Crisis Communication and

Cultural Constructions of Calamities:

Preparedness in Guyana, Thailand and the United States

Kan wai dee kwa kae
–Thai proverb, "prevention is better than correction"

If yuh plant plantain yuh can't reap cassava.
–Guyanese proverb

Temporal! Temporal! Que sera de New Orleans cuando llegue el temporal?
(Hurricane! Hurricane! What will happen to New Orleans when the hurricane comes?)—folkloric song in plena style

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Abstract or summary

This research provides an international comparison of personal and communal crisis preparation and communication. The study investigates the impact of the December 2004 Indian Ocean tsunami on southwestern Thailand, the January 2005 flooding of communities in Guyana, and the August and September 2005 hurricanes and flooding in the area of New Orleans, USA. Through in-depth interviews and focus groups with individuals, community organizations, and nongovernmental organizations (NGOs), this research gives voice to many whose disaster stories would not be heard otherwise and reminds of the importance of crisis contingency planning and disaster preparation. Suggestions for personal and communal disaster preparation and a list of online preparedness resources are provided.

Introduction

At the end of December 2004 the world watched television reports of a deadly tsunami in Southeast Asia and vowed to help with monetary and physical donations and prayers. With more than 200,000 lives lost, and nearly 2 million displaced by its effects, the Indian Ocean tsunami is one of the worst natural disasters in recent history. Just a few weeks later, Georgetown, the capital city of Guyana, and its surrounding areas experienced their first natural disaster: flooding that affected 300,000 of its 750,000 people in 110 villages. Some of the Guyanese lived in flooded, chest- and waist-high conditions for 20 days. The flooding in Guyana went mostly unnoticed by the world. Months later Hurricane Katrina tore through the U.S. southern city of New Orleans, resulting in weeks of flooding and revelations of the socio-economic disparities that tourists rarely see in destination cities.

Through a Joint Initiatives Program (JIP) grant funded by The Tokyo Foundation, researchers traveled to each of the disaster areas during the summer of 2006 and interviewed survivors concerning their disaster experience(s). Specifically, researchers interviewed co-researchers in the Guyanese capital city of Georgetown, in four villages on the east coast of the Demerara River and in an Amerindian village along the Essequibo River. In the United States, interviews were conducted in Louisiana state. Primarily researchers conducted interviews in New Orleans city and the surrounding parishes, and the cities of LaFayette and Slidell. Finally, co-researchers were interviewed in Phang-nga and Phuket provinces in Thailand, specifically in Hat Khao Lak, Hat Patong, Hat Karon, Hat Kamala, and Hat Nang Thong.

The project

Drawing upon the experiences of people who survived natural disasters in Georgetown, Guyana, Phuket Province, Thailand, and New Orleans, Louisiana, this research sought to provide guidance for preparing for natural disasters and calamities. This study investigated the experiences of some people affected by calamities, examining how they prepared for the events, how organizations and mass media messages influenced their preparation, and how disasters and preparation for them are socially constructed based on standpoints and cultural beliefs. Through focus groups and in-depth interviews, five researchers interviewed individuals and organizations about their disaster preparation communication.

Utilizing phenomenological inquiry (Lanigan, 1979), the researchers collected descriptions of lived experiences, reduced the capta (conscious experiences or data) into essential

themes, and sought explanatory interpretations of themes from the descriptions. The research process included the researchers situating themselves and their perspectives and perceptions within the research. Orbe (1990) explains key assumptions of phenomenological inquiry: that it rejects the suggestion of "objective research" and positivistic epistemology; it "seeks to gain a deeper understanding of the nature and meaning of everyday experiences" (p. 37); and, while traditional research seeks specific answers to questions, this methodology is more discovery-oriented; it seeks to study phenomena in an open, non-restrictive manner; it focuses on the study of persons and their experiences; and finally, it elicits actual conscious experience instead of hypothetical situations or incidents. Phenomenological inquiry research has long been a respected method of capta collection in the field of anthropology and continues to gain respect and increasing use in more disciplines.

This research utilized qualitative methods, both interviews and focus groups. To know specifically what preparations individuals made when faced by disasters, who, if anyone, assisted them in preparation efforts, what preparations they wish they had made, and how they socially construct the events of the calamity, it is best to utilize qualitative methods. Within the interviews and focus groups, we asked specific questions, but allowed for discussion and interaction that triggered suggestions for future preparedness. Data gleaned through the interviews were analyzed by phenomenological inquiry (Van Manen, 1990; Lanigan, 1979) and grounded theory (Strauss & Corbin, 1994), which allows for themes to arise from the collected information.

This research was triangulated by using a combination of interviews, focus groups, and textual analysis of media coverage of the three disasters and their aftermath. We also conducted member checking, and asked our co-researchers to check our results to ensure we highlight the concepts and strategies they deem most important. Throughout the study we refer to those we interviewed as co-researchers (Orbe, 1990) because they, through sharing their stories, provide insight and understanding concerning their experiences.

