bureau 2010). With 50.5 percent male and 49.5 percent female residents, the average age of Bayou la Batre residents is nearly 34 years (U.S. Census Bureau 2010). In addition to facing the ongoing global economic downturn beginning in 2008, Bayou la Batre has also been struck with major challenges concerning poverty, educational attainment, and crime. The median household income in Bayou la Batre is \$34,539, nearly \$20,000 lower than the national median household income (U.S. Census Bureau 2010). In 2010, nearly 20 percent of households in Bayou la Batre were living below the poverty level, five percent higher than the national poverty average (U.S. Census Bureau 2010). Mobile County Public School System, the district in which the Bayou is located, has a 50% dropout rate, one of the highest dropout rates in the state of Alabama (Southern Education Foundation 2008). Of Bayou la Batre

residents over age 25 (n=1,543), nearly 64 percent have attained a high school education, which is nearly 20 percent below the national high school education attainment rate (U.S. Census Bureau 2010). Additionally, Bayou la Batre's crime rate is more than double the national average, ranking much higher in the number of burglaries, assaults, and vehicle thefts (USA 2013).

In order to understand the economic and social impacts of the BP spill on Bayou residents, it is first important to gain a broader understanding of the area's history, as well as the role of past disasters within the community. The history of the area speaks to the challenges that residents of the Bayou have endured and the ways in which the BP spill exacerbated pre-existing challenges that have developed over time. Historian Frye Gaillard (2007) described Bayou la Batre as "a place where residents freely acknowledge that life on the edge of the continent is hard...[t]he hurricanes come and the hurricanes go, requiring resilience of those who survive" (2007:856). Now, in addition to the ongoing struggles with hurricanes and other changing social dynamics, the Bayou continues to face major challenges recovering from the impacts of the BP oil spill, a new form of disaster that is plaguing this coastal community.

Bayou la Batre: Experience with Disaster

By the late 1800s Bayou la Batre and its surrounding areas developed into a popular tourist destination where people from all over the United States vacationed (Gaillard 2007; Gaillard et al. 2008). The downturn of the tourism industry began in the aftermath of the 1906 hurricane, which resulted in the death of 135 local residents and major damage and destruction (Gaillard 2007; Gaillard et al 2008). The tourism industry and local economy continued to take

major hits as additional hurricanes caused more destruction in 1916 and 1925. A trade book about the history of Bayou la Batre described the devastating impacts of these events:

Hurricanes in 1906 and 1916 destroyed most of the homes and hotels along the beach. The storms began a downhill path from which the resort attractions never recovered. Many of the seafood establishments and innumerable boats were destroyed by the storms. Loss of homes, timber, and personal belongings further depressed the whole area. (Leading Business Men 1963:6)

Another historical overview of the Bayou describes the resilient character of the local people in the aftermath of these devastating storms, drawing on the story of one resident:

But depression is not destruction, and the resilience of the inhabitants is characteristic of a people who had come to know and love their homes near the water and to live on terms with the sea. The attitude of calm determination was well expressed by the father of one family who, in the midst of the storm of 1906, when wind and tidal waters undermined the foundations of his eight-room home, calmly directed his sons: "Bring the boat around to the west bedroom, boys. It is time to leave." He returned to rebuild his home which today is the gathering place for four generations. (Lipscomb 1966:25)

It was after the storms of the early twentieth century and in the context of a declining tourism industry that Bayou communities became even more tied to the sea for subsistence. Spurring this trend, technology developments over the decades helped make seafood harvesting faster and more efficient. Meanwhile, in the 1970s the shipbuilding industry also began to develop and soon became a booming enterprise in Bayou la Batre, which came to be recognized as the shrimp-trawler-building capital of the world (Pearson 2008). However, by the late 1900s and early 2000s, the local shipbuilding industry shifted toward building more offshore supply vessels, owing to a number of economic problems with constructing shrimp trawlers, including the plunging price of shrimp, increased cost in fuel prices that made it expensive to maintain and operate trawlers, scarcity of boat financing, and the overbuilding of shrimp trawlers (Pearson 2008). More recently, shipyards in Bayou la Batre have entered into the towboat building market. Many of the shipyards suffered physical damage in the aftermath of Hurricane Katrina,

and business has been further stifled by the economic recession and the BP oil spill. The spill halted business for the few shipyards that had continued building fishing vessels, and the spill-related drilling moratorium was crippling to some of the shipyards that build supply boats and towboats. As one reporter put it: “The economic recession had already put the brakes on business in the shipbuilding town of Bayou la Batre. But the Deepwater Horizon oil spill and the subsequent drilling moratorium have made the future look even more grim” (Charles 2010).

By the late 20th century, the seafood industry represented nearly 85 percent of the local economy in Bayou la Batre, an \$80 million enterprise (Gaillard 2007; Gaillard et al. 2008). Like the shipbuilding industry, however, the seafood industry was also beginning to face a number of challenges that were negatively affecting profits including increased prices of diesel fuel, competition from imported seafood, and environmental regulations. Bruce W. Maghan² documented the troubles of commercial fishers with environmental regulations in his poem *Futility*:

Forgive me Father for I have obviously sinned,
I've chosen the life of a commercial fishermen.
I try to make my living on the sea;
But, no matter where I go they prosecute me.
It's the oldest occupation in the land,
Yet, it's hard to make others understand
That creatures from the sea I am compelled to land.
I'm nearly down to my last straw
Because no matter where I fish I'm violating someone's law.
In Louisiana and Texas, it was their wish
That I can no longer harvest the red fish.
In Alabama and Florida, things are not better
Because they are now going after the gill netter.
In Mississippi, I really have to scrimp
Since all that is left for me is a very few shrimp.
It's been hurdle after hurdle.

² Original citation information unavailable; a framed copy of the poem was photographed in a restaurant in Bayou la Batre.

Now, they're blaming me for the loss of a sea turtle.
This is all very hard to take,
Especially since all that I own is at stake.
To all of these problems there is primarily one solution,
We must get a handle on the main culprit, water pollution.

During these uncertain economic times when the seafood industry was in flux, in 2005 just a few months before Hurricane Katrina, developer Tim James put a controversial \$200 million proposal to develop condominiums along the Bayou waterfront (Gaillard 2007; Gaillard et al. 2008). The project could have led to gentrification and the overhaul of small businesses along the coast, many of which supported the seafood industry by selling supplies and selling the catches that are brought in. Then four months later, on August 28, 2005, Hurricane Katrina struck the Gulf Coast region. Although much of the media attention was focused on New Orleans and Mississippi, Bayou la Batre was also devastated by Katrina, experiencing very strong winds and a storm surge of nearly fifteen feet. The hurricane winds moved 32 boats from the Bayou waters into the marshes; months later it took a \$1.4 million, two month long operation to recover these vessels (Gaillard 2007; Gaillard et al. 2008). There was also considerable controversy surrounding rebuilding efforts, in terms of perceptions that money was unevenly dispersed between Bayou la Batre and the unincorporated surrounding communities, along with concerns about whether the possibly detrimental development plans of Tim James would be revisited.

In *In the Path of Storms*, a book about the historical foundations of Bayou la Batre and Coden, Alabama, one high school freshman from Bayou la Batre wrote about her Katrina recovery experience, vividly describing how the storm adversely affected her and her family:

There was no running water, no gas, no power, and no way to keep cool. Smothering from the heat, I was forced to sleep sweaty in nothing but a bathing suit. My parents and I could not bathe and had nothing to eat. We nearly starved...but food wasn't our concern. We had no place to call home anymore. Instead, we were forced to sleep in our old home where mold has begun to grow

on the walls. Toward the end of the second week, I couldn't hold back the tears.
(Gaillard et al. 2008:52)

In an excerpt that was originally published in the book *Eyes of the Storm: A Community Survives after Hurricane Katrina* and reprinted in *In the Path of Storms*, another student expressed her Katrina recovery experience through a poem:

My house was crowded with relatives
Who lost their homes in the Bayou.
We sat in the heat
With no power or water for weeks.
My house wasn't damaged much,
But homes all around us were destroyed.
Pets were lost.
Trees blocked the road.
The aftermath was devastating.
Stores were closed for a long time.
Gas went way up
And tempers flared in the heat.
(Gaillard et al. 2008:96-97)

Despite the array of challenges that people in the Bayou faced, again their resilience helped them to pull through and begin rebuilding following Hurricane Katrina, in a community that one local resident described as “[a] place where people know how to be neighbors and were willing to do what needed to be done” (Gaillard et al. 2008:86).

Demographic Changes in the Bayou

In addition to the range of forces that shaped the character of Bayou la Batre, the face of this small fishing village began to change in the 1970s as a result of a massive influx of Asian immigrants, when the Catholic Refugee Service assisted more than 2 million refugees in immigrating to the region to escape war and genocide in their own countries, many of them fleeing the Vietnam War and the takeover by the Khmer Rouge in Cambodia (Gaillard et al. 2008). Some of these Vietnamese, Laotians, and Cambodians immigrated to the Bayou toward

the end of the Vietnam War, and others arrived in the aftermath of the war, and by 2000 Asian residents made up over a quarter of the community's total population. There was a mixed response to the influx of Asian immigrants in the Bayou. Although some residents voiced disapproval about how the Asian American residents had an insular community and how they were taking over jobs in the seafood industry, others thought the Asian immigrants gave the area an economic boost because of their speedy production rates. One local seafood broker made the following comment about the economic effects of increased seafood processing rates spurred by Asian immigrants:

The Asian workers would pick 100 to 120 pounds of crabmeat a day. They doubled the production of American pickers. It made the crab business grow. If they were shucking oysters, they sometimes worked twelve hours a day, and changed the whole complexion of oyster production. They shrimped also. They bought old boats and worked hard and upgraded their boats. They were heavy producers, and people had to respect that. (Gaillard et al. 2008:34)

PURPOSE OF THE DISSERTATION

Research suggests that children³—here defined according to the United Nations Convention on the Rights of the Child as those who are age 18 and younger—have unique disaster recovery needs that differ from those of the adult population because of age, cognitive abilities, and dependence on adult guardians and caretakers (Bullock et al. 2011). Adolescents (age 12-18) are particularly at risk because they are experiencing “rapid and complex developmental changes involving biological, psychological, and social processes” (Conger et al. 2000). Disaster scholars and government officials have repeatedly called for more research that investigates the differential impacts of disasters on youth and explores both their vulnerabilities and capacities in disaster preparedness, response, and recovery (Anderson 2005; National Center

³ The term children is used interchangeably with youth throughout the course of this dissertation.

for Disaster Preparedness 2010; National Commission on Children and Disasters 2010; Peek 2008).

Understanding youth's vulnerabilities and capacities in the face of disasters is an especially critical issue in light of the increasing prevalence of catastrophic disasters, which between 1990 and 2000 affected approximately 66.5 million children worldwide per year (International Federation of Red Cross and Red Crescent Societies 2001). Deepening our understanding of disaster impacts on youth, who make up nearly 25 percent of the U.S. population, will provide vital insights into the societal factors that result in disparate levels of risk for marginalized groups and shape their recovery experiences. This qualitative study addresses current research gaps by exploring the narratives of Bayou la Batre youth affected by the BP oil spill, focusing on adolescent youth with parents who work in commercial seafood industry/and or the shipbuilding industry. The study draws on 40 in-depth, face-to-face interviews with youth; 40 informal interviews with adult informants, including mental health professionals, educators, and community leaders; and more than 100 hours of participant observation.

OVERVIEW OF THE DISSERTATION

In the chapter that follows, I present the theoretical groundwork and conceptual debates that inform the research. Specifically, the next chapter provides an overview of the ecological-symbolic perspective on technological disasters and examines literature regarding children's vulnerabilities and capacities in the face of disasters. In Chapter Three, I discuss the qualitative research methods employed in this study, describing the project design, the fieldwork undertaken, the data analysis approach, and key lessons learned from interviewing youth for this study.

The next three chapters focus on my empirical findings. Chapter Four examines youths' perceptions concerning how they thought the spill might affect them, their families, and their community in the more immediate aftermath of the spill, as well as their observations regarding how the actual impacts unfolded in the year following the disaster. This chapter highlights deeply rooted issues of uncertainty that plague response and recovery following the BP disaster. In Chapter Five, I explore lifestyle changes—the disruption of everyday routines or patterns that commonly occurs in the aftermath of disasters—focusing specifically on two lifestyle changes that youth interviewees frequently reported: ways in which changes in interviewees' parents' jobs affected the amount of time families spent together and ways in which closure of the Gulf of Mexico shifted family-centered recreational time. Chapter Six addresses the coping strategies that youth employed to make sense of and deal with the impacts of the BP oil disaster, specifically examining ways in which youth rely on blame, distraction, and emotional processing as ways of coping. Finally, in Chapter Eight, I conclude with a discussion of the empirical and theoretical contributions of the findings presented in the dissertation, as well as recommendations for post-technological disaster interventions, policy considerations and directions for future research.

CHAPTER II THEORETICAL BACKGROUND

My approach to the data collection and analysis is rooted primarily in an ecological-symbolic framework for analyzing the impacts of technological disasters, and secondarily in studies of children and disasters. In this chapter, I first provide a brief overview of the ecological-symbolic perspective. Next, I explore how the ecological-symbolic perspective has been employed to understand community response to technological or human-caused disasters. In this section, I define key differences between natural and technological disasters, and then explore matters that typically arise in the aftermath of technological disasters. Finally, I present issues of children's disaster vulnerabilities and capacities, based on literature from the sociological sub-field of children and disasters.

AN ECOLOGICAL-SYMBOLIC THEORETICAL APPROACH TO UNDERSTANDING SOCIAL RESPONSES TO TECHNOLOGICAL DISASTERS

Kroll-Smith and Couch (1991) developed the ecological-symbolic approach in an attempt to reconcile two perspectives on disasters and their impacts, which they call the generic and the event-quality perspectives. The difference between these two approaches relates to the question of whether technological disasters lead to societal impacts that are different from and more negative than those produced by natural ones. The generic perspective sees the consequences of disasters as effects produced by event characteristics such as severity and scope, rather than by physical dimensions such as whether they originate from natural or technological sources (Quarantelli 1985; Kroll-Smith and Couch 1991). The event-quality definition posits that this distinction matters because technological disasters have characteristics that distinguish them, such as uncertainty regarding long-term effects and overall increased stress (Green et al. 1990; Kroll-Smith and Couch 1991; Freudenburg and Jones 1991; Freudenburg 1997; Gramling and

Krogman 1997; Gill and Picou 1998; Ritchie 2004, 2012; Ritchie, Gill, and Farnham 2012).

Kroll-Smith and Couch (1991) claim that both definitions are too extreme in their focus, arguing that the event-quality definition focused too heavily on physical dimensions of disasters in explaining human responses to disaster threats, impacts, and recovery, while the generic approach focused exclusively on the social dimensions of disasters, failing to take into account that physical attributes of hazards matter. Furthermore, they contend both perspectives fail to take into account the role of human agency in interpreting and making sense of disasters (Kroll-Smith and Couch 1991). Employing a social constructionist approach, Kroll-Smith and Couch (1991) focus on the nature of the disaster impacts and the interpretations of those impacts, arguing that “the real issues is not the quality of the disaster per se, but whether or not it significantly alters the relationship between a community and its built, modified or biophysical environments, and how people interpret and experience the changes in those environments” (Kroll-Smith and Couch 1991a: 361). Hence, disasters are socially constructed based on both the physical attributes of the event and the meanings people associate with such shifts.

The ecological-symbolic framework is based on two core tenets. First, “people exist in exchange relationships with their built, modified and biophysical environment” and thus those environments are critical for the social order and community well-being (Kroll-Smith and Couch 1991a:361). Second, “disruptions in ordered relationships between individuals, groups and communities, and their built, modified and natural environments, are labeled and responded to as hazards and disasters” (Kroll-Smith and Couch 1991a:361). A number of scholars have documented chronic community stress following socially-mediated disruptions between people and the environment (Baum and Flemming 1993; Kroll-Smith and Couch 1993; Picou 1998; Gill et al. 2012). The ecological-symbolic framework suggests that disruptions in the ways in which

people interact with the environment result in the social construction of such events as disasters. Kroll-Smith and Couch (1993) explore these two tenets by posing the following central questions: “What local environments are disrupted by natural calamities or the products and residues of technology?” and “How are these disruptions perceived?” (48).

The ecological-symbolic framework also recognizes that some communities may be especially vulnerable to resource contamination resulting from disasters. Heightened vulnerability to technological disasters stems from a range of factors, including proximity to contamination and/or relationships to resources that were contaminated (Fowlkes and Miller 1982; Picou et al. 1992; Freudenburg 1997; Houts et al. 1998; Edelstein 2004; Picou 2009; Gill et al. 2012). Disproportionately vulnerable sub-groups that heavily rely on the environment for subsistence have been characterized as renewable resource communities (RRCs) (Picou et al. 1992; Picou and Gill 1996). RRCs are defined as communities whose “primary cultural, social, and economic existences are based on the harvest and use of renewable natural resources” (Picou and Gill 1996:881).

Ultimately, the ecological-symbolic theoretical approach provides a conceptual mechanism for integrating ways in which individuals interpret and make sense of disasters. In comparison to other conceptual frameworks that I considered drawing on—such as vulnerability theory (Morrow 1999; Cutter 2009; Wisner 2004), systems theory (Mileti 1999), and sociopolitical-ecology theory (Peacock and Ragsdale 1997)—the ecological-symbolic approach is unique in that it draws on elements of social construction theory. This constructionist approach to disasters incorporates individuals’ experiences through their own lens, based on how such events alter their interactions with one another and their surrounding environment, recognizing that individuals’ definitions of disaster are socially produced (Kroll-Smith and Couch 1991).

Additionally, in contrast to youth-focused psychological frameworks, such as the family stress model (Conger and Conger 2002; Conger and Conger 2008), the ecological-symbolic approach provides a much more holistic perspective, going beyond exploring how stressors affect parent-child relations and also examining shifts in interactions within the larger family, school, and community contexts.

COMMUNITY RESPONSE TO TECHNOLOGICAL DISASTERS

Defining Technological Disasters

Researchers have documented the social impacts of technological disasters such as the Centralia mine fire (1962), Santa Barbara oil spill (1969), Buffalo Creek flood (1972), Love Canal disaster (1978) Three Mile Island accident (1979), Livingston train derailment (1982), Bhopal Tragedy (1984), *Exxon Valdez* oil spill (1989), and BP oil spill (see Molotch and Lester 1975; Erikson 1976; Gleser, Green, and Winget 1981; Fowlkes and Miller 1982; Houts 1988; Bogard 1989; Erikson 1994; Gill and Picou 1998; Gill et al. 2012). Although some social scientists believe that there is little or no reason to distinguish natural and technological disasters (Quarantelli 1985; Showalter and Myers 1994), others contend that there are distinct differences in how individuals experience and perceive natural and technological disasters (Freudenburg and Jones 1991; Erikson 1994; Gramling and Krogman 1997; Picou, Marshall, and Gill 2004; Gunter and Kroll Smith 2007; Brunnsma and Picou 2008). Rather than dichotomizing these distinctions, it is perhaps most useful to consider natural and technological or human caused disasters on a continuum “with overlapping qualities, characteristics, and social impacts” (Gill 2007b:620). Thus, disasters often have both natural and technological origins, and therefore operate as “natech” disasters that are “generated through the synergistic interaction of natural forces with engineering, production, and technological systems of industry and government” (Picou

2009:41). For instance, in the case of Hurricane Katrina, the storm was caused by natural forces, although the breaching of the levees in New Orleans was the result of technological failures (Picou 2009; Tierney 2012).

With the notion of a continuum in mind, empirical research suggests that technological disasters are associated with a sense of blame and culpability for identified responsible parties that are less likely to follow natural disasters (Gramling and Krogman 1997; Gill and Picou 1998; Ritchie, Gill, and Farnham 2012). Furthermore, technological disasters are associated with more uncertainty about both short- and long-term ecological, economic, and social effects and greater and more long-term stress and anxiety (Green et al. 1990; Freudenburg and Jones 1991; Freudenburg 1997; Gramling and Krogman 1997; Gill and Picou 1998; Ritchie 2004, 2012; Ritchie, Gill, and Farnham 2012). Baum and Flemming (1993) also highlight key differences between accidents that are human-caused and those that are caused by forces of nature, arguing that “[h]uman-caused accidents, because they clearly involve human error or culpability, are characterized by the experience of loss of control and involve the violation of expectations for control” (666). On the contrary, natural disasters reflect a more culturally-accepted lack of control over natural forces (Baum and Flemming 1993).

Erikson (1994) characterized technological disasters as a “new species of trouble” that has two primary characteristics. First, is the element of human causation. In addition, he points to the ways in which toxic contamination differentiates technological disasters from natural disasters:

They contaminate rather than merely damage; they pollute, befoul, and taint rather than just create wreckage; they penetrate human tissue indirectly rather than wound the surfaces by assaults of more straightforward kind. And the

evidence is growing that they scare human beings in new and special ways, that they elicit uncanny fear in us. (Erikson 1994: 144)

Although both technological and natural disasters have some overlapping characteristics, many scholars argue that there are subtle differences between the two, suggesting that there is a need to better understand how natural and technological disasters affect communities differently (Erikson 1994; Gill 2007b; Brunnsma and Picou 2008). Below I discuss a number of common issues that arise in communities following technological disasters, including social and economic disruption, increased psychological stress, frustration concerning protracted event-related litigation, and the emergence of corrosive communities. Despite the fact that some of these issues also arise following natural disasters, they tend to be much more prolonged in the aftermath of technological disasters (Green et al. 1990; Gramling and Krogman 1997; Gill and Picou 1998; Ritchie 2004, 2012; Ritchie, Gill, and Farnham 2012).

Social and Economic Disruption

Social and economic disruption typically begin in the immediate aftermath of a technological disaster. Such disruptions may include issues such as shifts in community member ties and turmoil surrounding spill cleanup activities. Following the 1972 Buffalo Creek Flood in West Virginia, residents expressed a sense of loss of community solidarity. The disaster was caused by a dam failure that released millions of gallons of black water waste, resulting in the deaths of more than 100 people and leaving more than 4,000 people homeless. Narratives of residents who had previously prided themselves on their sense of community highlighted how the technological disaster changed their way of life:

The whole thing is a nightmare, actually. Our life-style has been disrupted, our homes destroyed. We lost many things we loved, and we think about those things. We think about our neighbors and friends we lost. Our neighborhood was completely destroyed, a disaster area. (Erikson 1976:196)

Similarly, another resident commented on the social disruption in the aftermath of the Buffalo Creek Flood:

We did lose a community, and I mean it was a good community. Everybody was close, everybody knowed everybody. But now everyone is alone... They've lost their homes and their way of life, the one they liked... All the houses are gone, every one of them. The people are gone, scattered. You don't know who your neighbor is going to be. You can't even go next door to talk. (Erikson 1976:196)

Similarly, studies following the *Exxon Valdez* spill documented how cleanup initiatives provoked turmoil. Many commercial fishermen and fisherwomen were displaced from their jobs, and forced to compete for a limited number of cleanup jobs (Gill and Picou 1997, 1998). Others decided not to work for Exxon as a matter of conscience (Gill and Picou 1997, 1998; Ritchie 2004). In total, Exxon spent \$2.5 billion on cleanup-related activities, employing local people along with thousands of migrant workers. This led to a population increase of more than 10,000 people in the geographic areas of Valdez and Cordova that caused overwhelming housing and social service demands (Gill and Picou 1998; Impact Assessment, Inc. 1990). As discussed in the introduction to my dissertation, coastal communities in the Gulf experienced similar upheaval after the BP spill.

Despite the economic boom that cleanup funds provided for some, Exxon-Valdez spill-related activities strained familial and social ties, as conflict among family members, friends, and neighbors arose concerning unequal access to cleanup and oil mitigation funds (Impact Assessment, Inc. 1990; Palinkas 1993; Gill and Picou 1998; Ritchie 2004). Tensions heightened as directly affected residents (e.g., fishing industry workers) received different amounts of financial assistance and those who were indirectly affected often received no assistance at all (Palinkas 1993; Gill and Picou 1998; Ritchie 2004). Additionally, parent-child family ties were altered. Some children received less attention because their mothers and fathers worked on the

cleanup or were busy conducting other spill-related activities (McLees-Palinkas 1994; Gill and Picou 1997; Ritchie 2004). However, these findings are based on adult accounts, and we know very little about how family dynamics changed following the Exxon spill from youth's first-hand experiences.

Contamination, Uncertainty, and Stress

It can be especially challenging to detect ecological damage associated with technological disasters, and effects can continue to unfold for years after such events. The sense of uncertainty regarding the long-term threats of exposure to chemical toxins commonly creates stress (Kroll-Smith and Couch 1991b; Freudenburg 1997; Picou and Marshall 2002; Edelstein 2004). Individuals are further stressed by the difficulty of finding trustworthy information sources concerning these health risks. Thus, affected communities may face “invisible trauma” or the psychological effects of environmental contamination risk (Vyner 1988). Ultimately, exposure to toxins can cause a variety of physical health risks, including heightened potential for cancer, genetic damage, skin irritation, and respiratory problems (Baum and Flemming 1993).

Looming uncertainty forces affected individuals to socially construct their own definitions of the situation, and conflict often arises as a result of diverse definitions (Fowlkes and Miller 1982; Freudenburg 1991; Kroll-Smith and Couch 1993; Hannigan 1995; Button 2010). Individuals and groups must socially construct their interpretations of events and conditions within the context of what Hannigan (1995) describes as “the claim-making process.” This involves claim makers (e.g., scientists, corporations, politicians, citizens, and agency leaders) communicating environmental issues to audiences. These audiences then interpret claims and counter-claims based on their own experiences and knowledge. To interpret claims and counter-claims individuals also draw on pre-existing frames and discourses that are shaped

by social influences, based on “what people know, think they know, or (mis)interpret about surrounding dangers” (Auyero and Swistun 2008:359). Gill and Picou (1998) highlight the ways in which the claim making process leads to conflict and power struggle among competing parties: “[b]ecause contamination is relatively undetectable and its effects are often unknown or difficult to prove, a dispute typically emerges between ‘victims of contamination’ and corporate/government authorities regarding the existence of a ‘problem’” (796).

Ongoing uncertainty can lead affected individuals and groups to seek assistance from scientific and legal experts to support their claims, while corporations and government entities also enlist experts to confirm their counter claims (Hannigan 1995; Gill and Picou 1998; Button 2010). Additionally, conflict can arise within communities regarding disaster impacts. While some community members may be “maximalists”—those who believe they were affected by the disaster, others may be “minimalist”—those who perceive little or no damage (Levine 1982). For example, one local resident made the following comment about the Centralia mine fire: “[s]ome people refuse to believe that a fire exists in town even though it broke the surface at one point and spews carbon monoxide everywhere...They refuse to even acknowledge the odor” (Kroll-Smith and Couch 1993:56). At the same time, another Centralia resident argued: “I don’t believe the mine fire is in Centralia itself. I think people just want to move. Maybe the fumes are in the house, I don’t know; that’s what they’re yelling about, but the fire is going the other way” (Kroll-Smith and Couch 1993:56).

Similarly, studies found that beliefs about toxic exposure varied among individuals affected by the Love Canal chronic environmental disaster. Perceptions were correlated with the age of study participants and the presence of a dependent child in participants’ houses, as well as a number of other factors (Fowlkes and Miller 1982). Variation in risk perception following both

the Centralia mine fire and Love Canal disaster highlight broader issues of residents being forced to draw upon available frames and narratives in order to socially construct their definitions of risk and assign meanings to the disaster accordingly. While there is a great deal of scholarship on the ways in which adults perceive risk to toxic exposure, there is very little known about youth's interpretations of technological disaster risk.

Psychological stress is also heightened following technological disasters when social capital—networks and the shared norms, values, and understandings that arise from them to facilitate cooperation within or among groups—diminishes (Ritchie 2004, 2012; Ritchie and Gill 2007a). Social capital can be negatively affected as event-related stress and conflict pervade communities and as other effects continue to persist. Thus, social capital can be viewed as a type of collective resource, similar to that of financial or human capital, which can diminish or be drawn on as a support mechanism during the disaster recovery process (Hurlbert et al. 2001; Koh 2008; Ritchie 2004, 2012).

Protracted Event-Related Litigation and Beliefs about Recreancy

Within the past 15 years, a handful of researchers have turned their attention to investigating the detrimental impacts disaster-related litigation has on communities that have experienced technological disasters, and how it erodes their trust in the organizations deemed responsible. Unlike natural disasters, technological disasters are often followed by class action and personal damage claims (Freudenburg and Jones 1991; Picou et al 2004; Picou, Marshall, and Gill 2004, Gill et al. 2012 [2010]). As discussed earlier, many individuals are involved in protracted BP oil spill-related litigation because they have not yet received claim funds or believe they have been insufficiently compensated for economic losses, property damages, or health costs. Lawsuits filed for large-scale technological disaster damages are scientifically

complex and generally involve multiple parties. Experts must determine the extent of damages and must identify entities that are responsible for various impacts and losses, which is challenging in the face of responsible party denial, ineffective government response, and inconclusive scientific findings (Picou, Marshall, and Gill 2004).

