

2015

# Minorities' Perception of the Comprehensive Emergency Management Model of Distributing of Information

Lawrence Davis  
*Walden University*

Follow this and additional works at: <https://scholarworks.waldenu.edu/dissertations>

 Part of the [Communication Commons](#), [Public Administration Commons](#), and the [Public Policy Commons](#)

---

This Dissertation is brought to you for free and open access by the Walden Dissertations and Doctoral Studies Collection at ScholarWorks. It has been accepted for inclusion in Walden Dissertations and Doctoral Studies by an authorized administrator of ScholarWorks. For more information, please contact [ScholarWorks@waldenu.edu](mailto:ScholarWorks@waldenu.edu).

# Walden University

College of Social and Behavioral Sciences

This is to certify that the doctoral dissertation by

Lawrence Davis

has been found to be complete and satisfactory in all respects,  
and that any and all revisions required by  
the review committee have been made.

## Review Committee

Dr. Kristie Roberts, Committee Chairperson,  
Public Policy and Administration Faculty

Dr. Christina Spoons, Committee Member,  
Public Policy and Administration Faculty

Dr. Tanya Settles, University Reviewer,  
Public Policy and Administration Faculty

Chief Academic Officer  
Eric Riedel, Ph.D.

Walden University  
2015

Abstract

Minorities' Perception of the Comprehensive Emergency Management Model of Distributing of  
Information

by

Lawrence Davis

MA, Troy University, 2005

BS, Valdosta State University, 1992

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Public Policy and Administration

Walden University

April 2015

## Abstract

Failure to receive critical and timely information from emergency management professionals (EMPs) may lead to the loss of life during disasters and emergencies. Recent research and government reports have indicated that there may be communication failures between EMPs and minority community members, though little is known about how minority communities perceive EMP communication efforts. The central research questions and purpose of this study were designed to explore the experiences of minority community members in receiving and interpreting disaster-related communications from EMPs. Data for this phenomenological study were acquired through in-depth interviews with 13 members of ethnic and racial minority groups in a southern state. The data were transcribed, inductively coded, and analyzed for trends, themes, and patterns. This study yielded two key findings. First, members of minority groups perceive a lack of dialogue and interaction from local EMPs. Second, Kim's theory of interethnic communication offers relevant explanatory value in this particular population. Another interesting finding is that respondents indicated that they were much more likely to be open to communication from the EMPs through their church rather than other official communication venues. These findings offer opportunities for positive social change and enhanced communication between EMPs and their minority constituents. Effective communication methods that EMPs might implement include creating strategic alliances with community cultural centers such as churches, civic organizations, and other places at which members of minority communities interact.

Minorities' Perception of the Comprehensive Emergency Management Model of Distributing  
Information

by

Lawrence Davis

MA, Troy University, 2005

BS, Valdosta State University, 1992

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Public Policy and Administration

Walden University

April 2015

## Dedication

I dedicate this dissertation to my late mother and father, Vera and John Davis. They instilled in me basic qualities of determination, respect, and hard work. They are forever missed and cherished in my memories.

## Acknowledgments

This dissertation could not have been completed if it had not been for my faith in God and the support of my committee members, editor, family, and friends.

I am extremely thankful for the committee members who actually made it with me through the entire process: Dr. Kristie Roberts-Lewis, Dr. Christina Spoons, and Dr. Tanya Settles. I appreciate their guidance, patience, and dedication to helping me achieve my academic goals very much.

I extend special thanks to my editor, Ms. Lauren M. Jones. The value of a good editor cannot be stressed enough. I hope that our involvement in this project will become an enduring relationship that will continue in the future as I work on future publications. Her professionalism, candor, and creativity were a tremendous help and support throughout the development of this dissertation.

Finally, I want to thank my family. Much of what I do springs from my desire to make things better for those near and dear to my heart. I am eternally grateful to my late parents, Vera and John Davis, who taught me the value of determination, respect, and hard work. To my children, Kiara, Chauncey, and Velana, this academic accomplishment is only a guide and roadmap for you to follow and continue while you make your own way in life.

## Table of Contents

List of Tables .....	vi
List of Figures .....	vii
Chapter 1: Introduction to the Study.....	1
Introduction.....	1
Background of the Problem .....	5
Statement of the Problem.....	7
Purpose of the Study .....	8
Research Questions .....	9
Theoretical Framework .....	11
Nature of the Study .....	13
Operational Definitions of Terms .....	14
Assumptions.....	18
Scope and Delimitations .....	19
Limitations .....	19
Significance of the Study .....	20
Summary .....	22
Chapter 2: Literature Review .....	24
Introduction.....	24
Literature Search Strategy.....	25



Theoretical Foundation .....	26
Interethnic Communication Theory .....	26
Punctuated Equilibrium Theory .....	32
Organization Theory .....	34
Principle 1: Comprehensive .....	38
Principle 2: Progressive .....	39
Principle 3: Risk-Driven .....	39
Principle 4: Integrated.....	39
Principle 5: Collaborative .....	39
Principle 6: Coordinated .....	39
Principle 7: Flexible.....	39
Principle 8: Professional .....	40
Current Research Literature .....	43
Emergency Management Communication Processes and Challenges.....	43
Comprehensive Emergency Management Plans.....	45
Disaster Mitigation.....	48
Emergency Management and Stakeholders’ Involvement .....	59
Emergency Management and Minority Population Considerations .....	66
Summary and Conclusions .....	69
Chapter 3: Research Method.....	70