This research adds to crisis communication literature because, "although crises take many forms, communication scholars have typically focused on crisis in organizational or political contexts. In contrast, natural disasters and crises, such as forest fires, hurricanes, earthquakes, tornadoes, and floods, have received less systematic attention" (Sellnow, Seeger, & Ulmer, 2002, p. 273). We hope this research will aid citizens and organizations in preparing for future disasters and suggest to civic leaders the importance of preparing its publics appropriately for future events by better understanding perceptions of those who have experienced difficult disasters (Sellnow & Seeger, 2001). Our research provides important answers about organizing for future disasters, "the point of view is simply this: Disaster studies provide rich data for addressing basic questions about social organization—its origins, adaptive capacities, and survival" (Kreps, 1984, p. 310). We also believe that we are uniquely qualified and situated to conduct this research, as "communication scholars, who are by nature interested in interaction, are well positioned to examine the dynamics of crisis events" (Sellnow & Seeger, 2001, p. 165). Further, our ethnographic, qualitative approach is beneficial as it provides a voice for those whose experiences are typically not highlighted because of its, "special burden when it comes to questions of inequality because it gazes on the practices of everyday life" (Murphy & Kraidy, 2003, p. 306).

This research was emotionally taxing as it involved listening to the very difficult experiences of several in extremely stressful situations. Behar (1996) suggests research that does not hurt, or cause the researcher pain, is not worth conducting. Hearing the stories of grief and

suffering, and witnessing the destruction for ourselves even more than one year later, we too, grieved over the situations. We found co-researchers who know they should prepare, but most have not taken steps to be better prepared for future disasters.

Results

Our research project took us to three locations: Georgetown, Guyana which experienced major flooding for three weeks in January 2005; Phuket and Phang-nga provinces in Thailand which were some of the worst hit during the December 2004 Indian Ocean tsunami, and New Orleans, Louisiana, U.S.A., which suffered from hurricanes Katrina and Rita and subsequent flooding in August and September 2005.

The research team first traveled to Guyana, known as the land of many waters. Eighty percent of the country is a lush, tropical rainforest. The capital city of Georgetown is known as the garden city for its tree-lined avenues, numerous wooden mansions, and the canals and dykes which remind of its English and Dutch colonial past. Guyana is also known as the land of six peoples. Asian Indians, African, European, Portuguese, Chinese, and Amerindians are counted among these peoples. Nine different Amerindian groups are in Guyana. In Guyana we interviewed co-researchers from Georgetown, four villages on the East Coast of the Demerara River; villages along the Essequibo River and an Amerindian village along the Pomeroon River.

Next, we conducted interviews and focus groups in New Orleans, Louisiana, a major southern U.S. city, best known for its Bourbon Street destination, located in the historic French Quarter. Mardi Gras, an annual celebration of decadence in February, was previously its claim to fame. Unfortunately, the devastation of Hurricane Katrina will exist in infamy.

Phuket and Phang-nga provinces in Thailand are tourist destinations. Located on Thailand's western shores, the tourist beaches are desired destinations. Until the fateful Sunday morning in December 2004, the beaches were seen as scenes of fun, not destruction. Traditionally the area was inhabited by sea gypsies; it is now a paradise for Thai and foreign tourists.

More than one year after the disasters (May, June, and July 2006), the interviews were conducted giving our co-researchers the opportunity to evaluate long term effects of the devastation. Researchers used an interview guide to ensure consistency while allowing co-researchers to share their experiences in their own words. The wealth of information yielded many results which will be further disseminated. The following six recurring themes emerged from the depth interviews that were common to all the countries surveyed:

1. Source credibility affects perceptions of crisis communication and preparation
2. Government(s) caused (or could have prevented) the disaster(s)
3. (Governmental) Mismanagement prior to, during, and after the disaster
4. Collaborating in established social networks, such as religious organizations, helps citizens cope in disasters, but these organizations are problematic partners for relief NGOs
5. People believe disaster preparedness is important and necessary, but they do not prepare
6. The experience and effects of disasters vary for each person

First, source credibility affects perceptions of crisis communication and perceptions of source credibility are culturally based. In Guyana and New Orleans individuals appear less likely

to consider government sources credible. In Thailand the government is accepted as a credible source and the King and his royal family are respected and revered for the perceived protection they provide the Thai people. While community members use the media to access information during disasters, their perceptions about the credibility of the media may also be affected by the source. Co-researchers from each culture reported using the media, primarily television, as their primary source of information during the disaster. Many reported that they also rely on community leaders to help them interpret information and guide decision making.

Second, many believe that the <u>government caused (or could have prevented) the disaster(s)</u>. In Guyana and New Orleans co-researchers blame poor maintenance for the magnitude of the disasters. The government in Guyana was held responsible for failing to maintain the *kokers*, a gate at the end of a canal used to control the flow of water, and irrigation system necessary to control the flow of water, and irrigation system in a nation with coastlands below sea level. The country's canals and trenches were clogged with trash and vegetation resulting in stagnant water, breeding grounds for mosquitoes and disease. Similarly, the government in New Orleans was criticized for not having an effective evacuation plan, not adequately maintaining and reinforcing the levees, and waiting too long to seek and accept assistance. Our co-researchers in Thailand were less critical of the Thai government, but there were some expressions of frustration that there was no tsunami warning system in December 2004. Less important than the government's actual performance is its perceived performance and perceived crisis management (Stromback & Nord, 2006). Governmental responsibilities for the disasters are noted as both omissions and commissions.