Studies have shown that litigation contributes to post-technological disaster conflict and stress among affected individuals and communities (Picou, Marshall, and Gill 2004; Ritchie 2004). For example, in the aftermath of the *Exxon Valdez* oil spill, researchers who collected longitudinal data in a fishing community found that those who were litigants in spill-related cases perceived more community damage and exhibited higher stress levels than non-litigants (Picou, Marshall, and Gill 2004). They argued that litigants were more severely affected because they were more likely to have stronger economic dependence on contaminated local resources and because they experienced a greater loss of trust in institutions believed to be responsible for the spill.

The time frame of post-disaster legal processes can vary greatly. The *Exxon Valdez* spill was tried and appealed at various levels of the court system over the course of nearly two decades. In contrast, following the 1982 Livingston train accident— an accident that resulted in the derailment of 43 cars, of which 36 contained hazardous materials— litigation was settled in three years (Gill and Picou 1998). Litigation battles are particularly wearisome for plaintiffs due to the uncertainty associated with litigation outcomes, conflict surrounding equitable damage settlements, and stress from protracted legal procedures (Picou, Marshall, and Gill 2004). Qualitative research has shown that the legal process can be extremely stressful and arduous, acting as a secondary trauma (Ritchie 2004; Ritchie, Gill and Farnham 2012).

Beliefs about recreancy—perceptions of failed governmental and organizational structures— are also associated with potentially serious impacts. Mistrust in institutions and in parties deemed responsible for disasters can further disrupt the social order and heighten perceptions of risk, psychological stress, and community disruption among affected populations (Freudenburg and Jones 1991; Freudenburg 1993; Ritchie, Gill, and Farnham 2012). Following the *Exxon Valdez* oil spill, research indicated that initially many local residents in Cordova believed that Exxon would take responsibility for the disaster and facilitate a smooth and effective cleanup initiative. However, as time progressed many began to lose hope and express great frustration with the recovery efforts. One respondent interviewed during a qualitative study about the long-term impacts of the *Exxon Valdez spill* (conducted between 2002 and 2010) stated the following:

I was naïve that I believed what the oil companies said, that in fact if there ever was [an oil spill] they would ... clean it up. I heard on Good Morning America about [the spill].... I thought, ‘Oh it will be fine. It will be taken care of.’ I had lunch with a friend of mine ... and we said, ‘Oh yeah we really believe that everything is going to be all right.’ By that evening we knew everything wasn’t going to be all right. (Ritchie, Gill, and Farnham 2013:9)

The Emergence of a Corrosive Community

Technological disasters tend to produce corrosive communities, which are characterized by persistent long-term presence of mental and physical health impacts in affected communities issues related to recreancy, and challenges associated with protracted litigation (Freudenburg and Jones 1991; Freudenburg 1997; Picou, Marshall, and Gill 2004; Ritchie 2004; Ritchie, Gill, and Farnham 2013). Freudenburg and Jones (1991) contrast corrosive communities with the “therapeutic community” context typically associated with natural disasters:

Rather than working cooperatively to deal with problems that were “nobody’s fault” and resulted from natural processes, the victims (and potential victims) can

become participants in a disruptive struggle over affixing blame.... Rather than finding that authorities act in a generally helpful and appropriate manner, the victims often report that they find authorities to be evasive and unresponsive.... Rather than gaining an appreciation for the helpfulness of their fellow human beings, the victims find they become suspicious and cynical toward those who appear to be responsible for the accident yet unwilling to accept responsibility for it. All of these problems, moreover, tend to take place under the omnipresent shadow of potential litigation. (1158)

Thus, communities become corrosive as conflict stirs about who is to blame for human-caused catastrophes. According to residents, authorities tend to be unresponsive to community needs in post-technological disaster settings and overly concerned with their own economic and bureaucratic interests (e.g., see Ritchie 2004). Furthermore, as discussed above, litigation and claims processes for disaster-related compensation create a social environment in which uncertainty and stress persist.

Some researchers have criticized the idea that corrosive communities are a common outcome of technological disasters, arguing that the ecological-symbolical framework provides a broader approach that must incorporate a greater range of collective responses to technological events beyond the dominant conflict-based conceptualizations (Gunter et al. 1999). In highlighting case studies that do not conform to the traditional corrosive community model, Gunter and colleagues draw on their study of two communities living in Superfund sites. These communities exhibited consensual rather than corrosive response patterns and believed that there was limited danger to toxic exposure, in spite of the great concern expressed by government agencies (Gunter et al. 1999; Auyero and Swistun 2008). Yet, as previously noted, the emergence of corrosive communities has been observed in numerous technological disaster settings. In addition to exploring the range of response outcomes in adult populations, it is also essential to explore the types of impacts that arise among youth in areas struck by technological disasters.

CHILDREN AND DISASTERS

Despite advances in our understanding of the social impacts of disasters on adults, the effects of disasters on children in general and technological disasters in particular have been seriously understudied. As previously noted, children have unique disaster needs that differ from those of the adults because of their age, dependence on adult guardians and caretakers, and cognitive abilities (Bullock et al. 2011). They may face more difficulties coping with disasters because they have less experience than adults making sense of and processing traumatic life experiences. Children also tend to experience magnified effects because they must cope with disaster-related stress during a developmental phase in which their personalities and identities are forming. As Bullock and colleagues (2011) suggest:

For an adult, although the effects of the disaster may be profound and lasting, they take place in an already formed personality... The child has to construct his or her identity within a framework of psychological damage done by the disaster. When the symptoms produced by disasters are not treated, or when the disaster is ongoing, either because of the destruction wrought or because the source of trauma is itself chronic, the consequences are even graver. (23)

Ultimately, disasters can lead to toxic stress or stress caused by children's exposure to extreme and/or prolonged adversity (Shonkoff 2009, Center on the Developing Child n.d.). Without an adequate adult support network to buffer negative impacts, such stressors may have long-term effects on children's cognitive and physical development (Shonkoff 2009, Center on the Developing Child n.d.).

There is a growing body of literature on the mental health effects of disasters on children (see Bradburn 1991; Shaw et al. 1996; Prinstein et al. 1996; Stanley and Williams 2000; Yule et al. 2000; Garrett et al. 2007; Blase and Shwalb 2009; Masten and Narayan 2012). Many psychological studies draw on data collected from parents or adult caretakers about children's

post-disaster behaviors to assess for posttraumatic stress disorder and other posttraumatic disturbances (Bradburn 1991; Shaw 1996; Korol et al. 2002; Wroble and Baum 2002). Sociologists can greatly expand upon this work because much of it focuses on psychological evaluations of children in the aftermath of disasters and fails to take into account the social context in which children's disaster recovery unfolds.

Sociologists have only begun to make significant contributions in this area within the past decade, mainly contributing to the study of children's disaster preparedness and recovery in natural disasters (Anderson 2005; Peek 2008; Peek 2010; Peek and Richardson 2010; Peek et al. 2011). It is important to develop a more comprehensive body of knowledge that examines natural and technological disasters through a sociological lens. Doing so would further consider how factors such as race, class, and gender result in disparate levels of risk and shape individuals' disaster experience, as well as addressing questions about the extent to which disasters exacerbate pre-existing inequalities, vulnerabilities, and power struggles. A sociological lens would also provide a more contextualized understanding of children's unique disaster needs and experiences, which coupled with the existing individualistic psychological approach offers a broader understanding of this critical topic. In the following sections, I examine how sociological disaster research has made strides in examining the ways that children are disproportionately vulnerable to disasters. I also explore how this field is beginning to make contributions to the study of children's agency and capacities concerning disaster preparedness and recovery.

Children's Disaster Vulnerability

As previously mentioned, most empirical studies have focused on children's disaster vulnerability to natural disasters. Selected findings from this body of literature can be used to inform research on children's experiences with technological disasters. However, further

research is needed to advance our understanding of key characteristics that distinguish children's technological disaster recovery. Below, I highlight relevant findings from sociological research on children's disaster vulnerability and identify areas in which the study of technological disaster must be further advanced in its own right. The following section focuses on how children are disproportionately at risk owing to their unique psychological, physical, and educational vulnerabilities (Peek 2008).

A number of studies have documented the long-term psychological effects of children's exposure to disaster (Shaw et al. 1996; Koplewicz 2000; Yule et al. 2000; Garrett et al. 2007; Blaze and Shwalb 2009; Marsee 2008; Weems et al. 2009). Following disasters, children are at higher risk than adults for developing post-traumatic stress disorder (PTSD) or related symptoms such as anxiety, depression, sleep disorders, and emotional distress (Norris 2002; Peek 2008). Older children are more likely than younger ones to experience greater levels of traumatization because they are better able to grasp the meaning and implications of the event (Mercuri and Angelique 2004). Consequently, they may exhibit behavioral problems; eating disorders; increased risk-taking behaviors; misuse or increased misuse of alcohol or drugs; and decreased interest in peers, hobbies, and social activities (Mandalakas et al. 1999, Stanley and Williams 2000; Reijneveld et al. 2005, Bullock et al. 2011). Often, children's post-disaster mental health needs are not sufficiently addressed. For instance, a survey following the attacks of September 11 conducted with parents in New York City who had children aged four to seventeen revealed that only 27 percent of children identified with severe or very severe post-traumatic stress reactions received intervention services or counseling (Fairbroter et al. 2004).

Psychological impacts may vary based on level of exposure, gender, and age (Vogel and Venberg 1993; Stanley and Williams 2000). Pre-existing vulnerabilities may also be further

exacerbated in the face of disasters. For instance, even before Hurricane Katrina, Louisiana and Mississippi were among the states with the highest poverty rates in the country, the worst child indicators, and the highest rates of uninsured children (Garrett et al. 2007). Furthermore, characteristics of the post-disaster environment, such as lack of access to support services and resources and the presence of parents or caregivers who are distressed, may also lead to adverse psychological effects (Vogel and Venberg 1993; Maida 1993; Prinstein 1996). Although empirical research suggests that technological disasters can cause greater and more long-term stress and anxiety than natural disasters for adults (Freudenburg 1997; Gramling and Krogman 1997; Gill and Picou 1998), studies have yet to document whether this is also the case for children.

Numerous studies have examined the disproportionate injury and death rates of children as compared to adults in natural disasters (Ikeda 1995; Parasuraman 1995; Ramirez et al. 2005; International Federation of Red Cross and Red Crescent Societies 2007; Zahran 2008; Kolbe 2010). Such concerns are not as prevalent for technological disasters because they typically lead to less structural damage that would cause children to be injured or killed. However, it is also the case that technological disasters are frequently associated with exposure to environmental toxins that can cause more harmful effects on children than on adults. Proportionately for their body weight, children drink more water, consume more food, and breathe in more air than adults, which causes them to be at higher risk for toxic exposure than adults (Environmental Protection Agency 2008). Additionally, increased reports of child abuse in the aftermath of past disasters indicate that children may be more physically vulnerable following disasters (Curtis et al. 2000; Keenan et al. 2004). However, few studies have been able to systematically document such an increase. When supporting data are available there are still questions about whether abuse can be

directly attributed to the disaster. Such claims have yet to be investigated in the aftermath of technological disasters.

Youth may face a number of educational challenges following disasters, including a lack of interest in school, decline in academic performance, and delayed progress (Mandalakas et al. 1999; Dean et al. 2008; Peek 2010; Peek and Richardson 2010; Bullock 2011; Weems In Press). Teachers have commonly play a central role in facilitating youth's recovery experiences following natural disasters taking on tasks such as sharing knowledge of disaster-related resources and providing emotional support (Prinstein et al. 1996; Barrett et al. 2008; Alvarez 2010; Peek and Richardson 2010; Ducey and Stough 2011). School peers can also play an integral role in post-disaster educational recovery, providing social support and helping to integrate displaced youth into new school environments (Peek and Richardson 2010). However, there is a critical gap concerning research on role of teachers and school peers in the aftermath of technological disasters.

Additionally, many studies exploring educational vulnerability focus on school relocation in the aftermath of disasters (Casslerly 2006; Barret 2008; Aguilar 2009). Technological disasters do not typically cause the physical destruction of schools and immediate school relocation that often occur in large natural disasters. However, they can cause severe economic impacts for families that may ultimately result in relocation to an area where parents or caregivers can find employment opportunities. A number of scholars have documented the challenges that youth face with displacement and relocation following disasters (Blaze and Schwalb 2009, Peek et al. 2011). In their study of families relocated to Colorado in the aftermath of Hurricane Katrina, Peek and colleagues (2011) documented stressors associated with the transitions and adjustments that displaced families face. For instance, parents must relocate their families to safer locations

that were not threatened by disasters, while youth must deal with temporarily or permanently losing connections to familiar settings and individuals within their social support systems, as well as establishing new support systems (Peek et al. 2011).

Children's Agency and Capacity in Disaster Preparedness and Recovery

Complementing their research on children's vulnerability, researchers are also beginning to explore and document ways in which children have contributed their knowledge and creativity to disaster preparedness and recovery, showing how children have engaged in tasks such as organizing disaster drills, sharing educational disaster information with friends and family members, providing peer counseling, assisting in aid collection and distribution, and participating in planning and rebuilding efforts (Anderson 2005; Peek 2008). The bulk of this limited body of research has targeted activities associated with natural disaster preparedness, response, and recovery (Plan International 2005; Mitchell et al. 2008; Morris and Edwards 2008) and has yet to explore children's agency and capacity in the aftermath of technological disasters. Clearly, however, these events can provide unique opportunities for youth to learn about environmental hazards and inequalities, and can provoke many forms of agency, activism, and volunteerism. Further studies are needed to grasp a better understanding of ways in which children can benefit by engaging with hazards and disasters in safe and developmentally appropriate ways.

Gaps in the Children and Disasters Literature

In addition to the gaps noted above, much of the social science research on children's disaster recovery focuses on short-term recovery. Many studies have been conducted within weeks or months following an event, although adverse effects typically continue beyond this time frame, especially in catastrophic events and cases of toxic disasters such as the Exxon and

BP oil spills. Additionally, to date research on youth has been heavily based on adult perceptions. Although this work has provided a foundation for understanding children's recovery, it is essential to incorporate children's firsthand accounts in order to develop a more well-rounded knowledge base (Peek 2008). Parents and caretakers who are themselves experiencing event-related stress may sometimes misinterpret children's reactions or they may ignore or deny evidence of children's post-disaster stress in an effort to move forward with their lives and not be reminded of their own trauma (Bullock et al. 2011). Additionally, particularly with older youth, parents may be unaware of how both the disaster and their own problems as adults may be affecting their children.

CHAPTER III
RESEARCH METHODS

OVERVIEW

From March to October 2011, I conducted a total of 40 face-to-face, audio-recorded interviews with youth between the ages of 12 and 18 and an additional 7 pilot youth interviews; 44 audio-recorded interviews with adult informants (mental health professionals, educators, and community leaders, etc.); and more than 100 hours of participant observation, for which I wrote detailed field notes (See Table 1). I did this fieldwork over the course of four trips to Bayou la Batre, Alabama, spending a total of eight and a half weeks in the area. In this chapter, I describe the project design, research methods, and fieldwork involved in this study. I then discuss my data analysis approach and conclude this chapter by outlining key lessons learned from interviewing youth.

Table 1. Research Activities: March-October 2011

Dates	Time Spent in Field	Adult Informants Interviews	Youth Interviews	Participant Observation Hours
March 2011 (Preliminary Scoping Trip)	4 days	15	-	-
June 2011	2 weeks	11	9*	21.5
July-August 2011	3 weeks	11	19	33.5
September-October 2011	3 weeks	4	19	53.5
Totals	8 ½ weeks	44**	47	108.5

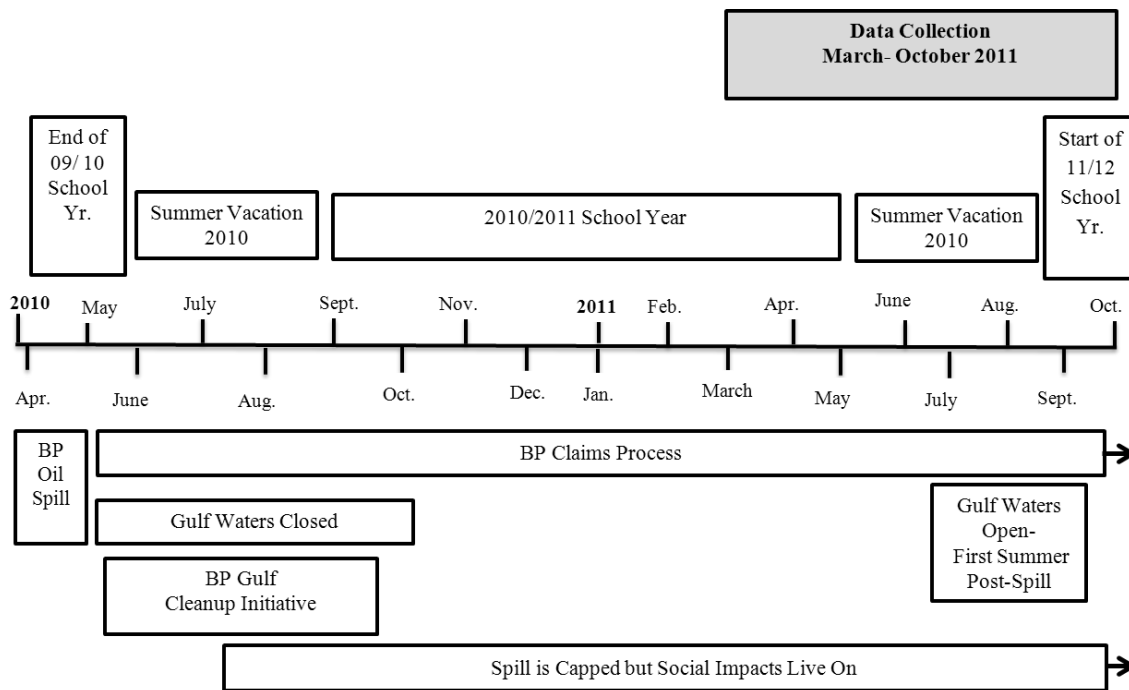
*Seven of the nine interviews were pilot interviews conducted with participants who did not meet all of the criteria for the sample population.

**Total includes three additional meetings conducted by phone

Figure 2 positions data collection activities within the context of the area’s school year and the unfolding of the spill and its aftermath. At the time of my first trip to Bayou la Batre in

March 2011, the preliminary four-day scoping trip, the spill's one-year anniversary was approaching. I then began to conduct youth interviews in May shortly after the end of the 2010/2011 school year—that is, during the summer after the well was capped and commercial fishing resumed. The interviews were designed to capture youth's opinions, reflections, and experiences concerning the range of events that took place at different post-spill stages (lower half of Figure 2).

Figure 2. Data Collection in Context of the Spill and School Year



QUALITATIVE RESEARCH IN POST-DISASTER SETTINGS

For decades, sociologists have used disasters as a context for studying organizational response and human behavior in times of crisis (Dynes 1970; Drabek 1986; Tierney et al. 2001; Stallings 2002; National Research Council 2006; Tierney 2007). During the early foundations of

disaster research in the 1940s, officials were concerned about the public's ability to respond to a nuclear attack in a civil and non-violent manner. Consequently, the government used disasters as so-called natural laboratories for the study of human response to extreme events (Dynes and Drabek 1994; Gilbert 1996; Mileti 1999). Although early studies focused on formal responses and ways in which the public responds to crisis events as a whole, as the field progressed it came to incorporate how factors such as race (Morrow 1997; Bolin 2006; Dyson 2006), class (Fothergill and Peek 2004; Bolin 2006; Dash 2010), and gender (Enarson 1998; Enarson et al. 2007; David 2008; Madhavi 2009; David 2012, Tierney 2012) affect how individuals experience disasters. More recently, sociological disaster research has also begun to integrate how age affects experience with disasters and to incorporate the studies of children's disaster recovery issues (Anderson 2005; Esmail et al. 2007; Peek 2008; Peek 2010).

There is a growing body of literature on methodological approaches to disaster research and fieldwork (Phillips 2002; Stallings 2002; Norris 2006). Much of this work highlights how the methods employed in sociological disaster research are akin to those in other forms of social science research—e.g., surveys, interviews, and observation—and thus it is primarily the context in which disaster studies are carried out that distinguishes them from other social science research (Stallings 2002). Contextual differences may refer to physical destruction in the natural and built environment, interference with daily routines, and disruption in institutional practices. Additionally, contextual differences may also take into account the distress that research participants may experience as a result of a disaster. For example, technological disasters such as the BP spill are associated with a sense of blame for identified responsible parties, great uncertainty, and long-term stress and anxiety (Freudenburg 1997; Gramling and Krogman 1997; Gill and Picou 1998, Arata et al. 2000; Gill et al. 2011, Ritchie et al. 2011).

Qualitative methods have had a longstanding presence in disaster studies (Phillips 2002). For example, seminal work by Erikson (1976, 1994), Edelstein (1988), and Kroll-Smith and Couch (1990) have influenced how we conceptualize and understand the social impacts of disaster events. For this study, I employ two forms of qualitative data collection, primarily focusing on one-on-one interviews and also using participant observation to inform my understanding of the setting. In the following sections, I describe both methods in further depth. Taking a qualitative approach allowed me to explore the experiences of the study participants, endeavoring “to see the world from their perspective and in doing so make discoveries that will contribute to the development of empirical knowledge” (Corbin and Strauss 2008:31). Furthermore, qualitative methods seek to locate participants’ experience within the larger context in which they are embedded (Lofland and Lofland 1995; Corbin and Strauss 2008). In this case, that involves understanding youth’s experiences in the aftermath of the BP spill within their historical and cultural contexts.

SAMPLING APPROACH

In selecting interviewees, I used a “purposive” or “criterion-based” approach for selecting study participants, who ranged between ages 12 and 18. Using a purposive sampling approach to select interviewees ensured representation of different perspectives (Singleton and Straits 2005). For example, I sought to include diversity of age (among youth), race, gender, and ties to industries affected by the spill. The initial focus was on youth whose parents were tied to the commercial shipbuilding and/or seafood industries; however, I also incorporated interviews with a few youth whose parents are not tied to these industries, although the youth themselves are.

The sample generally represents the racial makeup of the city of Bayou la Batre.⁴ The majority of the participants have lived in Bayou la Batre or surrounding areas for at least half of their lives; this is reflective of the broader population, in which the majority of residents are natives whose families have lived in or near the Bayou for generations (See Table 2 for sample characteristics).

The sample population (aged 12 to 18) is almost evenly divided between high school and middle school students. In total the sample is composed of 60 percent female respondents and 40 percent male respondents. Thirty percent of the youth I interviewed previously worked in the seafood industry or were actively working within this industry during the time of the interview. In developing the sampling strategy, I specifically targeted this particular age range for two main reasons. First, older youth are generally better able to articulate their experiences than those who are younger (Clark 2011), particularly concerning disaster-related economic and social shifts that could be more difficult for younger children to identify and express. Second, I had hoped to include participants who could reflect on their own experiences of working in the seafood industry and examine how their employment was affected by the spill. However, I was not aiming to interview a specific percentage of youth seafood workers in the sample because I was unsure how common it would be for local youth in the target age range to hold jobs in the seafood industry (youth's work in this industry is often undocumented). Furthermore, I was uncertain whether youth who were working in seafood jobs "under the table" would be willing to talk openly with me about their experience. Ultimately, I found that 12 of the 40 participants were working in seafood jobs at the time of the interview or had previously held jobs in this

⁴ As mentioned earlier, sixty percent of Bayou la Batre residents are white, 23 percent are Asian/Asian American, 12 percent are African American, 3 percent are Latino residents, and the remaining 5 percent are predominately of mixed race (mostly white and Asian/Asian American or white and African American) (U.S. Census Bureau 2010).

industry. Additionally, two of the study participants worked on the oil spill cleanup, which was not legal because they were under age 18. Approximately half of the interviewees who had jobs in the seafood industry were Asian American youth working in seafood processing shops with their parents.

Table 2. Interview Sample Characteristics

Category	Number of Interviewees N=40*	
Female	25 (60%)	
Male	15 (40%)	
Racial Breakdown	White	20 (50%)
	African American	8 (20%)
	Asian American	7 (17.5%)
	Biracial (Black and White)	3 (7.5%)
	Puerto Rican	2 (5%)
Middle School Students (Grades 7-8, Age 12-14)	18 (45%)	
High School Students (Grades 9-12, Age 14-18)	21 (52.5%)	
High School Graduate (Age 18)	1 (2.5%)	
Lived in Bayou la Batre for Lifetime or Over Half of Lifetime	33 (82.5%)	
Works/Worked in the Seafood Industry	13 (32.5%)	
Worked on Oil Spill Clean-Up	2 (5%)	

*Information does not include pilot sample.

During the interviews, I also collected information about the study participants' parents or guardians (See Table 3). The majority of respondents had at least one parent or guardian who

worked in the seafood industry at the time of the interview or who previously worked in the industry, losing their jobs following the BP spill (70%). Parents filled a range of positions, including working as seafood processors, fishermen and fisherwomen, shrimpers, shrimp net makers, or crabbers. Thirty-five percent of the respondents had at least one parent or guardian who worked in the shipyard industry at the time of the interview or was displaced from a shipyard job following the BP spill. While a parent in the seafood industry might be a mother, father, or both, most of the shipyard industry parents were fathers, with only one mother employed by a shipyard. Forty-three percent of the study participants had at least one parent (almost always fathers) who worked on the BP spill clean-up. In some cases, participants' mothers were involved in clean-up activities, mostly through working along with respondents' fathers or other male relatives, such as the youth's uncles.

Table 3. Parent(s) or Guardian(s) Employment Information

At Least One Parent or Guardian:⁵	
Worked in seafood industry, or has been displaced from this industry in the aftermath of the oil spill	28 (70%)
Worked in shipyard industry, or has been displaced from this industry in the aftermath of the oil spill	14 (35%)
Worked on BP spill clean up	17 (43%)

⁵ Figures do not add up to 100 percent because categories are not mutually exclusive.

INTERVIEW DATA COLLECTION

Initiating Entrée and Developing the Study Context through Adult Informant Meetings

Preliminary entrée into the community was facilitated by Dr. Liesel Ritchie of the Natural Hazards Center, University of Colorado Boulder, who was part of a National Science Foundation-funded research team examining the social impacts of the BP spill on renewable resource communities that have strong economic and cultural ties to the natural environment in coastal Alabama. Dr. Ritchie connected me with a number of local community leaders who were then able to further facilitate my entrée into a variety of local community, faith-based, and educational organizations where staff members provided useful insights into recovery issues following the oil spill and assisted me in recruiting youth to participate in the study.

From March 28 to March 31, 2011, I conducted a preliminary scoping trip to Mobile and Bayou la Batre, during which I informally spoke with 15 adult community leaders in organizations serving spill-affected populations in the area. The goal of this trip was to gain entry into the community and to refine the scope of my work by identifying primary disaster recovery issues pertaining to local youth. During the trip I met with a total of 14 informants who provided a range of insights on oil spill recovery in Bayou la Batre and the surrounding communities. Over the course of the following three trips, I continued to meet with local adult informants in the Bayou. In total, I met with 44 adult informants over the course of the project.

Adult informant interviews provided additional context for the study and the interview instrument, helped expand my local network, and facilitated opportunities to meet individuals who could share their perceptions about the impact of the spill on local youth. However, adult narratives are not focused upon in this dissertation, as the main goal of this work was to tell the

story of the BP oil spill through the voices of youth. Although adult interviews are not analyzed here, I will likely examine these data in the future.

Youth Interviews

For the study, I conducted 40 face-to-face, in-depth interviews with youth between the ages of 12 and 18. The interviews were conducted at locations agreed upon between the respondents and me. During the summer months, most of the interviews took place in a small private back room at the local library. However, other locations were used when participants did not have transportation to the library or preferred to do the interview elsewhere. Those locations included local fast food restaurants, participants' homes or backyards, and office space at local organizations. During the final data collection trip, when school was in session, the majority of the interviews took place in the middle and high schools. I obtained permission from school staff to conduct these interviews in classrooms that were not occupied and in quiet spaces in the school libraries. Interviews in the schools were done after the school day or during free times in the school day such as lunch hour or elective periods, so as not to interrupt students' instructional time.

In an attempt to identify interested youth who met study criteria—those who were aged 12 to 18 and had one or both parents in the seafood and/or shipyard industries—I went to a range of places, such as sports activities, middle and high school classrooms, extra-curricular activities, and church and Sunday school services. In these arenas, community leaders and or teachers who were adult informants often facilitated opportunities for me to talk with youth about the project, during which I generally gave a short self-introduction and overview of my project along the following lines: “Hi Everyone! My name is Brandi Gilbert and I am a graduate student at the University of Colorado. I am working on a project about the impacts of the BP oil spill on

middle and high schoolers in the Bayou and their families. I am interested in interviewing anyone who has one or both parents who work in the seafood or shipbuilding industry. Can you raise your hand if one or both of your parents work in the seafood or shipbuilding industry?" I then proceeded to distribute parent permission forms (See Appendix A) to those who raised their hands, which I later collected at the time of the interview.