Introduction.....	70
Research Design and Rationale.....	74
Research Questions.....	75
Data Collection .....	76
Role of the Researcher .....	76
Methodology.....	77
Participant Selection .....	77
Instrumentation .....	79
Procedures.....	79
Data Analysis .....	80
Issues of Trustworthiness.....	82
Validity and Reliability.....	82
Informed Consent and Ethical Considerations .....	83
Summary.....	84
Chapter 4: Results.....	86
Introduction.....	86
Setting .....	87
Demographics .....	87
Data Collection .....	87
Data Analysis .....	88

Evidence of Trustworthiness.....	90
Results.....	91
Questions 1-3 .....	91
Interview Data Themes – Questions 4-10.....	94
Overarching Themes.....	100
Summary.....	101
Chapter 5: Conclusions and Recommendations .....	102
Introduction.....	102
Interpretation of the Findings.....	102
Limitations of the Study.....	107
Recommendations.....	107
Implications of this Study .....	109
Implications for Social Change.....	110
Recommendations for Action .....	111
Recommendations for Further Study .....	113
Researcher’s Experience with the Research Process .....	113
Conclusion .....	114
References.....	116
Appendix A: Letter of Cooperation from A Kentucky Missionary Baptist Church.....	132
Appendix B: Email Invitation to Participate in the Study .....	134

Appendix C: Consent Form for Minority Church Members ..... 135

Appendix D: Interview Questions ..... 139

List of Tables

Table 1 Kim's (2005) Contextual Theory's Eight Theorems ..... 29

## List of Figures

Figure 1. Question 1 - Do you know who your local emergency manager is?.....	92
Figure 2. Question 2 - Have you ever heard of all hazards disaster mitigation and know what it is? .....	94
Figure 3. Question 3 - Have you ever heard of all hazards disaster mitigation and know what it is? .....	94

## Chapter 1: Introduction to the Study

### **Introduction**

Emergency management professionals (EMPs) can save lives and minimize damage by providing timely and effective warnings as well as critical information prior to a disaster occurrence. Previous studies have shown that there is a need to improve the process of communicating and disseminating emergency risk information to minority populations (Hawkins, J., & Rowel, R., 2007). Supporting research conducted by Anthony Peguero indicates that Latinos are not being prepared for emergencies because of problems associated with the dissemination of hurricane mitigation information (Peguero, 2006).

Communication difficulty between African Americans and European Americans is not a new concept. In a 1995 article, Mark P. Orbe indicated that there was a need for awareness pertaining to cultural differences within the communication process to avoid potential problems that plagued interethnic interaction (Orbe, 1995). The current curriculum for emergency management instruction (EMI) does not require or contain any cultural awareness or diversity training, which could help EMPs communicate more effectively with minorities. Consequently, lack of awareness by EMPs today could influence their ability to communicate with minority populations and hinder the effective distribution of emergency preparation information. This lack of preparation has affected EMPs' ability to communicate effectively with minorities, thus impeding their ability to communicate pertinent emergency management information to these populations. According to Waters (2002), a survey conducted among members of the Oakdale, CT fire department touted the benefits of "developing and implementing a cultural awareness program to assist emergency medical services personnel with handling emergencies of people of different cultures" (p. 2). Through interviews with purposively selected minorities, this research

study sought to obtain a greater understanding of the actual perceptions about the effectiveness of the information distribution attempts made by EMPs. Further, this study sought to understand if, in fact, minority populations are actually getting this information and taking appropriate action.

According to the National Climatic Data Center's (NCDC) 2012 statistics, "there were 11 weather and climate disaster events with losses exceeding \$1 billion each across the United States". This makes 2012 the second costliest year since 1980, with a total of more than \$110 billion in damages throughout the year (National Climatic Data Center, 2012). Along with natural disasters, including notable examples such as Hurricane Katrina and Hurricane Rita in 2005, and Hurricane Sandy in 2012, the U.S. also faced manmade disasters such as the devastating terrorist attacks on September 11, 2001 (9/11) and the Boston Marathon bombing terrorist attack in 2013. Each of these events required the dissemination of pertinent emergency preparedness information to people affected by these disasters in order to allow them to take appropriate action to survive or exit the distressed areas as quickly as possible.

Research shows that accurate information is not distributed effectively to "ethnically diverse populations throughout the United States" (Fothergill, Maestas, & Darlington, 1999; Peguero, 2006). Thus, emergency managers make the wrong assumption that all people are receiving, understanding, and taking appropriate action in response to their disaster warnings, plans, and information. Recent disasters in the United States and tragedies associated with manmade and natural disasters indicate that, during lulls or periods of stasis between these events, EMPs should aggressively ensure that people are informed about how to take proper steps to prepare for these events. Outside of active disasters, EMPs work to provide citizens with information that would help promote their efforts to prepare for emergencies.