More than one year after Hurricane Katrina ravaged New Orleans, discussions continue as to whether citizens should be allowed to rebuild their homes in flood-prone areas. Steinberg (2006), among others, suggests due diligence must be exercised by the government to protect people from building in hazard areas. There is concern that the New Orleans area will be redeveloped as it was. This is problematic as some suggest there is an opportunity to prevent future disasters, "in natural disasters such as floods, merely returning to the state of affairs that were in place prior to the crisis is usually undesirable. Instead, the community must either dissolve or consider what corrections could reduce the risk of similar damage in the future" (Sellnow & Seeger, 2001, p. 163). After the storm in New Orleans, the government was severely criticized for allowing development in unstable areas and not enforcing building codes (Earthquake, 2005). Similarly in Guyana, many co-researchers told us they remember the time when building codes were enforced and homes had to be elevated. Traveling through the village streets, it is apparent that many homes were built on just one, lower level and were much more damaged in the flooding than elevated, approved homes.

While there is plenty of blame focused on governmental entities for a lack of planning or preparation for the disasters, there is also consternation on the lack of a plan for the storms' aftermath. In each country there are, more than one year after the disaster, many internally displaced persons (IDP). For instance, after the hurricanes in New Orleans, many of the locals fled for the state of Texas and other destinations of refuge. Temporary workers, largely of Latino descent, and many of them lacking proper work documentation, descended on New Orleans and worked in dire conditions removing moldy building materials. Because of their vulnerable state and undocumented status, the workers have been overwhelmingly exploited by contractors and governmental employees.

Often mismanagement in the disasters was a result of poor communication between and among different levels of government, nongovernmental organizations (NGOs), and private

citizens. A poor response to a crisis, or a poorly perceived response, leads to further blame, because "citizens are looking for leadership that will bring immediate solutions: they need potable water, they need shelter, they need food, in many cases they need medical attention. They don't necessarily know what level of government provides these things—and they don't care. They want the response" (Wilson, 2005, p. 85).

Too often in crisis situations, governmental leaders have treated the local publics as ignorant to what steps are necessary to prevent, prepare for, and survive through disasters. Sandman (2006) even suggests "when people do come up with their own precautions, official reactions tend to be patronizing or hostile" (p. 259). He also suggests involving citizens in crisis communication planning as "when citizens are asked to comment on government emergency response plans (which happens all too seldom), their responses don't just demonstrate that they have 'concerns' the planners need to take into consideration; they also point to real, substantive flaws in the plans themselves" (p. 260).

Third, the disaster was mismanaged and aid was not allocated appropriately. There was virtually no accountability for governmental aid and co-researchers believed that great disparity existed between reports of donations from the international community and resources available in their communities. Even though NGOs and private citizens eventually received a considerable amount of aid, a number of vulnerable populations, including women and immigrant communities, did not receive equal assistance.

Many times in all three research sites we were told of how aid was distributed unfairly. It would seem on national and international levels attention and concern for disasters and those surviving them are also unevenly distributed. For instance, many areas in the U.S. state of Mississippi suffered greatly from Hurricane Katrina, but as the city of New Orleans is more famous a destination, the devastation in Mississippi received little press coverage. Likewise, the flooding in Guyana was mostly ignored by international media for two primary reasons: first, it occurred within a few weeks of the tsunami in Southeast Asia; and second, Guyana is a poor country which does not attract much outside investment or tourist dollars. Unfortunately, "there is a simple and salutary lesson from the comparative history of catastrophe: disasters most often exacerbate social inequality and benefit those in power" (de Waal, 2006, p. 2).

Transportation issues became troubling in the disasters also. People used whatever means they could to get to work, search for provisions, and to help others. In Guyana many recounted their experiences riding in "refrigerator boats," (refrigerators with the doors removed), the boat of [last] choice, chosen among the debris for its buoyancy (Gibbs, 2005). Stories in Guyana about the refrigerator boats were also frustrating: some sought the opportunity to take advantage of the needy and charged money for the makeshift boat rides or requested portions of provisions as payment.

In New Orleans many co-researchers decried the fraudulent practices of contractors and the inadequacy of the balance of power in negotiating their futures. Stuever (2006) explains one noticeable evidence of misuse and abuse of appropriated funding, "contractors hired by the Federal Emergency Management Agency or the Army Corps of Engineers have in some cases been overpaid (by thousands of dollars) to cover the city and suburbs in blue tarp, and this report was greeted with outrage—and more despair" (p. C2).

In Thailand we heard multiple times that no governmental assistance was provided to some survivors. Thais who were not registered to work or live in the affected provinces received no aid. Although there were governmental interventions, and we were told many times of the King and royal family's generosity to tsunami victims in Phuket and Phang-nga provinces, those

who were not registered to live in the provinces received no aid. Many fled to their home provinces and lived with family members until the situation improved, tourists began to return, or they missed the area. One man, whose mother and wife were literally swept from him in the tsunami waters, left Phang-nga and went to Bangkok for five months. At that point he could no longer bear to be physically far away from the memories of his wife and mother so moved back.

The situation in New Orleans was said to have exposed the face of U.S. Southern poverty to the world. Most media depictions of the hurricanes showed poor, black residents stuck in New Orleans while the water rose and (allegedly) rich, white residents who sought safety in faraway towns or states, suggesting aid and relief were based on racial profiling. Forgotten in this black and white dialectic are the many other ethnic communities, cultures, and groups who were affected by the storms and their aftermath. However, aid distribution following disasters may be race and/or gender based, as "the Red Cross acknowledged that its response to minority evacuees during Katrina and Rita was lacking, with some African American communities having less access to aid than white communities" (Salmon & Williamson, 2005, A12).