Although the \$10 incentives were always a part of the study, after talking with and interviewing several youth, I learned that I should be more explicit about it during my recruitment speech. When I did mention the incentive, youth generally showed more excitement about participating in the research. Also, I found that it was more appealing to youth when I presented the interview as an informal time to talk. Thus, I added the following wording to my recruitment speech: "Anyone who does the interview will get a \$10 gift certificate to use at Hollywood Video and Pizza to rent games and movies or buy pizza. So it's \$10 just to talk about your opinions."

Before leaving each arena in which I gave the recruitment talk, I collected a list with the names and cell phone numbers of each person to whom I provided a permission slip. In some cases, I followed up with youth by text or phone to ask if they were interested in participating in the study, and if they agreed we set up a time to meet. In other cases, if I found youth in an arena in which they could be found every day at the same time, for example when I recruited students in a second period middle school library class, I returned one or two days later to collect permission slips and schedule interviews in person.

At the time of the interviews, after collecting participants' signed parent consent forms, I asked them to sign an assent form indicating that they agreed to participate in the study and

would allow me to audio record the conversation (See Appendix B). At this time, I also gave each study participant a \$10 gift certificate to thank them for agreeing to take part in the interview. Upon giving the participants their gift certificates, I reminded them that as the assent form stated, their participation was completely voluntary. Therefore, they could skip any questions that made them feel uncomfortable or stop the interview at any time, and would not be penalized for this in any way. I also stressed that if they decided to withdraw from the interview, they would still get to keep their gift certificate.

At the start of each interview, I asked participants to complete a one-page information form (See Appendix C). The form was used to collect participants' contact and background information. Contact information included participants' addresses, home and cell phone numbers, and email addresses. Background information included interviewees' age, birth date, gender, school, grade, race, and how many years they had lived in the Bayou area. At the bottom of the sheet, I asked participants for permission to contact them in case I had any additional questions at a later date. Interviews ranged from approximately 20 minutes to one and a half hours, on average lasting about 45 minutes each. All interviews were conducted one-on-one, with the exception of two two-person interviews. Both double interviews were with girls, one pair of cousins and one pair of friends. I agreed to this format given that these youth clearly felt more comfortable talking to me together and expressed this to me. During these sessions I asked them to respond individually to each question.

The interview guide was divided into two main sections (See Appendix D). The first section included a set of introductory questions that were intended to collect personal information about the participants and get them comfortable with talking to me. For example, these questions elicited information about interviewees' important moments growing up, favorite

things to do, and opinions about what it is like to live in the Bayou area. The second section elicited information concerning the following key topics: (1) individuals' daily lives before the spill; (2) individuals' experiences with the spill, such as shifts in family dynamics, social ties, and recreational and educational activities in the aftermath of the spill; and (3) youth's collective stress and coping mechanisms.⁶

A Note on Power Dynamics in Youth Interviews

Status and power dynamics are an inevitable part of interactions between researchers and study participants whether those participants are adults or children. However, power differentials are particularly pronounced when subjects are non-adults (Corbin and Strauss 2008, Lofland and Lofland 1995). Thus, much of the literature on child-centered methods focuses on strategies for addressing issues of power in research involving youth. Eder and Fingerson (2002) note the importance of the researchers' awareness of this particular power imbalance:

When interviewing children, it is essential that researchers begin by examining the power dynamics between adults and youth. Researchers do not always recognize that, in general, children have lower status than adults and lack power in Western societies... Children are taught all their lives to listen to, respect, and obey adults. They are surrounded by teachers, parents, relatives, and adult friends who have the power to command children's actions. (182)

In conducting interviews with youth, I was constantly mindful of this power imbalance and actively addressed it through my approach to both the consent and data collection processes. I took a two-fold prolonged approach to obtain written consent from youth taking

⁶ Youth narratives elicited during the interview are used extensively in Chapters IV through VI. Presentation of narratives was designed to keep original data excerpts intact, with slight alterations or omissions made to protect human subjects and/or allow for ease of reading.

part in the study and their parents or guardians. First, before asking for consent, I provided youth and their parents with a letter that described the project and its purpose, explaining that their participation was completely voluntary.

During the data collection process, I was also mindful of how youth might perceive me as an authority figure, which could cause them to answer questions based on how they thought I expected them to respond. Therefore, I sought to minimize the power differential between myself and the interviewees by using four specific strategies. First, I began the interviews by establishing a rapport through asking youth nonthreatening questions, such as questions about their daily routines or happiest memories with their families (Fargas-Malet 2010). Second, I assured interviewees that none of their information would have their name attached, and that their responses were confidential unless they told me anything that would lead to them hurting themselves or others being hurt. Third, I avoided creating situations that replicated a teacher-student dynamic in which participants were reminded of classroom lessons based on “known answer” questions (Eder and Fingerson 2002). Finally, I conducted interviews in locations where youth felt most comfortable speaking openly and honestly, in which their responses would not be restricted by adults or by other youth who might hear them.

The second and third strategies were somewhat more difficult to maintain during my final data collection trips when I began to conduct interviews in schools. On a few occasions, I found that participants showed up to the interview and verbally noted concerns that they might not know the “right answers,” or that their non-verbal cues (e.g., avoiding eye contact, fidgeting, etc.) showed a bit of concern or hesitation. For example, when I met with one interviewee in the school library, as soon as she walked in she said “What are you going to be asking me, because I don’t know that much about the spill.” In these types of situations, I tried to negotiate the

power relationship by reassuring participants that there were no right or wrong answers and that I was just interested in their opinions. I also encouraged study participants to ask me any questions they chose and to feel free to ask for further clarification on interview questions that seemed unclear to them. In presupposing that the power differential issue would be even more central in the school setting, I spent more time on the front end of the conversation explaining my open dialogue interview format with study participants than I previously did in non-school settings. Additionally, when I conducted interviews in schools I set myself apart from teachers by dressing less formally.

PARTICIPANT OBSERVATION DATA COLLECTION

Visiting “God’s Little Acre:” The First of Many Participant Observation Experiences

One of my most memorable experiences in Bayou la Batre was during my first trip to the area when I went to visit the local boat docks. I was not sure where the docks were, therefore I programmed my global positioning system (GPS) to take me “to the center of the city,” thinking I would find the docks from there. The GPS dead ended me at what looked like the middle of nowhere in front of a small wooden sign attached to a tree that said “God’s Little Acre.” It was the docks, but not exactly what I expected. The waterway was narrow, with lots of rusty boats docked in place. The graveled roadside was filled with pickup trucks, but there were not any people around.

I was hesitant to get out of the car, but after a couple of minutes of sitting in the driver’s seat peering out, I did so. As I walked outside in the humid and muggy air looking at the boats and a pile of oyster shells that was over six feet high and five feet wide, I took in the smell—one which to me smelled of old shrimp. It was a smell that I later came to be very familiar with the

more time I spent in the Bayou. On numerous occasions I later heard this smell affectionately referred to as “Bayou perfume,” which was especially pungent on rainy days. As I inhaled the Bayou perfumed air, I thought about how although I was walking outside in an ostensibly public area, somehow the space by the water felt especially private and sacred. I had the feeling I was walking into someone’s house without knocking. I felt especially imposing because I was taking photographs of the area and was not sure whether someone might see me and find my presence and my picture taking as unwelcomed and intrusive.

After I walked along for a few minutes, two white men who appeared to be in their fifties pulled up in a white pickup truck. They parked on the graveled terrain and the one on the passenger side rolled down his window and called out in a friendly but curious voice, “I know everyone around here, but I’ve never seen you.” He proceeded to strike up a conversation, asking me what I was doing in the Bayou. A few minutes into the conversation he told me that it looked like I had some leftover lunch on my face and he took his thumb and reached out to wipe some crumbs off the side of my mouth. I was a bit taken aback, but then the three of us laughed at my expense. It was after this that the man and his friend talked openly with me about how the BP spill had negatively affected their commercial fishing jobs and how they had been waiting for their BP claim money for months. They told me that they had been commercial fishermen for all of their working lives and they were unsure if they would be able to continue working in the fishing industry in the aftermath of the BP spill.

We talked for about twenty minutes and as I was about to leave, a younger white man who appeared to be in his thirties came up to us. The men introduced me to him as their new friend Brandi. Upon reflection, I realized that this was where my participant observation began. It was the first of many times during my fieldwork in the Bayou that participant observation

opened the door for me to informally hear the experiences of community members and gain the trust of many adult gatekeepers⁷ and youth themselves. Through these kinds of informal interactions, I went from being a completely unfamiliar face to a familiar one, regularly running into community members in most places I went around town including the library, grocery store, restaurants, and local events. Furthermore, the detailed notes that I took during and following participant observation activities provided rich descriptive data that helped to situate interviews within the cultural and historical context (Lofland and Lofland 1995).

Types of Participant Observation Activities

Over the course of the data collection phase, I spent over eight weeks in the field and completed more than 100 hours of structured participant observation. Participant observation activities were documented through field notes that I generally attempted to type within 24 to 48 hours of the experience in order to maintain accuracy. However, documenting the field notes within this time frame was sometimes challenging due to my hectic fieldwork schedule. In total, fieldwork activities yielded more than 100 typed pages of notes.

The bulk of my time during the preliminary scoping trip was spent interviewing adult informants, and thus most participant observation activities occurred during the second, third, and fourth data collection trips. Those activities generally centered on three key facets and settings for community life: faith-based, community-oriented, and school-based settings. Faith-based activities were a constant thread in my fieldwork, as church is a staple for many Bayou la Batre residents. I was a regular attendee at Lantern Baptist Church, located just outside of the Bayou. I also attended another church that had an active youth ministry. By the end of my

⁷ Gatekeepers are those whose trust and/or permission are needed to conduct research in the setting (Singleton and Straits 2005).

fieldwork, I became especially close with the pastor of Lantern Baptist Church and his family and was invited to family dinners that followed church services. During my final formal data collection trip, I was also invited to be a guest speaker at the annual Lantern Baptist Church youth banquet. It was an honor to participate in the festivities in this capacity.

Community activities were also central to the fieldwork. Some activities in which I participated were more formally organized events in venues such as the local community center or at the sites of community-based organizations. Other participant observation activities were much less formal, at the homes of local residents or at the local docks. Formal community events included attending a health fair, a Boy Scouts' troop meeting, food drive, and practices and games for the local youth soccer league. Toward the end of my last trip, I was asked to be a judge for a cook-off. I also participated in bi-weekly Bayou Recovery Response meetings. These meetings began a few months after the spill as a venue for local organizations to discuss community needs and issues. Attending these meetings allowed me to speak directly with service providers about my study and offered an especially good opportunity to network with those who provided youth-centered services. Further, through consistent involvement in the group I established credibility and trust among key community leaders.

Occasionally, I was tired and overwhelmed by the amount of time I spent conducting or traveling to and from interviews or engaging in participant observation. However, from the start of my fieldwork I vowed to myself that I would take part in any activity or event to which residents invited me no matter how exhausted I might be, unless it was unsafe or unethical. Therefore, I found myself participating in a range of informal community activities. This included attending a sweet sixteen birthday party, going fishing for my first time ever with one of the youth who participated in the study, going to a waterpark with a local family, hanging out

at the docks with workers who were waiting to unload seafood from incoming boats, getting a driving tour of the Bayou from a local resident, and going to a Father's Day family dinner and pool party at a local resident's home. These activities were an effective way to get more involved in the community and to learn about the cultural context in which I was working. Over the course of the fieldwork I found myself doing things that I never would have imagined. For example, two teenagers from my study taught me how to fiberglass a boat. I also bought my first pair of white rubber boots (otherwise known as shrimping boots or Bayou la Batre Reeboks) to wear at the docks. And seafood processors at the docks taught me how to head shrimp by holding one shrimp in each hand and snapping the heads off simultaneously.

Because the large majority of the data collection occurred in the summertime, it was not until toward the end of my fieldwork that I also began to incorporate school-based activities in my participant observation, attending local middle and high school events and extra-curricular activities. During the school day when I was not conducting interviews I sometimes observed classes, particularly in the high school, where teachers who were familiar with the study welcomed me into their classrooms. After school I regularly attended meetings for the community service clubs, where I joined in ongoing activities. For example, I participated in a coastal cleanup with the middle school service club. I also helped them clean up and decorate a small grassy area at the center of town for Halloween. Additionally, I assisted the high school community service group with a used uniform sale and donated to a candy drive for their community Halloween party.

Many of my evenings and weekends were filled with school sporting events. I was a regular attendee at middle and high school football games, often attending with a local family that "adopted" me. They regularly invited me to go to sporting events with them and to take part

in their other family activities and outings. My final data collection trip took place during homecoming festivities. I went to the middle and high school homecoming football games, the middle school homecoming dance, and the high school homecoming parade and pep rally. Overall, I found that spending time in both schools was very beneficial to my work because as I spent more time in the schools, an increased number of youth became more familiar with me and the study. This led them to feel more comfortable participating in the study or referring their friends to me. My presence at school activities also provided opportunities to build rapport with school administrators and teachers.

Understanding that “the norms of reciprocity and exchange are inherent in the fieldwork process,” and truly wanting to lend a helping hand in the community, I sought a variety of opportunities to contribute my time and resources (Adler and Adler 1987:40). In addition to the range of activities described above, I engaged in other service-oriented activities. For instance, I assisted with a local food giveaway during which I worked with local residents to unload food trucks and distribute food to more than 100 families. When I attended youth league soccer practices, I helped coaches with drills and verbally encouraged the players, with whom I developed relationships. Lastly, I sought to donate resources in situations where I could be of assistance without compromising my researcher role. For example, when a local church ran out of school supplies that they were donating to children in need, I brought supplies to help replenish their stock.

Documentary Sources

Over the course of participant observation activities I collected a wide range of materials, which enabled me to get a better understanding of the history, cultural context, and political

economy of the community (Hodder 1994; Prior 2003; Quarantelli 2003). My systematic collection of documents resulted in an archive of more than 100 documentary sources, each of which was labeled and dated. Some documents specifically pertained to the oil disaster, while others generally helped me to grasp a better understanding of everyday life in the Bayou for youth. Examples of spill-related documents included Bayou Recovery Response meeting minutes, BP oil spill recovery service pamphlets, photographs of signage stating where individuals could find spill-related recovery resources, and sample BP claim forms. Other documents included pamphlets from school clubs, a biographical DVD about Bayou la Batre developed by local high school students, and photographs of a school art exhibits with pictures taken by high school youth that represent what is important to them in their everyday lives.

RESEARCHER IDENTITY IN THE CONTEXT OF FIELDWORK

Throughout the course of the fieldwork, I frequently reflected on the ways in which my identity as a young African American woman shaped the research process. In particular, my age was a major factor that influenced my interactions in the school context. Middle and high school students were often curious about what I was doing and commonly asked me personal questions concerning my age, relationship status, and where I was from, especially after they became more familiar with me as a result of my participant observation activities. I was willing to engage in such conversations because of my conscious decision to make personal connections with individuals in the research setting. Ultimately, these conversations helped me to learn more about children's lives as well, and provided an opportunity for me to ask them to take part in the study and/or recommend friends who might be interested in participating.

Additionally, some teachers were appreciative of my presence, inviting me into their classrooms because they saw me as a role model for their students. In introducing me to their classes, teachers often noted that I was a student working on my doctorate at the University of Colorado and encouraged their students to talk with me about my educational experience. When I first began my fieldwork, I met with two teachers who specifically said that they agreed to talk with me because they saw from my picture (printed on my one-page project overview) that I was young and black. They went on to tell me that they thought it was important for their students of color to have young, successful role models. Ultimately, these teachers introduced me and my study in their classes; I was able to share my educational experience with some of their students and a number of them also participated in the study. As was discussed in the previous section, I recognized the norms of reciprocity in fieldwork and saw such mentoring opportunities as a means of contributing my time and cultural capital to youth in the research setting.

In addition to spending time at the middle and high school I also went to the local docks to talk with fishermen, shrimpers, and workers unloading and selling seafood. This space was dominated by white men, with very few exceptions. Over the course of the many times I visited the docks I never saw another black woman in that setting, which highlights issues concerning how researchers navigate their race and gender in fieldwork settings. Overall, my presence was generally welcomed, and the men took time to talk with me, sometimes about their experience working in commercial seafood and other times specifically about how the spill affected their businesses. One of the shrimpers I met on my final data collection trip invited me to go shrimping with him and his partner; both were white men who appeared to be in their fifties. As they loaded their boat with cans of beer for their shrimping trip, they said that if I really wanted to get to know what it was like to work in the seafood industry I should go out with them and

experience it for myself. Although I very much wanted to take them up on this offer, thinking that it would greatly enrich my fieldwork experience, I choose not to go. My decision was because of my positionality as a young African American woman. I knew that if my identity were different, perhaps if I were a many of any age and especially a white man, I would have considered taking the trip. Being in this situation made me reflect on a number of questions about the ways in which a researcher's identity affects the fieldwork process: How does researcher identity affect access to certain spaces and places? How should researchers take into account safety concerns that arise as a direct result of their identities? What is the value of working on a research team rather than as an individual researcher, particular a multi-racial team of both men and women? Ultimately, how can researcher identity help or hinder the research process?

DATA ANALYSIS

Youth interviews⁸ were professionally transcribed in their entirety. I then analyzed transcribed copies using constant comparison and analytic induction techniques (Lincoln and Guba 1985; Miles and Huberman 1994; Auerbach and Silverstein 2003), employing a two-cycle approach (Saldana 2009). During the first coding cycle, I generated a list of deductive codes that centered primarily on the questions outlined in my interview guide. Each code was then defined in a codebook. To elaborate on this basic code list and capture some of the key emerging codes, I hand-coded six percent of the transcripts. Based on new themes that surfaced in my review of these narratives, I created additional codes and added the most common and recurring codes to

⁸ As previously noted, data analysis specifically focuses on youth narratives. Interviews with adult informants are not discussed here as they are outside of the scope of this dissertation, but they were used to inform context and develop the interview guide.

the code list and codebook. This code list was then used to complete the first cycle coding using qualitative software (ATLAS.ti).

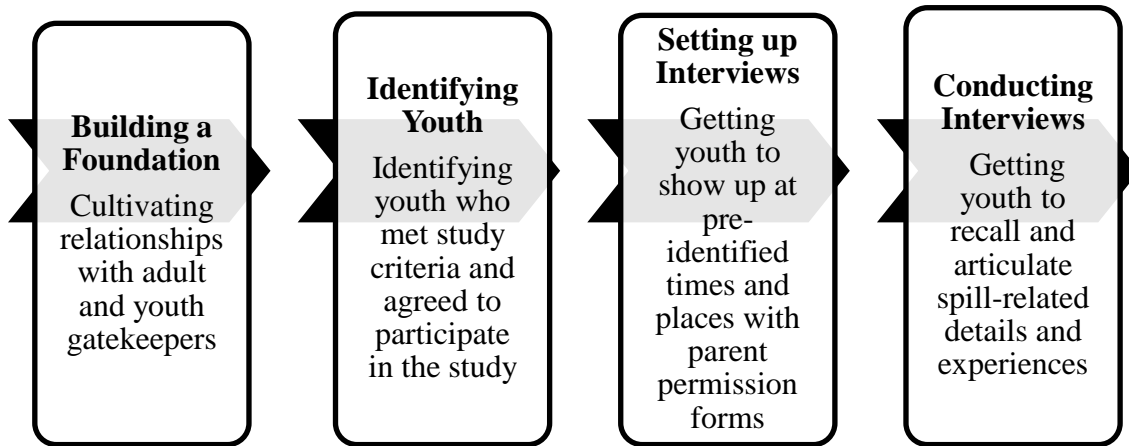
The second stage of analysis was aimed at finding connections and relationships within the coded data in order to develop a richer conceptual framework (Saldana 2009). During second cycle coding, I categorized the code list into four major groups, based on how the data parsed out into the following themes: background story; direct and indirect spill impacts; perceptions and understandings; and working through and coping with the disaster. I then printed out the extracts of text that corresponded to each code in the code list and organized the printouts according to the four categories.

In reading the printed data I looked for recurrent themes, in an effort to determine what common sub-themes were emerging, how frequently these sub-themes arose, and what sub-themes commonly co-occurred. This sometimes led to splitting or collapsing some of the previously established codes in order to redefine the code perimeters. In analyzing the data, I also created diagrams that showed how codes and developing findings unfolded and related to one another. Ultimately, data excerpts that are included in the following chapters were selected because they emerged as accurate representations of other narratives in the data. Thus, the presented excerpts represent a convergence of data, with the exception of those which I explicitly draw upon to discuss narratives that differed from more dominant ones.

LESSONS LEARNED FROM INTERVIEWING YOUTH

Over the course of the project, I learned a number of valuable lessons and adapted a range of strategies in response to challenges that occurred throughout what emerged as the four steps in my youth interview process (See Figure 3).

Figure 3. Steps in the Youth Interview Process



Building a Foundation

Often, I had to first build relationships with adult gatekeepers (e.g., community leaders, parents, educators) in order to gain access to physical locations where I could talk with and recruit youth for the research. Once adult gatekeepers accepted me, I then cultivated relationships with youth—some of whom were also gatekeepers themselves. The participant observation activities that I previously discussed helped to establish and maintain ties with both adult and youth gatekeepers, making them feel more comfortable with me and the study. Developing these relationships was also particularly important because of researcher and media saturation in the area. Residents wanted to be reassured that I cared about the community and that they could open up to me and trust me with their stories. Although it did not happen very often, some community members also wanted assurance that I was not representing BP. When they asked me about this or I suspected that it might be a concern for them, I distanced myself from BP by focusing on my student role, reminding them that I was a graduate student there to learn about how the community was coping with the spill.

Identifying Youth

Once I gained entrée into arenas in which I could meet and talk directly with youth, I sought to identify interested youth who met the study criteria—those who were aged 12 to 18 and had one or both parents in the seafood and/or shipyard industries. During my first data collection trip, because school was not in session, I went to a range of activities and places where I thought that individuals in the target age range might gather. This included soccer practices for the community youth league, church and Sunday school services, and Boy Scouts' meetings (there was no Girl Scouts organization in the area). In these settings where there were generally anywhere from five to fifteen youth, I had a difficult time identifying youth who had parents in these industries particularly the seafood industry. Initially, I thought it was astonishing that I was having trouble identifying youth with parents in the seafood industry in Bayou la Batre—a town known as the seafood capital of the Alabama. In considering the possible challenges for the study, it never occurred to me that identifying youth who met the criteria might be an issue.

To make sense of this particular challenge, I had to think further about the current state of the seafood industry. Many adults with whom I informally spoke talked about the seafood industry as one that was dying, due to factors such as the increase in diesel fuel costs and the decrease in profits because of growing competition from imported seafood. Some of these adults also talked about the booming nature of the seafood industry when they were younger, drawing on their own memories of being out on the boats fishing and shrimping with their parents who were making a very good living. This made me question whether my challenge identifying youth who had parents in the seafood industry was further evidence of the fleeting state of this industry. However, I found that it was much easier to identify youth who fit the study parameters once I began to recruit in school settings. I believe this was a function of the larger pool of

individuals with whom I was interacting. Working with groups of approximately 30 students there were typically one-third who indicated they had one or both parents working in the seafood and/or shipyard industries.

Ultimately, recruiting within the school context may have steered me towards exploring the experiences of more traditional youth, thus excluding particular populations whose narratives could have further enriched the study findings. For instance, I did not include in my study youth who opted out of high school, who in some cases may have pursued employment opportunities in the commercial seafood or shipbuilding industries. This represents an important limitation in light of the community's significant high school dropout rate. Additionally, the study did not incorporate youth who were home-schooled, and therefore may have had even more in-depth observations about the economic and social impacts of the BP disaster on their families as a direct result of spending more time within the home context.

Setting up Interviews

Lastly, throughout the study I faced challenges getting youth to show up for their scheduled interview time and to bring the necessary signed parent permission forms. In the early phases of data collection, I tried to schedule the interviews days or even up to a week in advance. I thought that this advanced planning would maximize my productivity in the field and allow me to arrive in Alabama already having pre-scheduled interviews. This was a major misconception. Between the time I had set up the interviews and the scheduled interview time, study participants often forgot about the interview. This frequently resulted in them needing to reschedule when I called them the day before to remind them about our appointment.

After experiencing a number of cancellations early on in the project, I developed a different tactic to interview scheduling that was much better suited for this age group. I changed two key components: how I scheduled the interviews and how I reminded participants about their interview date and time. First, I stopped attempting to schedule interviews so far ahead of time and generally only scheduled two to three days in advance, at most. In many cases, interviews were scheduled the day before.⁹ This approach was harder to maintain because it was much less predictable and sometimes required more work on my part in scrambling to secure last minute interviews. However, it reduced the number of no-shows and postponements among study participants.

Second, rather than making reminder calls the day or night before the interview, I switched to sending reminder texts (for those who gave me their cell phone numbers to remind them about the interview). Because my number was unfamiliar to youth they sometimes did not answer my phone calls, so I had to leave messages and wait for return calls. Thus, using text messages provided an immediate contact strategy. Texts are also a more common form of communication for contemporary youth. The text messages generally read something like: “Hey _____ (name), it’s Brandi. I’m looking forward to talking with you tomorrow about the BP spill. This is just a reminder that we are supposed to be meeting tomorrow at _____ (time) at _____ (location). Let me know if that still works for you. And don’t forget your permission slip 😊.”

Conducting Interviews

During the pilot interviews, I noticed that one of the major challenges was youth struggling to remember spill-related details. This was understandable given that the disaster

⁹ Once I began interviewing in school settings, I usually scheduled interviews a day in advance or on the same day.

happened more than a year before interviews took place. An effective strategy for drawing out youth's memories and prompting for details was to ground questions about the spill in events going on in youth's lives. This involved situating questions about the spill in the context of the school year calendar. For example, after asking the preliminary non-spill related interview questions I would transition into the spill-centered questions by saying something like: "Do you remember the end of last school year when the BP spill happened? Can you tell me a little bit about what things were like after that?" As the interview progressed, I would continue to anchor the questions in the context of the school year and other things going on in youth's lives. For instance, I would prompt them by saying "Do you remember last summer vacation when the spill cleanup was going on and the waters were closed? Can you tell me about what was happening around that time?" or "How about this summer vacation? What has it been like now that the waters have reopened? Are you back to going swimming, fishing, and other activities?"

Sometimes it was challenging for youth to remember when their parents were displaced from work as a result of the spill and when they returned to work or found a new job. In these cases, it was also especially helpful to jog youth's memories using the school year as a temporal framework. Often, interviewees could not tell me what months their parents were out of work or for exactly how long, but they could identify if their parents were displaced for all or most of the summer vacation. Grounding the study in this manner was helpful for interviewees across the 12 to 18 year old sample range, but it proved to be a particularly useful tactic with interviewees on the younger end of the spectrum.

In addition to challenges with recalling spill-related details, some participants had trouble articulating the impacts of the spill on themselves and their families. There was a stark contrast between when I spoke with interviewees about the spill and when I asked them later in the

interview about their experiences with Hurricane Katrina. Even for those whom the BP spill impacted greatly, it was much easier for them to verbalize the effects of Hurricane Katrina. This challenge highlights the notion of “invisible trauma” (Vyner 1988) associated with technological and environmental disasters as compared with natural disasters. Youth discussed more sensory and visceral memories of Katrina; for example, they drew on memories of their roofs being caved in, not having electricity in the blistering summer heat, and living in trailers or moving in with family members. Some also discussed the roles that they took on to physically help with the rebuilding process. The BP spill memories they drew on were often much more subtle and less sensory-based than their Katrina memories. Additionally, while the BP spill had major economic and social impacts, for many of them it did not provoke the vivid physical memories that Hurricane Katrina did. Thus, in comparison with Hurricane Katrina, this technological disaster did not nearly have the same physical impact on youth, which made it a bit more challenging for youth to articulate its effects on their lives.

CHAPTER IV

“WE’RE OUT OF A JOB:” THE SPILL’S ECONOMIC IMPACTS AND A GULF OF UNCERTAINTY

The primary objective of my study was to examine how youth whose parents were economically tied to commercial seafood or shipbuilding industries in Bayou la Batre, Alabama perceived and experienced the 2010 BP oil spill. As was previously mentioned, renewable resource communities (RRCs), such as the Bayou, are disproportionately vulnerable to disasters that contaminate the environment because of their strong economic, cultural, and social ties to renewable natural resources (Picou et al. 1992; Picou and Gill 1996). This chapter predominately discusses economic impacts of the disaster, while the following chapter focuses more explicitly on cultural and social impacts.