It is important to remove barriers to the communication process that prevent EMPs from engaging in information dissemination. Most emergency managers are Caucasian males aged 21-62 with a mean age of 46. This demographic has a strong potential for presenting communication barriers between EMPs and the minority populations they serve (Emergency Management Demographics, 2004). An interethnic communication study is a platform used to determine if effective communication is taking place. This type of study has a strong potential to identify communication barriers between EMPs and the minorities who tend to be disproportionately affected by natural and manmade disasters. If validated, this hypothesis would indicate that local EMPs' efforts to provide pertinent information to their constituents have not been effective. As a result, not all citizens receive resources and services in the event of an emergency, nor are they all receiving assistance with developing disaster and emergency plans so that they can take steps to mitigate in the event of a future event. With assistance from EMPs, citizens typically engage these steps during the comprehensive emergency management (CEM) model's preparation and mitigation phases (McEntire, 2007).

Emergency managers in the United States use the CEM model, which defines four phases of emergency management: mitigation, preparedness, response, and recovery (Blanchard et al., 2007). The dissemination of emergency management information so that citizens can respond and react is critical to saving lives, and reducing property damage. Flaws in this process that impede effective emergency management must be addressed (Perry & Greene, 2007; Rodriguez, Quarantelli, & Dynes, 2007; Slovic, 2000; Waugh & Streib, 2006; Weber & Hsee, 1998). Despite improvements made in the CEM, research indicates that minorities are still not receiving information in a timely and accurate manner, thus indicating that there are gaps in the CEM process (Cwiak et. al., 2004).

Peguero (2006) investigated the dissemination of hurricane mitigation among Latinos in Florida. Peguero's study focused on the problems associated with communication, most notably language challenges. Peguero hypothesized that, in comparison to Caucasian families, Latino homeowners use family relationships as an important source of hurricane mitigation information. The findings of the study support this hypothesis, including the conclusion that not all citizens are prepared to deal with actual or pending disasters. Although Peguero (2006) focused on comparing ethnic and minority populations with Caucasian communities, this study's findings also highlighted connections among several factors, including socioeconomic differences, language barriers, minority preferences for particular information sources, and distrust of governmental authorities. This wariness appears to be associated with racial and ethnic minorities' vulnerability to disasters.

A significant advantage of the present dissertation study is that it could be conducted anywhere that has a large minority population from which to seek volunteers. A suitable pool of minorities is likely to be found in any city in the United States that has churches or other organizations that are predominantly minority in composition. Emergency managers in the United States are predominantly Caucasian males (Holdeman, 2014), and the population that was studied is largely minority, suggesting that the results are likely to be applicable throughout the country. The overall intent was to determine the effectiveness of the emergency managers in the local community to be able to distribute information to the constituents in their respective jurisdiction. This was arrived at by seeking out the perceptions of the minorities in any particular location.

This research explored the perceptions of minorities in relation to how local EMPs in the United States communicate information effectively. It specifically examined whether or not

minorities were receiving disaster mitigation information in a timely and accurate manner at A Kentucky Missionary Baptist Church (AKMBC). For the purpose of this study, I have chosen not to use the actual name of the church from which we gathered participants. The same study may be duplicated at similar locations in the future to get an even broader perspective of the effectiveness of local EMPs as they endeavor to communicate with their local areas of responsibility.

Chapter 1 includes the background of the problem, statement of the problem, purpose of the study, research questions, theoretical framework, nature of the study, operational definitions of terms, assumptions, scope and delimitations, limitations, significance of the study, and summary.

### **Background of the Problem**

The EMPs' ability to provide accurate and timely information to affected populations will influence decisions made by local citizens to evacuate or take measures such as going to a shelter. Consequently, it is important for these EMPs to have effective interethnic communication skills in order to be able to communicate effectively with the members of the community are entrusted to protect. The EMPs' actions should therefore include helping community residents develop emergency plans and understand the available resources and services available to them should an emergency or disaster take place. Unfortunately, recent events such as Hurricane Katrina and Rita show that disparities exist in how minorities respond to events (Finch, Emrich & Cutter, 2010). This disparity may be the result of issues with how local EMPs provide information to the minorities in their jurisdictions. The intent of this research was to seek a greater understanding of the perceptions of a predominantly minority population

and glean from them their understandings of if/how they get information from local emergency managers.

Unlike the individual citizen, federal, state, and local governments are required to adhere to various laws and regulations to prepare for potential threats to their jurisdictions such as those provided in the Robert T. Stafford Relief and Emergency Assistance Act of 1974 (Elmore & Brown, 2007). Congress placed special measures in that Act to assist states with preparation, response, and recovery efforts (Luther, 2011). Natural and manmade disasters, such as hurricanes and terrorist attacks, create severe disruptions in the lives of those affected by these disasters. According to the Federal Emergency Management Agency (FEMA), disaster mitigation is the effort to reduce loss of life and property by lessening the vulnerability and impact to communities from disasters (McCarthy & Keegan, 2009).

