

DISASTER PREPAREDNESS AND RESPONSE
AMONG RELIGIOUS
ORGANIZATIONS

by

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ABSTRACT

The purpose of the project was to discover whether or not religious communities were prepared, with both supplies and a plan of action, for disasters and whether or not they provided relief efforts in the aftermath of a disaster. This project also provided insight into the explanations for group preparedness and relief efforts of religious groups and how they coped with natural disasters in accordance with their faiths. From this data, I determined the relationship between religious affiliation and disaster preparedness and response. I used a stratified random sample to gather participants from the Birmingham, Alabama area. A total of 15 participants were used in this study: Baptist (1), Catholic (2), Episcopalian (1), Judaism (2), Jehovah's Witness (1), Jesus Christ of Latter-Day Saints (1), Lutheran (3), Methodist (2), and Nondenominational (2). Qualitative interviews were conducted with religious leaders to assess disaster preparedness, if they provided relief efforts after a disaster, the reasons for their actions, and how they cope with natural disasters.

The results revealed slightly more than half of the participants were prepared for a disaster with supplies, a disaster plan, or both. Those religious groups which were not prepared stated it was due to the small congregation size or the lack of space for storing disaster supplies. All of the participants stated they provide relief services after disasters occur. The most common services included debris removal, the collection of monetary and clothing donations, and the collection and redistribution of food and water. Religious groups shared a common theme to explain why they provide relief, being that it is part of their faiths mission, beliefs, and/or

teachings. Lastly, there was a weak relationship between religious affiliation and how these groups cope with natural disasters.

DEDICATION

This thesis is dedicated to all the individuals who supported me on my journey through graduate school. I want to thank my family and friends who always believed I could accomplish anything I set my mind to.

LIST OF ABBREVIATIONS AND SYMBOLS

FBO	Faith-based Organization
FEMA	Federal Emergency Management Agency
NCDP	National Center for Disaster Preparedness
NGO	Non-governmental Organization

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INTRODUCTION

Anthropology and religion have a long history since the field of Anthropology began to develop. Emile Durkheim developed a theoretical framework for society which stated we have social facts to which society conforms. These social facts “were collective representations of the collective consciousness, or group mind” (Erickson and Murphy 2008, pg 79). This means that we, as a society, have a group mind which governs our behaviors. In religion, the congregants make up a group within society which shares a subset of the group mind. It is this group mind that causes them to have a common line of beliefs which govern their behaviors, for example, placing taboos on the consumption of particular foods. This research project extended the idea that religion influences behavior by examining how religion influences disaster preparedness and response among various religious denominations.

Oliver-Smith (1996) provided three perspectives of disaster that have developed within the field of anthropology: a behavioral response approach, a social change approach, and a political economic approach. This project explores the behavioral response of the religious community to disasters. One anthropological approach to behavioral response in disasters is to study how individuals and groups interact before, during, and after disasters in order to maintain social cohesion (Oliver-Smith 1996). My project will use this approach to study disaster preparedness before disasters and how religious organizations respond to the community after a disaster occurs.

Disasters are sudden events which can cause enormous amounts of damage, loss of life, and disruption of normal daily activities. Disasters, both man-made and natural, occur every year throughout the world. Adequate disaster preparedness is important to reduce stress and anxiety, to ensure adequate supplies are on hand, and to limit potential secondary dangers associated with a disaster. Disaster preparedness includes having the necessary supplies to sustain oneself for three days and a plan of action. Some of the necessary supplies would include water, food, a first aid kit, clothes, batteries, and a flashlight. Due to chaos during disasters, it can be difficult to locate, buy, or gather supplies which illustrate the importance of adequate planning. Redlener and Berman (2006) completed a review of the literature on preparedness from 1940 to 2001 and combined the information with the results from their study on disaster preparedness. The study showed that from 1940-2005 there had been no notable increase in personal preparedness, despite events such as WWII, the Cold War, Y2K, September 11th, and Hurricanes Katrina and Rita (Redlener and Berman 2006). This information indicates that previous methods used by the federal government to enhance preparedness have not worked.

Religious communities have the opportunity to play an important role in assisting the community after a disaster and are recognized as a common voluntary organization active in disasters. However, they can only play this role if they are prepared with supplies and a plan beforehand. This project was focused specifically on the role religious communities' play in preparing and providing relief efforts in times of natural disasters. Natural disasters include events such as tornadoes, hurricanes, and earthquakes. I intended for this project to be a starting point for further research by providing information from a range of denominations in the

Birmingham, Alabama area on disaster preparedness and response. Specifically, the project explored three questions; 1) if religious groups were prepared for disasters, 2) if they provided relief efforts after a disaster, and 3) if they had a disaster plan in place for future disasters. This project also gained insight into the reasons religious communities were prepared and responded to disasters, and how they coped spiritually with natural disasters. The overall goal of this project was to discover if a relationship existed between religious affiliation and disaster preparedness, response, and coping mechanisms.

LITERATURE REVIEW

ARE INDIVIDUALS PREPARED FOR A DISASTER?

A review of the literature was completed to examine the available research on personal preparedness for disasters. According to FEMA (2004) it is important for individuals to plan to sustain themselves for at least three days after a disaster because emergency personnel and supplies can take up to 72 hours to reach the affected disaster site. The Federal Emergency Management Agency (FEMA) recommended that a family disaster supply kit include: a three-day supply of non-perishable food, one gallon of water per person per day, a battery-powered radio, clothing, cash, a flashlight and extra batteries, and a first aid kit (FEMA 2004). FEMA stated it is not only necessary to have supplies, but each family should develop a plan to implement when disaster strikes. The plan should include evacuation routes, communication plans, safety information, and written instructions for people with special needs. It was recommended that businesses and schools develop a written plan as well (FEMA 2004).

The National Center for Disaster Preparedness (NCDP) conducted annual surveys of personal preparedness throughout the nation (National Center for Disaster Preparedness 2007, 2011). An examination of preparedness trends in the 2007 and 2011 surveys revealed very little difference in preparedness. This was an alarming find because it suggested there is a lack of

effort from either citizens or the government to help citizens get prepared for disasters. For comparability between the surveys, the NCDP used the same questions yearly. In 2007, almost half (47%) of the population surveyed felt a terrorist attack or major weather event would happen within the next five years. In 2007 and 2011 only one-third (34%) of Americans were prepared for a disaster, and two-fifths (43%) of the population stated they had no plans to get prepared for a disaster. The percentage of families with an emergency preparedness plan slightly increased between 2007 and 2011 with 43% and 49% having a plan, respectively. The most alarming find in both the 2007 and 2011 preparedness survey was that two-thirds of Americans believe assistance will arrive within several hours after a disaster occurs (National Center for Disaster Preparedness 2007, 2011). These studies illustrated that populations felt an event was likely but had not adequately prepared and/or do not plan on preparing for a disaster.

FEMA and the Citizen Corps (2009) assessed national personal preparedness. The following is a summary of their findings. They found a little over half (57%) of the survey population had supplies set aside in case of a disaster, most often citing water (71%) and non-perishable foods (74%) in their kits. Other items cited included flashlights (49%), first aid kits (32%), and radios (20%). A written emergency household plan was mentioned by 44% of the survey participants. Barriers to preparedness cited by participants included the belief that first responders would help them, a lack of knowledge, and time constraints. The FEMA and Citizen Corps survey concluded that 61% of the population expected the first responders to assist them with their needs, and 39% and 42% expected to receive help from faith-based communities and nonprofit organizations, respectively. Those individuals who stated they were very religious

believed they could look to their religious community and local nonprofit organizations for help after a disaster. These individuals cited having an emergency household plan more often than the general population surveyed (FEMA and the Citizen Corps 2009).