Because data were collected beginning one year after the 2010 BP oil spill, youth were able to reflect on how they originally thought the spill might affect themselves, their families, and their community, and to discuss their observations regarding how the actual impacts unfolded. The current study contributes to a long line of research exploring how stressful financial downturns, such as the Great Depression and the agricultural economic crisis of the 1980s in the Midwest, affect youth and their families (Angell 1936; Cavan and Ranck 1938; Komarovsky 1940; Siegal 1984; Lempers et al. 1989; Elder et al. 1992; Duncan and Brooks-Gunn 1997; Elder 1999; Conger and Conger 2002; Leinonen et al. 2002; Conger and Conger 2008). While much of this literature examines how youth are indirectly affected by financial hardship through the ways in which their parents react to such stressors, the current study moves beyond solely focusing on parent-child relations. The findings presented in this chapter explore how youth’s perceptions and experiences are situated in a larger social context that takes into

account the effects of economic disruption on the family unit as a whole, as well as on the greater community.

I begin by highlighting youth's narratives that situate Bayou la Batre as an RRC, focusing on its strong economic and cultural ties to the Gulf. Next I explore youth's perceptions of the oil spill, first discussing ways in which some study participants initially downplayed the disaster. I then examine youth's perceptions regarding economic uncertainty following the spill. Finally, I highlight the self-reported economic impacts described by youth (e.g., loss of jobs among immediate family members, need for family to significantly reduce spending, etc.), followed by a discussion of strategies that youth used to deal with the economic hardships that their families faced. The narratives incorporated into this chapter shed light on the ways in which youth experienced and interpreted the BP oil spill, specifically exploring how they have socially constructed this disaster.

“BEIN’ OUT ON THE WATER IS NOT ONLY OUR LIVES, BUT OUR CAREERS:” BAYOU LA BATRE AS A RENEWABLE RESOURCE COMMUNITY

As evident in the narratives presented below, youth recognized their community's economic dependence on natural resources in supporting commercial seafood and shipbuilding industries. In this context, they were especially concerned about the impact the spill might have:

The Bayou depends on seafood for its origin, I guess you could say. That's the major thing down here, seafood, shrimping, crabbing, oysters. That's what the city was built on, that and shipbuilding.

Most people around here, they have somethin' to do with the water for a job. Some of 'em fish, some of 'em oyster, crab, some of 'em shrimp. It's all water-based stuff.

Bein' out in the water is not only our lives, but our careers. That's what a lot of people do here. That's kind of what we depend on, is the water.

Additionally, two brothers who participated in the study (interviewed separately) reflected on the generational nature of the commercial seafood industry within the community and their own family, noting how the oil spill disrupted water-based jobs. The younger brother, a 13 year old white male said:

There were a lot of people gettin' really mad or ticked off at whoever, 'cause they were just mad that they couldn't get on their boat and do what they normally did. Most of 'em have been livin' on the water most of their lives, helpin' their family. I have kinfolks that have been livin' on this water for 90-some years, goin' back farther.

Similarly, his 16 year brother stated:

People in general were just angry at the fact that somethin' they've been doin' for years, as young teenagers, they couldn't do. And they didn't know if they could do it ever again, 'cause for a little while people didn't know if it [the seafood industry] was ever gonna come back if the oil did hit...My step Poppa [grandfather], he's been doin' it since he was young, 10, 12 years old. That's all he's ever known, shrimpin', crabbin', oysterin'.

Another interviewee also described the community's ties to environmental resources and how these ties were altered by the disaster:

We're based on the water. So it really concerned us. You pretty much always see everybody you know when you're here, and lot of people would talk about it [the oil spill]. It was like, they would either own a [water-based] business or they knew somebody that owned a [water-based] business or they actually worked with seafood themselves. You would hear about people we know gettin' laid off or pay's cut back or just really worrying about all of that. Cause this is, like, seafood city, I guess you'd say, so we all worried about the spill completely stoppin' [the seafood industry].

As was noted in the introduction to this dissertation, both the seafood and shipbuilding industries in this renewable resource community have faced a range of economic challenges, which were further exacerbated by the BP oil disaster. In my field notes from August 4, 2011, I reflected upon the challenges that those working in the seafood industry face, highlighting the economic uncertainty inherent within the industry:

Last week I met the daughter of a man who owned a few shrimp boats and a small seafood processing shop along the docks where they sold their own catch and the catch of other local shrimpers. She was a white woman who looked to be in her 30s and shared with me that she and her siblings worked in their father's business along with him. After we talked for a while, I asked her if she thought it would be okay if I joined the crew on the docks for a day to see what it was like and she agreed. Last night, when I called the seafood shop to confirm that it was still okay for me to join her father answered the phone he responded, "Well we start at 7am. If there's work we start, and if there's not we sit around and drink coffee." His response was representative of what his crew later reinforced, which was that every day was different when you work at the whim of the sea.

Today it was extremely hot and humid. The docks smelled strongly of seafood, a scent that was very pungent when you first stepped out of the car but that you eventually grow used to after a while. There were lots of flies and dragonflies swarming the area. I wore a hunter green t-shirt and dark brown shorts with my white shrimp boots that I had recently purchased, as everyone said that if I wanted to be at the docks I had to wear these Bayou la Batre Reeboks. I was also informed that it looked bad if the boots were too white and I needed to soil my boots, so I rubbed dirt on them before heading to the docks.

When I arrived at the docks, there were was one black man who was in his 30s and three white men, one in his 60s, another in his 50s, and an 18 year old. The men were waiting for boats to dock so that they could unload the catch and to sell shrimp to customers. But it was a very slow day at the docks; I was there from 7am to 12pm and no boats arrived and only one customer came to purchase seafood. While we waited, I struck up a conversation with the 18 year old man. We began to talk about his education and he told me that he never considered dropping out of school to work on the water stating the following: "My grandfather always told me this seafood industry is fixin' to go to shit. Stay in school." He went on to explain that his grandfather and uncle have worked in the seafood industry for decades. He began joining them on the boat for work and recreational trips when he was three years old and has been driving the boat since he was five. He passionately said: "It was just like second nature. It's in my blood." While we were waiting around I also talked to the man who looked to be in his 50s and he told me that he was a military veteran and had traveled around the world working in the navy. When I asked him if he had ever considered working in the seafood industry full-time, he said that the work was too unreliable and therefore he has only done it on the side to make extra money. When the guys were standing around talking amongst themselves they spoke excitedly about yesterday when a television crew was at the docks filming them for a documentary. They said that it was very busy and over 10 boats docked, for which the crew unloaded the catch and processed it. Observing the men standing around waiting for work while they reflected on their successes of the previous day showed me first-hand how uncertain and unpredictable the seafood industry is.

“AT FIRST I DIDN’T THINK IT WAS A BIG DEAL:” IMMEDIATE REACTIONS OF YOUTH TO THE BP SPILL

Despite the strong ties of this RRC to the Gulf, in the immediate aftermath of the disaster some participants stressed that they initially thought the spill “wasn’t a big deal.” However, their narratives indicated that often their thinking shifted when something triggered them to personalize the event. For example, one interviewee spoke about how he first found out about the spill in school and doubted it would have any significant impact on the Bayou. As he learned more about the spill, he realized that the waters were being shut down and this would have major effects on jobs in the community:

I was in my history class. My teacher was real big on the environment and stuff. She was tellin’ us about it. I didn’t believe it at first. I was like, “It’s no big deal, it’ll probably get capped off and it won’t get to us.” But I got home and we started talkin’ about it and the guys on the news were tellin’ us they might have to close the water down and it was a big deal. I was kind of—no big deal, until they finally told everybody it [the Gulf] was bein’ shut down and there wasn’t gonna be a shrimpin’ season, crabbin’ was bein’ shut down, and so was oysterin’.

Another interviewee described a similar experience in which she originally thought the disaster was “blown out of proportion.” However, when she realized how much oil was released into the Gulf and saw a number commercial shrimp boats simultaneously returning to the docks, the severity of the situation set in:¹⁰

R: I think we were in school when it [the oil spill] happened. We were in class and somebody texted my teacher and it said some oil rigs exploded and oil was comin’ out, and it’s right there. I thought it was blown out of proportion, that it could be just like one gallon, but it was lots of it. My dad told me “It’s like, so many barrels had gone out in just an hour, just between when it started and when we got home. I was like, “Oh, this is real.” I didn’t really expect it to happen.

I: What did you think once you realized how big it was?

R: I was like, nobody was goin’ out [out on the Gulf], nothin’. The spill happened during shrimping season. The season starts in March and it goes until August or

¹⁰ ‘I’ is used to indicate when interviewer is talking and ‘R’ when respondent is speaking.

September and when we passed by everybody was comin' in. To see all the boats come in that usually don't come in...It was unreal. 'cause we're so used to seein'... no boats are in the harbor during that period of time. Everybody was in. Nobody had work. Nobody was makin' money.

Other interviewees reflected similar sentiments. One 11th grade white female study participant said she initially thought authorities would quickly clean up the spill, but when the oil began to spread it made her think more seriously about how the disaster might affect the Bayou:

I'm one of those people who thinks nothing is ever going to happen to me. So when I first found out about the spill I was like, oh they're gonna get it all cleaned up and it's not gonna spread, but it did. And when it actually did, it was just like "wow." All I could think about was all these kids who I go to school with, all their parents they own seafood shops and there's other kids whose parents have shipyards. And I just thought to myself that those kids whose parents only work opening oyster shells every day or only work heading shrimp every day, what is this gonna do to them? I actually know a girl, and I talked to her in 8th grade right after it happened and I remember her telling me that they were about to lose their house because her parents both lost their jobs after it happened. So I think that's something that really hit home for me, after I heard it with my friends.

Some interviewees told me about experiences where they initially downplayed the potential impacts of the spill, until they understood that the spill would not only affect the Bayou community as a whole, but also would likely directly affect the jobs of their parents or other immediate family members:

I was just like, I'll get over it. Next year it won't be as big of a deal as it is now, it won't be a bother. I just didn't care. Until I realized my grandma [would lose her job] and then I freaked out. I didn't like it.

I really didn't think it was that big of a deal, but then the seafood industry stopped. My dad got laid off.

I didn't really concentrate on the oil spill 'til after, in the summer, when my parents didn't have work and they're sitting at home with me now. That's when it really started to click in my head. But immediately after I wasn't thinking much of it.

“NOW WHAT DO WE DO?:” YOUTH’S PECEPTIONS ASSOCIATED WITH ECONOMIC UNCERTANITY

According to interviews, one of the primary concerns right after the spill was uncertainty concerning the disaster’s economic impacts on local seafood and shipbuilding industries. Study participants were particularly worried about their parents’ jobs and/or the jobs of other close family and community members. In some cases, the adverse outcomes that they feared never came to fruition because individuals were able to keep their jobs, or only experienced a brief interruption in employment. However, for many of the youth I interviewed, anxiousness and stress surrounding uncertain economic impacts were further exacerbated when their loved ones lost their jobs as a direct result of the spill.

In this section, I focus explicitly on youth’s perceptions concerning potential economic impacts of the disaster, examining reported effects later in this chapter. Past research indicates that individuals’ perceptions surrounding issues of uncertainty and threat of loss can cause a great deal of stress (Hobfoll 1991; Baum and Flemming 1993; Gill and Picou 1998). Scholars have explored such issues in community technological disaster recovery literature, predominately focusing on adult populations (Baum and Flemming 1993; Gill and Picou 1998; Ritchie 2004, 2012). Findings discussed below contribute to this body of research, shedding light on how youth have both observed these concerns regarding uncertainty and threat of loss in adult talk following this technological disaster and have also engaged in this discourse themselves.

When I asked study participants what they remembered most about the days following the BP oil spill, they commonly talked about economic uncertainty. For example, one study participant stated: “Everybody that worked in seafood got shut down, and I think everybody was thinkin’ the same thing as us, that we’re not gonna be able to do it no more. Now what do we

do?” Another interviewee noted her observations of individuals in her neighborhood who worked in local seafood and shipbuilding jobs and were very concerned about the economic effects of the disaster:

Some people were cryin’. We lived around a bunch of people that all worked in the shipyard. In our neighborhood, everybody usually works in the shipyard or the seafood industry, and everybody was kind of worried. They didn’t want to lose their jobs or lose money, and might not be able to afford their homes or anything [if they lost their jobs].

Similar sentiments were reflected in many other interviewee accounts, in which youth recalled the apprehensions they and their families had during the months after the spill:

My parents and my grandparents worried about our [shipyard] business goin’ really bad and worried about our shrimp boat goin’ out of business completely. We didn’t know if we were gonna have to stop the boat for a while, which we did, but we didn’t know if we were gonna have to stop it completely and pretty much tell other people [we employed] there was nothin’ we could do. So we really got worried about that.

We talked about when it [the spill] was gonna end, if we was gonna be able to keep our job, stuff like that. It was like, we ain’t gonna be able to keep our jobs, too much oil. We ain’t gonna be able to find work and stuff like that, ‘cause they thought all the seafood shops and stuff like that was gonna close down due to all the oil out there in the Gulf.

Although many youth reports associated with these issues were similar to the ones described above, a few study participants expressed especially grave concerns. For example, one 13 year old black female explained that her parents mostly talked about the spill privately in their bedroom and she wondered what they were saying because she believed the following might happen:

I thought my dad wasn’t gonna work anymore, he was gonna stop, they were gonna lay him off, or they was gonna close up [the shipyard] and not work anymore. And I thought we were not gonna have enough money to pay everything [bills] in our house.

When I asked her if she told her parents about what she thought might happen, she said:

Well, one time I told my dad that I thought we weren't gonna have enough money, and he said, "Don't worry about it, I'll figure everything out." Then I got relief, because I trusted my dad.

In contrast, some interviewees expressed similar worries that they never shared with their parents. For instance, when I asked one 15 year old Asian American study participant whose parents both worked in seafood processing what his most unforgettable experience surrounding the spill was, he articulated his perceptions regarding his family's economic situation. He never shared the following with his parents because he did not want them to know that he was worried:

[I was thinking] are we gonna get, like, bankrupt or kicked out of our house? Are we gonna starve, go without food? Those were the major things I was thinkin' about. It was stressful. I never had to think about that stuff before the spill.

"Double Trouble" and More: Asian American Youth's Perceptions of Spill Impacts

Overall, Asian American study participants reported heightened concerns about potential spill impacts in comparison to interviewees in other racial categories. This was due in large part to the fact that they were much more likely to have multiple people within their immediate family at risk for spill-related job loss. For many of the Asian American study participants, both parents worked in seafood processing (for those who lived in two-parent households) as well as themselves and/or sibling(s) working alongside their parents. Even before the spill, family members commonly worked together with each being paid individually based on the amount of seafood they processed, but ultimately combining profits. The money earned from processing seafood was considered family wages, rather than that of any individual in the family unit. Therefore, Asian American youth in the study recognized that the disaster would likely not only affect the job of one family member, but might have a major effect on their entire family's economic situation. One 16 year old female respondent talked about her fear of both her mother

and sister losing their seafood processing jobs, which she referred to as “double trouble.” “I was sad, because I thought my mom was gonna lose her job, and scared, ‘cause my sister, she worked oysters too, so that would be double trouble, I guess.”

Though she did not mention this, I later found out from interviewing her 12 year old brother that he also worked in the seafood processing shop with their mother and sister during the summer before the oil spill and had planned to continue this work during the following summers. Thus, what his sister previously described as “double trouble” could actually be interpreted as “triple trouble.” When I asked him how much he earned shucking oysters, he reported that his mother collected the money and he did not know how much he was paid. Furthermore, he expressed that knowing how much he made was unimportant to him because he worked to earn wages for his family and not for himself. This narrative highlights the cumulative risks that numerous Asian American families faced following the spill.

Another Asian American interviewee also discussed the language and educational barriers that stand in the way of many Asian American seafood processors finding other forms of employment. He commented that he was especially concerned about his parents being able to find other work if they were displaced from their jobs shucking oysters because of their “limitations,” referring to their very limited ability to speak, read, and write in English:

They [my parents] were telling me what they had heard, what the situation might be like, that they might be out of a job for a year or up to 10 years because the oyster beds would be destroyed because of the oil spill. Unlike Katrina, it wouldn’t take a couple weeks to recover, but the damage would be worsened because of it. They were scared that they couldn’t find another job, and not being able to do anything else because of their limitations, they were worried.

YOUTH’S REPORTS OF THE SPILL’S ECONOMIC IMPACTS ON THEIR FAMILIES

While the findings in previous sections focused mainly on youth’s perceptions concerning how they thought the spill might affect themselves, their families, and their

community, the following section examines their self-reports on ways in which the spill directly affected their families' economic situations. As was discussed in the methods chapter, 70 percent of respondents had at least one parent or guardian who worked in the seafood industry at the time of the interview or who previously worked in the industry but lost their job following the disaster. Thirty-five percent of the respondents had at least one parent or guardian who worked in the shipbuilding industry at the time of the interview or was displaced from a shipyard job following the BP spill. Parents filled a range of positions in the seafood industry, including working as seafood processors, fishermen and fisherwomen, shrimpers, shrimp net makers, or crabbers. Parents working in shipbuilding were also in a range of jobs including painting, welding, carpentry, and clerical work.

Though some youth observed no or slight spill-related economic shifts within their families, the overwhelming majority reported moderate or major economic shifts in the year following the BP oil disaster. It is central to note that these impacts were unfolding within the greater context of a declining national and international economy, and thus the spill intensified and exaggerated pre-existing economic issues. Additionally spill-related economic impacts must also be taken into consideration within the pre-disaster state of the seafood industry—one that was facing rapid declines due to factors such as the increase in diesel fuel costs and the decrease in profits because of growing competition from imported seafood. Study findings revealed that two primary factors shaped how interviewees' families were economically affected by the spill: the level of parental involvement in seafood and/or shipbuilding industries and the degree to which disaster-related economic tensions were minimized through BP compensation funds.

For respondents who had two working parents, if at least one parent had a non-water-based job, there was likely to be less economic disruption following the disaster. This was due to

the stability that the other parent's job often created for the family during this time of general uncertainty. Furthermore, in a few cases the parent working in the seafood or shipbuilding industry had an additional job or source of income, which also served to maintain stability and lessen the economic strain. For example, one 12 year old female interviewee shared that her father was a commercial fisherman and also owned a non-water-based business in a neighboring town. She talked about ways in which this additional income source helped to reduce family conflict that could have emerged as a result of spill-related economic problems:

My dad, he could have been really, really mad and could have gotten really depressed and upset. I mean, he was, but he knew he still had another job to do, so he was thankful for that and so was my family, so nobody was really fightin' or mad or anything.

In contrast, youth living in households in which both parents worked water-based jobs, only one of two parents were employed and the working parent had a water-based job, or a single parent worked a water-based job generally experienced more severe economic disaster impacts. As discussed in the section above, dual parents working in seafood processing—in many cases along with youth—is a common occurrence within Asian American families in the study and in the broader community. Therefore, these families were hit especially hard. One Asian American teenager talked about the economic impacts on his family and other Asian American families in the Bayou:

It's pretty seafood-based down here [in Bayou la Batre]...Everything was affected. A lot of people were out of jobs in the Asian community, as most people either shucked oysters or crabs. Without their businesses they were pretty much in the same situation my parents were in. Everybody was looking for a job.

“Daddy’s Gonna Stop Workin’?:” Economic Troubles for the Family Patriarch

A number of study participants came from families in which their father, who worked in the shipbuilding or seafood industry, was the sole or main financial provider of the household.

Overall, more than half of interviewees were in the study sample because their fathers had water-based jobs. While a parent in the seafood industry might be a mother, father, or both, all of the shipyard industry parents were fathers, with the exception of one mother who worked in a shipyard. Many youth indicated that they found it especially disturbing when the jobs of their fathers, the family patriarchs, were compromised. When I asked one Puerto Rican 12 year old girl whose father worked in a shipyard to tell me about her family, she said made the following statement which contextualized her father's role as the family patriarch:

I like my family. It's fun to be around them all the time. They like makin' jokes. They always like having cookouts and meeting new people...My mom she likes cleaning up the house, and we [me and my sister] help her clean up the house almost every day. My dad just likes to work, 'cause he wants to make sure he's taking care of us. He'll look for any kind of job, like, right now he's not here, he's all the way in Louisiana working [on a shrimp boat].

She later articulated what life was like for her family after her father lost his job as a direct result of the oil spill:

My dad, during that time [following the spill] would go ... out more and try to see what he could do to get another job so he could at least get more money. We didn't have air conditioning back then, 'cause the air conditioner broke...They [the utility company] cut off everything. We had to get water from our neighbor's house, because we didn't have any water at all because we didn't have that much money to pay [the water bill]...We had to go to our neighbor and ask if we could get buckets of water, and we had to ask another neighbor if we could put our hose in her thing so we could fill up our buckets. It was kind of embarrassing, 'cause we really didn't have that much money to pay it [the water bill]. We spent, like, a month without TV, which was kind of sad.

Another study participant, a white 12 year old male, reflected on how finances were tight in his family following the spill, but what was most striking was seeing his father cry for the first time ever after he found out about the disaster:

We had to watch what we spent money on, we couldn't just go and if we wanted somethin', we couldn't really get it. We had to use it for main purposes of food and stuff. We couldn't just go out there and say, "Hey, that looks good," and get

it, like a toy. We might get one or two, but not as much. ...But the worse part of all was after it first happened when I woke up in the mornin', it was on the news, and I walked out there, and I remember, my dad was sittin' in a chair and he was just cryin'. I was like, "What's wrong?" and I looked on TV and they said, "Oil, millions of barrels spilled." I'm, like, speechless...I've never actually seen him cry before. That was the first time I've seen him cry.

A 16 year old African American female also talked about challenges she experienced when she learned that her father lost his job and would not be able to provide for her in the way that she was accustomed to:

At one time I was kind of mad, 'cause we [me and my sisters] was always spoiled, and when he [my dad] stopped workin', we just couldn't get the things we were used to. But I kind of got over it because before then, I would get everything I wanted. I mean, I didn't have everything, but I had a lot of stuff. And I was like, "There's no need for me to get mad," because as much as my daddy and my mom used to spoil me, especially my daddy, as much as he used to spoil me, there's no need for me to get mad, 'cause once he started back workin' and all that, we can do what we wanted to do. You can't just get a job like that. It takes a little while to actually find a good job. My other sister, the one that's nine, she felt bad, too. She was mostly sad, because she was like, "Well, Daddy's gonna stop workin'? How we gonna get this? How we gonna get that?"

"We Got a Couple of Checks from BP...But Right Now Things Are Kind of Tight"

In addition to the level of parental involvement in seafood and/or shipbuilding industries shaping the ways in which interviewees families' were economically affected by the spill, another influential factor was whether parents obtained reimbursement for lost income through the BP claims process. Although conflict surrounding unequal access to claims funds and other forms of compensation has been documented following the BP oil spill and other disasters (Impact Assessment, Inc. 1990; Palinkas 1993; Gill and Picou 1998; Helgoth 2011; Schwartz and Schrope 2011), here I explore how youth whose families received claim monies talked about the role of the funds in helping their families to manage economically after the spill.

One Asian American girl I interviewed told me about how the BP claim money helped her family pay off their home after both her parents were displaced from their seafood processing

jobs:

My dad, he couldn't really work. My mom couldn't work because there weren't many oysters, so she didn't work for a while... and we just lived on whatever the BP [claim] money was. It wasn't that bad, because I don't really know how they did the money thing, but the money was actually decent size. We ended up paying off our house, so it was actually all good for us.

Aside from this excerpt, it was much more common that youth whose families received BP compensation funds described how although the funds may have initially provided very helpful economic assistance, some financial tensions persisted. For instance, one female high school student whose father was a crabber expressed the following:

BP helped out at first, but I guess they [my parents] got into a few arguments about money and stuff like that. They [my parents] couldn't afford stuff. ..They'd been having trouble paying bills and stuff like that.

When I asked another interviewee if things were financially tight for her family when her father was displaced from his job in the shipyard, she too noted that the money was helpful in the more immediate aftermath of the disaster, but did not alleviate longer-term financial issues: “We got a couple of checks from BP, when he [my dad] was out of work for two months and that helped some, but right now things are kind of tight.”

These and other narratives reveal that BP compensation funds helped to soften some economic hardships that occurred in the more immediate aftermath of the spill, but that disaster-related monetary problems and issues of economic uncertainty persisted. Past research has indicated that in comparison to natural disasters, technological disasters are commonly associated with more uncertainty concerning short- and long-term economic and social effects as well as longer-term anxiety and stress (Freudenburg and Jones 1991; Freudenburg 1997; Gramling and Krogman 1997; Gill and Picou 1998; Ritchie 2004, 2012). Indeed, it is likely that the types of disaster-related impacts discussed above as well as new concerns could linger for

years or even decades to come (Ritchie, Gill, and Picou 2011). Hence, further study is needed to build on the current findings and to explore whether youth's experiences surrounding technological disasters also extend into the longer term.

UNDERSTANDING YOUTH'S PERCEPTIONS AND EXPERIENCES THROUGH A THEORETICAL LENS

The Conservation of Resources (COR) model provides a conceptual framework for further understanding youth's perceptions and experiences in the aftermath of the BP oil disaster. This model posits that "stress occurs when resources are threatened, when resources are lost, or when individuals invest resources without gaining adequate resources in return" (Hobfoll 1991: 187). Resources fall within four main categories: (1) objects (e.g., boat, house, natural resources), (2) personal characteristics (e.g., determination, self-worth), (3) conditions (e.g., secure work, strong friendship bonds) and (4) energies (e.g., insurance, credit). Furthermore, Hobfoll (1991) contends that rapid resource loss—for example, resource loss or the threat of it as a result of a disaster—is a source of traumatic stress. As apparent in the narratives above, threat of disaster-related resource loss and actual loss provoked major concern and stress among youth in the study.

For many respondents, the disaster embodied stress-provoking negative conditions that commonly arise in the face of resource threat or loss. Such conditions may arise from stress that happens unexpectedly, puts disproportionate demands on individuals' resources, induces powerful mental images, attack individuals' values, and goes beyond the typical ways that resources are employed (Hobfoll 1991). Study participants were particularly unsettled by the ways in which the disaster, a sudden and unexpected event, damaged environmental resources necessary for local economic production. This threat also led to an attack on youth's values those of other people in their community because of the Bayou's status as an RRC and its strong ties

with the natural environment to sustain the seafood and shipbuilding industries.¹¹

Youth narratives presented here indicate that uncertainty—particularly economic uncertainty—is not limited to adult populations and is interwoven into youth discourse following technological disaster. Findings also speak to differences in youth discourse surrounding uncertainty as compared to that of adults. Prior research has documented that adults harbor a range of concerns about potential health impacts, ecological issues, litigation, and economic outcomes of technological disasters (Kroll-Smith and Couch 1991b; Freudenburg 1997; Gill and Picou 1998; Edelstein 2004; Ritchie et al. 2011). However, children’s narratives are much more heavily focused on micro-level economic impacts on their family and community members.

YOUTH’S STRATEGIES FOR DEALING WITH DISASTER-RELATED ECONOMIC ISSUES

The following section discusses specific approaches that interviewees employed to assist their families following the disaster when resources were threatened or lost unexpectedly. A range of studies note strategies that families employ to deal with economic pressures (Elder 1999; Conger and Conger 2002; Leinonen et al. 2002). Specifically, Conger and Conger explored how social resources may serve to buffer negative effects of financial hardships. For instance, obtaining assistance from extended family members (e.g., food, housing assistance) could significantly lessen economic pressures faced by youth and their parents. However, much of this research focuses on the resources that the family may draw on as a whole, and fails to take into account the specific tactics that youth employ to assist their families during economic hardship. Below, I highlight three specific strategies that youth in the study used to deal with

¹¹ The following chapter focuses more specifically on issues of cultural loss, as well more recreational and social impacts.

economic pressures that followed the disaster: taking on increased household chores, assisting family members with translating and/or filling out BP claim paperwork, and trying to be less of a financial burden on their parents and finding ways to contribute to the family economy.

Taking on Increased Household Chores

Youth taking on additional sibling caretaking and household duties was commonly reported among study participants. Interviewees attributed these responsibilities to a number of post-disaster shifts. For instance, a 17 year old white male study participant discussed the extra household chores he started doing when his parents and older sister began working on the spill cleanup, which involved long hours, noting a system his family used for telling him chores they needed him to do:

My sister always does laundry. I pretty much already had the dishes, the yard work, cleaning up the living room, keepin' my room clean. My dad, whenever he was sittin' around watchin' TV he'd fold clothes. I pretty much picked up everybody else's job after the spill. If they wanted somethin' special done, we have this dry erase board, and they'd leave me what they wanted done, and I'd do that and cross it off.

Another interviewee whose parents worked on the spill cleanup told me about her experience learning to cook because her parents were away for long hours, and thus she began preparing meals for herself and elderly grandmother:

After the spill I had to learn how to cook, since there was nobody [my parents] there. My grandma, she was the only one home with me and her eyesight's gettin' bad. She has somethin' that's wrong with her eyes, and she's just can't cook that much. So I cooked and watched out for her.

Although most youth who faced increased household responsibilities noted that this was a result of their parents working on the cleanup, a few youth experienced this shift because of changes in their parents' work schedules at their commercial seafood or shipbuilding industry jobs:

I: Did anything change with your family responsibilities after the spill?