Mitigation is the first phase of the CEM model and it involves activities that are designed to prevent or reduce losses from disasters (Blanchard et al., 2007), such as effectively disseminating emergency management information to the general public, which is critical to saving lives. However, despite improvements made in the CEM model, research indicates that minorities are still not receiving information in a timely and accurate manner, which indicates gaps in the CEM process (Perry & Greene, 2007; Rodriguez et al., 2007; Slovic, 2000; Waugh & Streib, 2006; Weber & Hsee, 1998). This problem has negatively affected families and communities because it can result in the loss of lives. The use of interpersonal networks, such as family members and community and faith-based organizations, are keys to mitigating communication problems plaguing the CEM process (Peguero, 2006). This study therefore explored the perceptions of minorities in relation to the CEM's process of distributing disaster mitigation information. The study also investigated the timeliness and accuracy of the

information minorities received, and the factors that eventually caused minorities to react or respond to emergencies. Gaining a greater understanding of the perceptions and reactions of minorities when it comes to preparing for emergencies can assist in making further improvements to the CEM model before the next disaster, either natural or manmade.

Additionally, this research study also discusses possible actions and steps taken to address the problem of improving the flow of information regarding all hazards disaster mitigation to minorities. The effort to improve the flow of information is critical during the lulls in between events such as a natural or manmade disaster. The intent is to bring about positive social change, thereby improving the ability of individuals, businesses, and organizations at the local level to prepare for, respond to, and recover from all disasters.

#### Statement of the Problem

If EMPs do not actively engage and communicating with their minority constituents by distributing information regarding planning and preparation for, and surviving and recovery from emergencies and disasters, their inactivity could have tragic consequences for the affected communities. Eight-seven percent of EMPs are Caucasian. It appears as if these EMPs are not communicating with the minority constituents in their local communities. The devastating effects of Hurricane Katrina in New Orleans in 2005 left thousands stranded in the Superdome and killed several thousand other people. It appeared on television that the vast majority of these people were non-Caucasian. One could deduce that from, an interethnic communication perspective, the Caucasian EMPs may not have engaged with their minority constituents in order to communicate effectively with them. One attribute of interethnic communication is that the theory involves a single communicator engaging with another person (Kim, 2005). The single communicator, in this case, is the EMP. Therefore, I selected a participant pool of local

minorities to participate in this study to investigate whether or not they had any communication with their local EMP.

Having interethnic communication skills to disseminate information to citizens and inform them about the CEM model is critical to saving lives. It is especially important to get information out to minorities and all citizens in local communities' in-between disasters. Preparing for a disaster during the event is not an ideal time for such groundwork. Flaws in disseminating information impede effective emergency management, and ineffective communication is a crucial pitfall (Perry & Greene, 2007; Rodriguez et al., 2007; Slovic, 2000; Waugh & Streib, 2006; Weber & Hsee, 1998). This problem has negatively affected families and communities, which can result in the loss of lives.

The use of interpersonal networks, such as those of family members and community and faith-based organizations, are crucial to mitigating communication problems plaguing the CEM process (Peguero, 2006). However, interpersonal networks are an alternative to the actual process of a local EMP taking time to engage with his or her constituents and developing a rapport and relationship.

### **Purpose of the Study**

The two-fold purpose of this qualitative case study was 1) to understand minorities' perceptions of how effectively emergency managers use interethnic communication to convey the CEM's process of distributing information, and 2) to investigate the timeliness and accuracy of the information minorities received about disaster mitigation information at A Kentucky Missionary Baptist Church (AKMBC). During the timeframe that there is not an emergency or disaster is occurring, people should be preparing for these traumatic events. Effective communication should take place during such lulls to develop emergency plans by citizens and

for emergency managers to get out into communities and become involved in the preparation and mitigation phases of the CEM process. Thus, the importance of communication is vital to how effectively this takes place among minorities and those typically least prepared for tragedies or emergencies. According to Blanchard et al. (2007),

Comprehensive emergency management is the preparation for and the carrying out of all emergency functions necessary to mitigate, prepare for, respond to, and recover from emergencies and disasters caused by all hazards, whether natural, technological, or human caused. (Blanchard, p. 4)

FEMA defines several two elements of effective emergency management, preparedness and response, in the following way:

...preparedness is focused on the development of plans and capabilities for effective disaster response. Response is the immediate reaction to a disaster, and recovery consists of those activities that continue beyond the emergency period to restore critical community functions and to manage reconstruction. (Stone, 2012)

### **Research Questions**

The need for emergency management professionals to be able to communicate to a diverse population of local citizens that they support is essential to providing timely and accurate information. Effective response to disasters must include “planning, coordination, and communication among the many people and organizations involved” (Rubin, 2007). This research study was designed to gain a greater understanding of how effective local emergency management professionals are communicating with predominantly minority populations. The following research questions used the qualitative case study approach to engage the participants in the form of interviews.

1. Does interethnic communication play a role in whether or not local emergency management professionals and local resources (such as support centers/shelters) are available to minority residents?
2. From the perspective of the minority participants in this study, what challenges exist regarding acquiring information and training opportunities from local emergency management professionals?
3. What hindrances influence the effectiveness of emergency management professionals and hinder their communicating with predominantly minority populations regarding disaster mitigation information?

The first question focuses on the importance of emergency management professionals to be able to communicate with diverse populations. Therefore, it is essential that they are able to engage in interethnic communication in a competent manner to disseminate information. Given that the preponderance of these professionals are Caucasian males, data analyzed may show flaws in the approaches and processes emergency managers currently utilize to reach out and interact with minority populations.