Fourth, working in social networks helps disaster survivors but is a poor model for NGOs. One of the problems with aid offered was how to distribute it. NGOs in Guyana told us they were approached by faith-based groups who requested aid for their membership. The organization chose not to aid religious groups, but instead suggested those requesting help go to their neighborhoods and find out what people in their geographical community needed. Because of the mission and mandate of some NGOs, they are not permitted to collaborate with faith-based organizations. We found that those who were encouraged by a social or religious group or grass-roots organization to prepare for crises fared better after the event. Personal preparation can allow for greater comfort in the aftermath of a storm or other calamity and can also provide greater faith in one's ability to withstand harsh conditions. Although people in all three countries and disasters worked together to comfort each other, prior planning would help. Cultural suggestions, like that of the Thai saying *karn ruam meu ruam jai* (joining hands, joining hearts; collaboration) to encourage networking and participation, are most persuasive.

Fifth, people think that they should prepare but do not. Even though most co-researchers reported that preparedness is important, few have taken steps to prepare for future disasters. Co-researchers found it difficult to express why they have not prepared. Socio-economic barriers to preparedness exist, such as an inability to store provisions for future events or to save money for times of need. However, individuals with the necessary financial resources to store or save were also likely to tell us that no effort had been made to prepare. When social groups discuss what steps they have taken to prepare for disasters, and when they undergo specialized training for future events, the group members are motivated to further prepare for themselves and their families. Cultural considerations of preparedness are also important to consider, since the Thai "social system encourages dependence on one's superiors for protection and advancement" (Roongrengsuke & Chansuthus, 1998, p. 183). Therefore, in some cultures, being prepared for future crises can be perceived as being less deferential or faithful to one's leaders.

Hurricane Katrina's wrath on New Orleans and the surrounding areas exposed for many a surprising truth: governments are not prepared to fully assist in case of emergencies. Therefore, personal planning and preparation is necessary. As Cwiek (2005b) states, "too often, local community members assume that there is an effective state and local mechanism that triggers if/when a crisis occurs. This could not be further from the truth for the vast majority of communities" (p. xiii). Even if governments have a plan and are prepared, there is often a delay between the disaster and their arrival to assist. In fact, it usually takes three to four days for

agencies to assess, prioritize, and respond to a major crisis. Events like Hurricane Katrina often goad some people into preparing for the unknown. Cwiek (2005a) suggests that people are finally recognizing, due to terrorist and natural disaster threats, that individual planning is important. Unfortunately that preparation may just be a passing fad (Pomfret, 2005) and it will take future disasters encourage people to prepare further for various contingencies.

If governmental leaders and disaster relief officials understand that people have differing attitudes and motivations towards preparedness, they will be better equipped to encourage all to prepare adequately. We are suggesting that there are five levels of emergency preparedness:
1). those who are totally prepared for any short-term emergency contingency;
2). those who are well prepared with enough supplies to get through most disasters;
3). those who feel somewhat prepared for short-term emergencies;
4). those who are prepared just a little bit; and
5). those who are unprepared for any emergency contingency.

Finally, the disaster experience and aftermath varies for everyone involved. While disasters affect women and men differently, it is difficult to assess which group was most affected. Women often emerged as community leaders, seeking creative solutions to solve problems resulting from the disasters. Red Thread, a woman's empowerment organization in Guyana, played a primary role during the flood by teaching women how to organize their communities. Several women in New Orleans emerged as community leaders during and after the flood. In Thailand, a woman started a jewelry manufacturing company to help other women find alternative work to sustain their families. By chronicling women's experiences in all three locations, the researchers aimed to empower women. Co-researchers also reported that groups were affected differently, but agree that the experience was devastating for all. Instances of discrimination based on gender, ethnic group, and religion occurred in each location. There were also instances where individuals crossed these divisions to render assistance to other groups.

Khan & Marcus (2005) explain why their plight as women experiencing disasters is more burdensome than that of men, "we are the women whose work is being recognized—the mainly grass-roots women of every race who braved waist-deep and even chest-deep flood waters filled with disease and death to find new ways to feed, clothe, shelter, teach, nurse, and worry about our children—above all, to keep them safe. We had to work even harder and in more dangerous conditions" (p. 5). We also found in each location that women suffered more than men in recovery efforts. "Women's experiences have typically been neglected in society's narrative of historic disasters, and those who have examined them have found not only that they are very different from men's but that the reconstitution of gender relations can be the defining element of a calamitous event for the women who lived through it. Women and children usually constitute the majority of people affected and in receipt of assistance" (de Waal, 2006, p. 5).

The aftermath of the disasters continues for survivors long after media attention is gone. Guyana never received much global media attention. The tsunami in Thailand was well documented, but it is easy to believe that the areas have fully recovered without visiting the sites of destruction. The damage in New Orleans has left the media spotlight; even coverage of the one year anniversary focused on controversies and not the experiences of the survivors. But, the lasting effects of the storms live on.

In Phang-nga, people lost their homes and all possessions. As the Thai provinces rely heavily on tourism, many were immediately unemployed as foreigners hesitated to visit Thailand for fear of another tsunami. Little thought has been given to those who lose their jobs or for training in new occupations. Women especially were concerned about losing their jobs or shops.

In desperation many sought new employment, and quickly learned there were few opportunities. A Thai diving instructor who no longer had tourist students worked as a diver for the search and recovery efforts. When the recovery work ended, with few options, he moved to a monastery and pursued religious studies in order to survive after the tsunami.