R: I had to help my mom out more with cooking and cleaning around the house and sometimes babysit my siblings because she had to do night shifts at the oyster shop. She never worked night shifts before the spill.

I: What about the spill made her start having to do night shifts?

R: Some people lost their jobs [were laid off] at the oyster shop, and she kept hers, and her boyfriend was workin' there, too, but he got laid off, so she was workin' two shifts to make it up.

She went on to comment that because she was the oldest of her siblings, aged 15, she took on most of the additional household roles that her mother could not fulfill due to her work schedule:

I: Did your brothers and sisters also have to do more around the house?

R: It was mostly me, but they did help a lot 'cause I'm the oldest one. Now that she's working her old daytime schedule again it went back to being less work, but I don't mind doing what I did before, 'cause it did help my mom out a lot.

Assisting Family Members with Translating and/or Filling out BP Claim Paperwork

Helping parents overcome language barriers in the BP claims process was a common issue for Asian American study participants. Of the seven Asian American participants in the study, each mentioned language translation issues that their parent(s) encountered during the claims process. Five of the seven were responsible for assisting with the translation, and the two that were not involved in the translation efforts had older siblings who took on this responsibility. The following exchange highlights an interviewee's experiences taking on this task following the disaster:

R: I had to go with my mom to go get some of her money and I had to fill out some papers for her....I was translating for my mom.

I: Does your mom speak any English?

R: She does, like, she'll understand you, but you have to talk slowly, I guess. And you can understand her, but it's like an accent, kind of...

I: What kinds of paperwork were you translating?

R: The release for the money.

I went on to ask this 14 year old interviewee what it was like for her to translate BP paperwork. She said: “It was hard, some of it... I mean, it wasn’t hard. Some of it was kind of confusing, ‘cause I didn’t know what the words meant.” She then told me that she had been translating for her mother since she was aged 10, therefore she was accustomed to doing so; however, BP claim paperwork was more complicated and difficult than the materials she traditionally translated. Another interviewee, a 17 year old, echoed the previous narrative in which he helped with translation, but was relieved of these responsibilities once his parents found someone else who could better understand the legal jargon:

R: It’s really hard because they don’t speak English very well, so they’re illiterate when any of that paperwork comes up. I try and help them fill it out. I translate whenever they have any issues. They only speak a little English. They can write some and read some, but it’s not much.

I: Did you also translate the BP claim paperwork for them?

R: I started to, but once they found others more capable as far as legal stuff, that responsibility was lifted for me.... But before that, a lot of that stuff went through me as far as paperwork.

I: How do you feel about doing those things?

R: I didn’t like it at first, but then I understood why, because they had no other choice. It needed to get done, so I accepted it, and whenever they needed me to do it, I did it. It was quite early when I started, so it wasn’t hard after I got used to it.

As illustrated in the excerpts below, most study participants accepted such translation tasks as their family responsibility. Some disliked having to translate for their parents more than others. For instance, one 14 year old respondent began by telling me that although she had older brothers, she was responsible for translating for their mother because of her three siblings she was the only one who was proficient enough in both Vietnamese and English. She then

commented on her strong dislike for having to repeatedly fill out long, in-depth BP claim papers and other family documents in the past:

I have to do the [BP] paperwork for ‘em. I hate it. I mean, I don’t hate it, yeah, I want to help her [my mother], it’s just too much work. It’s all the BP crap, the papers you have to do over and over again. If somebody in the family buys a house, I have to fill out all that paperwork...I was in third grade when I started filling out family paperwork and translating. I’ve been translating since first grade. I didn’t fill out paperwork, my aunt done it at the time, but she, like, moved, ‘cause she don’t stay here that much, so my cousin done it. My cousin, I think she was, like, in third grade at the time. And the BP form is long! I had to fill out that thing about five million times.

Although this was less common, one 15 year old male study participant talked about assisting community members with language barriers during the claims process, in addition to helping his own immediate family:

R: I’ve helped several families, three or four, with, like, translating for BP.

I: What families were you helping translate for?

R: My friend’s mom, I forgot her name, and a few others. My grandma, my mom and dad, mostly. And some random people that were just sitting in the lobby of BP. They seen me helpin’ my mom and dad and they asked my mom for me to help them.

I: What kinds of things were you helping with?

R: Just translating, like when we go to BP, at Subway over there, they’ll tell me somethin’ and I’ll tell it back in Vietnamese to the people.

I: Can you guess about how many times you ever had to do that over there, helping different people?

R: Six or seven.

Trying to be Less of a Financial Burden on Parents and Finding Ways to Contribute to the Family Economy

Some youth noted that they attempted to be less of a financial burden on their parents because they understood their family’s economic state following the disaster, and thus they saw

this as a helping strategy. One 17 year old interviewee talked about how she and her two younger sisters stopped asking their parents for material things that their father could not afford, based on their understanding of their family's economic situation:

It was bad 'cause we [me and my two sisters] had to learn to hold out and stop begging cause we had to understand that we had to save money to survive until he [my father] gets a chance to go back to work. And it was kinda hard.

Similarly, another interviewee talked about the challenge of making financial sacrifices when her family was facing economic challenges:

My mom was just like, "I'm asking you as a mom to just kind of hold off on things if it's not important and you don't need it." She was like, "Can you do that for me?" and I was like, "Yeah." It was hard to make the sacrifices, because once you're doin' somethin' [recreational activities] like every weekend you kind of got used to it. But I needed to make sacrifices to help my mom.

Although this was a less common strategy, a few interviewees talked about finding job opportunities following the disaster. Adopting this strategy enabled them to earn their own money in order to help their families in small ways or to support themselves more so they would not have to rely so heavily on their parents. For instance, when I asked a 17 year old Asian American study participant if things had changed for him and his family after the BP oil spill, he replied:

Yeah, they definitely have changed. My parents have been out of work for a while, so that made living a little harder, seeing as how they couldn't afford to do stuff they usually did....I started working. That's the only different aspect in my life.

He went on to explain challenges that he faced finding a job, as a result of employment-seeking adults who were displaced from work as a direct result of the disaster:

Everybody was looking for a job. All these job openings, which meant as far as us teenagers, we'd be out of luck looking for a job if a more capable adult was there to be hired.

Another interviewee, a 16 year old white male, told me about how he earned money by working

on the spill cleanup on his family's boat. His earnings helped to replace monies that he had previously been making by crabbing with his father. When I asked him if things were financially tight for him once his father was displaced from work, he said: "Not really, because I worked and had that money saved up, so if I needed something I could go get it. I saved it as best I could." Generally, his parents were able to provide for him and he did not have to rely very heavily on his own savings, although he expressed that he felt glad he had it in case he needed anything.

In contrast, some youth noted how they felt helpless because they weren't able to help their families economically during these hard times. For instance, I had the following exchange with one 13 year old girl whose father lost his job in the shipyard after the spill:

I: Did it ever feel like your family didn't have enough money to buy certain things?

R: Sometimes they did. Not all the time.

I: What was it like when you didn't have enough money?

R: It was bad, 'cause I felt like I couldn't do anything, 'cause I'm just a kid, I can't work or anything like that.

Despite the sense of helplessness expressed in this quote, the data presented above indicate that there are many ways children can help their families during troubling economic times that often follow technological disasters. These findings not only address calls for research that explores the interwoven complexities of work and family life by exploring children's perspectives and experiences (Bloom-Feshbach et al. 1982; McLoyd et al. 1994; Conger and Conger 2008), but also speak to the growing body of literature of children's agency and capacities concerning disaster recovery. Although we are beginning to understand the ways in which children have contributed to disaster preparedness and recovery efforts for natural

disasters (Plan International 2005; Peek 2008), we have yet to explore such issues in the aftermath of technological disasters. Therefore, these findings begin to fill a critical gap in identifying how youth have actively recognized their families' economic needs and struggles and have adopted specific strategies in an effort to help during the recovery process.

SUMMARY

As a renewable resource community, Bayou la Batre is heavily tied to the Gulf of Mexico for the success of its commercial seafood and shipbuilding industries. Youth in the study understood the importance of local environmental resources and how the BP oil spill negatively altered such ties to the Gulf. Findings discussed in this chapter speak to youth's perceptions surrounding the economic uncertainty within their families and communities, as well as their experiences with micro-level economic tensions in the aftermath of the disaster. Furthermore, findings indicate that youth developed strategies to deal with economic issues in the family, such as taking on increased household chores, assisting family members with translating and/or filling out BP claim paperwork, and trying to be less of a financial burden on their parents and finding ways to contribute to the family economy.

CHAPTER V

“IT TOOK A PART OF YOUR LIFE OUT:” LIFESTYLE CHANGES FOLLOWING THE BP OIL SPILL

While the former chapter mainly explored youth’s perceptions and self-reported economic impacts surrounding the BP oil spill, this chapter examines disaster-related cultural shifts in the renewable resource community of the Bayou. Specifically, I consider what Edelstein (2000, 2004) conceptualized as lifestyle change—the disruption of everyday routines or patterns that commonly occurs in the aftermath of disasters—focusing on two lifestyle changes that study participants commonly reported. First, I explore ways in which changes in the jobs of the interviewees’ parents post-spill affected the amount of time their families were able to spend together, in some cases resulting in increased bonding and in others increased tension within the family unit. Second, I highlight the integral role that recreational time on the Gulf of Mexico with family members and friends played in the daily lives of many youth in the study, discussing how such ties were disrupted following the BP oil spill.

WHEN DISASTERS LEAD TO FAMILIAL SHIFTS

Edelstein (2000, 2004) suggests that lifestyle change often emerges at a collective level in response to technological disasters. These lifestyle changes are coping mechanisms, and thus they are not inherently negative. However, families may experience stress and conflict as a result of lifestyle changes in the more immediate and longer-term aftermath of a disaster. One way in which familial shifts may occur is through the amount of time that families are able to spend together because of changes in parents’ employment situations. Study findings revealed that youth whose parents were displaced from seafood or shipbuilding jobs they held before the spill but were able to garner employment opportunities working on spill cleanup activities often noted

spending less time with their parents following the disaster. This was generally attributed to the work schedules of parents employed through the cleanup initiative, which frequently involved extended or irregular hours. On the other hand, youth whose parents were also displaced from work but were not able to secure spill cleanup jobs or other forms of employment often reported spending an increased amount of time with their parents in the aftermath of the disaster.

Much of the discussion that emerged surrounding familial shifts was centered on changes in the amount of time that youth spent with their fathers. There are two main reasons for this. First, more than half of respondents were in the study sample because their fathers worked in commercial seafood or shipbuilding; given this, many of the youth's fathers' jobs were affected by the spill. Additionally, it was mostly interviewees' fathers rather than mothers who worked on the spill cleanup, and therefore they were forced to spend less time with the family unit. In a few cases their mothers also worked alongside fathers on the cleanup crews.

“I WOULDN'T SEE HIM AS MUCH AS I DID BEFORE THE SPILL:” DECREASED FAMILY TIME FOLLOWING THE BP SPILL

Many youth in the study expressed in-depth, heartfelt narratives about the changes in the amount of time they were able to spend with their parents after the spill, particularly with their fathers. For instance, one 13 year old white male interviewee whose father was a crabber who worked on the cleanup when he was temporarily displaced from his job said:

[When my dad was working on the spill cleanup] I wouldn't see him as much as I did before the spill, because they'd [he and the cleanup crew members] go out early in the mornin' and in the afternoon they'd come home and we'd all eat together. He would go to church on Sunday as much as he could. Only if it was a must, he had to go out and stay on the water and do whatever they needed. I didn't like it at all. I'd rather be out there with him than just stayin' at home.

He went on to note:

It was different than normal [when my dad was working on the spill cleanup].

Normally we'd be more in the water or close to the water or somethin'. Like on Sunday we'd go down to my grandmother's and go swimmin' in the river. We didn't do that often [during the time of the spill cleanup], 'cause most of our family was working with VoO [Vessel of Opportunity, the BP oil spill cleanup initiative] or for BP or whatever. So we wouldn't do any of that.

I had a similar exchange with a 12 year old white male interviewee whose father owned a seafood shop with his grandfather and uncle, where his mother also worked. When they had to temporarily close their business, his father began working on the cleanup initiative. The interviewee talked in great detail about how he felt when he was forced to spend less time with his father the cleanup:

R: When my dad and them [his cleanup crew] first started workin' on the cleanup they had to go out and watch for oil durin' the night with the booms and stuff. I wanted to go out on the boat with them. That's what I'd always done. Every time the boat went out, I was out on the boat. I wanted to go and they said no, I couldn't go. I think the summer of second grade goin' into third, we went out every night and I only missed two nights out of the whole summer.

I: What was it like when you weren't on the boat and your dad was goin' out on it for the cleanup work?

R: It was like seein' your sister, a sibling or someone that was important to you, leave and not bein' able to spend time with 'em. The boat was part of my life. I couldn't hardly do anything. Most kids, they go and play on games and stuff, hang out. I go to the boat and work on it with my dad. That's what I always done.

I: Did you ever tell your dad or any of your family about how upset you were that they were doing that and you couldn't be out on the boat?

R: He knew. He said if there was any way possible, I would be on the boat. But there was no way, 'cause if they caught someone under 18, he wouldn't have a job anymore, 'cause the job was so important...we needed the money.

Another respondent, a 12 year old study participant, talked about spending less time with both her parents because they worked together on the cleanup initiative:

It was kind of hard [when both my parents were working on the spill cleanup], 'cause you know, they're my parents... We [my siblings and I] understand that we had to see them less. Sometimes they had to work [the cleanup] even on the

weekends, and we like spending time with them on the weekends and stuff, but instead, like, they had to work on the cleanup.

When I went on to ask her if she ever told her parents how she felt this way, she said: “Mm-hmm. They said, It’s okay, we’ll always be your parents. And that we would see them more when the cleanup was over and that they were doin’ a good cause.” As the previous excerpts illustrate, the disaster resulted in a major lifestyle change, decreasing the amount of time that families could spend together. Previous research has also noted similar familial shifts following the *Exxon Valdez* oil spill (Gill and Picou 1997). However, these findings were based on adult reports, and thus the data presented here shed light on the firsthand experiences of technological disaster-affected youth.

“IT WAS A LOT OF BONDING TIME WHEN THEY DIDN’T HAVE TO WORK:” INCREASED FAMILY TIME FOLLOWING THE BP SPILL

Although some youth reported spending less time with their parents following the BP oil spill, others noted spending an increased amount of time with their parents, particularly with their fathers. These narratives were mainly provided by study participants whose fathers were temporarily or permanently displaced from seafood and/or shipbuilding industry jobs, but were unable to secure other employment. Some interviewees talked about this as a period during which they were able to spend more quality time with their parent(s), who had previously worked long or non-traditional hours. For instance, I engaged in the following conversation with one 16 year old African American interviewee who spoke about the time that she and her younger sisters enjoyed with their father when he was laid off from his job as a welder at a local shipyard:

I: What was it like to have him [your dad] home during that time [when he was laid off]?

R: We [my sisters and I] were sad, but then we were happy that he was home,

‘cause he would spend more time with us. We all could be like a little family and do stuff.

I: What kind of things did you do when he was at home?

R: Like, let me just say, when he was workin’, when he’d come home, he’d be so tired, all he would do is, like, shower, eat, and sleep, ‘cause he would be workin’ all day. We would always want him to play board games with us and he was like, “I’m sorry, but I’m so tired and I’ve gotta get up early so I can’t.” And we was like, “Okay, we understand that you’re tired.” Later, when he stopped workin’ because of the spill, we all [my sisters, my mom, and I] played family games together. We played games every night, like, the PlayStation games... And he still does now [that he’s back to work in a different shipyard]. He’ll play Wii with us when he does have time, but it’s not like he used to when he was not workin’.

I: How do you feel about that, now that he’s started a new job and you don’t have as much time together?

R: I don’t know if we’ll still be able to spend time like we did when he wasn’t workin’. He’s probably gonna be workin’ on Saturdays now, I know that, and I don’t know about Sundays. But it’d be kind of hard, ‘cause he’s started back workin’ and it’s not gonna be like it was. But I’m happy for him, ‘cause he always been tryin’ to find a good job [since the spill] to make the money that he needs.

The following comments from a 15 year old Asian American respondent reflect similar sentiments. She talked about it being a rarity for her to spend extended periods of time with her father before the spill, because he was a shrimper who commonly spent weeks at a time out on the Gulf:

I’m not really used to my dad being home, because usually he’s out [shrimping] for about two weeks or so and then he comes back...But when he was out of work after the spill he was home more. He slept. He made me my food. My mom is really lazy and she doesn’t cook unless people are coming over or my dad’s coming home or unless she just feels like it. So I was happy, ‘cause I got my dad to cook for me, and he always made the things I liked. I don’t know how to say it [the names of the food he cooked] in English because it’s Asian stuff, but I was happy, because he’s the only person who makes my favorite thing.

Another study participant, a 17 year old Asian American male whose parents both worked long hours shucking oysters before the spill, characterized the time when his parents were displaced from work as a period in which there was “a lot of family bonding:”

It was a lot of family time, for sure. They [my parents] stayed at home and we [my siblings and I] stayed at home, so we spent a lot of time together just doing stuff, watching TV together, playing cards and stuff like that. A lot of family bonding. It was a lot of family bonding when they didn't have to work. A lot of stories.

While in most cases interviewees focused on the positive effects of spending more time with their parent(s), other narratives revealed that increased family tension was also a major issue for some respondents following the spill. Again, study participants mostly reported such tensions surrounding their fathers:

My family is full of men with short tempers. But it [my daddy's temper] wasn't normally that short... My daddy, he got a little upset sometimes [following the spill]...His fuse was a little bit shorter. We [me and my brother] just tried not to press his button...It was where you just tried to avoid it a little bit. Sometimes I'd just stay in my room if he seemed like he as gettin' aggravated, or I'd go to my room early, just to try to get away from it all. But he'd get mad sometimes before, if somethin' really aggravatin' happened, or me and my brother did somethin' bad or whatever. Normally my little brother, not me. [laughs] We've seen him mad before, it was just kind of a constant thing [after the spill].

We [me and my family] went up to Illinois for about a week to forget about it [the spill] in the summer, before my sister's birthday for a family reunion. No one really talked about it then because my mom wrote to everybody [who was going to be at the reunion] on Facebook and told them not to talk about the spill, like "Don't say anything about the oil spill because he'll get real mad." Everybody was lookin' at Daddy really weird, but they didn't say anything about it.

“WHEN YOU HIT THE WATER...IT'S KIND OF LIKE EUPHORIA OR SOMETHIN'”

In addition to the lifestyle change that occurred as a result of disaster-related familial shifts, the latter part of this chapter focuses on a second form of lifestyle change. During the time when the Gulf was closed, many youth for whom recreating on the water was an integral part of their lives since early childhood were no longer able to do such activities with their family and friends. Below I discuss the central role of Gulf recreation, such as swimming, fishing, and

boating, in the lives of youth in the study, and employ the ecological-symbolic theoretical perspective to explore ways in which this shifted as a result of the disaster.

Youth's narratives served to contextualize the important role that spending time on the Gulf played in their everyday lives. This aspect of their lives was drastically changed as a direct result of the contamination in the Gulf following the BP oil spill. As Edelstein (2000) contends:

Contamination produces comprehensive and often dramatic undesired changes for victims....There is likely to be controversy about the physical reality and consequences of contamination that will introduce uncertainty into daily life. In short, post-contamination lifestyles are likely to be different and stressful. (129-130)

Findings discussed below contribute to our understanding of how youth deal with contamination and the uncertainty around it, particularly in a context in which they have strong social and cultural ties to the natural environment—in this case, the water.

In highlighting the role of their ties to the Gulf before the spill, some interviewees likened being on the water to a euphoric or relief-filled feeling. For instance, one 15 year old white female interviewee stated:

You get used to the sand on your feet, and when you hit the water, I don't know, it's kind of like euphoria or somethin'. I don't know how to explain it. 'Cause it's cool, and down here summers can get over 100 degrees. So the water, it's just like a break from all the sweat.

Another 12 year old female respondent said “Every time I go out there, it's almost like a relief, bein' happy goin' out there.” One study participant also explained that in a small rural town, such as Bayou la Batre, that does not offer many of the same activities as living in a big city, recreating on the water is an especially important part of community members' lives:

Down here, that's [recreating on the water] what a lot of people do. It's not really like a city, so a lot of people down here don't go to the mall that much. They don't go bowling or skating. So a lot of people go fishing and go swimming and

go to the beach.

Furthermore, a 17 year old white study participant said that he was glad he did not live in a city because being in the Bayou allowed him to interact with nature and spend time on the water:

I like the people and just the fact that we're not in a city where everything's congested. You're out here and you have elbow room, you have fresh air. Like I said, a lot of nice people. It's just beautiful. Nature's all around you, so you can swim and fish.

During one-on-one interviews, I asked study participants a number of introductory questions to collect personal information about each individual and to get them comfortable with talking to me. The following two questions often led youth to talk about enjoying activities on the Gulf such as swimming, fishing, and boating: "What do you like most about living here?" and "Where are the places you like to go most in your community?" Although not every respondent mentioned recreating on the Gulf, approximately two-thirds of interviewees talked about it in response to these questions or at other points in the interview, making statements such as the following:

I think it's a real joy livin' down here 'cause I like to fish and I'm livin' 300 yards from the water.

Out on the water [is where I like to go most]. That's the only thing I know, with some boats and stuff.

I like goin' out fishin'. We catch redfish, white trout, speckled trout, and ground mullet. Sometimes we catch sharks. Two weeks ago we caught a hammerhead, eight feet long.

[What I like most about living here is] all the stuff you can do, hunting, fishing, shrimping, everything.

I like to go to the beaches, just bein' out by the water, goin' with whoever, just on a boat, drivin', fishin', just doin' somethin' on the water.

I like bein' in the water I guess, I like goin' fishing all the time.

The park [is where I like to go], mainly. The park is basically across the road from my house. It's right on the water and they've got a little pier out there where you can go out there and sit...I like the view of the water... I guess [what I like most about here is that] you're right by the water, beaches.

The comments above are from both boys and girls; however, in some cases there were stark differences in the types of water-based recreational activities in which boys and girls participated. Overall, boys tended to have more freedom and independence on the water, in some cases owning and operating their own boats starting at a young age. As evident in the narratives presented below, many of the boys took great pride in the agency they had on the water. For instance, one 17 year old white respondent excitedly recalled his experience having his own boat:

Well, I had my own boat at one time. It was in my sister's name. It was really more of a tax write-off than anything. But it was mine. Have you ever heard of floundering? I rigged lights on it where you could go floundering, and we did a couple times. It was so cool. I had my own boat, cool! They [my friends] were like, "Show off!" It was my dad's friend, and my dad bought it off him for a little bit of nothing. He [my dad] was like, "You got a boat! Cool!" But we ended up selling it last winter. It was too small to do anything with. It was a little 16-foot barge...It was just really narrow, really shifty. But it was a boat, and I was happy.

A 12 year old white male study participant also talked about himself and his cousins, who are aged 11 and 14, fishing independently on his 14 year old cousin's boat:

R: Fishing [is my favorite thing to do], I guess. That's all we do during the summer. We [my cousin, my friends, and I] dig in our catch net and catch our bait, shrimp, whatever we have, and just go out and catch an ice chest full of fish. Then we go home and filet 'em up and fry 'em up and eat 'em. My cousin has a little skiff and me and my two friends go out with him. We all live by each other. I can walk down my road and go to the water where I can fish or whatever.

I: How old are your cousin and your friends?

R: My cousin is 14 and my friends are both 11.

I: So you four go out alone on the water? Is that ever scary?

R: Sometimes it is, 'cause if you break down, you're the only one out there.

I: Have you ever broken down?

R: Not out that far. We have broken down, and we've paddled back to where we go out from. If we break down we know we can go to my uncle's shop on the water or to my grandparent's shop.

I: Do all four of you know how to operate the boat?

R: Yes, ma'am.

I: How old were you when you learned to operate the boat?

R: This summer I started gettin' more into it, teaching myself some and bein' told [by other friends and family members] what to do and what not to do.

Similarly, another interviewee, a 16 year old African American male, spoke about how he and his brother operated their own small fishing boat independently starting at a young age:

I: When did you start fishing?

R: When I was probably about eight years old and my brother was ten years old, we started goin' out by ourselves.

I: Who took you fishing?

R: Mama, she launched us. We had a little fishing boat. We drove around with a net like one of these [shows me a fishing net], but these are only 100 foot. My brother would drive it and we'd go fishing.

I: Were you ever scared to be out alone?

R: No. Not a worry in the world we had.

I: How long would you stay out there?

R: About an hour and a half.

I: And no one was out there to check on you?

R: They could see us from the road up there, down there on the beach.

In my field notes, I reflected on my experience going fishing with this study participant. The experience was eye-opening because it allowed me to see first-hand the freedom and agency he

had on the water, as well as the great depth of local knowledge he has gained from fishing on the Gulf since childhood:

Carl's¹² boat was about eight feet long, a white skiff with navy blue trimming that comfortably sat two people. It had been in his family since he was a young boy, but he added his own touches to it to make it his own. For instance, he put a radio and speakers in one of the compartments meant to store fishing supplies, which he referred to as his sound system. Before we left his house he blasted the radio for a few minutes playing a country western song then a rap song, but then turned it off and told me we should not play it on the water because it will scare the fish away. We hitched the boat to the back of his blue pickup truck and drove it about a mile, where we launched on the Gulf. He started up the boat motor and we rode for a couple of miles until he turned the motor off once we were out of the marshes. First he put the fishing net out that was about 30 feet long and talked me through how he casts it. After a few minutes, he pulled it in. We caught about five fish. Then after a couple of minutes he asked me if I wanted to try casting the net myself. I said yes, but I was ill prepared to wade in the water because I was wearing flip flops. Carl took off his dirty, soaked boat shoes and gave them to me to put on. They were too big for me and I couldn't even get them to stay on my feet, so then he tied them really tight for me to get them to stay on and I hopped into the water. The lukewarm brownish water came up to my waist. The bottom of the ocean was so muddy that it was hard to even move my feet, which I did not expect after Carl had made it look so easy. We laughed and he told me to get back in the boat and instead he would pull the boat along with him as he casted the net and pulled it in so that I could stay on the boat, but still see what was going on. He took a rope and tied it to the boat then put the other end around his waist and pulled me along as he worked with the net.

As the fish were coming up in the net we were taking out the mullet and throwing the catfish back because he said the catfish from the area did not taste so good. Occasionally, other types of fish got caught in the net as well. Carl identified all the fish and told me how to differentiate them. He was also able to recognize them by the different sounds they make. As Carl pulled the fish out of the net he handed them to me and my job was to put them into the cooler. He taught me how to hold them so that they wouldn't flip out of my hands, telling me to hold them in the front and cover their eyes so that we they could not tell what was going on and they would not move around as much. Later he showed me how to clean the fish, cut their heads off, and filet them. Carl knew that I was studying to be a "doctor" but didn't exactly understand what kind, he asked me if I was going to be doing any surgery because if I was this would help prepare me! Again, I thought that cleaning and preparing the fish would be easier because Carl made it look so effortless, but I had a bit of hard time getting going. As I did my first couple Carl gave me tips, like the right angle for holding the knife to scale the fish. In the end

¹² A pseudonym has been used to protect the identity of the study participant.

we caught about 25 fish, which Carl was planning to sell to a local restaurant for their weekly grits and mullet night.

RECREATING ON THE GULF: THE CRUX OF FAMILY TIME IN THE BAYOU

Although a few study participants mentioned recreating on the Gulf with their friends, it was much more common for youth to talk about these activities associated with the time they spent with their families. Overall, narratives revealed that Gulf recreation was at the center of family time for many youth, and thus the water played an integral role in familial activities and rituals. For instance, one 16 year old white female talked about her experience camping on Dauphin Island, a nearby beach town, a ritual that she and her family participated in every summer before the spill:

We [my family and I] go to Dauphin Island a lot and swim at the beach. We go stay there in the summers. We have a camper and we bring it over there to their camp grounds. And that's where we stay on the weekends cause our parents have to work during the week.

A 12 year old white female interviewee also talked about spending time shrimping and fishing with her relatives: "I like to fish and shrimp. I go with my grandfather, just my family, my aunts, my uncles. Just a lot of family, because we've got family members that have boats." Other comments reflect similar sentiments concerning the value of Gulf recreation as key to family time:

I go fishin' and boat-ridin' out in the Mississippi Sound together with my grandfather. If we don't catch nothin', we just ride around, it's just real enjoyment.

Before the spill, I went to the beach a lot with my grandma, my mom, and my auntie. We play with each other, we bury each other in the sand, all kinds of stuff.

I fish on the pier with my aunts, my cousins, and my siblings. And my parents come sometimes too. My cousins have a house in Coden. We call it the log cabin. It's on the river, and we fish there all the time.

I just chill and hang out with my family... Sometimes we go for family rides and stuff. We just go around the beach and stuff like that.