The second question focuses on the perceptions of the minority participants and possible flaws that are prevalent in how information is conveyed to them specifically pertaining to training and available resources. It will give some indication of the ability of emergency managers to instruct local citizens on developing emergency plans and knows where people can go in the event of an emergency or disaster. It also will indicate if this interaction is taking place at all and if so to what extent. The responses could also lead to providing solutions and options to improve the process if there is a need to improve. Finally, the last question examines possible hindrances to the communication process between the emergency managers and professions and



local citizens, especially minorities. Analysis of the responses could lead to removal of barriers and improvements in the overall process currently utilized by emergency management professionals to interact and communicate effectively with minority populations.

### **Theoretical Framework**

Interethnic communication is the primary theory associated with this research study along with punctuated equilibrium and organization theories provide additional theoretical case study. The results of this research could have wide-ranging implications regarding how effectively emergency management professionals are at communicating to ethnic populations. It may also show that intercultural communications training may need to be included in the training that emergency managers receive in order to be more effective at addressing issues associated with disseminating information pertaining to emergencies and disasters.

Past research on interracial communication defined it generally as communication between people of different racial groups within the same nation-state (Blubaugh & Pennington, 1976). Interethnic communication is used interchangeably with interracial communication, which refers to communication between two people from different ethnic groups (Orbe & Harris, 2008). Research in communications has demonstrated that culture plays an important role in how people experience communication (Orbe, 1995). Research conducted in the past also shows potential tensions involved in interethnic interaction and the ways that cultural differences diminish the prospects for effective communication (Orbe, 1995). The racial makeup of the US is changing to the extent that minority groups, especially Hispanic and Asian Americans will no longer be a racial majority (US Census Bureau, 2000).

Intercultural communication has become a prominent field of study within the communication discipline since the 1980s (Chen & Starosta, 1998). Intercultural communication

has become an umbrella term to contain all aspects of communication that involve cultural differences. Part of the premise behind this study is that there are differences between the general demographic make-up of the emergency managers and the citizens they serve. The managers are predominantly Caucasian men, and the lack of diversity among them could affect the managers' ability to communicate effectively with their constituents, who are predominantly minority (Cwiak, et. al., 2012). Early research over the last three decades into the various aspects of communications has shown that there is a differentiation between the verbal and nonverbal communication patterns, usage, and styles between African Americans and European Americans (Pennington, 1979).

I considered punctuated equilibrium theory (PET); however, I did not select it for this research because this theory is widely used with respect to public policy changes. This particular research does not really apply to policy changes; rather, it applies to changes in individual behavior. The changes are incremental and take place over periods of stasis because there are lulls in between emergencies and disasters when it comes to individuals taking action to prepare, plan, respond and recover from these events. However, this is not a policy issue. Therefore, I chose not to use PET as the primary theory, but I did include it as one of the considered theories.

Organizational theory was also considered to provide the contextual framework for this research. I did not select this theory because organizations come in different sizes such as churches, civic organization or individual families. This particular research deals with local EMPs communicating with their constituents, rather than the workings of organizations. The local office is indeed an organization and depending on the size of the population that the office supports, it will dictate the number of EMPs that are assigned to the office. However, since the scope of this research is very narrow and deals specifically with the actions of individual EMPs

communicating with their own local communities and zones of responsibility, the organizational theory did not fit the needs of this research. If I had focused on an office, this theory might be more feasible. This theory would have been adequate for the theoretical framework, but not as appropriate as interethnic communication theory.

Each EMP must communicate with his or her constituents or risk the consequences of failing to engage in the process of effective communication. Kim's theory was an accurate reflection of the intent of this research in this regard.

A brief overview of the three theories provided in this section with a more detailed explanation is provided in Chapter 2. Kim's theory of Interethnic Communication theory is the primary theory associated with this research (Kim, 2005). Both, organizational theory and the punctuation equilibrium theories could have sufficed for this research. However, with the emphasis on communication it proved to be more relevant to provide the most effective theoretical framework. However, due to the focus on communications, Kim's theory fit this research better. Professionals in the field use the comprehensive emergency management model, which is a set of tactics and strategies to manage disaster planning, preparation, response, and recovery (McEntire, 2007). The theories and strategy is covered in chapter 2 and 3. Ultimately, an individual EMP's attempts to communicate with his or her constituents influenced the decision to choose the interethnic communication theory as the most appropriate for this research. Kim's theory reflected the intent of the research better in this regard.

### **Nature of the Study**

The purpose of this case study research was to understand the perceptions of minorities in relation to EMPs use of the CEM's process of distributing information, and to explore if minorities are receiving disaster mitigation information in a timely and accurate manner at A

Kentucky Missionary Baptist Church (AKMBC). Data were collected for this study by in-depth face-to-face interviews. A convenience sampling was used to select the sample, which included 13 members (both male and female) of AKMBC. The in-depth interviews were transcribed and analyzed for themes and codes. The focus was to elicit information regarding the interethnic communication effectiveness of emergency managers to communicate with this demographic of the population during prior to or in the absence of an emergency or disaster. Additionally, it also sought to gain a better understanding of the level of familiarity with their local emergency management professionals and whether have they been provided with information regarding local resources and support centers/shelters; establishing disaster plans; and what barriers exist that affect them from having emergency plans prior to an event occurring.