Additionally, the type of disaster and its location may affect the type of aid and media coverage it receives. Guyana's floods received little global media attention, likely due to its proximity to the overwhelming tsunami and the fact that the country is little known outside of the Caribbean and South America. Often aid organizations must prioritize their giving and disasters with more media coverage can receive more support and funding. In fact, disasters which affect poor or faraway places may have to advertise to win attention and garnish relief (de Waal, 2006). New Orleans and its surrounding areas received much attention in the weeks after the hurricanes, but to many Americans is now a distant memory, only one year later. In fact, many Americans believe the region has fully recovered as they see media images of a thriving French Quarter (which was actually barely affected by the hurricanes or the flooding).

Analysis

Each of the six themes which emerged from depth interviews provide both theoretical and practical implications. At times, they reinforce our knowledge about crisis communication, provide practical lessons for future disasters, or hold heuristic value for future studies.

Perhaps the most important factor during a crisis is the ability of the public to receive credible information to affect decision making. Tilly Smith, a British elementary school student, emerged as a credible source when she recognized the signs of a tsunami and saved nearly 100 tourists on a Thai beach by telling them to flee. A Vietnamese man in Patong recognized the signs of an impending tsunami, but ran without telling anyone because he felt they would not believe him. Indeed, in Thailand many people perished from the tsunami as they did not understand the warning signs. Before the large waves crashed ashore, the water receded from the beaches at a rapid rate, leaving many fish flopping in the sand. Several people ran to the beach to catch the fish, not realizing that they would be swallowed in the coming waves that quickly crashed into the beach and up the streets.

In New Orleans, governmental leaders were especially poor sources for credible information as they suggested places like the Convention Center and Superdome were adequate shelters when really there were no preparations made for housing evacuees there. Further, evacuees who fled the storms were rendered vulnerable to physical violence and sexual molestation in the designated places of refuge. A lack of planning for those who did not evacuate the city was exposed again; when the Superdome was used as a shelter in 1998, it was obvious there were not enough generators, food, and supplies prepared (Ripley, 2005).

In Guyana many co-researchers discussed receiving assistance from churches, mosques, and other social groups. While the President was highly visible during the floods, wading knee-deep in flood waters to meet with constituents and offer aid, the government was highly criticized for not maintaining the country's irrigation system. Co-researchers from New Orleans and Thailand also reported that they find friends and family most credible in times of disaster, and those that they know. This finding supports Gardner's (2005) suggestion that disaster victims will turn to nontraditional sources of information, such as clergy. Our co-researchers did cite their religious leaders and peers as credible sources of information and inspiration.

Different audiences can perceive different people to be credible. In Guyana and New

Orleans the government is perceived as being less credible than in Thailand. Therefore, cultural differences must be considered in developing crisis communication strategies. Mistrust among communities and feelings of vulnerability affect how the message is received.

Oral, or traditional forms of, communication can be the most credible information within some cultural groups. Language abilities, culture, and literacy levels must be considered when conveying important information. One of the most interesting stories in the media following the Southeast Asia tsunami was of the Moken people who live on an island between Burma and Thailand. None of the village people perished in the tsunami because of their oral history recounting tsunami legends. Although there were some who doubted the signs, all were eventually persuaded to flee and were saved (Wirthlin, 2005).

The media are often the most widely available source of information during natural disasters. The sources quoted in the media affect individual perceptions of the credibility of the information reported. The media, though, may lose credibility as they rush to respond and sometimes provide false news (Stromback & Nord, 2006).

Source credibility is extremely important to preparing citizens for disasters as "timely warning of tornadoes and hurricanes allows residents to protect themselves" (Sellnow, Seeger, & Ulmer, p. 287). Constructing the messages is as important as the conveyance of the message. Technical language can hinder or confuse the message, which is especially problematic in crisis situations. Information must often be conveyed precisely and understood immediately to mitigate crises or hamper further injuries, so acronyms and jargon should be avoided.

And, Sandman (2006) suggests one additional source that must be acknowledged is the public themselves. Governmental agencies and NGOs must recognize the importance of public involvement and opinion and value their insights as a credible source. He suggests leaders must "trust that most people are resilient and can bear dire warnings, awful events, and unpleasant truths; to trust that they will want to do the right thing, and that preparing to make good use of volunteers is thus a central part of crisis planning; to trust that their ideas about how to best cope with the crisis are likely to be worth hearing, worth implementing, and worth letting them implement" (p. 260).

The second theme which emerged during this study was the belief that the government caused or could have prevented the disasters. Governmental responsibilities for the disasters are noted as both omissions and commissions. The government in Guyana and New Orleans were blamed for poor maintenance, specifically, not maintaining the drainage systems designed to protect the communities which are both below sea level. The government in Thailand was criticized for not having a tsunami warning system in place and allowing the clearing of beaches in order to develop tourist properties.

The theme of government responsibility has long been echoed in crisis communication literature. Winston Churchill suggested, "the responsibility of ministers [government officials] for the public safety is absolute and requires no mandate. It is, in fact, the prime object for which governments come into existence." Citizens trust their governments to warn them adequately concerning disasters and to evacuate if necessary.