Although these surveys were conducted by different organizations and therefore phrased questions in different manners, their results were comparable. From 2007 to 2011, personal preparedness had not increased even though the population felt at risk for a disaster. NCDP found that only a third of the population felt prepared, whereas FEMA and the Citizens Corps found that over half of the population was prepared. NCDP's preparedness question was more conservative, asking participants if they had all the materials for being prepared, whereas FEMA and the Citizen Corps only asked if the population was prepared. From this, I gathered NCDP has a more reliable result for personal preparedness levels. All three surveys concluded only two-fifths of the population had a written plan of action if a disaster were to occur. NCDP and FEMA and the Citizens Corps found the expectation of immediate assistance to be a significant barrier to adequate preparedness (National Center for Disaster Preparedness 2007, 2011, FEMA and the Citizens Corps 2009). Two-fifths of the participants in the FEMA and Citizen Corps studies expected help from faith-based organizations (FBO's) and/or non-governmental organizations (NGO's) (FEMA and the Citizens Corps 2009). This information clearly indicates the potentially important role that local religious groups can play in assisting their communities after a disaster, but only if the religious groups themselves are prepared.

A meta-analysis of articles in a Google Scholar search using the criteria of “disaster preparedness” religious communities” between 2010 and 2011 returned 108 articles. The articles

were grouped according to four themes: action by religious groups, meaning disaster preparedness and/or response, U.S. disasters, community preparedness, and community action. Only 2% of the articles addressed action by religious groups, 10.2% of the articles dealt with community preparedness, and 9.3% of the articles concerned community action. The results revealed that in the past year little research has been conducted on religious group's preparedness level and response to disasters. This finding suggests the need for research in disaster preparedness among religious groups and their response efforts after a disaster occurs in the United States.

Kim and Kang (2010) examined the effects of community belonging, risk perception, and integrated connectedness to a storytelling network on individual preparedness before and during a hurricane in Tuscaloosa, Alabama. Integrated connectedness to a storytelling network refers to an individual's connectedness to local media or community organizations which have the potential to influence an individual's decision to connect with other members in the community. Kim and Kang (2010) discovered community belonging was related to preparedness during a hurricane, but not prior to a hurricane. Preparedness during a hurricane included events such as reduction of one's concern about safety by checking local weather and media outlets or through communication with neighbors and friends about the event. Residents tended to check on their neighbors during a disaster to verify that the neighbors were safe and uninjured and were not in need of assistance. A resident's integrated connectedness to a storytelling network was related to pre-hurricane preparedness and during hurricane preparedness. In other words, those individuals who watched the news frequently or were part of a community group, such as a religious

organization, were more likely to be prepared both before and during the hurricane. Social risk perception, which referred to an individual's concern for members of the community, was significantly related to pre-hurricane preparedness but not during hurricane preparedness. Kim and Kang (2010) suggested that social risk perception influences pre-hurricane preparedness due to individual's beliefs that the hurricane will not affect them but it will affect their neighbors. Personal risk perception was positively related to during hurricane preparedness but not to pre-hurricane preparedness. The most interesting find from Kim and Kang's (2010) research was that individuals who were more integrated in the community were more likely to be prepared before and after a disaster. There is a gap in the literature concerning how these religious groups influence disaster preparedness among individuals. This research project hopes to address this gap in the literature by examining why religious groups choose to prepare for disasters.

ARE RELIGIOUS GROUPS PREPARED FOR DISASTERS?

Minar and Greer (1969), as cited in the Encyclopedia of Social and Cultural Anthropology, defined community as a population located in one geographic area. Living in this one area "will throw up common problems and give rise to common perspectives, which lead to the development of organizations for joint action and activities, which in turn produce common attachments, feelings of interdependence, common commitment, loyalty and identity within a social group"(Barnard and Spencer 1996 pg 114-115). In the present case, the community we are examining is the religious group. As mentioned previously, the participants from FEMA and the Citizen Corps (2009) study stated they would look to FBOs and/or NGOs for assistance;

therefore, it is important for religious groups to be prepared for a disaster so that they will be better able to assist the community they serve, particularly if the community is not personally prepared for a disaster. Also, due to local knowledge of resources and the knowledge and skills of the people in the neighborhood, community organizations could have a significant impact on disaster preparedness (Patterson, Weil, and Patel 2010). This led to the suggestion by Hurst and George (2009) that FBO's and NGO's should be involved in disaster preparedness and planning with state and local governments. Hurst and George (2009) proposed that the government assist these organizations in preparation for disasters since they rely so heavily upon them. They argued that the government should teach these organizations specifically how to prepare and respond to disasters and how to track the resources they utilize. Hurst and George (2009) suggested that preparedness training include information relative to food and water reserve levels, a plan of leadership and contact information for the community, shelter designation, and provision of information to individual families on how to prepare a disaster kit and plan. Once the planning process is complete, organizations should train individuals how to respond by conducting regular disaster drills. Hurst and George (2009) recommended that FBO's advocate for cooperation with the government in provision of assistance to victims. These organizations should also catalogue their resources and track distributions to the community. FBO's need to organize relief efforts so that they may address the community's immediate needs. They should also train their leaders in mental health services (Hurst and George 2009).

The literature was also reviewed to determine whether or not religious groups, specifically, are prepared for disasters. In Cain and Barthelemy's (2008) study, a post-Katrina

survey found that religious leaders believed keeping the basic necessities on hand in case of disasters and having the clergy trained in disaster management would allow for smoother relief efforts. These suggested necessities included flashlights, a one-day supply of food and water, and either cots or air mattresses for sheltering people. The leaders suggested these preparedness steps after experiencing the difficulty with the organization of relief efforts after a disaster had occurred (Cain and Barthelemy 2008). However, when De Vita and Kramer (2008) surveyed faith-based and community organizations affected by Hurricanes Katrina and Rita to determine if they were prepared should another disaster strike, they found that less than a quarter of the organizations had developed emergency plans, and less than two-thirds had prepared for future disasters (De Vita and Kramer 2008). There is a significant gap in the literature regarding whether religious organizations are prepared for a disaster with a plan and the appropriate supplies. Cain and Barthelemy's (2008) study illustrated that the religious groups were not prepared but had learned from their experience that they need to be prepared. De Vita and Kramer's (2008) study suggested that even though FBO's and NGO's stated the importance of being prepared for the next disaster, action was yet to be taken. If the community is to rely upon religious groups in a disaster, it is important for the religious groups to be prepared with a post-disaster plan of action and to have some of the disaster supplies on hand. This project examined whether or not religious groups had a plan and supplies in place if a natural disaster were to occur. Natural disasters include events such as tornadoes, hurricanes, and earthquakes.

DO RELIGIOUS GROUPS PROVIDE RELIEF SERVICES AFTER DISASTERS?

According to Chaves and Tsistsos (2001), faith-based groups provided social services on a regular basis to their surrounding community. The most common social services provided by these groups included provision of clothing, food, and shelter. Faith-based groups used vast resources such as volunteers to provide these established social services. Volunteers may engage in cooking and serving meals to the community or participate in repair and reconstruction of homes using materials provided by the religious group. The social services provided are all immediate and basic needs that could be met by different congregations. These types of social services suggest that congregations tend to participate primarily in the short term needs of the community. Chaves and Tsistsos (2001) found churches with more resources, located in poor neighborhoods, and associated with Protestant denominations rather than the Roman Catholic Church participated in more social service activities. These routine social services seem to transcend to relief efforts after a disaster strikes.

Multiple studies examined relief efforts provided by religious groups. These studies conducted surveys immediately following disastrous events. In Cain and Barthelemy's (2008) survey of churches affected by Hurricane Katrina, the churches provided an example of the services that religious communities provide after a disaster occurs. They provided financial aid, food, clothing, and assistance in locating family members and outside resources. These services were largely funded by money from the church fund, donations, and fundraisers. The churches suggested that working together with other churches could prove to be beneficial in the future because it could reduce duplication of services and therefore reduce expenditures. It would also allow churches to focus on the best service they can provide (Cain and Barthelemy 2008).

De Vita and Kramer (2008) conducted a similar survey among faith-based and community organizations in the areas where Hurricane Katrina and Rita struck land. These organizations provided clothing, food, money, shelter, child care, job training, housing rehabilitation and spiritual guidance. The faith-based and community organizations funded these services with donations and money provided by larger organizations such as the American Red Cross. Two-thirds of the participants mentioned collaboration with another group when providing relief efforts (De Vita and Kramer 2008).