The responses analyzed to determine themes and trends associated with their responses. The study, in accordance with parameters established by Walden University's Institutional Review Board (IRB) ensured the ethical protection of research participants. The nature of the study is discussed in further detail in Chapter 3.

### **Operational Definitions of Terms**

***Advisory:*** *A message to say that a hazard is in the early stages of approaching and warnings may follow (Alexander, 2002).*

***Agency:*** A division of government or a nongovernmental organization with a particular function in post disaster works (Alexander, 2002). Government agencies may have statutory responsibilities for particular areas or tasks.

***All-hazards:*** A natural or manmade incident requiring actions to not only protect life, property, environmental, health, and safety, but also minimize the disruption of social, economic and government services or activities (National Response Framework Resource Center, 2008).

***Black-box model:*** A model with internal workings that are not specified (Ljung, 2001). The modeling process therefore relates exclusively to the connection between inputs and outputs.

***Briefing:*** *Advice given to emergency personnel about the incident or disaster whose effects they are about to tackle and regarding the tasks that they will perform (Alexander, 2002).*

***Building failure:*** The partial or total collapse of an architectural or engineering structure (e.g., building, bridge,) or its sudden, unexpected, and total inability to fulfill the function for which it was designed (Alexander, 2002). Failure is caused when the load (usually the dynamic, or transient, load) on a building exceeds its strength, in terms of rigidity (stiffness) and flexibility (ductility or ability to absorb the forces that cause deformation).

***Civil protection:*** The process of protecting the general public, organizations, institutions, commerce, and industry against disaster, by creating an operational structure for mitigation, preparedness, response and recovery (Alexander, 2002). Military forces do not play a central role in civil protection, which is in the hands of administrative authorities, such as municipal, provincial, state or national governments.

***Comprehensive emergency management:*** Can be defined as the preparation for and the carrying out of all emergency functions necessary to mitigate, prepare for, respond to, and recover from emergencies and disasters caused by all hazards, whether natural, technological, or manmade (Blanchard et al., 2007).

***Comprehensive emergency management plan:*** The CEMP “specifies the purpose, organization, responsibilities, and facilities of agencies and officials of the political subdivision in the mitigation of, preparation for, response to, and recovery from emergencies and disasters” (Municipal Research and Services Center of Washington, 2013, para. 1).

**Control:** The direction of management and rescue activities in an emergency (Alexander, 2002). Authority for control is specified in legislation and emergency plans. It is allied with the processes of directing and assigning tasks to emergency workers, and assuming responsibility for failures.

**Cost-benefit analysis:** In terms of disasters, the benefits of inhabiting areas at risk, of carrying out various activities in them, and putting oneself at risk, set off against the costs of damage and losses in disaster (including estimated future costs of the event) and of mitigation works (Alexander, 2002).

**Culture:** The accumulation of beliefs, traditions, customs and historical memories that collectively define how a given group or population lives (Alexander, 2002).

**Database:** A collection of information (in numerical or textual form or as images) that has been classified and stored in such a way that potential users (Alexander, 2002) can access it selectively. .

**Emergency:** An imminent or actual event that threatens people, property, or the environment, and which requires a coordinated and rapid response (Alexander, 2002).

**Emergency manager:** They have the critical task of “coordinating multi-organizational, intergovernmental, and intersectional response and recovery operations” (Waugh & Streib, 2006, p. 134) leading up to, during, and after a disaster.

**Emergency operation center:** The “nerve-center” of disaster-relief housing in a room or rooms, an apartment, or a building located outside the main disaster area, but usually not at great distance from it (Alexander, 2002).

***Federal Emergency Management Agency (FEMA):*** An agency of the U.S. Federal government charged with reducing losses caused by disaster and protecting critical infrastructure (Alexander, 2002).

***Hazard:*** A natural, technological, or social phenomenon that threatens human lives, livelihoods, land use, property or activities (Alexander, 2002).

***Incidence:*** The number of new cases of a disease or injury recorded in a given population in a specified period of time, usually 24 hours (Alexander, 2002).

***Manmade disasters:*** “Catastrophic events that result from human decisions. Manmade disasters can be sudden or long-term disasters. Sudden manmade disasters are known as socio-technical disasters” (Shaluf, 2007, p. 687).

***Mitigation:*** Medium to long-range activities designed to reduce the impact of future disasters (Alexander, 2002). Methods are divided into structural mitigation (e.g., building levees along a river to reduce flooding), semi-structural (e.g., allowing floodable areas to exist along a flood plain to contain flood waves) and nonstructural (e.g., flood-damage insurance). Most modern mitigation strategies involve combination of methods (Alexander, 2002).

***Natural disaster:*** The impact of an extreme natural phenomenon on the human system (lives, livelihoods, and activities; Alexander, 2002).

***Natural hazard:*** An extreme natural phenomenon that threatens human lives, livelihoods, or use of land (Alexander, 2002).

***Organizations in disaster:*** Discrete social systems characterized by high degrees of internal interaction (Alexander, 2002). Sociologist divides them into adapting (changing function to meet the needs of the disaster), emerging (newly created to meet the needs), expanding

(absorbing volunteers, conscripted, or convoked members), extending (enlarging their brief to meet needs created by the disaster), and redundant (not useful to the relief effort).