Additionally, some interviewees reflected on early childhood memories about being on the Gulf with their families. For instance, when I interviewed a set of cousins, who were aged 12 and 13 they reflected on their early memories of fishing with their family:¹³

I: Can you both tell me one thing that stands out in your mind about growing up here?

R1: Fishing and seafood and stuff like that.

R2: I guess fishing and everything.

R1: I have been fishing ever since I was, like, one year old. My mama would hold me and I'd reel in the fish.

R2: I remember my first time fishing when I was three. It was October, and I cried. I didn't want to touch the fish, but I finally got over it. I caught a fish on my fishin' pole, and my mom had a picture of me. I was holdin' the fish. I kissed it.

When I asked another 12 year old interviewee to tell me about his most important moment growing up, he also talked about one of his first memories on his family boat with his parents:

Oh! I think the most important was when I was 'bout four or three years old, my dad and my mom took me out on the boat, and that was the first time with me bein' out on the boat. Me and my dad and my mom, we got in. It was a real small crabbin' boat we had. We went down the bayou and just played around, went swimmin' a little bit. That was kind of all. And I knew that's where I wanted to be, on the water. Didn't want to be anywhere else.

Interviewees who shared experiences of being on the Gulf at a very young age generally went on to discuss continuing to take part in these recreational activities with their families throughout the course of their lives, with the exception of the timeframe when the Gulf was closed following the spill. In contrast, one interviewee noted that she often went crabbing with her dad when she was a small child, which was a common form of bonding for her and her father, but when she was in middle school she stopped going and instead spent more time with her friends:

¹³ In the following data excerpt, R1 refers to the first respondent and R2 refers to the second respondent.

I: Can you start by just telling me about an important moment that stands out in your life?

R: Going crabbin' with my dad.

I: When did you start doing that?

R: When I was about six. I used to go [crabbing] on the weekends whenever I wasn't in school. It was kind of nasty, 'cause it stinks and stuff, but when I was little, I liked it, it was time to spend with my dad. We'd just talk about random stuff. And I would get on the radio and talk to his friends.

I: Have you been doing it ever since?

R: I stopped when I got into seventh grade, I've only been a few times since then.

“EVERYTHING WAS CLOSED DOWN:” GULF RECREATIONAL DISRUPTION

A number of respondents reflected upon how they felt during the time when Gulf waters were closed, and thus they could no longer recreate in the same ways. Words such as “sad,” “lonesome,” “boring,” “stressful” and “angry” were used as interviewees described this lifestyle change they faced. As evident in the narratives below, many youth were especially disheartened because they were not able to engage in the types of activities they had grown up doing and loved so much:

I was angry because I couldn't go to the beach and go fishing and it was just stressful for me because I had grown up around the water since I was a baby. I was used to bein' around the water.

I kind of got sad, because you couldn't go to the beaches for a long time and you couldn't go fishing for a long time, and I like fishing and I like going to the beach, so that was kind of hard.

We didn't go fishing or swimming last summer. Everything was closed down. It was kind of an eerie feelin', 'cause I ain't never seen the beaches closed down before. It was real weird. Not fishing at all last summer was kind of a lonesome feelin'. It took a part of your life out, I kind of lost somethin', like losin' money. I just really hung around at the house. I was kind of bored.

We [my mom and I] started gettin' prepared and everything [for a summer of

swimming, boating, and fishing]. But when we found out about the spill we knew we wouldn't be able to go swimmin' or boating or whatever, so my mom, she put up all the fishin' stuff and everything away. We had everything planned out. We had planned the days we could go to the beach and what days we were gonna go fishin'. So I was sad when this never happened.

Another interviewee, an 18 year old white male, spoke about similar feelings as those expressed above but noted that other distractions occupied his time—such as working on the spill cleanup initiative:

While the oil spill was goin' on, the cleanup, things were [pause] I don't know the word for that, I'd say crappy. It sucked not bein' able to go fishin' and do the stuff that we normally do. But at least I was busy doin' cleanup. If we wouldn't have been busy, it would have really sucked. For the longest time, we just couldn't believe it was happenin'. For as long as I've been alive, nothing like that has ever happened around here. It's the only thing that has kept us from goin' fishin'.

On the other hand, a few interviewees talked about being completely unfazed by the closing of the waters because they shifted their attention to other activities, and reported that they were not affected by the recreational disruption that the BP oil spill caused:

We [my cousins and I] used to go fishing, but when the Gulf was closed we just stayed in the house. There's a lot of stuff to do up in there. We would always come up with ways to have fun, like we would pull the king-size mattresses out of the adult bedroom and climb up in the attic and jump off onto the mattresses. And then we'll play basketball in the front yard.

I went on to ask the interviewee the following question, “Even though you were having fun finding other things to do, how did you feel about the fact that you couldn't be out on the docks fishing?” to which he responded, “It wasn't really a big deal.” Another study participant made a similar comment, in which he mentioned other ways that he found to spend his time “I was like, ‘I'm fine.’ I can go to my cousin's and swim, go hang at my cousin's house. He had a big old creek we went swimmin' in.” Overall, although such narratives are represented in the data, it was much more common that interviewees reported an emotional response to this recreational lifestyle change that occurred during the time in which the waters were closed as a result of the

oil spill.

BACK ON THE WATER

For youth in the study, being back on the water once the Gulf was reopened was met with mixed emotions. On the one hand, many respondents reported feeling overjoyed and relieved to return to Gulf-related activities. However, on the other hand some interviewees noted their hesitancy, or that of their parents, to return to recreating on the Gulf due to health safety concerns. Again, this highlights previously discussed issues concerning the ways in which both youth and adults must socially construct risk in the face of the uncertainty that characterizes technological disasters, which commonly leads to contrasting and competing definitions of the situation (Fowlkes 1982; Freudenburg 1991; Kroll-Smith and Couch 1993; Hannigan 1995).

“BEIN’ BACK ON THE WATER WAS LIKE A RELIEVED FEELING”

When I interviewed youth who reported frequently spending time on the Gulf before the spill, I often asked them to describe their first time back on the water after the disaster. One interviewee, a 12 year old white respondent, spoke about her, her mother, and her friends having a celebration the first time they returned to the beach following the spill, for which her mother baked a special cake:

I: Do you remember the first time you were back on the water [after the oil spill]?

R: I was happy. All my friends were there. We all played in the water. We had a good time. We all went out to eat, and then we all went to my house and celebrated. We had a cake and everything. We went swimming, and then after we had the party and everything, we all went fishing. It was like, “Yay!” because we could go fishing.

The comments of other interviewees indicate similar sentiments:

Bein’ back on the water was like a relieved feelin’.

We [my brother, and friends, and I] was goin’ out a lot when the oil spill cleanup was over because we were happy to be back out... ‘Cause we had to go back to

school, but almost every day after school, we'd be goin' fishin', doing somethin' on the water.

It felt good [to be back on the water]. I was sittin' there just lookin' at the water, and when the spill happened, I couldn't do that no more, just sit there and watch or whatever.

“AFTER THE BP THING, MY MOM DOESN'T REALLY LIKE TO GO TO THE BEACH:” SKEPTISM CONCERNING GULF RECREATION

In some cases, I explicitly asked youth if they were concerned about health safety in returning to Gulf recreation; however, in most cases I did not overtly ask this, but the topic emerged in conversation. Youth commonly expressed concerns about water safety, reporting that others around them, particularly family members, talked about such worries, which then caused youth to question water safety and in some cases shift their behaviors. The following comments highlight the ways in which some youth talked about the skepticism expressed by their family members. These excerpts reflect challenges that youth faced in attempting to overcome disaster-related lifestyle changes and return to their regular routines and patterns:

I: You said you like to go to the beach, too?

R: Yeah, but this past summer, after the BP thing, my mom doesn't really like to go [to the beach].

I: Do you have one unforgettable experience that stands out in your mind surrounding the spill?

R: How we couldn't go fishing. I used to go fishing a lot with my parents, every weekend that they were off. Last year before the spill the spill was the last time we went.

I: Do you think that it's safe to go back now?

R: Not really.

I: Have you talked to your parents about going back to fishing?

R: Yeah, but they was like they don't know about it yet, so... We'll just have to see.

I: Why'd they say they don't know about it yet?

R: Maybe because something is still wrong with the water, I guess.

Another interviewee also spoke about uncertainty concerning exposure to oil. Her strategy for adapting to this uncertainty was to refrain from swimming too deep in the Gulf, assuming that

going deeper in the water would be more dangerous because it could possibly expose her to oil:

It was weird. We'd go up there [to the beach] and a lot of people, like my friend's mom, she would tell her kids as well as my mom, "Don't go out there, 'cause we don't know if there's any oil out there." Because there was so much oil comin' up on the beach, we didn't really go out on the beach until close to the end of the summer, when we knew it wasn't really gonna be out there bad. But it was just like, you know you can go in the water, but don't go out there too deep, just watch where you go, things like that.

On the contrary, a few participants discussed having little or no concern about being exposed to oil regardless of the skepticism of others in their surroundings:

I: Once it [the BP oil spill] happened people were saying there's tar balls, there's fish dying, there's this, there's that. I know during the summer there were people that wouldn't let their kids go to the beach because they were afraid of the tar balls, when really there's like none out there that I've seen. I've seen a few, maybe a couple of months after the spill first happened, but for about a year I haven't seen anything.

I: So do you think it's safe to swim in the water now?

R: I swam in there the whole summer and I'm fine. I'm still here (laughs).

I think they opened the waters back up in October, and once they opened 'em back up, we fished around here, but everybody I know that fished was real skeptical. They didn't want to keep any of the fish. And I didn't keep 'em for a couple months, and then after a couple months went by, everybody was eatin' 'em, so we started keepin' 'em. And here lately they've been catchin' the snapper with the spots on, like a bacterial infection. We've always caught snapper with bacterial infections. I don't know if you know, but barnacles have a lot of bacteria on them, and coral. And if they're [the fish] swimmin' by the leg of an oil rig and hit a barnacle, it'll well up like that and make a sore, and after while it'll heal.

That's gonna happen no matter where there's an oil spill or not.

As the narratives above illustrated, youth used the fact that their health seemed unaffected and knowledge of sea life as a means of making sense of the uncertainty surrounding post-spill exposure to oil. However, previous research indicates that there tend to be considerable concern about long-term issues of toxicity following technological disasters, which in some cases are unclear in the more immediate aftermath (Freudenburg 1997; McGill 2011; Tunnell 2011).

SUMMARY

While Edelstein's (2000, 2004) concept of lifestyle change has been adapted by scholars to examine the disruption of everyday patterns and routines in the aftermath of past disasters such as the *Exxon Valdez* oil spill and Hurricane Katrina, this work has predominately focused on adult populations (see Ritchie 2004; Ladd 2007; Ritchie and Gill 2007b). To date we know little about lifestyle changes that youth experience following disasters particularly technological disasters, which may have effects that are overlooked, underestimated, or misunderstood by adults facing their own recovery issues. The findings discussed above shed light on two significant lifestyle changes that interviewees in the Bayou reported in the wake of the 2010 BP oil spill. Additionally, findings contribute to the growing body of literature that draws on the ecological-symbolic framework to explore ways in which disaster are socially constructed based on how they alter both individuals' relationships with one another and with their built environment.

Many respondents' narratives suggest that they experienced a decrease in the amount of time they were able to spend with their parent(s) post-disaster, particularly with their fathers who in some cases worked on the spill cleanup initiative or were displaced from their jobs a result of the spill and found other forms of employment. Interestingly, several participants reported spending an increased amount of time with their fathers after the spill, which in some cases led to heightened family tensions and in others to a special bonding experience. Although the lifestyle change literature mainly describes negative shifts (Edelstein 2000; Edelstein 2004; Ritchie 2004, Ladd 2007, Ritchie and Gill 2007a), the former example adds to this research by also noting positive changes for those affected by technological disasters.

Additionally, findings examine ways in which spill-related contamination prevented

youth from engaging in activities with family members and friends that were a central part of their everyday lives, such as fishing, swimming, and boat riding. Findings contribute to our knowledge concerning how youth make sense of and cope with toxic contamination and the uncertainty surrounding this issue, again a topic that we mostly understand from an adult perspective (Erikson 1976; Freudenburg 1997; Kroll-Smith and Couch 1997; Edelstein 2004; Auyero and Swistun 2008; Gill et al. 2012).

CHAPTER VI

“EVERYBODY TALKED ABOUT IT. SOME PEOPLE DIDN’T TALK ABOUT IT AT ALL:” SENSEMAKING AND COPING IN THE AFTERMATH OF THE BP OIL SPILL

This chapter presents ways in which youth sought to cope with and understand the 2010 BP oil spill. I begin by briefly highlighting foundations of coping research and existing gaps in post-disaster coping research on children. In this section, I also suggest ways in which sociologists can expand upon disaster-related coping research, an area of study that has been mainly dominated by psychologists. Next, I present the most predominant coping strategies of the youth interviewed for this study. Within this chapter, the ecological-symbolic theoretical approach (Kroll-Smith and Couch 1991a) is used to better understand how youth interpreted and socially constructed the disaster throughout the coping process. Specifically, I examine ways in which youth used blame, distraction, and emotional processing (i.e., talking about the disaster) in coping with the event and its aftermath.

FOUNDATIONS OF COPING RESEARCH

The most widely cited definition of coping originates from Lazarus and Folkman’s (1984) adult model of stress, cognitive appraisal, and coping, which has also been the basis of many studies on childhood and adolescence (Compas et al. 2001). They define coping as “constantly changing cognitive and behavioral efforts to manage specific external and/or internal demands that are appraised as taxing or exceed the resources of the person” (Lazarus and Folkman 1984:141). Coping is shaped by a number of components, including personal characteristics (e.g., race, class, gender); level of exposure to traumatic event(s); situational characteristics (e.g., access to resources and support); and intervening stressful life events (e.g., relocation, death of a family member) (La Greca 1996).

In the late 1980s, psychological research on how children and adolescents cope began to flourish, during a time when most coping models and assessment measures focused on adults (Compas et al. 2001). Despite the wealth of coping research in the past decades, there has been little consensus regarding how to conceptualize and measure coping in children and adolescents (Compas et al. 2001; Skinner et al. 2003). Specifically, there is very little agreement on the categories or dimensions that characterize different types of coping strategies. Skinner and colleagues (2003) analyzed 100 different assessments of coping, which all used different sets of categories. In total, these assessments referred to approximately 400 sub-types of coping. Overall, two of the most common distinctions for higher order categories are problem versus emotion-focused and approach versus avoidance (Skinner et al. 2003; Eschenbeck et al. 2007). Problem versus emotion-focused coping refers to “[c]oping that is aimed at managing or altering the problem causing the distress” as compared to “coping that is directed at regulating emotional responses to the problem” (Lazarus & Folkman 1984: 150). Approach versus avoidance coping involves “[c]ognitive and emotional activity that is oriented either toward or away from threat” (Roth & Cohen 1986: 813). However, scholars have argued that these binary models do not reflect the multidimensional and complex nature of how youth cope (Compas et al. 2001; Skinner et al. 2003).

Despite this lack of agreement among scholars regarding how to categorize and measure different types of coping, a number of researchers have documented the need for studies to investigate children’s coping in the aftermath of disasters, including human-caused or technological disasters (Prinstein et al. 1996; Wroble and Baum 2002). In noting the importance of further exploring how children cope with technological disasters, Wroble and Baum (2002) stated:

Given the likely continued expansion of technological networks that support the 21st century lifestyle, it is almost certain that accidents like these [technological disasters] will continue to occur... Adults respond to these events with greater chronic stress and dysfunction than they do to more immediate, powerful natural disasters (Baum, 1987). Exposures to toxic hazards are likely to have effects on children that can continue into adulthood. For all those reasons, more extensive study and better understanding of how children perceive, interpret, and cope with toxic and nuclear accidents is urgently needed. (218)

Additionally, researchers have stressed the importance of documenting youth's post-disaster experiences through their own first-hand accounts, rather than relying on parent and caregiver reports (Mercuri and Angelique 2004; Peek 2008).

Although many of the coping studies to date, including disaster-focused coping studies, have been conducted by psychologists, sociologists have great potential to expand upon this work in a way that takes into account social contexts. As Compas and colleagues state, coping research could greatly benefit from a more holistic approach:

The need to better understand individual-difference factors that can influence coping is balanced by the need to pay closer attention to the social context in which children encounter and try to cope with stress. This includes both the broad social and economic context in which children live and the characteristics of stressful events and conditions with which they are coping. (Compas et al. 2001: 122)

A sociological lens would also provide a more nuanced understanding of children's unique disaster experiences and needs, which coupled with existing individualistic psychological approaches offers a broader understanding of this critical topic. A sociological lens is especially pertinent in the context of disasters, in which pre-existing social and economic problems are often exacerbated.

YOUTH COPING STRATEGIES FOLLOWING THE BP OIL SPILL

Below I examine common coping mechanisms that youth in the study drew upon following the spill, focusing on blame, distraction, and emotional processing. These coping strategies were not necessarily used in a mutually exclusive manner; some youth reported using different strategies at different times. For example, a number of interviewees revealed that they employed emotional processing in the more immediate aftermath of the spill, but avoided disaster-related discussion in the months following the spill.

BLAME

Having an individual or party to attribute blame to can be a way to explain disturbing events and create order within the situation (Baum 1983). Although externalizing and internalizing blame are both considered coping strategies, here I specifically discuss the ways in which blame was externalized. The findings focus on how youth in the study condemned BP for what they described as a biased cleanup initiative and faulted BP as well as other community members for unfair claims processes. I also examine less common contrasting narratives in which youth refrained from engaging in blame.

“You Can Put a Man on the Moon, But You Can’t Stop an Oil Spill:” Preventing and Cleaning up the BP Spill

A number of interviewees mentioned blaming BP for failing to take proper responsibility for the spill and cleanup-related activities. These conversations speak to larger issues of recreancy or perceptions of failed governmental and organizational processes, which are common following technological disasters (Freudenburg and Jones 1991; Gramling and Krogman 1997; Gill and Picou 1998). As was discussed in the theoretical framework chapter, prior research, mainly focused on adult populations, has documented ways in which recreancy

and blame can further disrupt social order and heighten psychological stress (Freudenburg and Jones 1991; Freudenburg 1993; Ritchie, Gill, and Farnham 2012). However, the findings discussed below also indicate the strong presence of recreancy-centered dialog among youth, in which they articulate strong sentiments regarding blame and distrust for the responsible party in this case, BP.

When I asked one interviewee what he had heard from others around him concerning the spill, he discussed how he and local community members attributed blame for the disaster to BP:

R: They said it was kind of messed up, because you can put a man on the moon, but you can't stop an oil spill—you can't keep somethin' from blowin' up. What it was, they knew the problem already, that it [the rig] had a bad regulator on it. That's what blew up. And they [BP] didn't want to spend no money on nothin'. And in the long run, it cost them more than what they had to spend on it.

I: What kind of things did you hear people saying about BP?

R: Just puttin' 'em down, callin' 'em sorry, they wasn't no good.

I: What do you think about that?

R: Actually, things happen. But like everybody else said, you can put a man on the moon, but you can't stop a leak. I don't feel sorry for 'em [BP]. Mr. Feinberg [government-appointed administrator for BP compensation funds], I don't feel sorry for him, neither.

Similarly, the following excerpt is from another interviewee who reflected on a conversation in which he and his friends talked about their dislike for BP, because the organization was responsible for putting so many local people out of work:

During the video about the spill at school, there was four of us at my table and we all was just expressing our feelings and how we felt about the oil spill. We didn't like BP. We didn't care for 'em, was kind of what we talked about. Everybody, I think, in the Bayou was talkin' about the spill and how they think they're not gonna be able to work anymore.

In contrast, some interviewees deflected blame from BP. For instance, one 15 year old female

discussed how the spill was out of BP's control:

I: What kind of things did you hear other people talking about with the spill?

R: I guess that it's kind of BP's fault because they should have had better, I guess you could say pipes or whatever, and they should be fined for it, stuff like that. It's all BP's fault, and if somebody lost anything, they [BP] should pay for it.

I: What do you think about that?

R: I think that something like that, if it happens, there's really nothin' you can do about it besides move on. It's kind of BP's fault because they should have checked everything, but you can't control if something's gonna break. If it breaks, it breaks. You can't go back and change that. You might make the pipe better. They said it was good, because they had to do tests or whatever, and if they say it was good, it's good. It could have just broke at the time because there was too much, like, impact.

I: Did you ever hear people who were talking and saying things like what you just said, your thoughts about it?

R: My mom, she kind of sees things like I do, because we're pretty much alike. She seen things like I did, but then she kind of said, "They should have did another check just in case somethin' was to happen if they were doin' somethin' that big or somethin'." And I was like, "Yeah, that's true, but if they did an inspection the first time, they shouldn't have to do it again."

The comments of a 12 year old male interviewee revealed similar sentiments:

I kind of think it was their fault, 'cause they didn't get it cleaned up as soon as we wanted 'em to, but the spill wasn't their fault. Someone messed up. It was just an accident.

In addition to discussing whether BP was to blame for the oil spill, some interviewees also discussed the way the company handled the organization of cleanup efforts, which was often perceived as unfair and biased. These conversations typically focused on conflict about who was able to garner employment opportunities working on the cleanup. A majority of comments concerning these issues arose from interviewees whose family members had difficulty getting or were unable to get cleanup jobs. For instance, one 16 year old white interviewee whose father

was a commercial fisherman told me that his dad had trouble acquiring a cleanup job directly with BP, but eventually was able to assist the owner of a local business that was employed to assist with the cleanup:

R: I don't even think we got hired on with BP, but everyone around us got hired. He got hired on, they got hired on, the people down here got hired on [pointing to houses surrounding his home], everyone got hired on but us. I could tell my dad was mad, and it made me mad. How come they get hired on and I don't? And they said you have to have requirements, like a 19- to 20-foot boat. My dad has a 19-foot barge, and there was people goin' out there with little aluminum boats, little bitty bass boats and stuff that didn't meet the requirement, but they're workin' for BP. To me, that had a lot to do with politics....It was just a lot of, "I know him, he knows me," like that goin' on. "Scratch my back and I'll scratch yours." We never got hired on to BP.

I: How did you end up getting hired on to do the cleanup?

R: There were two people, it was BP and another guy.... He was helpin' with the cleanup and we got on with him.

Several other youth also mentioned that their parents were never able to secure positions doing cleanup work despite their efforts, which was contextualized within conversations about how they blamed BP for facilitating an unfair claims process:

He [my father] took the boom class, and then he was ready, had his boat ready and everything, but they never called him to go out there and work.

I think they [my parents] tried to get cleanup work, and they went through this entire process and everything, and I think they were out there for maybe a day or two. I don't know what happened with the situation as far as the cleanup went. They certainly did try to get that opportunity for themselves.

"Some People Were Mad at People:" Blame and Anger Surrounding the BP Claims Process

As I noted in the theoretical framework chapter, in post-technological disaster settings where there seem to be unequal access to cleanup work and claims funds, conflict tends to arise among family members, friends, and community members (Impact Assessment, Inc. 1990; Palinkas 1993; Gill and Picou 1998; Ritchie 2004). Thus, communities may become corrosive in

the face of uncertainty, social disruption, and conflict surrounding the ways in which disaster-related funds are disbursed (Freudenburg and Jones 1991; Freudenburg 1997; Picou, Marshall, and Gill 2004; Ritchie, Gill, and Farnham 2012). Although much of the current body of research on technological disasters focuses on how issues of blame and conflict play out among adults within a corrosive community, the following findings suggest that in the aftermath of the BP spill, youth engaged in similar discourse.

Conversations associated with blame in the context of the BP claims process were even more common than those regarding the cleanup initiative and evoked emotions such as anger, sadness, and frustration. Although interviewees placed some blame on BP for faulty claims processes, their emphasis was much more heavily focused on condemning other community members for taking advantage of the process and making unjust claims. Similar tensions about who received compensation and how much have been documented following other technological disasters, such as the *Exxon Valdez* oil spill (Palinkas et al. 1993; Gill and Picou 1998; Ritchie 2004). The excerpts below provide insights into the ways in which youth discussed the emergence of corrosive community as a result of economic claim tensions:

We were all angry at BP, because they shut us down and they didn't pay us the money that we usually get. We was all mad at 'em. And some people were mad at people, but we didn't actually argue with 'em, but we just talked about it in the family. And we knew that other people can be sittin' in the house or whatever and go down to the claims office and say, "I worked on a boat," and they'll pay you right then, while we took the files and everything and they said we don't have the credit, and it goes on for a month, and they never gave us any amount of money.

I remember when the talk started about people getting money from BP. That was a big thing; it still is a big thing. The sad thing is a lot of people that really didn't even need the money have gotten it, when people that really did need it didn't [get money].

Some youth also described what they considered to be undeserving community members

receiving claim funds in comparison with how their own families received insufficient compensation. They blamed BP for paying out too much money in faulty claims, and not enough to their families and others whom they deemed to be affected by the spill:

BP wasn't treatin' people fair. Some of them hadn't worked in seafood and got a note from someone that said they worked on the boat. Then they went there [to the claims facility] and could get \$50,000 or \$100,000 from BP, while we got \$4,000 at the most for the shop... It just makes me mad 'cause other people never had a job for years, and they'll go down there and get \$30,000. Someone I know got \$150,000, hasn't even worked for a long time, but he got more money than us. It just makes me aggravated how the BP claims office worked.

My grandparents actually sent a claim off for our business, and it actually got denied. I don't think they got any money. If they did, it wasn't nothin'. Their claim got denied. My aunt may have gotten a little money, but I'm not sure. A lot of people [who] weren't involved with seafood would send 'em [claims] off anyway just to get money, and they would get it, and the people that really did need the money wouldn't get it. And so that was a big problem...A lot of [local] claims you would hear about wouldn't get money at all. But then I know people in Mobile [who] would get claim money, but they're not [affected] as much as we are down here. It was pretty bad.

At times, interviewees also reflected on how they believed that members of their own families collected claim money unfairly. For example a 15 year old girl whose father is a crabber noted:

I heard people talkin' about how they weren't givin' 'em the right amount of money, and some people at the time weren't even working in seafood and they were gettin', like, their claims or whatever back sooner than people that really were workin' in seafood. My cousin, he didn't work in seafood or anything before then, and he was gettin' bigger checks than my dad.

When I went on to ask her if this caused conflict between her cousin and dad, she said that it did but it seemed to be "one of those things that everyone knew but didn't really talk about."

Study findings also shed light on ways in which youth position themselves within larger discourses. For example, in the following narrative of a 12 year old white male whose grandfather is a shrimper, it is clear that his opinions are heavily influenced by stereotypes that

he learned from his grandfather and others in his surroundings:

R: I thought everybody just wanted money, because nobody down here works. They work for seafood, my papa told me about this, it used to be the most building shrimp boats in the world, we used to always build shrimp boats. We barely build shrimp boats nowadays.

I: Why do you think it's like that now?

R: Lazy.

I: Do you hear other people talk about how people around here are lazy?

R: All the time.

I: Do you think that's true.

R: Mm-hmm.

I: Why?

R: I don't know. They don't want to work for nothing.

I went on to ask this interviewee to tell me about one unforgettable experience related to the spill. In response he commented, "All the lies. Everybody was lyin'. They wanted money." This young man did not attribute his own opinions directly to his father, grandfather, or other adults in his surroundings, but he did talk about how he heard them also blaming local people for taking advantage of the claims process. These findings reveal how technological disasters contribute to corrosive situations, as existing stereotypes are heightened and used to frame individuals' narratives of the disaster.

Although many conversations regarding the claims process were focused on blaming BP and local community members for unfair outcomes, there were some less common narratives in which youth discussed positive feelings about the claims process. For instance, one teenager who collected a claim after losing his job sacking oyster shells said he recognized some undeserving community members received payments, but overall he was still happy with the amount of

money he received:

I think most of it was that people [filing claims] didn't want somebody that knew them dealin' with money because they'd be able to find out or know that they didn't have any part of the commercial industry. And then there was a lot of people that needed money and didn't get money. And then there was a lot of people that didn't need the money at all, or they needed it but they didn't have any right to it, and they got plenty. Like I said, I didn't even ask for as much as what they sent me, but am I gonna tell 'em, "Here, take it back?"

Similarly, some interviewees noted that their families were satisfied with the payments they received from BP, commenting on how the funds helped meet financial needs within their households. One female Asian American interviewee whose parents both worked in the seafood industry stated:

My dad, he couldn't really work. My mom couldn't work because there weren't many oysters, so she didn't work for a while. She started working a few months back, like before school started, and my dad, he didn't work for a while except eventually he went to help with the oil spill and everything, so it was just they worked for the oil spill, then they came home, and we just lived on whatever the BP [claim] money was. It wasn't that bad, because I don't really know how they did the money thing, but the money was actually decent size. We ended up actually paying off our house, so it was actually all good for us. I know some people had it hard. I know my grandma's neighbor; they didn't collect any money, since apparently they didn't know where to go or anything. They had a lawyer, but it was just difficult for them.