Gajewski et al. (2011) examined the response of NGOs, which included many faith-based groups, to Hurricane Katrina evacuees in Austin, Texas. FBOs in Austin, Texas began providing services to evacuees almost a week before FEMA arrived with assistance. Although these organizations provided a vast amount of immediate services to victims, long-term assistance was scarce. Approximately one month after Hurricane Katrina hit, shelters in Austin closed their doors and evacuees began to search for long-term living arrangements.

The Homeland Security Institute (2006) issued a report of the role faith-based and non-governmental organizations played during a disaster. Efforts provided by these organizations help to restore order to the community in its most desperate time of need. The Homeland Security Institute (2006) interviewed over 100 organizations to determine what services they provided after a disaster. They determined ten frequently provided services: shelter, food, medical treatment, hygiene supplies, mental and spiritual support, home reconstruction services and debris removal, logistic services such as storing stock piles of supplies, transportation, child care, and case management services. The most important limitation mentioned by faith-based

and non-governmental organizations was limited resources and a lack of planning and coordination. These organizations were not included in governmental planning which caused difficulties in establishing shelters, medical services and hygienic services. A survey of the needs of affected areas was difficult for these organizations due to the lack of cooperation with the government. Resources became scarce for organizations as volunteers became tired and money for supplies ran out. Faith-based and non-governmental organizations partnered with each other to provide services which cut down on costs and duplication of services. This allowed an organization to specialize in one service such as food, shelter, or mental and spiritual support. Religious organizations were able to effectively help the affected community due to their location within the community. The government could not always reach the affected area, but local organizations were there to start assessing needs. Lastly, these organizations had resources that extended beyond that of government organizations. They had an abundance of volunteers, donations, and a network with local and out-of-state organizations (Homeland Security Institute 2006).

Although disaster response by religious organizations seems to be thoroughly studied, the majority of these services were provided after a hurricane. This study examined relief efforts after all natural disasters, including floods, hurricanes, and tornadoes. The study had a strong emphasis on tornadoes due to the effects the April 27th tornadoes had on Alabama in 2011. This research also examined funding for relief efforts in hopes of obtaining a full view of the activities provided by religious groups after a disaster.

In a study conducted by the Homeland Security Institute (2006), it was concluded that faith-based and non-governmental organizations were successful in providing services to the affected community due to their mission, their closeness to the community, and their resources. These organizations felt it was their duty to help others as being called upon by a higher authority. Because these organizations were located in the affected area, the organizations were more effective due to their close ties to the community (Homeland Security Institute 2006). This research project aimed to close the gap in the literature concerning the reasons religious groups provide relief services after disasters.

HOW DO RELIGIOUS GROUPS COPE WITH NATURAL DISASTERS?

A few articles discussed how religious groups cope with natural disasters. Chester and Duncan (2010) examined past and present disaster responses by Christians. Christians have a theodicy they follow which is defined as combining the idea of a loving God with the evils that exist in the world. Chester and Duncan (2010) examined the Old Testament of the Bible in which disasters were explained as a punishment from God for sinning. After Chester and Duncan (2010) completed a review of the literature on how Christians respond to disasters, they concluded that since the mid-1990's a change in Christian beliefs towards disaster victims had occurred. The general belief is that disasters occur "so that God can realize a more significant benefit" (Chester and Duncan 2010 pg 86). Chester and Duncan (2010) suggested that this change "means that in the vast majority of cases, relief can proceed without the need to reconcile concepts of a loving God with the reality of human suffering, because the divine presence is to

be found in the distress of victims and is not viewed as a function of the physical process that trigger disaster” (Chester and Duncan 2010 pg.92).

Tausch et al. (2011) conducted a qualitative study examining religion and coping mechanisms after Hurricanes Katrina and Rita. They collected a sample of 72 adults who were living in south Louisiana when Hurricane Katrina and Rita struck land. Tausch et al. (2011) did not collect information regarding an individual’s religious affiliation; they were only interested in whether the person practiced religion or not. In a sample of 72 adults, 66 reported they benefitted from religion and 6 stated they were not religious. The three most common areas of religion mentioned included a religious group’s service and involvement in the community, the use of religious practices, and one’s own personal beliefs about the spiritual world. Most individuals felt the need to help others who were worse off than themselves after the storms. These congregations and individuals provided outreach to those in need. One participant stated she was so involved in providing relief efforts to other individuals after Hurricanes Katrina and Rita that she forgot about her own worries and how the storm affected her. Religious practices such as praying for one’s self or for others and reading the Bible were cited as key coping mechanisms. Participants stated they prayed to give thanks and ask for help. Another common coping mechanism was to understand that God only gives an individual as much as He thinks they can handle. The six individuals who did not practice religion and the sixty-six individuals who did practice religion stated that the storms did not change their views on religion (Tausch et al. 2011).

Alawiyah et al. (2011) conducted a similar study, but only among African American survivors from Hurricane Katrina. The participants were hurricane evacuees recruited from a host city in the south. Seventy-three participants were interviewed in this study. Alawiyah et al. (2011) were interested in how religion and spirituality helped African Americans cope and adjust to their situation after Hurricane Katrina. The majority of survivors interviewed mentioned religion without the need for prompting. Similar to Tausch et al.'s (2011) findings, survivors mentioned prayer and reading the Bible as strategies for coping with the disaster. Other survivors mentioned they attend church to help them cope with the disaster. Most of the participants stated their belief in God helped them through the disaster. Some participants elaborated stating that believing in God gave them hope for their future. Other individuals stated they coped by helping members of the affected community because it took their minds off their own situation (Alawiyah et al. 2011).

The goal of my thesis research was to close the previously mentioned gaps in the literature by examining the reasons religious groups prepare and respond to disasters and the reasons they chose not to prepare and provide relief efforts. It also provided insight into the coping mechanisms of religious groups. By examining these topics in my sample population, this research should help to provide greater understanding of the degree to which religious affiliation influences preparedness, response, and coping mechanisms.

METHODOLOGY

This project used participants of religious communities in the greater metro Birmingham area. Stratified random sampling was used to gather participants to obtain the most diverse sample of disaster preparedness and relief efforts provided by religious communities in Birmingham, Alabama. Stratified random sampling was judged to be the best suited method for the current research project because it allowed a range of denominations, rather than just one specific denomination, to be included in the research process. The sample of participants consisted of these religious groups: Baptist, Catholic, Pentecostal, Jesus Christ of Latter-Day Saints, Methodist, Lutheran, Episcopalian, Presbyterian, Nondenominational, Greek Orthodox, Jehovah's Witness, Judaism, and Christian Science. Multiple denominations were chosen in order to discover whether or not religious affiliation influenced disaster preparedness and response. Institutional Review Board approval was obtained from the University of Alabama at Birmingham in order to conduct this research (see IRB certificate pg 57).

Participants were chosen from entries in the local Yellow Pages telephone book. The first five religious groups listed under the title of the denomination were chosen for participation. Multiple titles were listed for each denomination; however religious groups were selected from the list with the broad denomination as its title. For example, religious groups for Baptist were selected under the title Baptist, not Southern Baptist. The exception to this process was Judaism which was listed as Synagogues Messianic, Synagogues, Synagogues Jewish, and Synagogues Traditional. A religious group was excluded in this step of the research process if no address was

given in the telephone book, or if the listing was for a religious school. These addresses were checked for accuracy on yellowpages.com. Greek Orthodox, Christian Science, and Judaism had fewer than five religious groups listed under the denomination title; therefore all the congregations were included. This sampling method has two limitations. First, some bias existed due to the selection process of choosing the first five religious groups in alphabetical order rather than completing a random sample from the entire list of religious groups. The second limitation was that the Yellow Pages may not have included a complete list of all the religious groups in the Birmingham, Alabama area.

The sample size goal was to obtain three participants from each religious group. Due to a low response rate (19%) and the lack of three religious groups in each denomination, five additional religious groups were chosen from each denomination following the same method mentioned above. The response rate was still low (15%) after the second mail out and three religious groups from each denomination were not obtained. The overall sample was 15 which included Baptist (1), Catholic (2), Episcopalian (1), Judaism (2), Jehovah's Witness (1), Jesus Christ of Latter-Day Saints (1), Lutheran (3), Methodist (2), and Nondenominational (2).