***Pre-disaster mitigation:*** The concept of investing prior to disasters to reduce the vulnerability of communities to future disasters (McCarthy & Keegan, 2009).

***Preparedness:*** Short-term actions taken to reduce the impact of impending disaster (Alexander, 2002). The actions include warning, evacuation, and stockpiling of emergency supplies.

***Recovery:*** The coordinated process of supporting disaster affected communities in reconstruction of the physical infrastructure and restoration of emotional, social, economic, and physical well-being (International Disaster Risk Management, 2009).

***Risk management:*** The process of applying measures that reduce risks after the risk has been identified, characterized, and analyzed (Alexander, 2002).

***Vulnerability:*** Susceptibility to loss, damage, destruction, or casualty in future disasters (Alexander, 2002). It is strongly related to poverty, lack of mitigation, lack of political power, and marginalization, but it cannot be predicted completely by any of these factors.

***Window of opportunity:*** Public opinion is sensitized to the problem of hazards and disasters to the extent that there is substantial demand for measures designed to increase safety and reduce future risks (Alexander, 2002).

### **Assumptions**

Assumptions made for this study were:

- The in-depth, face-to-face interviews were appropriate for understanding minorities' perceptions of the CEM's process of distributing disaster mitigation information. The



study also investigated the timeliness and accuracy of the information minorities received.

- This research can be replicated in any predominantly minority community across the US and have similar results.
- The case study's in-depth interview questions will answer the research questions.
- The case study's in-depth interview questions worded so that the participants can accurately interpret the questions asked.
- The participants will answer the interview questions honestly and openly by sharing their perceptions, as minorities, of the CEM's distribution process for disaster mitigation information and the accuracy and timeliness of the information they received.

### **Scope and Delimitations**

The participants included 13 adult minority members (both male and female) of AKMBC. The study excluded Caucasian members of the church. The research focused on the minorities' perceptions of the CEM's process of distributing disaster mitigation information and the timeliness and accuracy of the information minorities received. Therefore, the study only included minority-generated data, where participants had the opportunity to share their lived experiences. Future studies can be conducted to compare and contrast the perceptions of Caucasian members of the church or even a larger participant pool.

### **Limitations**

This case study research had several limitations. The research stemmed from one geographical region, specific participant population, a small sample size, and limitations in data verification. Generalizing the results of the study is one possible limitation since I used a convenience sample of 13 minority participants of AKMBC; therefore, the results of the study

may be limited beyond similar population of minorities. Another possible limitation is that the study used a small number of minorities; therefore, the results are not generalized beyond minorities that participated in this study. In addition, participants may have limited knowledge of current terminology regarding emergency management; therefore, participants are provided definitions to ensure that they respond properly to the interview questions.

Furthermore, this study explores the perceptions of minorities in relation to how effectively emergency managers are utilizing interethnic communication skills to use the CEM's process of distributing disaster mitigation information and whether minorities are receiving this information in a timely and accurate manner. Therefore, this study did not focus on all processes on the CEM model or the leadership of emergency managers. Another possible limitation is bias issues, such as social desirability bias, as participants may want to look good so they may respond dishonestly (Creswell, 2009).

### **Significance of the Study**

Despite improvements made in the CEM model, research indicates that minorities are still not receiving information in a timely and accurate manner, which indicates gaps in the CEM process (Perry & Greene, 2007; Rodriguez, Quarantelli, & Dynes, 2007; Slovic, 2000; Waugh & Streib, 2006; Weber & Hsee, 1998). The CEM model provides emergency management professionals with a model to provide citizens with information to mitigate, prepare, respond, and recover from disasters and emergencies (Blanchard et al., 2007). However, the model is only as effective if the information is provided to the diverse population from managers that have interethnic communication skills. Attaining accurate and reliable mitigation information and having a disaster plan, is key to people surviving a disaster (Bolger, 2003). During the mitigation and preparation phases is when the majority of the actions and steps should take place

in order to inform citizens and help people and organizations prepare for these events. With so much of the world's population in locations with hazards and risks from earthquakes, tornadoes, thunderstorms, snowstorms, forest fires, cyclones, floods, tsunamis, hurricanes, and other disasters, the need for information is critical in order for people to survive.

Findings from this study can be used to improve the CEM model and help emergency managers in distributing disaster mitigation information to minorities. Along with the emergency management and public policy fields, a wide array of other fields might be interested in the research findings as well, to include the fields of public health study in disaster management, psychology, and sociology. The findings from the study may also be applicable to many agencies and organizations, to include emergency managers, first responder agencies, the Department of Homeland Security (DHS), and to the FEMA. The results may result in changes in the process of how these agencies communicate and disseminate information. In responding to Katrina, Waugh and Streib (2006) noted criticisms directed at the DHS and FEMA, which included a lack of leadership and inability to mount an effective disaster response and relief to those affected by the disaster.

This research study discusses possible actions and steps taken by emergency managers to address the problem of improving the flow of information regarding all hazards disaster mitigation to minorities. Possible actions includes improved emergency management communications among individuals, families, faith-based organizations, communities, volunteers, citizen responders, emergent groups, private organizations, and governmental organizations; thus creating a stronger network. The intent is to bring about positive social change, thereby improving the ability of individuals, businesses, and organizations at the local level to prepare for, respond to, and recover from all disasters.