She went on to describe how the receipt of BP claim funds became a celebratory ritual in her neighborhood, where some families would host parties when they received their payment:

[M]y mom and her friends were always talking about it [the claims process]. They were always wondering about the final payments. And whenever someone would actually get it in, they would have, like, a little party at their house. It was so funny! My mom would be talking on the phone and she'd be like, "Oh, there's a party!"

DISTRACTION

Distraction refers to “turning attention away from unpleasant thoughts or events to reduce negative feelings” (Broderick 1998: 173). For example, distraction or avoidance¹⁴ may involve attempting to block out thoughts of a traumatic event, doing something fun or more appealing to forget what happened, thinking about other positive things instead, or making light of the situation (Lazarus 1993; Broderick 1998). Although avoidance can be viewed as a negative approach that hinders emotional processing (Vernberg and Vogel 1993), coping mechanisms are not inherently good or bad, and their effectiveness is dependent upon the situation (Lazarus and Folkman 1984).

A number of researchers have found distraction to be an especially useful strategy for youth dealing with uncontrollable situations (Glyshaw et al. 1989; Altshuler et al. 1995). For instance, a study on youth coping with everyday problems found that adolescents commonly engaged in distracting coping behaviors, such as spending time socializing with friends (Glyshaw et al. 1989). Friends, teachers, and parents can play a pivotal role in encouraging youth to take part in activities that divert their attention from concerns and fears associated with traumatic events (Prinstein et al. 1996). In a study conducted by Prinstein and colleagues (1996), children reported that among their friends, parents, and teachers, parents played the most central role in helping to distract them from trauma-related issues and return to normal roles and routines. Although researchers have documented the use of distraction and avoidance in both boys and girls, several studies have shown that male adolescents are more likely to use this strategy (Stark 1989; Broderick 1998; Hampel and Petermann 2005; Eschenbeck 2007). However, the current study revealed few gender differences in the use of avoidance.

¹⁴The terms distraction and avoidance are often used interchangeably in the literature.

“Bringin’ up Old News”

A number of study participants told me about ways in which they avoided talking about the spill because they did not want to reengage in the same spill-focused dialogue, or it was simply overwhelming to keep rehashing the event. In one interview a 16 year old African American male talked at great length about his relationship with his 18 year old brother, with whom he had previously spent a great deal of time in the Gulf. For them, the water was where much of their bonding occurred from the time that they were aged eight and ten and operated their own small fishing boat independently. Yet they barely talked about the spill, despite the fact that he and his brother thought the disaster could have brought an end to their fishing days. This narrative is reflective of the ways in which distraction is commonly used as a coping mechanism for youth dealing with situations perceived as beyond their controllable (Glyshaw et al. 1989; Altshuler et al. 1995). When I asked him whether he and his brother ever talked about the spill, he said:

R: No, not really. We tried not to talk too much about it, it was like bringin’ up old news.

I: Even when it first happened, you didn’t really talk about it?

R: There wasn’t really much to talk about. We did talk about it a little bit.

I: What kind of things did you talk about?

R: About all the oil gettin’ in the water and killin’ all the fish.

I: Did you ever talk about the fact that you couldn’t go out together anymore?

R: Yeah, a little bit we did. He said, “That’s probably the end of our fishin’ days, after the oil spill.”

Similarly a 15 year old girl expressed how frustrated she felt hearing people repeatedly discuss the oil spill, comparing it to how people still talk about Hurricane Katrina years later. She articulated why such discourse makes it more challenging to get the spill “out of her head:”

Everybody talked about it. Some people didn't talk about it at all, because you heard it on the news all the time. It's like, we just wanted it to go away. When you talk about somethin' all the time, it keeps it there, in your mind, fresh, and we just wanted it to go away. I was one of those that didn't want to talk about it. I just wanted it out of my head. It's like, on the news after hurricanes, they talk about 'em forever. And it's like, it's over with, it's done, it's gone. I know it's part of our history, but it's just, some things you don't want to be brought back up into your mind. Like Katrina, they talk about her every year on the anniversary. It's like, I know—people are still recovering from Katrina. And it's on the news around every anniversary on how it was and how it is and how it's still not the same as it was before. I'm thinking, “I don't want to hear about it.” 'Cause after Katrina, my Nanny and Papaw's house was completely—we had to gut that whole entire house out, we had to gut the church out. But you just want people to stop talkin' about it and bringin' it up.

Another girl said that she did not talk about the spill because it was overwhelming in the sense that she was confused by what was taking place. Specifically, she spoke about the claims process, noting that she and her friends refrained from talking about it and categorized it as “grownup talk” because they did not understand it:

Well, one of my friends was talkin' about her dad tryin' to fill out a claim to get some money 'cause of the oil spill 'cause of his job, but that's all I pretty much heard, because we didn't understand.... We knew they could try to get money, but we didn't understand the real thing about it, so we didn't too much talk about it. It was just mostly the grownups talkin' about it.

“At School Everything Just Seemed Like Normal:” School as an Escape

Other avoidance-focused coping mechanisms centered on school as a setting in which youth could escape economic strains and/or familial tensions and seek a sense of normalcy. These narratives are particularly interesting because there is a great deal of discussion in the children and disasters literature about the importance of children's return to school as a way to get back to normal in the aftermath of natural disasters (Galante 1987; Prinstein et al. 1996;

Bullock et al. 2011). This can be especially important when there is a lot of physical damage to structures (i.e., homes, schools, etc.), which often stands in the way of youth carrying out their normal routines post-disaster. However, the following data excerpts also speak to ways in which school routines may restore normalcy for youth coping after technological disasters. Some interviewees mentioned that being in school allowed them to focus their energies away from the spill:

At school everything just seemed like normal. I guess people just wanted to avoid it when you go to school. Some people, inside of school and outside of school, they're totally different people. So when you come to school, it's kind of like a getaway from reality, I guess you could say. Like, if you're havin' a problem at home, you can come to school and there's not a problem here. So you don't have to think about it as much. And your mind, with your classes, your mind's always goin'. It's not a kind of, "I've got to think on this the entire day" kind of thing. Over the summer, if you just sat home and watched the news, it [the spill] was always on the news, and you continuously thought about it. When you come here, you're thinkin' about stuff like geometry or chemistry or English, not, "I wonder if my dad's gettin' enough work today or if the BP check's comin' in or how long did my dad work, did they let him off from the BP job?" Stuff like that.

I think the teachers wanted to get the students not thinking about it, get studies back on track, preparing us for our exams. I don't remember any of my teachers making a big deal about the oil spill inside of the classroom.

EMOTIONAL PROCESSING

Emotional processing involves engaging traumatic events through experiences such as trauma-related play, exposure to related images, or relevant conversation (Prinstein et al. 1996). A study on adult coping following the Three Mile Island nuclear accident found that emotionally-focused coping (i.e., emotion management) was associated with less stress than problem-focused coping (i.e., attempting to problem solve) (Baum et al. 1983). Researchers hypothesized that perhaps this was because there was very little that affected individuals could do to change the impact of the technological disaster, and therefore problem solving-oriented coping was less effective in relieving stress (Baum et al. 1983). Thus, like distraction, emotional

processing or finding strategies to work through one's emotions can be an effective strategy for dealing with uncontrollable situations. Further investigation is needed to examine more informal types of emotional processing, such as talking about disaster-related experiences and persisting stressors in the aftermath of the event (Prinstein et al. 1996). The current study addresses existing gaps in the literature by providing a unique opportunity to learn about youth's processing of the BP disaster event through their own accounts.

Youth's conversations about the disaster mainly occurred in familiar settings including their homes, school classrooms and lunch rooms, and churches. These dialogues were generally informal discussions between youth and their peers, parents, teachers, or other adults in their lives. Findings revealed overwhelmingly that conversations about the BP oil spill were among peers; some interviewees reported that they did not talk about the spill very much with parents. These results align with previous research that has documented the value of supportive peer relationships during stressful times (Prinstein et al. 1996; Smith and Carlson 1997). In some cases this was because youth did not want their parents to be concerned about them. In other cases, youth recognized that their parents did not engage in spill-related talk because they wanted to shield their children from the anxiety, tension, and conflict that followed the spill.

Overall, youth reported drawing on emotional processing coping strategies most often in the more immediate aftermath of the spill, a critical period in which youth were beginning to make sense of the spill and its potential repercussions. The ecological-symbolic perspective takes into account how individuals bring their interpretive frames to environmental disruptions, which many youth articulated through conversations with parents, peers, and teachers.

Parent Talk

Narratives focusing on emotional processing between youth and their parents or guardians mostly centered on how the spill might negatively affect parents' jobs and thus cause economic strain for the family. The following excerpts, from three female interviewees, reflect the types of rare conversations that youth reported with their parents:

We as a family just kind of talked about it. My mom said if my dad's job got too bad, both of his jobs, 'cause the oil spill made the economy even worse, then if the other business would have went down, Mom said we would have to stop horseback riding and we would have to have a strict budget. That part was kind of devastating, 'cause I didn't want to stop horseback riding.

Me and my stepdad, like, he stays to himself, I stay to myself. But me and my mom, we talked about it a little bit. We talked about what's gonna happen, what if this happens, what if that happens, is it gonna get worse, are they gonna find the leak, things like that. And how we're gonna have to start making a little bit of changes, save a little bit of money for power and water and gas and stuff.

I was just upset, because I didn't know at first that my dad was gonna stop workin', which, I should have, because I don't know why, 'cause there was an oil spill in the water, but I didn't really think, I was like, "Well, you know, the oil spill, my daddy probably still will be workin'." My mama told me and I was like, "Oh, gosh." We all had a long family talk. Every time somethin' like that happen, we all have to talk about it. My mom had to tell us, "Everything's gonna be fine. We just won't be gettin' like we used to." ...I just know when they talked to me and my sister, they only talked to us probably about two times about it, two long talks about it, they talked to us that week and then a couple weeks later they'll talk to us again, ask us how do we feel, is everything fine, we'll be okay, and all that kind of stuff.

As evident in the narratives presented here it was predominately mothers leading conversations about how fathers' jobs were affected by the spill and the resulting repercussions.

Friend Talk

Coping with the spill by talking with friends was commonly reported. Like conversations with parents, these discussions were also mainly centered on ways in which the disaster had

affected or might affect youth and their families. For instance, a middle school student whose father was a commercial fisherman said:

People talked about it a little, but not as much as I used to hear. Like, when it first happened, there was a lot of people talkin' about it at school. Now, nobody really talks about it anymore... They were just talking about how it affected their family. Everybody was just kind of—my friends and my friends' friends, everybody was just kind of talkin' about it. Some of the kids were not happy, 'cause that was their parents' jobs, to fish or build boats. That's how they made their money, so I guess they got upset because they knew they would be losin' money.

A number of other interviewees indicated that those with whom they choose to talk about the spill were typically friends who also had parents whose jobs had been or might be compromised by the spill, as they were able to relate to one another:

I did talk with my cousin, the one I stayed with, the one I used to live next door with about financial stuff and all kinds of things. Like, what if our dads didn't get to go back crabbin', what would we do?

I know the three sisters, I know that you interviewed them, they was my friends and their dad, he worked there at the shipyard. And we all talked about it. We're all good friends, and we helped each other out, too... We was there for each other like we was family. They're not my family—well, they're my family in God, but they're not my family, we're just close friends, and we helped each other out, too, when we needed it. And even some of my other friends that their dad worked in the shipyard, we all talked about it. We all felt the same way.

In contrast, one interviewee noted that he purposely shared his story with close friends whose parents were not necessarily tied to affected industries to create awareness about the implications of the disaster:

I can't remember much, just going back to school here and talking about it, me telling my friends about our situation. They didn't tell me how they were doing, so I don't really know about how they were affected, but I shared how my family was affected by the oil spill.... I didn't tell a lot of people, I just told my close friends. They felt sorry. They couldn't really offer anything. It was just to let people be aware of how it affected us. They didn't say much. They would tell

others about the situation I was in, which I didn't mind.

Although it was less common, in addition to dialoging about familial impacts associated with the spill another theme among youth's conversations was talk about capping the well. Some interviewees explained how they and their peers seemed to be fascinated with talking about how stop the leak, an issue that scientists and practitioners struggled with for nearly three months:

So most of us wouldn't talk about it [capping the well], and when they did, they were always talkin' about, "They should do this to it. They should do this to it. They need to listen to somebody. There's good ideas out there, why aren't they listenin' to 'em?"

We'd talk about how they were supposed to—when the cement idea came out in May, we'd all come back from takin' a big test and we were talkin' about the cement idea. Everybody was like, "How's that supposed to work?" and everything. One of my friends was like, "Well, I heard they're supposed to just push it down in there and block it all up." I was like, "I don't think that'll work, with how fast it's comin' out, you've got to see what that is and then you've got to figure out how fast that's gotta go. That won't work."

One interviewee even talked about how she and her friends jokingly made up ways to cap the well, making light of the situation in order to avoid feeling sad about it:

People were always sayin', "Why don't they just put a cork in it, throw cotton balls down it?" Stuff like that. But it wasn't anything serious, people more liked to joke about it, to kind of take away from the seriousness of it.... Why cry when you can laugh?

Teacher Talk

A number of studies have documented the integral role of teachers following natural disasters. For example, research has shown that teachers have shared their knowledge of disaster-related resources such as shelter and meal locations, helped re-establish educational routines, provided information about the disaster and recovery efforts, and served as a source of emotional support (Prinstein et al. 1996; Barrett et al. 2008; Alvarez 2010; Ducey and Stough

2011). However, there is little research concerning the role of teachers in the aftermath of technological disasters.

As was highlighted above, the school setting and teachers played a central role in helping some students return to normal routines and distract themselves from spill-related problems. However, fewer than half of youth in the study reported that they had at least one teacher who talked about the BP oil spill or taught spill-related lessons at school. As the data show, many youth were curious about economic impacts and how the oil spill could be stopped. The disaster could have prompted a range of classroom discussions, especially considering that it is one of the largest environmental disasters in U.S. history to date. Those whose teachers did address the spill in the classroom found it to be quite helpful for getting a better understanding of what was taking place. Concrete examples of spill-centered lessons that youth reported mostly focused on how the spill happened and techniques to cap it and environmental and wildlife impacts. These lessons were primarily taught by middle and high school science teachers and often involved visuals.

Several interviewees recalled their experiences learning about the disaster at school:

I remember when we went back to school the week after it happened. I think it happened when we were out of school. The very next week my teachers were showing some news clips, trying to explain it to us better what was happening and what was going to happen. That really helped, going to school and finding out more about it.

There was kids sayin', "I know what's goin' on with the oil spill and you don't." And the [science] teacher was like, "Okay, tell me what's goin' on." And they'd tell 'em wrong. We had to draw a big thing on what happened durin' the oil spill. He drew this big-picture thing.

They didn't teach any [spill-related] lessons. They talked about it and that was it. I think it was just one teacher that showed us a video, and that was my science teacher last year who showed us a video about the oil spill.... It was about the rig exploding and how the oil was leakin'.

The comments of others reflected similar experiences. For instance, one 15 year old female high school student talked about initially learning the details of the spill from a reader in her language arts class, and later learning more information from her parents that made her realize the severity of the situation:

My language arts teacher, she always gave us these reader things that we had to do and answer questions about the articles, and she gave us, like, a reader thing on it [the oil spill]. That's how I learned about it. In the reading thing, it didn't sound that bad. I thought they were gonna be able to fix it. But then, I started hearing about it from my parents talkin' about it. How the leak wasn't bein' fixed right away and that it was just spilling into the Gulf.

Like conversations noted among friends about capping the well, some classroom discussions explored this topic. The narrative of an eighth grade study participant highlighted questions that she and her peers posed when they learned about ongoing efforts to seal the ruptured oil well:

R: One of my teachers made a PowerPoint in science with pictures and video of it [the rig] on fire.... I think it explained it a lot more than the news did. It showed how they were thinking about plugging the hole.... Everybody had lots and lots and lots and lots of questions, lots of questions. Everybody was askin', What if the plug doesn't work? What if this doesn't happen? What if that doesn't happen?" And those questions couldn't really be answered. She was like, "I can't answer those questions. We don't really know." She found it, like, two weeks after it actually happened, and she made the PowerPoint, I think it was from, like, some weather service or something. And my teacher is like, "You all need to know about the BP oil spill and things like that." Because a lot of people didn't think it'd be as big as what it actually was, and people were just like, "It won't reach here." And then all that wind started goin' through, and everybody freaked out.

I: How did people respond when she said that?

R: She didn't really have answers. They [my classmates] were sayin', "Oh, that's stupid." Nobody was happy.

These comments echo feelings of frustration with uncertainty that are discussed in previous

chapters.

In addition to exploring the technical aspects of the spill and how to cap the well, some youth reported classroom conversations concerning the ecological and environmental impacts of the disaster. The following narratives highlight interviewees' classroom discussions about the negative effects on wildlife:

Well, they [the physics and physical education teachers] talked about it a little bit, about how it messes the earth's soil and kills the fish in the water, stuff like that. That's what they mostly talked about.

[W]e learned about it in my science class. And then our teacher showed us a slide show about it, and she showed us a slide show about the oil spill before that. I didn't even know there was an oil spill before this one [the *Exxon Valdez* oil spill].... I learned that it could kill the wildlife. I didn't know that it could. And then it's very hard to clean up.

Through both formal interview data collection and informal interactions, I found that framing the spill effects through an environmental lens was not a common narrative. However, one interviewee, a male high school student, discussed how a teacher frequently talked about the spill and its environmental impacts:

We had some teachers that talked about the economic thing, some talked about the environmental thing. Even though we did eat the seafood, some were real concerned about how the seafood was. I'm all right. My marine biology teacher, she still talks about it. She was real big on it. Still talks about how the oil spill affects us, about the dispersants causing the fish to die, stuff like that.

Interestingly, his younger brother, a 12 year old middle school student, also mentioned classroom discussion about environmental impacts. He was overcome and frustrated by his teacher's constant commentary, as she spoke from what he called a "green person" or "tree hugger" perspective:

R: My teacher, she was boiling' mad about it [the spill].... She was not weird, but she's this teacher that really cares about the environment. She cares about

everything that happens, and she was a green person, a tree-hugger, she cared about trees. I don't mean to be offensive or anything, but ... if I was talkin' about hunting' or somethin', she'd get on my case about, if you didn't do this or that.

I: What'd you think about what she was saying?

R: It got tiring just sittin' there listening to her. She went on and on and on and on. Most of the stuff she said we already knew, most of us that were in there that lived around the water.

I: Did you think it was offensive to people who lived around the water?

R: It might have, I mean, it was, a little, to me.... I ain't callin' her crazy, but she was just a little not ... I don't know to explain it, but she was just a teacher that I hope I never have again.

This excerpt highlights the ways in which some study participants were reluctant to engage in emotional processing, particularly when they believed conversations did not reflect their personal values.

SUMMARY

On numerous occasions I heard adults in Bayou la Batre and surrounding communities commenting that local youth were unaffected by the BP oil spill. The data presented above strongly indicate otherwise. Not only were youth absorbing what was taking place around them in the aftermath of the disaster, in many cases they were employing a range of coping strategies to deal with how the BP oil spill affected them, their families, and their community. Of these coping mechanisms, blame, distraction, and emotional processing were the most common approaches. Ultimately, findings concerning these coping mechanisms contribute to our understanding of the ecological-symbolic perspective, shedding light on ways in which youth experience, understand, and socially construct the BP oil spill disaster.

Many interviewees reported blaming BP for an unfair cleanup initiative and condemned BP as well as other community members for inequitable claims processes. Findings indicate that youth's conversations were similar to documented adult discourses associated with beliefs about recreancy and community conflict or the emergence of a corrosive community in the aftermath of previous technological disasters. Many youth in the study also employed distraction or avoidance as coping mechanisms, where at times they chose not to engage in conversation about the spill. This was mainly because they found spill-related talk to be overwhelming or that it tended to evoke unwanted feelings of anger, sadness, and/or frustration. Additionally, for some interviewees the school setting served as an escape, where they could separate themselves from disaster-related economic strains and family tensions and engage in their normal routines. Lastly, findings highlighted informal conversations among youth and their parents, peers, and teachers in which they emotionally processed and socially constructed the disaster. These conversations were especially prevalent in the immediate aftermath of the spill and were dominated by talk about how the BP oil spill might affect youth and their families. Other less common topics of discussion included how to seal the ruptured oil well and ecological and environmental impacts.

CHAPTER VII

CONCLUSION

In previous chapters, I described the experiences of youth following the 2010 BP oil spill, focusing on children in Bayou la Batre, Alabama whose parents were tied to commercial seafood and/or shipbuilding industries. Specifically, I examined (1) uncertainty associated with youth's perceptions of how the spill might affect themselves, their families, and their community in the more immediate aftermath of the spill; (2) study participants' observations concerning how the actual impacts unfolded following the disaster; (3) ways in which changes in the post-spill jobs of interviewees' parents affected the amount of time families spent together; (4) the role of recreational time on the Gulf of Mexico for many youth in the study and how this was disrupted by the disaster; and (5) coping strategies that youth employed to make sense of and deal with the impacts of the BP oil disaster. In this conclusion chapter, I highlight the empirical, practical, and theoretical implications of this study, concluding with a discussion of and recommendations for future research.

KEY EMPIRICAL CONTRIBUTIONS

Uncertainty

The greatest post-spill concerns that emerged in the study were economic uncertainties that might lead to challenges in meeting basic household needs. Youth were most worried about parents' job security following the spill, and if those who lost jobs in the seafood or shipbuilding industries would be able to garner employment opportunities working on the spill cleanup. Moreover, study findings reveal that youth were exceptionally concerned about the precarious financial situations of their fathers, who were often the main or sole financial providers in the

household. Interviewees found it especially disheartening for the family patriarch, who had always provided in the past, to face financial challenges as a direct result of the disaster. While a number of study participants reported feeling comfortable sharing their concerns with their parents, others choose not to talk about these looming uncertainties. In some cases, this led to children expressing grave concerns, such as the 15 year old respondent who feared that his family would go bankrupt or get kicked out of their home after both his parents lost their jobs at a local seafood processing plant. Ultimately, in some cases, youth's fears regarding their parents' economic situation never came to fruition, while in other cases their perceptions became realities as their families experienced major economic downturns following the spill.

Past studies, predominately focusing on adults' experiences with technological disasters, reveal that issues of uncertainty following these events provoke major stress and tension (Baum and Flemming 1993; Gill and Picou 1998; Ritchie 2004; 2012), particularly in renewable resource communities that are characterized by their strong economic, cultural, and social ties to natural resources (Picou et al. 1992; Picou and Gill 1996). Findings shed light on how issues of uncertainty are also relevant among youth populations. However, study results also speak to differences between youth and adult concerns. Adult narratives generally focus on a broader array of concerns (e.g., ecological, litigation, health, and economic issues), while youth narratives were predominately centered on micro-level impacts—mainly spill-related economic impacts on their family and community members.

Lifestyle Change

In addition to heightened concerns regarding potential disaster-related economic challenges, technological disasters may result in lifestyle changes or disruptions of everyday routines or patterns (Edelstein 2000, 2004). Lifestyle change (Edelstein 2000, 2004) is a useful

framework for conceptualizing post-technological disaster shifts for youth, particularly because they may not directly experience the same primary impacts as adults (e.g., job loss, litigation) but often feel secondary effects in their everyday lives. Hence, the concept forces us to examine more micro shifts, such as changes in family dynamics and recreational time that have broader social implications for both children and adults.

Specifically, this dissertation reveals two main lifestyle changes experienced by youth in the study following the spill. First, findings highlight how changes in parents' jobs in the seafood and shipbuilding industries, particularly those of fathers, resulted in shifts in the amount of time families were able to spend together following the disaster. Some interviewees reflected on spending less time with their fathers because they worked spill cleanup jobs. In other cases, youth spent an increased amount of time with their fathers, who were temporarily or permanently displaced from their previous jobs and did not work on the spill cleanup. For a number of respondents this time was fraught with conflict and hostility, as a result of the stress their fathers commonly felt from being out of work. Conversely, others characterized this as welcomed bonding time with parent(s) who had previously worked extended or odd hours. This finding points to positive lifestyle changes that could arise following technological disasters, despite the fact that lifestyle change has traditionally been used to explore negative post-technological disaster impacts (Edelstein 2000, 2004; Ladd 2007; Ritchie and Gill 2007a).

Second, findings illuminate ways in which many youth conceptualized recreational time on the Gulf (swimming, fishing, and boat riding), as an integral part of their lives that was disrupted by the disaster. Some study participants talked about the relief-filled or euphoric feelings associated with being on the water, which was the center of family activities for a number of interviewees. Although over the course of my fieldwork I commonly heard adults

downplay the impact of Gulf water closures on youth, findings reveal otherwise. According to respondents, recreational activities on the Gulf were at the center of many interviewees' earliest memories, family traditions, and everyday routines. Additionally, for a few male interviewees, the closing of the waters marked a time of lost autonomy and freedom, in which they were no longer able to operate boats and spend time independently fishing with peers.

Contamination and Toxicity

Findings provide insight into how youth make sense of and deal with post-technological disaster contamination, a widely studied social process among adult populations (Erikson 1976; Kroll-Smith and Couch 1991a; Freudenburg 1997 Edelstein 2004; Auyero and Swistun 2008; Gill et al. 2012). Although economic uncertainty was the primary concern that emerged from youth's narratives, a few interviewees described apprehensions regarding contaminated water. Overall, while a few study participants discussed water quality in the context of negative effects on wildlife, conversations focused more explicitly on the return to recreational activities on the Gulf of Mexico that were such an instrumental part of their lives before the disaster.

Study results indicate that youth were heavily influenced by family members and peers in socially constructing and making sense of contamination. Reconciling issues of toxicity sometimes challenged youth's desires to return to Gulf-centered recreational activities. Although some study participants talked about returning to these activities without skepticism, others displayed hesitation. Some youth developed strategies that made them feel safe recreating on the Gulf, such as the respondent who returned to swimming at the local beach, but refrained from swimming in deeper waters, believing that this would prevent exposure to toxins. Similarly, another interviewee noted that when he first started fishing following the spill he did not keep the

fish, but after a few months of not recognizing negative health consequences on those who consumed the locally caught fish, he decided that it was safe for him to eat the fish as well. These examples highlight the role that individuals in youth's surroundings play in their social construction of contamination, but also shed light on the need to provide youth with age-appropriate but scientifically-based information to inform their decision-making processes.

Agency and Activism

As was discussed in the theoretical chapter of this dissertation, research on youth's disaster recovery has heavily focused on vulnerability (See Norris 2002; Ramirez et al. 2005; Reijneveld et al. 2005; Bullock et al. 2011), but more recently there has also been a focus on children's agency (Plan International 2005; Peek 2008). To date, the majority of agency-focused studies have concentrated on natural disasters (Plan International 2005; Mitchell et al. 2008; Morris and Edwards 2008); findings examined here expand upon this area of research. Furthermore, although current conceptualizations of children's agency focus mainly on activism and agency outside of the household and family, here I argue that we must also examine how youth engage in these more internal forms of agency.

Following the BP oil spill, youth respondents reported a range of strategies that they employed to deal with the disaster-related economic effects on their families, which can also be conceptualized as acts of agency. One of the primary forms of agency was taking on additional household responsibilities because one or both parents worked on the spill cleanup or experienced changes in their work schedule following the disaster. These instances highlight how youth stepped up to contribute their time to assist family members as a direct result of the spill. Furthermore, a number of interviewees discussed their efforts to conserve familial resources, some by trying to be less of a financial burden on their parents and others, who were

of working age, by seeking employment opportunities. Lastly, the majority of Asian American study participants provided critical services to family or community members by either translating or filling out BP paperwork, in an effort to help those with limited English proficiency. These and other examples of youth agency and activism discussed in this dissertation provide a foundation for further exploring ways that youth engage and assist their families and communities following technological disasters. This is an especially relevant area of study following environmental disaster in RRCs, in which youth's contributions of time and resources can be instrumental in buffering economic impacts.

The School Context

The return to school commonly marks a sense of normalcy and reclaiming of everyday routines following natural disasters (Galante 1987; Prinstein et al. 1996; Bullock et al. 2011). My findings expand upon this line of research and also take into account the role the school context plays in the aftermath of technological disasters. On one hand, a number of interviewees who alluded to using distraction as a common coping strategy for dealing with the disaster stated that school provided an escape from economic strains and other tensions at home. On the other hand, although fewer than half of interviewees remembered at least one teacher talking about the spill or teaching spill-related lessons, those who did commonly found this to be helpful in making sense of and learning about the disaster. Classroom engagement surrounding the spill generally focused on how the disaster happened and techniques for capping the oil leak, as well as wildlife and environmental impacts. Findings suggest that teachers may play a key role in providing developmentally appropriate educational information and facilitating helpful discussions following technological disasters, thus expanding upon our knowledge of teachers' roles

following natural disasters (Prinstein et al. 1996; Barrett et al. 2008; Alvarez 2010; Ducey and Stough 2011).