After the addresses of the religious groups for each denomination were obtained, request of participation letters, a sample background information document, and a sample interview questionnaire document were mailed (see appendix pgs 47-49). The letter stated the purpose of the project, a request for participation in the project, and a request to notify the principal investigator if the group had an interest in the project. A follow-up call took place two weeks after the letters were mailed to determine if the group had received the letter and if they wanted

to participate. A telephone script was used when follow-up calls were placed (see appendix pgs 50-51). Three phone calls were made in an attempt to contact the religious group. If they did not return the call or did not answer the call, they were excluded from the study. If the religious group decided to participate, an appointment time was established for the interview.

This project used qualitative data gathered through semi-structured one-on-one interviews with religious leaders. Qualitative data was used in order to delve deeper into the reasons behind disaster preparedness, relief efforts, coping mechanisms, and previous disaster experiences. A semi-structured interview with open-ended questions allowed the participant to freely elaborate on any topic. A religious leader was defined as any person who held a position at the place of worship, such as a pastor, reverend, or brother. Individuals involved with disaster plans within the religious group were interviewed if the religious leader was unavailable. Religious leaders, rather than members of the congregation, were interviewed because it was presumed they would have in-depth knowledge of their congregation's beliefs and values, activities and involvement in the community. The interviews lasted between 35-60 minutes and consisted of questions to guide the conversation. Informed consent was obtained from the participant before the interview began (see appendix pgs 52-54). Basic information was gathered pertaining to the religious community's disaster preparedness levels and its disaster response plans. The interviews then went into more depth by examining how religious beliefs influenced preparedness and response, the congregation's ability to cope with natural or man-made disasters, and relief efforts after disasters. Preparedness was evaluated based on whether or not a three day supply of non-

perishable food, one gallon of water per person per day, clothes, blankets, flashlights, battery-operated radio, extra batteries, and a first-aid kit were available.

This project began in August 2011 and was finished in March 2012. The timeline was as follows:

August 2011: Interviews, questionnaires, and informed consent documents were prepared. A

Human Subject Protocol application was submitted to the IRB.

September 2011: Approval from the IRB was received in order to begin research.

October 2011: The first set of information packets were mailed to the religious groups in the middle of the month. Follow-up calls were made the last week in October and interviews were conducted.

November 2011: The second set of information packets were mailed to the next five religious groups at the beginning of the month. Follow-up calls were made in the middle of November and interviews continued to be conducted.

December 2011: Data collection was completed by the end of December.

January-March 2012: Data was analyzed, the results written, and findings presented to the principal investigator's thesis committee.

RESULTS

Interviews were analyzed by examining patterns and themes that occurred in the responses given by religious leaders. The congregation sizes of the religious groups are given in Table 1. All the religious groups were located in an urban setting and had an average age between 35-50 years. The most common average age of the congregation was 40 years old.

Table 1: Congregation Size of Religious Groups

Religious Affiliation	Congregation Size (Families)
Messianic Jewish- A	200
Messianic Jewish- B	50
Lutheran- A	400
Lutheran Missouri Synod- B	125
Lutheran-C	220
Episcopal	1500 Members
Catholic- A	850
Catholic-B	100
Nondenominational-A	125
Nondenominational-B	14000 Members
Jehovah's Witnesses	100
Methodist-A	50
Methodist-B	1400 Members
Baptist	400
Jesus Christ of Latter Day Saints	294

PERCEPTION OF DISASTERS AND PAST EXPERIENCES

When religious leaders were asked how likely they felt a disaster would affect their surrounding community within the next three years, nine responded they felt a disaster was

moderate to highly likely to occur. Four religious leaders felt a disaster was not likely to occur and two respondents were not sure how likely they felt a disaster were to occur. Messianic Jewish group A, Lutheran group A, Lutheran group C, Methodist group A, Methodist group B, and Catholic group A based their responses of highly likely to happen and not likely to happen on previous weather patterns seen throughout their communities. Jehovah's Witnesses however had a different explanation. They believed a disaster was "very likely (to occur). Based on (the) understanding of the scripture, (we) are living our last days of the system. Jesus mentioned disasters taking place to identify the last days."

On April 27th, 2011 multiple tornadoes struck the communities in and around Birmingham, Alabama. Of the 15 religious leaders interviewed, 13 stated they were either directly or indirectly affected by the tornadoes in April. Only four religious groups cited they had no disasters affect them in recent history. The Jesus Christ of Latter-Day Saints and the Episcopalian religious leaders were prepared for the disaster with supplies and a plan of action in place. The Episcopalian group "had two trucks of food and supplies sent to 25 families" the day after the storms occurred. The majority of the religious groups were not prepared when the April 27th tornadoes swept across the state of Alabama. Lutheran group B, Nondenominational group A, Nondenominational group B, and Methodist group B were not prepared for the disaster beforehand but were able to get supplies immediately following the disasters in order to provide relief efforts.

Relief services after the April 27th tornadoes were provided by all the participants in this study. The services varied according to the human resources available to that particular church.

A few leaders explained that if you have a person who works in tree removal industry, a roofer, and a plumber in your congregation, then your available resources would include organizing manpower to remove debris and help rebuild homes. The most common services provided after a disaster included the collection and redistribution of staple products such as canned goods and water, collection of monetary donations and clothing, and removal of debris. Two congregations mentioned that prayer services were provided after the disasters. Congregations that were small or that had an elderly volunteer group mainly provided services in terms of organization of incoming supplies for redistribution or provision of volunteers to larger organizations. Some churches stated they were involved in long-term recovery by building homes and organizing supplies which were still being donated months after the tornadoes occurred. Other services offered to the community by some of the religious groups included: gift cards to Wal-Mart, monetary support for temporary housing, operation of their congregation as a pick-up and drop off site for the American Red Cross, provision of a children's summer camp, nailing down tarps to roofs, and provision of food to the volunteers.

DISASTER PREPAREDNESS AND DISASTER RESPONSE PLANS

Each religious group was asked whether or not they maintained an inventory of disaster supplies at the church in case of a disaster. They were prompted with a list of items such as water, food, clothing items, blankets, first aid kits, and flashlights. Table 2 displays the answers religious groups gave to disaster preparedness and disaster response plan questions. Nine groups responded they do not keep any type of disaster supplies at the church. The most common reason

Table 2: Disaster Preparedness and Response

	Supplies	Community Plan	Committee at Place of Worship	Assist in Other States	Assist in Neighboring Areas	Plan for other States/Neighboring Areas	Funding
Jesus Christ of Latter Day Saints	X	X		X	X	X	X
Jehovah's Witnesses		X	X	X	X	X	X
Episcopalian	X	X		X	X		X
Baptist			X	X	X		X
Catholic A				X			
Catholic B							X
Methodist A		X		X	X	X	
Methodist B			X		X		X
Nondenominational A				X	X		X
Nondenominational B				X	X	X	X
Lutheran A	X			X	X		
Lutheran B		X	X	X	X	X	X
Lutheran C	X		X	X	X		X
Messianic Jewish A	X		X		X		X
Messianic Jewish B	X				X		X

groups did not have supplies at their place of worship was due to a lack of storage space. Nondenominational group B and Jehovah's Witnesses did not keep supplies at their place of worship, but did state they could quickly get the supplies needed if necessary after a disaster. Methodist group A works with their district office to have supplies brought in immediately following a disaster. Once the supplies arrive, the church becomes a distribution center for the surrounding communities.

Messianic Jewish group A and B, Lutheran group A and C, Jesus Christ of Latter-Day Saints, and the Episcopalian group had a few supplies on location if a disaster were to occur. The most common items stored at their houses of worship included flashlights, first aid kits, and defibrillators. Lutheran group C stated they were beginning "to collect supplies because now there is room (at the church) to store it." Previously they did not have any space to store supplies but recently a room became available. Lutheran group C also mentioned that they store chain saws at the church in case of a disaster. Debris removal is one of the main relief services they provide. The Jesus Christ of Latter-Day Saints group explained that they keep some supplies and equipment such as tools and first aid kits at the church; however, if a disaster occurs, they have a regional center in a nearby state from which supplies are trucked in immediately.