While there is plenty of blame focused on governmental entities for a lack of planning or preparation for the disasters, there is also consternation on the lack of a plan for the storms' aftermath. In each country there are, more than one year after the disaster, many internally displaced persons (IDP). The need for adequate housing, food and water, education, and employment following a disaster is staggering, but must be part of a preparedness plan. Social services and counseling efforts also must be in place following a large scale event. For those

who suffer through a disaster, being rescued must include adequate services and provisions to actually survive, recover, and thrive following the crisis.

While government agencies must prepare to assist citizens after disasters, personal preparedness is extremely important immediately following a disaster. "Too often, local community members assume that there is an effective state and local mechanism that triggers if/when a crisis occurs. This could not be further from the truth for the vast majority of communities" (Cwiek, 2005b, p. xiii). It generally takes three to four days for government agencies to provide provisions to affected areas. That is why personal preparedness, for a minimum of 72 hours, is important. The inability of the government to meet the needs of publics during disasters has fueled many political discussions. The debate considers the responsibilities of the government and the responsibilities of citizens and communities during a disaster.

The third theme which emerged during this study was <u>mismanagement of disaster situations or poor implementations of disaster plans</u>. Co-researchers from each location reported that there was virtually no accountability for aid and great disparity existed between reports of donation from the international community and resources available in their communities. While this information is difficult to prove, co-researchers reported examples of perceived arbitrariness in aid distribution.

In Thailand we heard multiple times that no governmental assistance was provided to some survivors. Although there were governmental interventions, and we were told many times of the King and royal family's generosity to tsunami victims in Phuket and Phang-nga provinces, those who were not registered to live in the provinces received no aid. Many fled to their home provinces and lived with family members until the situation improved, tourists began to return to affected areas, or they missed the area.

Additionally in Thailand, foreigners and minority groups suffered without governmental aid. Thailand's Burmese workers are typically employed in menial positions related to the tourism industry. The workers may or may not be properly documented with permission to work in Thailand. Several times we were told that foreign workers were not offered, or allowed, after-disaster aid. Many foreign workers did not seek assistance, either, for fear of being deported or questioning concerning their work documents. Some foreigners even failed to publicly acknowledge their perished relatives in order to avoid scrutiny.

Mismanagement of the disasters was not always linked to racial discrimination; gender and class bias existed as well. Gender bias was reported more often in Thailand than in Guyana and the United States. "In most cases, pre-existing patterns of discrimination against women and ethnic or religious groups were exacerbated by the tsunami" (Inderfurth et al., 2005b, p. 34). Aid designated for the most vulnerable members of the population were mismanaged. "The poor felt the devastating impact of the disaster acutely, while many more women were killed than men. Many villages were reported as having a ratio of female to male fatalities of more than 3:1. Of the 1.7 million displaced, hundreds of thousands continue to shelter with family or friends while tens of thousands remain in tent camps and temporary shelters" (Inderfurth et al., 2005b, p. 8).

In Guyana where people of African and Indian descent are often in conflict, a young women of Indian descent summarized the sentiment of many within her community saying that the government provided more relief to community with members of African descent and neglected their political base (Indian Guyanese) for fear of international criticism.

The fourth theme our research uncovered was that <u>social networks are important in disaster recovery</u>, but that not all NGOs or aid associations are willing to partner with specific (usually religiously-organized) networks. The study outlined several positive stories reflecting

the effectiveness of in-group self-reliance within organized groups.

One of the reasons social networks or community organizations were effective was because they had prior knowledge about the needs of member populations. "Many communities can discharge many social missions because they know their members personally" (Etzioni, 2001a, p. 8). Therefore, these groups are effective in meeting the needs of their members; however, these networks make exclude members of a community who do not belong to traditional social groups. Etzioni (2001a) suggests, "new efforts to work with more communities must take into account that their boundaries do not often follow governmental ones" (p. 13) and that quite possibly the faith-based groups can do a better job of assisting victims. We found that those who were encouraged by a social or religious group or grass-roots organization to prepare for crises fared better after the event. Personal preparation can allow for greater comfort in the aftermath of a storm or other calamity and can also provide greater faith in one's ability to withstand harsh conditions. Davis (2006), too, suggests working with local partners to provide aid. A comprehensive disaster preparedness plan for a community utilizes existing resources and incorporates contingency plans which prevent members of a communication for being excluding from needed support.

Our co-researchers think they should prepare for future disasters, but typically have not done so. Even though most co-researchers report that preparedness is important, few have taken steps to prepare for future disasters. Co-researchers found it difficult to express why that have not prepared. Socio-economic barriers to preparedness exist. Many of our co-researchers are on fixed incomes and are focused on surviving day-to-day, with little time to prepare for future events. They also lack funds to buy extra provisions for unforeseen circumstances. However, lack of funding is not the only deterrent to emergency preparation; individuals with financial resources were also likely to report no effort has been made to prepare.

In Thailand most of our co-researchers said that they felt very prepared for future disasters, even though they had not undertaken any personal preparation. Many suggested the implementation of the tsunami warning system will protect them from future disasters. It was also difficult for them to fathom additional contingencies or disaster situations that they would need to prepare for as most had experienced the tsunami, a few earthquakes, and depressed tourism due to avian flu.

Conclusions and recommendations

Since proposing this research in the fall of 2005, we have watched media reports of hurricanes and tropical storms in South America, tsunamis, typhoons and earthquakes in Asia, flooding in Samoa and Romania, and a devastating cyclone in Australia. This reminds us of the importance of the research: to provide suggestions for disaster preparation and mitigation.