In addition to the school setting serving as a context for teachers to interact with students concerning environmental disasters, it also provided opportunities for youth to talk with their peers about the BP oil spill. While some peer conversations were filled with brainstorming concerning ideas to cap the spill, others involved youth sharing their personal experiences, such as spill-related social and economic impacts that they and their families faced. Peer discussions, which commonly occurred in school classrooms and lunchrooms, were a key source of social support. These conversations played an integral role in youth sense making and coping, especially because many interviewees noted that they felt uncomfortable talking with their parents regarding implications of the disaster, so as not to induce additional stress on parents. Thus, study results also bolster prior research studies concerning the value of supportive peer relationships during stressful times (Prinstein et al. 1996; Smith and Carlson 1997).

Blame, Recreancy, and the Corrosive Community

Blame was among the most common strategies that youth employed in dealing with the disaster. A number of interviewees expressed strong sentiments in which they faulted BP for failing to take proper responsibility for the spill and cleanup activities. Such conversations reflect issues of recreancy or the behaviors and perceptions associated with institutional failures commonly observed among adult populations following environmental disasters (Freudenburg and Jones 1991; Gramling and Krogman 1997; Gill and Picou 1998; Ritchie 2004). Although recreancy has not been studied among youth, past research indicates that conflict surrounding

blame and recreancy can exacerbate stress and cause further social disruption (Freudenburg and Jones 1991; Freudenburg 1993; Ritchie, Gill, and Farnham 2012).

Additionally, youth in the study commonly made emotion-filled comments, blaming local community members for making unjust claims for spill-related financial compensation. In some cases children invoked previously existing stereotypes in framing their understanding of the conflict-laden claims process. Thus, findings discussed here contribute to a growing body of literature about the corrosive community (Freudenburg and Jones 1991; Freudenburg 1997; Picou, Marshall, and Gill 2004; Ritchie 2004; Ritchie, Gill, and Farnham 2012), a term used to describe how issues of blame and conflict can negatively affect relations among community members.

PRACTICAL IMPLICATIONS FOR POST-TECHNOLOGICAL DISASTER RECOVERY

Youth Have Distinctive Needs Following Technological Disasters

Although we have a more in-depth understanding of how technological disasters affect adults (See Erikson 1976; Green et al. 1990; Freudenburg and Jones 1991; Erikson 1994; Freudenburg 1997; Gramling and Krogman 1997; Gill and Picou 1998; Ritchie 2004, 2012; Ritchie, Gill, and Farnham 2012), this is the first empirical, qualitative study to explore youth's accounts of technological disasters in their own words. First and foremost, study findings highlight the need for community members and those providing social and mental health services to acknowledge that technological disasters affect youth's lives, and in some cases these effects may be different from those of natural disasters. As was previously discussed, natural and technological disasters can be conceptualized as being on a continuum, with some overlapping characteristics and social impacts, and others that are more distinct (Gill 2007b). Empirical

evidence suggests that complexities associated with technological disasters include the notion of invisible trauma, the lack of official disaster response from entities such as FEMA, and more uncertainty concerning short- and long-term ecological, economic, and social effects and greater and more long-term stress and anxiety (Vyner 1988; Green et al. 1990; Freudenburg and Jones 1991; Freudenburg 1997; Gramling and Krogman 1997; Gill and Picou 1998; Ritchie 2004, 2012; Ritchie, Gill, and Farnham 2012).

There is a need to recognize distinctions that are more commonly associated with technological disasters, along with understanding how they may shape youth's recovery experience. As the ecological-symbolic approach posits, it is not solely the physical dimensions we must attend to, but also the ways in which such dimensions shape individuals experiences with disasters (Kroll-Smith and Couch 1991). Study results provide an empirical foundation for community members and practitioners to understand issues that may arise as youth confront environmental disasters, such as heightened concerns and worries surrounding long-term uncertainties. Those involved in future recovery efforts must also consider how technological disasters may cause shifts in how youth interact with their family members, peers, community members, and the surrounding physical environment. For instance, environmental contamination may prohibit youth from engaging in activities that were at the core of their everyday lives and conflict surrounding claims processes may create tension within families and communities.

Openly Address Youth's Concerns within the Household

Parents or caregivers should also make an effort to talk more openly with children regarding disaster-related issues. Discussions concerning uncertainty that commonly follows technological disasters—in particular economic uncertainties—could help youth better make

sense of the disaster and its potential implications. These conversations could also lessen concerns about how families will respond to financial hardships. Although some youth in affected communities may appear to have no or few disaster-related worries, parents actively opening the lines of communication serves as a proactive step in the event that distress or uneasiness arise.

As Bullock and colleagues (2011) contend in their advice to parents: “You should not worry that talking about disasters will make children fearful. On the contrary, children are usually more frightened by what is whispered or not mentioned aloud than by matter-of-fact discussion. Let children speak freely about what scares or puzzles them” (154-155). Opening the lines of communications within the household is an especially important step because children feeling comfortable talking about their concerns within their families can be key part of the recovery process. In youth’s narratives, they commonly noted that they chose not to talk with parents about spill-related concerns, so as not to heighten parents’ worries; however, if parents open the doors for these conversations it signals to youth that they can talk candidly about these matters.

Make Space for Youth to Engage about Technological Disasters within the School Context

In addition to parents, teachers must recognize the key roles that they can play in the technological disaster recovery process. Teachers can dialogue with students about environmental disasters in the classroom, using such events as teachable moments to educate youth about hazardous threats, which can also assist youth in their decision-making processes. While there is some information available to help teachers and school officials provide support for students following natural disasters—for instance, the American Red Cross Master of

Disaster curriculum and the *Creating Healing Classrooms Guide for Teachers and Teacher Educators*—these resources are much less developed in the realm of technological disasters (American Red Cross n.d.; International Rescue Committee 2006). Project Rebound, a recovery effort funded by BP to help individuals affected by the spill, developed a brochure for teachers and school administrators with tips for talking with students about the disaster (Project Rebound n.d.). In particular, the brochure notes that the spill impacts may be different from those observed following Hurricane Katrina, encouraging teachers to incorporate age-appropriate lessons and activities concerning the spill and familiarize themselves with the resources that are available for students coping with the disaster.

In addition to the helpful tips that the brochure suggests, it would also be useful to provide teachers with more concrete ways to engage youth in spill-related issues. This could include teaching students to think critically about how disaster response and recovery efforts are presented in the media. For example, teachers could delve into how communities across the affected Gulf states are presented in similar and different ways within various media sources (e.g., newspaper, television, social media). Teachers might also help students think critically about how BP is framed in the media, examining the steps the responsible party has taken in the response and recovery efforts. This could include exploring the legal and financial complexities associated with the cleanup and claims processes. Additionally, science and environmental studies classes could tackle issues associated with contested science, encouraging youth to learn skills necessary to interpret accuracy and validity of scientific data associated with topics such as water and seafood safety. Concurrently, we must strive to learn more about ways of balancing such engagement, acknowledging that some youth find the school to be an escape from disaster-related conflict and challenges unfolding within the home. Furthermore, we must recognize

potential challenges of the type of classroom engagement suggested here. For instance, teachers may be grappling with discerning scientific information themselves, and may also be dealing with overwhelming and complex legal issues.

Acknowledge Youth's Role in the Recovery Process

Finally, communities recovering from technological disasters must recognize and value the roles that youth play following disasters, both within the household and in the broader community. In this case, these roles included doing more chores, seeking opportunities to earn money, and translating or filling out BP claim paperwork. Youth's narratives also shed light on potential areas in which it would be best if they were not involved. In particular, their involvement with BP claim paperwork reveals a critical need for more timely and easily accessible translation services. Although youth stepped in and provided these services to the best of their ability, it is essential to provide professional assistance with legal paperwork rather than burdening youth with such an adult responsibility that has potentially substantial economic implications for their families.

THEORETICAL CONTRIBUTIONS

Employing an ecological-symbolic theoretical framework, the findings discussed here inform our understanding of how youth experienced and socially constructed the disaster. This work provides an important lens through which to consider the social construction of environmental changes, particularly because previous studies of technological disaster recovery have predominately focused on adults' experiences (Green et al. 1990; Gramling and Krogman 1997; Gill and Picou 1998; 2012; Ritchie, Gill, and Farnham 2012). Examining how youth interpret and make sense of the manner in which hazardous threats alter their relationships with

community members and the built and natural environment broadens the scope of the ecological-symbolic framework.

In drawing on this framework, I was able to identify ways in which technological disasters affect adults and youth differently, as illustrated in the findings and practical implications discussed above. For instance, I examined technological disaster recovery issues commonly discussed by adults, such as economic uncertainty and conflict surrounding blame and recreancy, providing a sense of youth narratives that echoed those of adults in some ways, but were unique in others. Additionally, by incorporating conceptual tools such as lifestyle change (Edelstein 2000, 2004) my research moved beyond the construction of these more macro issues and examined micro shifts in youth's everyday patterns and routines, such as shifts in recreational activities on the Gulf of Mexico and changes in the amount of time youth were able to spend with their families following the BP oil spill. Lastly, the ecological-symbolic approach provides a framework for analyzing ways in which youth's interactions with peers and adults in the local community and school contexts shaped their experiences and interpretations surrounding the disaster.

POLICY CONSIDERATIONS

In 2007 the National Commission on Children and Disasters was established, consisting of 10 members¹⁵ appointed by President George W. Bush. The Commission was developed to address gaps in preparedness, response, and recovery policies and issues concerning children (National Commission on Children and Disasters 2010). In October 2010 the Commission delivered the first-ever comprehensive review of disaster-related federal policies, regulations,

¹⁵ The committee involved individuals with a range of experiences surrounding children's disaster issues, including healthcare, emergency management, and legal professionals.

and laws to President Obama and Congress (an interim report was also published in October 2009). Nearly one year later in April 2011, the Commission was terminated due to budgetary constraints.

During its tenure, the Commission provided myriad recommendations regarding children's disaster needs relating to issues such as evacuation, transportation, childcare, sheltering, and physical and mental health (National Commission on Children and Disasters 2010). However, there is a lack of resources, including time and money, for incorporating these recommendations into practices and policies for addressing children's recovery needs. Some recommendations have been addressed, such as the formation of the Federal Emergency Management Agency (FEMA) Children's Working Group (Federal Emergency Management Agency n.d.), while others, such as the development of a comprehensive National Strategy for Children and Disasters by the President, have not been implemented. These distinctions highlight a two-fold issue with current policies concerning children and disasters. First, the disbanding of the Commission—particularly without another body in its place to oversee implementation of the recommendations—highlights a lack of commitment to such issues. Second, the lack of authority of the Commission and of other government authorities to mandate changes or provide funding that would improve children's disaster preparedness and recovery experiences is detrimental to making any significant progress in this area.

Additionally, the Commission took an all-hazards approach in which they make general recommendations that do not differ according to the type of disaster. Future policy developments would benefit from taking into account how the type of hazard could potentially lead to unique needs in the recovery support that children may need. For instance, while some sections of the report provide recommendations for dealing with the physical needs of children who have been

exposed to toxic substances, the Commission fails to take into account the importance of talking with children about their concerns regarding exposure, which is especially integral following technological disasters in which children may face long-term uncertainties regarding exposure. Furthermore, the report fails to address the notion of “invisible trauma” to both children and their surrounding environment that commonly occurs in the aftermath of technological disasters (Vyner 1988). As previously discussed, it can be challenging to address the recovery needs of children dealing with environmental disasters, as these events may cause ecological damage that is hard to detect, in addition other invisible traumas such as looming uncertainties concerning long-term environmental, health, economic, and social impacts (Vyner 1988; Edelstein 2004; Ritchie et al. 2011).

Mark Shriver, Chairperson of the National Commission on Children and Disasters and Senior Vice President of Save the Children U.S. Programs, spearheads a range of efforts that seek to improve children’s disaster preparedness and recovery experience. Among these is the National Report Card on Protecting Children During Disasters, an initiative that works with local, state, and national policymakers to develop emergency management plans that address the unique needs of children (Save the Children 2012). For the past five years this effort has assessed every state on four core disaster preparedness and safety standards dealing with issues such as evacuation, reuniting following disasters, and addressing the physical needs of children with disabilities (Save the Children 2012).

While as a nation we have progressed significantly since the National Report Card on Protecting Children During Disasters was first started, increasing from four states that met all the standards in 2008 to seventeen compliant states in 2012 (Save the Children 2012), there are major barriers that stand in the way of this program achieving significant traction. Like the

efforts of the National Commission on Children and Disasters, the National Report Card does not take into account how different types of hazards may affect children's recovery needs and experiences differently. The fact that only a few components of this assessment would apply to children in the aftermath of technological disasters is problematic. This significant gap points to the need to expand the breadth of the report card measures, particularly because the evaluation is so heavily focused on whether states are prepared to physically protect children from the dangers that occur in the face of natural disasters. Thus, the National Report Card on Protecting Children During Disasters lacks a comprehensive assessment of whether states are prepared to deal with the emotional tolls that youth may face following both technological and natural disasters.

Additionally, although a number of states are making strides in reaching all or some of the four standards, there is a lack of authority on the part of Save the Children and other entities to mandate such efforts and to provide resources to assist states. This lack of authority is evident in Mark Shriver's statement in the introduction of the report, in which he discusses the protection of children during disasters as a moral obligation. Based on findings presented in this dissertation and decades of previous studies examining issues of children's disasters, I argue that we must move beyond moral obligation and into legal obligation that is upheld and enforced by the federal government.

Our government must mandate that parties responsible for technological disasters address the needs of children. Doing so could bring about challenges, as the Stafford Act—a law signed into place in 1974 which provides federal resources and assistance to local and state governments for disaster relief—does not apply to environmental disasters such as the BP oil spill (Federal Emergency Management Agency 2012). Instead, this event falls under the Oil Pollution Act, a law signed into place in 1990, largely in response to the *Exxon Valdez* oil spill, which deems the

responsible party liable for cleanup activities and financial damages (Environmental Protection Agency 2011). However, even in the case of the Oil Pollution Act, the federal government is charged with overseeing the efforts of the responsible party. As President Obama expressed in remarks following the BP oil spill:

As far as I'm concerned, BP is responsible for this horrific disaster, and we will hold them fully accountable on behalf of the United States as well as the people and communities victimized by this tragedy. We will demand that they pay every dime they owe for the damage they've done and the painful losses that they've caused. (U.S. House of Representatives Committee on Oversight and Government Reform 2011)

I argue that the government must strengthen its commitment to holding responsible parties accountable for all damages caused by environmental disasters, particularly social and psychological impacts within affected communities. Further, the term communities must not become solely synonymous with adults; children's distinct needs should also be considered and included.

RECOMMENDATIONS FOR FUTURE RESEARCH

This research suggests a number of directions for future research. Above all, scholars must continue to incorporate the study of children into sociological disaster research, particularly studies of technological disaster community recovery. As findings illustrate, environmental disasters have the potential to greatly affect youth. Thus, we should continue to study both short- and long-term social impacts of these types of events, particularly given that past research in this arena emphasizes lingering long-term effects that commonly unfold for adults following environmental disasters. Furthermore, although adults' reports of youth's recovery experiences provide valuable insights, we must continue to explore youth's narratives through their own first-hand accounts. Doing so will allow us to address knowledge gaps concerning children's

experiences through their own words and perspectives, which is especially important considering that many youth in the study tended to keep their worries and concerns from parents.

The current study provides a foundation for some of the changes and challenges that youth may experience in the aftermath of technological disasters and leads to additional lines of inquiry. In particular, these findings suggest that future research is needed to better understand how technological disasters affect the daily lives of youth. Exploring the following questions will greatly contribute to research and practice: How do different types of environmental disasters (e.g., nuclear accidents, chemical explosions) shape youth's lives? In what ways are social impacts of technological disasters different for youth in communities with strong cultural, social, and economic ties to natural resources as compared to those who do not live in renewable resource communities? How does short- and/or long-term post-disaster litigation affect youth and their families?

Furthermore, the current study has emphasized the role of teachers and schools in the aftermath of technological disasters. Studies should also carry on this area of exploration, investigating the following: How can teachers use local environmental disasters as teaching tools in the classroom? What are the most effective approaches to doing this in the midst of the conflict, controversy, and uncertainty that commonly follow technological disasters? What forms of social support can teachers and schools provide? How can schools facilitate opportunities for peers to support one another?

Future work should also deepen our understanding of post-disaster youth agency and activism, especially following technological disasters, addressing research questions such as: What forms of agency do youth take on at the household and community levels? Are such forms

of activism temporary shifts or do they become more permanent aspects of youth's lives? What similarities and differences are there in the activism youth take on in technological disasters as compared to natural disasters? How can adults facilitate safe and developmentally-appropriate outlets for youth activism and volunteerism?

Additionally, studying youth narratives through their first-hand accounts can be challenging, which begs questions considering the most effective and appropriate methodological approaches for eliciting youth's stories. As was discussed in the methods chapter of this dissertation, one of the major challenges during interviews was that youth struggled to remember spill-related details and articulate the impacts of the spill on themselves and their families. In talking with youth, it was much easier for them to verbalize the effects of Hurricane Katrina—despite the fact that it had occurred six years earlier—in comparison to talking about the impacts of the more recent BP spill. Findings highlight that technological disasters or “invisible traumas” (Vyner 1988) associated with environmental contamination that may not have more sensory or visceral memories attached to them are more challenging for youth to articulate. Over the course of the study, I found that an effective strategy was to ground questions about the spill in the context of the school year calendar (e.g., during certain parts of the school year or summer vacation). Repeated prompting was also a useful strategy for drawing out the details of youth's narratives. Future research is needed to build upon these strategies in further developing approaches for interviewing youth concerning invisible traumas, such as environmental disasters.

In sum, the empirical evidence presented here advances understanding of youth's technological disaster recovery experiences and illuminates future areas of inquiry. This work expands upon a substantial body of research that has focused predominately on adults'

experiences with environmental disasters. Ultimately, continuing to examine both youth's vulnerabilities and capacities in the face of technological disasters will address existing knowledge gaps and help us to better understand their unique disaster recovery needs.

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APPENDIX A

Post-Disaster Recovery Experiences of Youth in the Aftermath of the BP Oil Spill

Principle Investigator, Brandi Gilbert
PARENTAL PERMISSION FORM

September 2011

Please read the following material that explains the research study in which your child is being asked to participate. Signing this form will indicate that you have been informed about the study and that you give permission for your child to participate. I want you to understand what your child is being asked to do and what risks and benefit are associated with the study.

Once you provide your permission, your child will also be asked to provide his or her written assent to participate. Your child may not participate in the study unless BOTH you and your child agree.

Your child is being asked to take part in a research project conducted by Brandi Gilbert, a graduate student in the University of Colorado at Boulder's Department of Sociology (UCB, Boulder, CO 80309). This project is being done under the direction of Professor Kathleen Tierney, Ph.D., Department of Sociology. If you have any questions, comments, or concerns, Brandi Gilbert can be reached at 410.615.7327 and Professor Tierney can be reached at 303.492.6315.

Project Description

This research study is about the post-disaster recovery experiences of youth between the ages of 12-17 whose families have been directly affected by the Gulf Spill in coastal Alabama. The goal of the study is to better understand: 1) children's experiences with the disaster (e.g., changes in family dynamics, social ties, and recreational and educational activities in the aftermath of the spill) and (2) collective stress and coping mechanisms. Research efforts focus on children whose parents are tied to the commercial fishing or seafood industries.

Procedures

If you and your child agree to take part in this study, your child will be asked to participate in a face-to-face interview with the researcher that will last approximately 1 hour. The research activity will take place at a location to be determined by you both.

Your child will be asked questions about disaster recovery issues that he/she may have faced in the aftermath of the Gulf oil spill. Here are examples of some of the questions that may be asked:

- How do you spend your time after school and during your summer vacations? Has this changed since the spill? If so, in what ways?

Initials _____

- After the spill, did any of your teachers talk about or teach lessons about the spill or clean-up activities? And did you talk about the spill with friends at school or in your community?
- Are there any places where you could go to talk about how the spill has affected you and your family (school or local organizations)? If so, can you tell me about these places? If not, do you think it would have been helpful to have a place to talk about the spill and what kinds of issues would you have liked to talk about?

Participation in this research will include audio taping. The audio files from this interview will not be shared; they will only be used to help me accurately remember what your child says.

Benefits and Risks

Participants may benefit from research-based insights derived from the study, as the findings have the potential to help area residents and organizations better understand youth's experiences and respond to their needs during the long-term recovery of this technological disaster. Each participant will also receive a \$10 gift card for taking part in the study.

There are no physical risks involved in this research. There may be potential psychological/social risks in that the interview may elicit reports of event-related stress experienced by your child. However, such risks will be minimal because I intend to indicate in verbal and written form that participation is voluntary and that respondents may choose not to answer any questions that make them feel uncomfortable.

Ending Your Child's Participation

Involvement in this study is **completely voluntary**. Your child has the right to stop participating at any time and to refuse to answer any question(s). If he or she decides to do so, he or she will not be penalized in any way and will still receive the \$10 gift card.

Confidentiality

What we talk about during the interview will be confidential and only reported in a summary form, in which your child's name will never be attached to anything that you tell me. Although if by chance, during the interview your child tells me about information concerning harm to themselves or others (for example child abuse or neglect or a crime he/she or others plan to commit) I CANNOT promise to keep this confidential, as I am required to report this kind of information.

I will make every effort to maintain the privacy of your child's data. Interview audio files and transcriptions will be stored on a secured, password-protected network at my office on campus at the Institute of Behavioral Sciences at the University of Colorado at Boulder. Other than the researcher, only regulatory agencies such as the Office of Human Research Protections and the

Initials _____

University of Colorado Institutional Review Board may see your child's individual data as part of routine audits.

Invitation for Questions

If you or your child has questions about this study, you should ask the researcher before you sign this permission form. You may also feel free to ask additional questions at any time by contacting me via email at brandi.gilbert@colorado.edu or phone at 410.615.7327.

If you have questions regarding your rights as a participant, any concerns regarding this project or any dissatisfaction with any aspect of this study, you may report them -- confidentially, if you wish-- to the Institutional Review Board, 3100 Marine Street, Rm A15, 563 UCB or by telephone to (303)735-3702.

Authorization

I have read this paper about the study or it was read to me. I know the possible risks and benefits. I know being in this study is voluntary and that my child has the right to decline to participate or to withdraw his or her assent at any time during the study. I give permission for my child to be in this study. I have received, on the date signed, a copy of this document containing 3 pages.

Name of Participant (printed) _____

Name of Parent or guardian (printed) _____

Signature of Parent or guardian _____ Date _____

With my permission, the researcher may also contact my child again at a later date in the event that she may have any additional follow-up questions.

_____ Yes _____ No

(Also, please initial all previous pages of the permission form.)

Initials _____

APPENDIX B

Post-Disaster Recovery Experiences of Youth in the Aftermath of the Deepwater Horizon Oil Spill

Principle Investigator, Brandi Gilbert

ASSENT FORM

June 2011

Researchers Phone Number: 410.615.7327

Location of the Study: Mobile, AL

Study Description and Procedures

You are being invited to take part in a research study about the post-disaster recovery experiences of youth between the ages of 12-17 whose families have been directly affected by the Gulf Spill in coastal Alabama. The study focuses on youth like you whose families are tied to the commercial fishing or seafood industries. Your participating in this study is **completely voluntary**.

If you decide to take part in this study, you will be asked to do an interview with the researcher that will last approximately 1 hour. At any time, you can choose not to participate in the study or skip any questions that you feel uncomfortable answering. If it is okay with you, I will be audio recording our conversation. No one else besides me will listen to the audio files and they will only be used to help me accurately remember what you say.

Benefits and Risks

The benefits of being in this study are that the results of the research may provide local residents and organizations in your area with a better understanding of your experiences following the oil disaster. This may help them better respond to your needs during the long-term recovery of this technological disaster. All participants in the study will also receive a \$10 gift card for taking part in the interview.

Participating in this research will not involve any physical risks. But the questions I ask you might make you think about stressful things that have happened or are happening to you and your family. However, as mentioned above your participation is voluntary and you can skip any questions that make you feel uncomfortable or stop the interview at anytime you want and you will not be penalized for this in any way. If you decide to do so, you will still receive the \$10 gift card.

Initials _____

Confidentiality

What we talk about during the interview will be confidential and only reported in a summary form, in which your name will never be attached to anything that you tell me. Although if by chance, you tell me about information concerning harm to yourself or others (for example child abuse or neglect or a crime you or others plan to commit) I CANNOT promise to keep confidential, as I am required to report this kind of information. This is only for your safety and the safety of others around you.

Questions and Comments

If you have any questions or comments about the study feel free to ask at any time. You can call me at 410.615.7327 or email me at brandi.gilbert@colorado.edu.

Agreement to Participate in the Research

The researcher has told me about the research. I had a chance to ask questions. I know I can ask questions any time. I want to be in the research.

Remember - being in the research is up to you. No one will be upset if you don't sign this paper or if you change your mind later.

Name of Child/Adolescent _____

Signature of Child/Adolescent

Date _____

Age _____

With my permission, the researcher may also contact me again at a later date in the event that she may have any additional follow-up questions.

_____ Yes _____ No

Initials _____

APPENDIX C

Date _____
Interview Location _____
Interview Time _____

Information Form

Name: _____

Address: _____

Email Address: _____

Cell Phone Number: _____

Home Phone Number (if you have one): _____

Age: _____

Birthday: _____

Gender: _____ Female _____ Male

School: _____

Grade: _____

Race: _____

How long have you lived in this area? _____

Is it okay if I contact you in case I have any other questions I need to ask you at a later date?

_____ Yes _____ No

APPENDIX D

Interview Protocol

My name is Brandi Gilbert and I am working on a research project about oil spill recovery in the Gulf. As a part of the project, I am conducting interviews with people ages 12-17 to help me understand how the spill has affected youth in your area.

Please feel free to talk openly and share your opinions with me. What we talk about will only be reported in a summary form and your name will never be attached to anything that you tell me. Also, your participation in this project is completely voluntary, therefore at this time or at any time during the interview you may choose to not to participate in the study or skip any questions that you do not feel comfortable answering.

Thank you for getting your parent (or guardian) to sign the consent form that I gave you. Before we begin I will also need to get your written and verbal permission to conduct the interview. Please take a moment to read this form and sign the last page, indicating that you give me permission to interview you and allow me to tape record our conversation. The audio files from this interview will not be shared; they will only be used to help me accurately remember what you say. Do you have any questions before we begin?

First, I will start by asking you a few to get to know a little bit about you.

Introductory Questions

1. Can you tell me about some of your most important moments growing up (*Prompt: Anything that stands out in your mind*)? Can you tell me about your family?
2. How would you describe the bayou to someone who has never been here before?
3. Where are the places you like to go? Are there places where you do not like to go? If so what are these places?
4. What do you like most about living here? What do you dislike most about living here?
5. What's your favorite thing to do?
6. Can you describe your school for me? (*Prompt: What is it like to go to this school?*)
7. What do you like best about your school? What do you like least about your school?
8. How do you spend your time after school? And how do you usually spend your time during your summer vacations? (*Prompt for water activities such as fishing and swimming at the beach.*)

Spill Related Questions

9. Has this changed since the spill? If so, in what ways? (*Or, what has changed since the spill?*)
10. What did you do when you found out about the spill? What did your family do when they found out about the spill? (*Prompt: Did either or both of your parents lose their job or have to take a cut in hours or pay? Did either or both of your parents work on the spill clean-up?*)
11. Before the spill, did you think you would go into working in the seafood or shipyard industry as a full-time job in the future? (If not, why and what do you think you would like to do as a career? If so, are you still interested in going into the seafood industry, why or why not?)
12. What do you remember about the days after the BP oil spill? (*Prompt about memories concerning news coverage.*)
13. What kinds of things did you hear from other people around you about the spill? (*About BP? About BP claims process?*) And what did you think about what they were saying?
14. What was it like for you the months after the spill? In your community? With your friends and family members?
15. Sometimes disasters can lead to conflict within communities. Did you notice this in your community? At your school? In your household (among your family members, probe for sibling coping)? If so, can you please explain the types of conflicts that you noticed?
16. Can you tell me one unforgettable experience surrounding the spill?
17. Do you remember what things were like in your community after Hurricane Katrina? If so can you tell me what it was like? In what ways has the impact of the oil spill been different than Hurricane Katrina? In what ways has it been the same?
18. After the spill, did any of your teachers talk about or teach lessons about the spill or clean-up activities? And did you talk about the spill with friends at school? How about with friends in your community?
19. Are there any places where you could go to talk about how the spill has affected you and your family (school or local organizations)? If so, can you tell me about these places? If

not, do you think it would have been helpful to have a place to talk about the spill and what kinds of issues would you have liked to talk about?

20. Did anything change with your chores or family responsibilities after the spill (i.e. taking care of siblings so parents can work more, getting a job to help increase family income, etc.)? If so, do you think these changes were specifically related to the spill?
21. Had you ever done any volunteer work before the spill? After the spill, did you notice any places where youth could volunteer to help with spill-related activities? What caused you to either take part in or decide not to take part in these activities?
22. Is there anything else that I didn't ask that's important to you? Or is there anything else you would like to tell me about?
23. Do you have any suggestions about how this information could be used?