Four groups thought it was more important for individual members of the congregation to be prepared for a disaster than to keep all the supplies necessary after a disaster at the house of worship. Messianic Jewish group B provides an emergency preparedness class once a year which teaches the congregation how to develop a plan and how to make a kit with a three day supply of

goods. The Jesus Christ of Latter-Day Saints group did not offer classes to the congregation, but instead passed out an Emergency Handbook. This handbook provides information on how to create a disaster plan, evacuation plan, a 72 hour kit, and how to properly store water. Jehovah's Witnesses teach disaster preparedness through a series of worship services in order to get their congregation prepared. Lutheran group B currently encourages members to prepare individually but does not offer any type of educational information such as a class or handbook. Lutheran group B, Lutheran group C and Messianic Jewish group A stated that they are interested in offering classes on individual emergency preparedness in the near future.

Six religious groups had a committee in charge of implementation of disaster plans such as what relief efforts to provide after a disaster or how to get prepared for a disaster. Six other religious groups stated they had no committee at their church. Methodist group A, Catholic group A, and the Episcopal group stated they did not have a committee at their local church in charge of disaster plans, however there was a disaster committee located at the dioceses or district office.

Development of a plan of action for implementation after a disaster is important if a congregation wishes to provide relief efforts. Five groups had a plan of action for their community in the aftermath of a disaster. These groups included: Lutheran group B, Jesus Christ of Latter-Day Saints, Episcopal, Methodist group A and Jehovah's Witnesses. Lutheran group C and Nondenominational group B both stated a plan was in development for future disasters. Messianic Jewish group A and B, Lutheran group A, Catholic group A and B,

Nondenominational group A, Methodist group A, and the Baptist group had no disaster plan in place for their church.

The plan of action for each group that stated they had a disaster plan varied. Lutheran group B waits three days for the first responders to do their job before moving into the community to assist with needs. During this wait time, they gather all the necessary supplies to start clean-up services. They also call every member of the congregation to determine if they are safe. The Episcopalian group has a plan to establish an American Red Cross shelter at their church after a disaster and they also work closely with a local organization to house the homeless for one week. Methodist group A works with their district office, which has developed a disaster relief plan. If a disaster occurred in the community of Methodist group A, the closest of the five designated churches would open their doors to provide food, clothing, and transportation. Methodist group A is designated by the district office as a storage site for all donations and supplies. Jehovah's Witnesses plan consists of every member of the church having supplies to sustain themselves for three to five days. Immediately after a disaster, every member of the congregation is contacted to determine if they are safe and if they have any problems that need to be addressed.

The majority of groups stated that they respond to disasters in neighboring areas of Alabama and/or other states. Lutheran group A, B, and C, the Jesus Christ of Latter-Day Saints group, the Episcopal group, Nondenominational group A and B, Methodist group A, Jehovah's Witnesses and the Baptist group all respond to disasters in both neighboring areas of Alabama and in other states. Of these 10 groups, only five have a plan for responding to out of area

disasters. These included Lutheran group B, Jesus Christ of Latter-Day Saints, Nondenominational group B, Methodist group A, and Jehovah's Witnesses. Messianic Jewish group A and B and Methodist group B stated they assist with disaster relief in neighboring areas of Alabama. Catholic group A mentioned they assist with out of state disasters when possible.

In order to provide relief efforts to neighbors in the community, it is necessary to have funds to purchase the supplies. Five religious groups had funding set aside in case of a disaster, three groups did not have any funding for disasters, six groups pulled money from a general fund in emergency situations, and one group was in the process of starting a fund for disaster emergencies. When a disaster occurs, most of these groups have sources from which they can withdraw money for supplies; however, four groups stated they also immediately start collecting donations from the congregation and community.

EXPLANATIONS FOR DISASTER PREPAREDNESS AND RESPONSE

There was no common theme across participants for why their congregations felt they needed to be prepared for a disaster. Messianic Jewish group A and Lutheran group B stated the reason their congregations are prepared is due to the need for a sense of safety and security. The Messianic Jewish group A stated they receive "threats to the Jewish identity. (We) get attacked from both sides because (we) are Messianic." The sides being referred to are anti-Jewish groups, anti-Israel groups, and some attacks from Christian groups. Lutheran group C and the Jesus Christ of Latter-Day Saints group felt the need to be prepared due to the responsibility they have to their community to keep them safe. The Jesus Christ of Latter-Day Saints group

believed they needed to be able to save the community physically first before they could save them spiritually. Lutheran group C stated the importance of preparedness best. “(We) have a responsibility to the community, being an organization that (stresses) people do matter. The hope of the world is not FEMA, it is the little church.” Lutheran group C was trying to stress the fact that they have a responsibility to give hope to the people in their time of need and in order to do so the church must be prepared for disasters.

Jehovah’s Witnesses explained they get their individual congregants ready for disasters because the end of the world is approaching. They explained that the Bible tells that the end of the world is approaching and “everything that is in the Bible has come to past except these disasters” which are to take place in the end. Jesus said events were going to happen towards the end and therefore they need to be prepared. Methodist group A developed a disaster plan due to the past experiences with disasters they have experienced. The Episcopalian group stated that in order to do the mission of the church, which is to “make the love of Christ known in the community especially when people are in dire need of love and support,” they must be prepared. It is harder to spread the love of Christ if they are not prepared. The most common reasons a religious group was not prepared for a disaster included: the congregation was too small, lack of storage space for supplies, or the sense that disasters are not common in the neighborhood. As mentioned previously, all the religious groups had provided relief efforts after a disaster in the past. When asked why they chose to respond to disaster relief, the main theme of the answers was that it is part of their belief, mission, and/or teachings. Messianic Jewish group B, the Jesus Christ of Latter-Day Saints group, and Catholic group A and B provided relief efforts after

disasters because they felt it was their responsibility to assist the community in their time of need due to the teaching to love your neighbor as you would yourself. They also assisted the community because it is part of their values and in good faith to show compassion, care, and help when needs are the greatest.

Messianic Jewish group A, Nondenominational group A and B, and the Baptist group all provided relief efforts after a disaster due to the word of Jesus. Messianic Jewish group A explained “Jesus said let your let shine, do good deeds, and do good for God.” This group stressed that you must put these words into action or your faith is dead. Nondenominational group A and the Baptist group both referred to the Book of Matthew where Jesus commands that you visit the sick, clothe those without clothing, feed those without food, and serve those less fortunate. These groups believe there is a biblical mandate to be like Jesus.

Lutheran group A and C, the Episcopal group, and Methodist group A and B all referred to the mission of the church as the explanation for providing relief efforts. Lutheran group A and Methodist group A and B explained that they provide relief efforts to serve and reach out to others. It is part of the churches beliefs and values to see the need of the people and fulfill it. Lutheran group C provided relief efforts to show they love their neighbors and love God. By loving their neighbors, they also showed their love to God. Finally, the Episcopalian group stated they provided relief efforts as part of their mission. They build relationships with people in the community and in doing so they build a relationship with the kingdom of God.

COPING WITH NATURAL DISASTERS

The most common theme for coping with natural disasters was to address the physical and spiritual needs of individuals affected. Lutheran group A, the Jesus Christ of Latter-Day Saints group, the Episcopal group, Catholic group A, Nondenominational group A, Methodist group A and B, and Jehovah's Witnesses felt the best way to cope after a natural disaster was to help others with their physical needs and also offer spiritual services such as prayer after a disaster. Messianic Jewish group A and Messianic Jewish group B had different interpretations of why disasters occur. Messianic Jewish group A believed "God put natural process into action when He created Earth which can create havoc. Disasters are products of the Earth adjusting." Messianic Jewish group B explained they cope with disasters by understanding that the end of the world is approaching and that is where they get their motivation to move past disasters that occur.