While the request is for every household to have a 72 hour kit ready for future disasters, we are aware that the three-day supply may be too little. Some are suggesting a minimum five day supply of water and food; some warnings suggest an avian flu outbreak could require everyone to stay quarantined in their homes for a minimum of ten days.

Survivors of disasters must be included in the decision making for recovery. Engaging citizens in planning for recovery and through the entire crisis allows all to voice their concern and opinions and to participate fully in the recovery process. As Sandman (2006) suggests, governments need to learn to trust their citizens to provide information about best practices and to critique appropriately the government's actions.

In Thailand, the federal and provincial, and local governments should be commended for their coordination and implementation of the tsunami warning system. Most of those interviewed are very confident the system will protect them from future tsunamis. The tsunami warning systems are advertised to locals and tourists alike. Hotels and other businesses are conducting training and drills to ensure future disasters are handled appropriate. Additionally, signage indicating tsunami hazard zones and evacuation routes are found all along the beaches and major roads in Phang-nga and Phuket provinces. However, the signage as it is currently placed can be confusing, especially in case of emergencies. For example, at one stop sign in Hat Kamala, there were three different evacuation signs with arrows pointing in three different directions. While the signs provide options for getting out of the route of a tsunami, the choices will be too overwhelming for a quick decision in emergencies.

Future research on crisis communication and preparation is warranted. Natural and manmade disasters continue to afflict peoples worldwide, usually catching them unaware and unprepared. Definitions of preparedness also need further examination and research as disasters affect in multiple ways for extended periods. For instance, literacy and education preparedness will benefit those afflicted by and displaced by disasters. Career development and skills training must be developed so that those who lose their livelihoods in disasters will have further options. Financial and resource management is another area of interest for crisis situations. In New Orleans especially, many afflicted by the hurricanes said they would have liked to evacuate New Orleans but did not have the means to do so. Physical health is also of concern in disaster preparedness. Those who are physically fit will be better suited to helping others survive the experience. Those who are prepared with provisions and a plan will be better able to weather disasters emotionally, socially, and spiritually. Finally, preparedness research and training must include home maintenance and management, like knowing how to turn off natural gas and electrical supplies.

As troubling as it was to hear the experiences of disasters and to see the co-researchers relive their dreadful experiences, we feel this research is important and may encourage others to prepare, especially those in positions to protect citizens, for disasters of all types. Indeed, discussing disasters and seeing others suffer can have some effect, "San Francisco Mayor Gavin Newsome quickly decided that the shocking scenes of Katrina provided a teachable moment. Newsom unveiled a long-planned public-service advertising campaign last week that will amplify what may be Katrina's most important take-home message: survivors of a major emergency will probably need to fend for themselves for the first few days after calamity strikes. The goal is to get as many San Franciscans as possible to assemble—and keep current—a basic emergency kit, including a flashlight, a transistor radio, spare batteries, canned goods and, above all, enough water to last at least three days" (Nash, 2005, p. 57). We are also heartened when hearing stories of the farmers in Guyana (Ullah, 2005) and beyond that are storing feed and additional provisions for future contingencies.

Finally, we are grateful to The Tokyo Foundation for funding this timely research through the Joint Initiatives (JIP) Program. We appreciate the opportunity to spend money in Thailand which desperately needs tourism dollars, in New Orleans which continues to struggle to attract tourists, and in Guyana where the local economy remains depressed. We look forward to sharing the information gleaned from this research with others.

In each of our research sites we met with representatives from various Red Cross and Red Crescent societies. Known internationally for their preparedness training and disaster relief aid, the societies' suggestions for preparedness, gleaned from multiple sources, are below. Please

note that 72 hour kits are also called "go" kits for evacuation purposes. Disaster preparations should include provisions for a minimum of 72 hours; extended time or more contingencies should also be considered, depending on geographical location and household members.

To adequately prepare for both natural and manmade disasters, individuals should:
1). get informed concerning community hazards, disaster plans and warning systems;
2). make a plan that accommodates all special needs of their family or household members;
3). assemble an 72 hour kit that can be easily transported in an evacuation situation; and
4). maintain the plan and kit by updating contact information and rotating stored food and water.

Items to include in an 72 hour kit (stored in a dry place suitable for fast evacuation)

- **Blankets**
- **Bleach**
  - for purifying drinking water and making a latrine. In Guyana, the bleach bottles have instructions for water purification on the bottle.
- **Candles**
  - For light, heat, or for cooking if the gas or electricity are inoperable
- **Clothing** and shoes
- **Credit cards** and small denominations of **cash**—especially if the ATMs are not working
  - For unexpected purchases. In New Orleans, a minimum of $500 was suggested
- Important **documents** in plastic bags; preferably an additional digitized copy: birth certificates or other identification, student records, deeds and bank statements, tax returns, driver's license copies, passports, social security cards, vehicle titles, insurance policies, appraisals of valuables (all copies—original documents should be in safe deposit box)
  - Many school children dispersed from New Orleans had difficulties registering for school without records. Proving ownership of land and property was difficult in Thailand after the tsunami for those without documentation.
- Extra **eyeglasses** or contact lenses
- Basic **first aid** supplies
- **Flashlight** with **extra batteries**
- **Food**
  - Ready-to-eat canned meats, fruits, and vegetables
  - Canned juices, milk, soup (powdered drinks and soups require additional water)
  - High-energy foods (peanut butter, jelly, granola bars)
  - Comfort foods (cookies, gum, hard candies)
- **Games** or decks of cards
  - Children especially (Merida, 2005) have special needs in evacuations
- Extra set of car, home, safe deposit box **keys**
- **Matches**
  - in waterproof container
- Duplicate **medications** that will last 72 hours
- Paper list of emergency, important, and family **phone numbers and addresses**
  - Because telephones and electronic devices may fail and in cases of terrorism the system may be purposely shut down as a precaution