Both Lutheran group A and C had similar responses to coping with natural disasters. They explained that the Bible did not promise us a great and wonderful world. Lutheran group C stated "the assumption is that we deserve good but the Bible says we are inherently bad. We should expect brokenness instead of good things. The good things are what God gives us." Lutheran group A believed that in order to cope with a natural disaster, one must do their duty and help others and pray to God for help.

Nondenominational group A and the Baptist group both stated that they do not question disasters in terms of God and why they happened. The Baptist group explained it as follows "(disasters) are just part of living in the world. (It) is not our place to question why they (disasters) happen. It is our place to respond to them in a positive way and that is where God's

love comes in. If the world was a rosy place, we wouldn't appreciate it." Nondenominational group A also mentioned that they do not question disasters; they believe "God can handle our doubts, pains, and whys." They look to God's word and unite together with the community after a disaster. They worship and focus their attention on the sovereignty of God. Similar to this response, Nondenominational group B stated "the only way to cope is to build a relationship with God and Jesus. He is the way you cope."

Methodist group B and the Jesus Christ of Latter-Day Saints group coped by accepting the situation and being grateful they were not affected by the disaster. They showed their gratitude by assisting the community that was affected by the disaster. Catholic group A and B found the best way to cope with a natural disaster was to keep one's faith and look for the good God brings out of a bad situation.

DISCUSSION

PERCEPTIONS OF DISASTERS AND PAST EXPERIENCES

The majority of religious groups believed a disaster was moderate to highly likely to occur within the next three years. These perceptions were based on observations of previous weather patterns; however, Jehovah's Witnesses perceived a disaster as highly likely to occur within the next three years based on their religious beliefs. They believe that according to their understanding of the scripture, disasters will occur more often as the end of the world approaches.

The April 27th, 2011 tornadoes either directly or indirectly affected 13 of the 15 religious groups who participated in this project. Eight participants mentioned they were not prepared with the supplies and plans necessary to act after a disaster. The Jesus Christ of Latter-Day Saints group and the Episcopalian group stated they were prepared for the April 27th, 2011 tornadoes. The preparedness of the Episcopalian group corresponded with their perception of a high likelihood of a disaster occurring within the next three years. The Jesus Christ of Latter-Day Saints group stated they were not sure of the likelihood of a disaster but they believed one should be prepared and ready just in case something happens. It is important to note that the four groups who stated they had not had a disaster in recent history were not the same four groups who felt a disaster was low or not likely to occur within the next three years. This data implies perception of a disaster occurrence, at least in this sample population, had little influence on the preparedness level among religious groups surveyed.

In response to the April 27th, 2011 tornadoes, all participants mentioned at least one type of service provided to the community. The most common services provided included collection and redistribution of basic necessities such as food, water, and clothing. They also collected monetary donations and removed debris from yards within the community. The majority of these groups were involved in short term relief efforts; however, some groups did participate in long term relief such as building homes, conducting a children's camp, supporting temporary housing by paying rent, and organizing incoming donations. This research is consistent with Cain and Barthelemy (2008), the Homeland Security Institute (2006), and De Vita and Kramer's (2008) studies on the types of relief efforts provided by religious groups.

Lutheran group A and B, the Jesus Christ of Latter-Day Saints group, the Episcopal group, Methodist group A, the Jehovah's Witnesses group, and the Baptist group all mentioned without prompting that they worked with larger organizations after a disaster occurs to better assist the community. Four of these seven groups have a small to medium congregation size, suggesting that smaller religious groups will seek larger organizations to work with during the aftermath of a disaster. This will allow the religious group to push their available resources further.

DISASTER PREPAREDNESS AND DISASTER RESPONSE PLANS

The religious groups who stated they have a disaster plan if a disaster were to occur in their community included: Lutheran group B, the Jesus Christ of Latter-Day Saints group, the Episcopalian group, Methodist group A, and the Jehovah's Witnesses group. Lutheran group C

and Nondenominational group B were developing or had a semi-structured plan. A semi-structured plan refers to a verbal plan in which the religious group has provided services in the past for disaster victims and assumes they will do something similar if another disaster were to occur. Five of these groups stated they also have a plan if a disaster were to occur in a neighboring area or state. Religious groups with disaster plans in their community are more likely to have a plan for disaster response outside their community. Similar to these findings, those religious groups who stated they did not have a disaster plan for their community also did not have one for neighboring areas and states. The fact that religious groups who have a community plan also have a plan for outside their community may be due to the congregation taking its community plan and simply adapting it to the surrounding areas.

Whether or not a religious group had a disaster plan for outside their community or inside their community did not influence the religious group's decision to respond to disasters in neighboring areas or states. Messianic Jewish groups A and B, Lutheran groups A and C, Methodist group B, the Baptist group, the Episcopalian group, and Nondenominational group A all stated that they did not have a disaster plan for responding to neighboring areas and states; however, they all stated that they respond to disasters in neighboring areas and most of them respond to disasters in other states as well.

The vast majority of religious groups did not have the necessary supplies in stock at their place of worship. A few religious groups mentioned they keep some supplies at their house of worship, but this mainly included flashlights, first aid kits, and defibrillators. While this level of preparedness is not adequate for disaster response, it does reflect some level of readiness to

respond, and is more than other groups noted to have on hand. Consistent with the previous data, the Jesus Christ of Latter-Day Saints group and the Episcopalian group both kept a few supplies at their place of worship. This data is consistent with Cain and Barthelemy's (2008) study which found that religious groups were not adequately prepared.

Although the religious groups were not prepared for disasters on a group level, some of the participants stated that they focus efforts on readiness among individuals in the congregation rather than as a group effort. These groups included: Messianic Jewish group B, the Jesus Christ of Latter-Day Saints group, the Jehovah's Witnesses group, and Lutheran group B. The Jehovah's Witnesses group teaches its congregation disaster preparedness during worship services. Messianic Jewish group B offers a class once a year on how to get prepared for a disaster and the Jesus Christ of Latter-Day Saints pass out pamphlets to its congregation with all the necessary information on disaster preparedness. Lutheran group B did not state a specific method used to teach its congregation how to prepare individually for disasters, they only stated they encourage individual preparedness.

Six religious groups stated they have a committee in charge of disaster preparedness and response at their place of worship. Of those six groups with committees, only half of the religious groups have two out of three disaster activities completed. The three disaster activities examined included: a disaster plan for their community, a disaster plan for outside their community, and stockpile of some supplies at their place of worship. This data suggests that the presence of a committee in charge of disaster preparedness and response does not necessarily correlate with the preparedness level of religious groups.

Overall preparedness was determined by an examination of whether or not the religious group was prepared for the last disaster, had a disaster plan for their community, had a disaster plan for outside their community, had a committee in charge of disaster preparedness and response, and if the religious group had disaster supplies. The Jesus Christ of Latter-Day Saints was the most prepared having met four of the five criteria. The Episcopalian group, the Jehovah's Witnesses group, and Lutheran group B and C met three of the five criteria. Methodist group A, Nondenominational group B, and Messianic Jewish group A met two of the five criteria for preparedness. Lutheran group C and Messianic Jewish group A are in the process of preparing of disasters. Slightly more than 50% of the total participants interviewed were prepared for a disaster; however 100% of the participants, whether planned or not, provide relief efforts after a disaster.

EXPLANATIONS FOR DISASTER PREPAREDNESS AND RESPONSE

When the prepared religious groups were asked why they chose to be prepared for future disasters, the answers varied widely. Methodist group A was prepared for future disaster due to the past disasters that have affected their community. Lutheran group B stated it was common sense to be prepared for a disaster and that their religious beliefs did not influence the decision to get prepared. Lutheran group C stated they were beginning to get prepared for disasters because they have a responsibility to help keep the community safe. These three groups did not appear to be influenced by their religious beliefs when deciding to get prepared for disasters; however, three other groups were influenced by their beliefs to become prepared. The Jesus Christ of

Latter-Day Saints group, similar to Lutheran group C, prepared for disasters in order to help the community, but they stated that they become prepared to first save the community physically and then save them spiritually. The Episcopalian group prepared for disasters so that in the aftermath, it is easier to make Christ known to the community by offering relief services. The group also mentioned it was part of the mission of their church. The Jehovah's Witnesses group was prepared due to their religious belief that the end of the world is approaching. Finally, the Messianic Jewish group A stated they receive "threats to the Jewish identity. (We) get attacked from both sides because (we) are Messianic." The sides being referred to are anti-Jewish groups, anti-Israel groups, and some attacks from Christian groups. This response was lightly influenced by religion however it was a different kind of influence because they are receiving threats to their religious identity. Overall, it appears religious affiliation may influence a group's decision to get prepared for disasters.

A religious group's decision not to prepare for a disaster did not involve any influence from religious affiliation or the beliefs associated with the religious group. The most common explanations for unpreparedness were that the congregation was too small or their facilities did not have sufficient storage space for supplies. In some cases, no particular reason was given for not being prepared.

Religion had a major impact on a group's choice to provide relief efforts after a disaster. Even though four groups mentioned they provided relief efforts to assist the community in their time of need, three of these four groups also mentioned religious beliefs as a reason for providing relief services. The majority of religious groups stated they provide relief efforts due to their

religious beliefs, teachings, and/or the mission of their church. Some religious groups also used specific quotes from the Bible to illustrate why they provide relief efforts. The most cited verse from the Bible referred to by religious groups was from the Book of Matthew. Jesus says to clothe those without clothing, feed those without food, and serve those without. One religious group mentioned that they provide relief services because Jesus said to do good deeds in order to honor thy Father. These explanations are similar to the reasons religious groups provided in the Homeland Security Institute (2006) study. In their study, religious groups provided relief efforts because they felt called upon by a higher power to do so. There did not appear to be a difference in the reasons relief services are provided among the various religious affiliations.

COPING WITH NATURAL DISASTERS

The most common method for religious groups to cope with natural disasters was to help others in their time of need by addressing their physical needs first and then their spiritual needs. There did not appear to be strong differences in coping mechanisms among the different religious groups; however there was a difference in coping mechanisms between the two Messianic Jewish groups. Messianic Jewish group A believed disasters are the product of the Earth adjusting. The Earth adjusts due to God putting natural processes to work. Messianic Jewish group B believed disasters occur due to the end of the world approaching.

On the other hand, both Nondenominational groups A and B had similar responses to coping with natural disasters. Nondenominational group B stated the best way to cope with a natural disaster is to build a strong relationship with God and Jesus. Nondenominational group A

mentioned they read scripture and do not question God because he can handle their doubts and pains. This is partially related to what Nondenominational group B stated because by reading scripture you are strengthening your relationship with God and Jesus.

Both Lutheran group A and C cope with disasters in the same manner. They stated that God did not promise us a perfect world; we are inherently bad and should expect brokenness in the world. A good day is a blessing from God.

There appears to be a slight relationship between religious affiliation and how these groups cope with natural disasters. Specifically two groups belonging to the same denomination have similar ways to cope with natural disasters. As a whole, religious groups seek to meet the physical and spiritual needs of the community to help them cope with natural disasters.

This project had many strengths, weaknesses, and steps that could have been taken differently. The strengths of this research project included the in-depth rich information gathered from each participant concerning the explanations for preparedness and response. This project collected research that had not previously been collected by examining the reasons why the religious groups are prepared and respond to disasters. This research also examined whether or not religious groups were prepared with supplies and a plan of action. A small sample size, leading to the representation of religious denominations by only one group was a major weakness of this project. Another weakness was the bias due to the participants who chose to partake in the research. These religious groups may have been motivated more to participate in the research because they are highly involved in the aftermath of disasters. In future research, the collection of more participants for each denomination should be collected. This will allow

stronger conclusions as to whether or not religious affiliation influences disaster preparedness and response. If this research project was to be replicated, the question concerning coping with natural disasters would be reworded. Some participants had difficulty understanding what the question was asking; therefore, it was necessary to explain that I wanted to know how they cope spiritually with natural disasters. I would also collect more in-depth information into what their disaster plan entails.

CONCLUSION

It is apparent that religion influences some aspects of disaster preparedness and response and coping with natural disasters. The majority of participants interviewed believed a disaster was moderate to highly likely to occur within their community in the next three years; however, none of the participants were fully prepared for a disaster if it were to occur. Slightly less than half of the participants were prepared with supplies and/or some type of disaster response plan. Three of six religious groups who were prepared for future disasters were influenced by religion to become prepared. Those religious groups who were not prepared for future disasters did not mention religion in their reason for not being prepared. The most common explanation for unpreparedness was that the church congregation was small and/or that there was not enough room for supplies to be stored at the church. All of the groups provide relief efforts after a natural disaster. The most common relief efforts provided include: collection and redistribution of basic necessities such as food, water, and clothing. Religion heavily influenced a group's choice to provide relief efforts. The majority of religious groups stated they provide relief efforts due to their religious beliefs, teachings, and/or mission of their church. There was no apparent difference in the reasons relief efforts were provided among the various religious affiliations. Religious affiliation was related to how groups cope with natural disasters. Nondenominational group A and Nondenominational group B both stated that the best way to cope was to read the scripture and build your relationship with God and Jesus. Both Lutheran group A and Lutheran group C cope with disasters in the same manner. They understand that God did not promise us a

perfect world; we are inherently bad and should expect brokenness in the world. A good day is a blessing from God.

The second phase of this project could be to develop educational materials with the religious leaders. A quantitative survey assessing disaster preparedness levels could be distributed to the members of the various religious groups. After the initial survey, an educational intervention could take place using the materials developed with the religious leaders. The last step would be to conduct a follow-up survey to determine whether or not educational intervention for disaster preparedness was a success.

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APPENDIX

Request of Participation:

To whom it may concern:

My name is Danielle Hesse and I am a current graduate student in the Department of History and Anthropology at the University of Alabama at Birmingham. I am writing your religious organization to request your participation in my thesis research project.

After conducting a small literature review of articles relating to disaster preparedness, I discovered that little research has been conducted on the role religious community's play in preparing for disasters. Past research reveals that no significant improvement has been made in personal preparedness. Religious communities have a vital role in the community and can play an important role in disaster preparedness and relief. The purpose of the project is to discover whether a relationship exists between religious affiliation and the preparedness level and response of the religious group to disaster. I will gather data by conducting one-on-one interviews with religious leaders in which I will ask questions from the attached list. I will also gather background information about the religious organization such as denomination, congregation size, average age of the congregation, ethnicity of the congregation, and whether or not the religious organization is in a rural or urban area. Religious groups that wish to participate must be able to provide the name and contact number of the religious leader, with whom the interview will be conducted. A religious leader is simply a person who holds a position of leadership within the religious group, for example a preacher, pastor, reverend, etc. Interviews will take place in the religious leader's office or at the religious organization. These interviews will last approximately 45 minutes to an hour and 10 minutes. There is no risk involved in this study and the only personal information I will obtain is the name of the person being interviewed and an email address and telephone number they can be reached at, all of which will be kept in a secure location.

If your religious organization wishes to participate, please email me at dhesse1@uab.edu. I will conduct follow-up phone calls two weeks after letters are mailed if I have not heard anything from your religious organization. If your organization decides to participate, I will set-up an appointment for an interview at a time that works best for you. I would greatly appreciate your participation in my thesis project. I believe this project could be a starting point for further research by providing information concerning religious organizations preparedness for disasters and their expected disaster relief efforts.

Sincerely,

Danielle Hesse

Background Information:

Name of Participant: _____

Contact Phone Number: _____ Best Time to Contact: _____

Email Address (optional): _____

Religious Affiliation: _____

Congregation: Rural or Urban

Congregation Size (Approximately): _____

Ethnicity of the Congregation (Greater than 80% of Congregation):

Average Age of the Congregation: _____

Interview Questions:

How likely do you feel a disaster will occur within the next three years?

Has your religious community ever been through a disaster? What was the disaster? Was the church prepared? (had supplies on hand to help the community)

How did your church respond to the disaster? What services were provided?

Does your church respond to disaster in neighboring areas and states? Is there a specific plan that is followed for responding to disaster in neighboring areas?