- Family **photographs** (one for each child and adult)
  - To uplift and calm.
- Battery-powered **radio**
- Religious or uplifting **reading materials**
  - Evacuees, after having their physical needs met, requested Bibles to read
- Small, soft comfort **toy** for each child
  - To provide comfort during the stressful time of disaster
- Bottled **water** that is rotated every six months
  - one gallon per person per day for drinking, cooking, and sanitation
- **Sanitary supplies**: toilet paper, soap, hand sanitizers, feminine hygiene products

Local variations on 72 hour or disaster preparedness evacuation kits
- In Guyana, cassava bread will last for five months at a time.
- In Guyana, salted fish is easier to acquire and less expensive than some tinned or canned fish and meats
- In New Orleans many people keep axes in their attics for breaking out onto the roof
- Highly developed disaster preparation supplies are available, but are usually expensive. For instance, in Japan water-free shampoo, rice meals that do not require boiling, and compressed underwear are all available for including in 72 hour kits
- In Nigeria, *atmit* (a thin, nourishing porridge) has been provided to fend off starvation.

Special needs and considerations for 72 hour or disaster preparedness evacuation kits
- Pet supplies
- Infant needs
  - Diapers, baby formula or food, medicines, and teething toys are all necessary
- Elderly needs
  - Additional medicines or mobility aids
- Insurance coverage
  - In Thailand, all business owners mentioned that they now have insurance coverage. No one had any insurance prior to the tsunami.
- Livestock or domestic animals
  - In Guyana many feared losing their sheep and poultry in the floods, so allowed them into their homes, which made their families vulnerable to disease

Special considerations to shelter in place, or stay in the home or office without evacuating
- Alternate source of power
- Alternate source of heat

If evacuation becomes necessary, PRIOR to a disaster
- Plan a destination to go or meet others in the immediate neighborhood
- Put a map of the local area in the 72 hour or disaster prepared kit
- Plan a destination to go in the village or city but outside of the immediate neighborhood
- Plan a destination to go or meet others outside of the village or city
- Decide upon a family member or friend (who lives outside of your geographical area) that all evacuated family members will call or contact after an evacuation

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Additional Sources and Resources

American Red Cross
http://www.redcross.org
Are you prepared? San Francisco Office of Emergency Services
www.72hours.org
Asian Disaster Preparedness Center (ADPC)
www.adpc.net
Bay Area [San Francisco, California] Chapter of the American Red Cross
www.preparebayarea.org
British Columbia Earthquake Response Plan
http://www.pep.bc.ca/hazard_plans/eqplan99/eqplan99-1.html
Caribbean Red Cross
www.caribbeanredcross.org
Children, Youth and Families Education and Research Network
http://www.cyfernet.org/hottopic/july06.html
East-West Center Report: After the tsunami: Human rights of vulnerable populations.
http://www.eastwestcenter.org/stored/misc/AfterTsunami14FullReport.pdf
Federal Emergency Management Agency (U.S.)
www.fema.gov
The Guyana Red Cross Society
http://www.sdnp.org.gy/redcross/
Institute for Business and Home Safety
www.ibhs.org
International Federation of Red Cross and Red Crescent Societies
http://www.ifrc.org/
The Southeast Asian Moken people story
www.cbsnews.com/stories/2005/03/18/60minutes/main681558.shtml
National Emergency Management Association
www.nemaweb.org
National Geographic warning on New Orleans prior to Hurricane Katrina: Gone With the Water
http://magma.nationalgeographic.com/ngm/0410/feature5/?fs=www3.nationalgeographic.com
NC State University Family & Consumer Sciences Emergency Toolkit
http://www.ces.ncsu.edu/depts/fcs/human/disaster/kit.php
Oxfam Briefing Note: The tsunami's impact on women.
http://www.oxfam.org.uk/what_we_do/issues/conflict_disasters/downloads/bn_tsunami_women.pdf
Preparing for Disaster Handbook
http://www.redcross.org/images/pdfs/preparedness/A4600.pdf
Provident Living and Preparedness Recommendations from The Church of Jesus Christ of Latter-day Saints
www.providentliving.org
The Sigur Center Asia Papers: The 2004 Indian Ocean Tsunami: One Year Report
http://www.gwu.edu/~sigur/pubs/SCAP25-Tsunami2.pdf
Thai Red Cross
http://www.redcross.or.th/english/home/index.php4
Thailand Tsunami and Disaster Center
www.thaitsunami.com/wps/portal
Story about Tilly Smith, the British schoolgirl whose tsunami knowledge saved several
http://en.wikipedia.org/wiki/Tilly_Smith
UN Office for the Coordination of Humanitarian Affairs (OCHA)
www.reliefweb.int
Understanding Katrina: Perspectives from the Social Sciences
http://understandingkatrina.ssrc.org
Women in International Security Statement on Post-Tsunami Human Rights Concerns
http://www.brookings.edu/fp/projects/idp/20050321_rcohen.pdf
U.S. Geological Survey
www.usgs.gov