Does your church have a disaster plan in place if a disaster were to occur in this community? Is there a committee in charge of disaster preparedness and relief?

Does your church keep disaster supplies at the church in case of a disaster? (Water, Food, Clothing, Blankets, First Aid Kit, Flashlights, etc.)

Why does your church feel the need to be prepared for a disaster? What made your church decide to become prepared? Why doesn't your church prepare for a disaster?

Why does your church choose to respond to disaster relief? Why doesn't your church respond to disaster relief?

Is there church funding put aside in case of disaster?

Do your religious beliefs influence the decision to become prepared for a disaster? Do they influence the decision to respond to disaster relief?

How does your religious community cope with natural disasters?

Follow-up Telephone Contact Script:

My name is Danielle Hesse and I am a current graduate student in the Department of History and Anthropology at the University of Alabama at Birmingham. I sent your religious organization a letter approximately two weeks ago requesting the organizations participation in my thesis research project. I wanted to confirm that your organization received the letter. (WAIT TO CONFIRM WHETHER OR NOT THEY RECEIVED THE LETTER)

1. If they did not receive the letter I will read to them the main paragraph describing the project from the letter I sent requesting participation: After conducting a small literature review of articles relating to disaster preparedness, I discovered that little research has been conducted on the role religious community's play in preparing for disasters. Past research reveals that no significant improvement has been made in personal preparedness. Religious communities have a vital role in the community and can play an important role in disaster preparedness and relief. The purpose of the project is to discover whether a relationship exists between religious affiliation and the preparedness level and response of the religious group to disaster. I will gather data by conducting one-on-one interviews with religious leaders in which I will ask questions such as how likely do you feel a disaster will occur within the next three years, has your religious community ever been through a disaster, was the church prepared for the disaster, how did your church respond to the disaster and what services were provided, does your church keep disaster supplies at the church in case of a disaster, why does your church choose (not) to respond to disaster relief ect. (IF THEY WISH TO HEAR ALL THE QUESTIONS I WILL PROCEED BY READING THEM THE REMAINING INTERVIEW QUESTIONS FROM THE QUESTION LIST ATTACHED TO THE LETTER) I will also gather background information about the religious organization such as denomination, congregation size, average age of the congregation, ethnicity of the congregation, and whether or not the religious organization is in a rural or urban area. If your religious group wishes to participate I will need the name and contact number of the religious leader, with whom the interview will be conducted. A religious leader is simply a person who holds a position of leadership within the religious group, for example a preacher, pastor, reverend, etc. Interviews will take place in the religious leader's office or at the religious organization. These interviews will last approximately 45 minutes to an hour and 10 minutes. There is no risk involved in this study and the only personal information I will obtain is the name of the person being interviewed and an email address and telephone number they can be reached at, all of which will be kept in a secure location. Would your religious organization be interested in participating in this project? If you need to think about this for a little while or discuss this with other members of the religious group, I can call back in a couple of days or you may call me with your decision at (337)570-9905. I would greatly appreciate your participation in this project. Thank you for your time. Have a nice day.

2. If they received the letter: I have not heard a response from your religious organization and wanted to verify whether or not your organization will participate in this project.
 - a. If they say they will participate I will get the religious leaders information in order to establish an appointment for an interview
 - b. If they say they do not wish to participate: Thank you for your time. Have a nice day.



Informed Consent Document

TITLE OF RESEARCH: Disaster Preparedness and Response among Religious Organizations

IRB PROTOCOL: # X110913007

INVESTIGATORS: Danielle Hesse

SPONSOR: UAB Department of History and Anthropology

Explanation of Procedures

We are asking you to take part in a research study. This research study will look at how prepared your religious organization is for an emergency or a natural disaster such as a flood, tornado, or hurricane and at how your religious organization responds to disaster. The study is expected to take approximately 45 minutes to 1 hour and 10 minutes total. This study will consist of 60 religious organizations, all from Birmingham, Alabama and the neighboring areas.

If you choose to participate in the study, you will be asked to participate in a face-to-face interview about your religious organization's level of preparedness for disaster, how your organization responds to disasters, and how your organization's religious beliefs influence preparedness level and response to disaster. Information will also be collected pertaining to religious denomination, the size of your congregation, the ethnicity of your congregation, the average age of your congregation, and whether your religious organization is in a rural location or urban location. The duration of the interview is 35-60 minutes.

Risks and Discomforts

This study does not involve any more risk or discomfort than daily life. There are no anticipated risks to you or your religious organization.

Benefits

You may not benefit directly from taking part in this study. However, this study may help us to better understand whether or not religious communities are prepared for disaster, why they are or are not prepared, and what assistance they provide after disasters occur. These benefits can lead to further research projects which could help religious organizations better prepare for disasters.

Alternatives

The alternative is to not participate in the study.

Confidentiality

Information obtained about you and your religious organization for this study will be kept confidential to the extent allowed by law. However, research information that identifies you and your religious organization may be shared with the UAB Institutional Review Board (IRB) and others who are responsible for ensuring compliance with laws and regulations related to research, including people on behalf of the Office for Human Research Protections (OHRP). All personal identifying information (names, phone numbers, and email addresses) will be kept in a secure location and will not be used for purposes other than this study. The results of this study may be published, but your name and the name of your religious organization will not be given out. The denomination of your religious organization will be used to discuss the results of this study.

Refusal or Withdrawal without Penalty

Your taking part in this study is your choice. There will be no penalty if you decide not to be in the study. If you decide not to be in the study you will not lose any benefits you are otherwise owed. You are free to withdraw from this research study at any time. Your choice to leave the study will not affect your relationship with this institution.

Cost of Participation

There will be no cost to you from taking part in this study.

Payment for Participation in Research

You will not be paid to participate in this study.

Questions

If you have any questions, concerns, or complaints about the research please contact **Danielle Hesse**. She will be glad to answer any of your questions. **Ms. Hesse's email is dhesse1@uab.edu**. You may also contact her if you wish to learn the results of the research.

If you have questions about your rights as a research participant, or concerns or complaints about the research, you may contact the Office of the IRB (OIRB) at (205) 934-3789 or 1-800-822-8816. If calling the toll-free number, press the option for "all other calls" or for an operator/attendant and ask for extension 4-3789. Regular hours for the OIRB are 8:00 a.m. to 5:00 p.m. CT, Monday through Friday. You may also call this number in the event the research staff cannot be reached or you wish to talk to someone else.

Legal Rights

You are not waiving any of your legal rights by signing this informed consent document.

Signatures

Your signature below indicates that you agree to participate in this study. You will receive a signed copy of this document.

Print Name

Signature of Participant

Date

Print Name

Signature of Principal Investigator

Date



Form 4: IRB Approval Form
Identification and Certification of Research
Projects Involving Human Subjects

UAB's Institutional Review Boards for Human Use (IRBs) have an approved Federalwide Assurance with the Office for Human Research Protections (OHRP). The Assurance number is FWA00005960 and it expires on August 29, 2016. The UAB IRBs are also in compliance with 21 CFR Parts 50 and 56.

Principal Investigator: HESSE, DANIELLE
Co-Investigator(s):
Protocol Number: X110913007
Protocol Title: *Disaster Preparedness and Response Among Religious Organizations*

The IRB reviewed and approved the above named project on 10-11-11. The review was conducted in accordance with UAB's Assurance of Compliance approved by the Department of Health and Human Services. This Project will be subject to Annual continuing review as provided in that Assurance.

This project received EXPEDITED review.

IRB Approval Date: 10-11-11

Date IRB Approval Issued: 10-11-11

Marilyn Doss, M.A.
Vice Chair of the Institutional Review
Board for Human Use (IRB)

Investigators please note:

The IRB approved consent form used in the study must contain the IRB approval date and expiration date.

IRB approval is given for one year unless otherwise noted. For projects subject to annual review research activities may not continue past the one year anniversary of the IRB approval date.

Any modifications in the study methodology, protocol and/or consent form must be submitted for review and approval to the IRB prior to implementation.

Adverse Events and/or unanticipated risks to subjects or others at UAB or other participating institutions must be reported promptly to the IRB.

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