The study may, therefore lead to positive social change by improving the CEM process of distributing mitigation information, thus saving lives of residents and first responders who are affected by disasters and the consequences of terrorism. The research added to the effort to make continuous improvements in the area of information dissemination in emergency management, thus, learning from failures that took place in mitigating and preparing for disasters and hazards.

### **Summary**

The purpose of this case study research was to understand the perceptions of minorities in relation to how effectively emergency managers are utilizing interethnic communications skills to with the CEM model's process of distributing information and to explore if minorities are receiving disaster mitigation information in a timely and accurate manner at AKMBC.

Interethnic communication theory, punctuated equilibrium theory, and organization theory, serve as the theoretical foundation of this case study research. A case study research design was used and data were collected using in-depth face-to-face interviews. Convenience sampling was used to select the sample, which included 13 members (both male and female) of AKMBC.

Findings from this study may lead to positive social change by improving the CEM process of distributing mitigation information, thus saving lives of residents and first responders who are affected by disasters and the consequences of terrorism. In addition, findings from the study may also result in a stronger network by improving the ability of individuals, businesses, and organizations working together at the local level to prepare for, respond to, and recover from all disasters. The research will therefore add to the effort to make continuous improvements in the area of information dissemination in emergency management, thus, learning from failures that took place in mitigating and preparing for disasters and hazards.

Chapter 1 included the background of the problem, statement of the problem, purpose of the study, research questions, theoretical framework, nature of the study, operational definitions of terms, assumptions, scope and delimitations, limitations, significance of the study, and summary.

Chapter 2 will review the literature search strategy; theoretical foundation; current literature review, which includes emergency management communication processes and challenges, comprehensive emergency management plans, disaster mitigation, emergency management and stakeholders' involvement, and emergency management and minority population considerations; and summary and conclusions.

Chapter 3 will review the research design and rationale, role of the researcher, methodology, issues of trustworthiness, and summary. Chapter 4 presents the results of the data collected for this study. Chapter 5 contains the findings, results, and conclusion, as well as recommendations for future research.

## Chapter 2: Literature Review

### **Introduction**

The purpose of this case study research was to understand the perceptions of minorities in relation to how effectively emergency managers use interethnic communication skills with the comprehensive emergency management (CEM) model's process of distributing information, and to explore if minorities are receiving disaster mitigation information in a timely and accurate manner. It is critical in saving lives to disseminate emergency management information using the CEM model in periods during which there is occurring or imminent event or disaster affecting the public. When there are flaws in this process, effective emergency management is impeded (Perry & Greene, 2007; Rodriguez et al., 2007; Slovic, 2000; Waugh & Streib, 2006; Weber & Hsee, 1998).

Despite improvements made in the CEM model, multiple studies have indicated that minorities in the United States have still not receiving information in a timely and accurate manner. This indicates gaps in the CEM model's process of communication across ethnic lines. This problem has negatively affected families and communities, potentially resulting in the loss of lives. The use of interpersonal networks, such as family members and community and faith-based organizations, has been identified as a means of mitigating communication problems plaguing the CEM process (Peguero, 2006). This study specifically explored minorities' perceptions of the CEM's process of distributing disaster mitigation information and the timeliness and accuracy of the information minorities received, which will assist CEM in making further improvements to their model before the next disaster, either natural or manmade.

Chapter 2 reviews the literature search strategy; theoretical foundation; current literature on this topic, including emergency management communication processes and challenges,

comprehensive emergency management plans, disaster mitigation, emergency management and stakeholders' involvement, and emergency management and minority population considerations; and contains a summary and conclusions.

### **Literature Search Strategy**

Search strategies for the literature included an in-depth search in all Walden University Library research databases, including ProQuest and all EBSCO host databases, such as Business Source Premier Complete, Political Science Complete, PsycARTICLES, PsycINFO, and SAGE Premier. The primary search terms included *interethnic communication theory*, *punctuated equilibrium theory*, *comprehensive emergency management*, *emergency managers*, *disaster mitigation*, and *emergency preparedness*. Along with reviewing the body of each article, dissertation, and thesis, I further reviewed each piece of literature's reference section to identify additional resources. I examined relevant organizational websites, such as those of the Federal Emergency Management Agency (FEMA) and the Department of Homeland Security (DHS).

Three books provided the foundation for this research study. The first is *Principles of Emergency Planning and Management* (2002), edited by David Alexander, which is one of the foundational publications for case study research in the field of disaster mitigation and emergency management. The second is the 2012 book *Emergency Management: The American Experience 1900-2010 (2nd ed.)*, edited by Claire Rubin. The third is *Handbook of Disaster Research* (2007), edited by Havidan Rodriguez, Enrico Quarantelli, and Russell Dynes. I reviewed, analyzed, compared, contrasted, and synthesized the information in these books to extract information regarding the CEM model, especially its use by emergency management professionals in the field of emergency management, to inform this dissertation study.

## **Theoretical Foundation**

Three theories form the theoretical foundation of this study: interethnic communication theory, punctuation equilibrium theory, and organizational theory. These theories highlight the importance of communication, as explained through interethnic communication theory; the importance of interaction during lulls, or periods of punctuation equilibrium; and the importance of organizational interaction and the human dimension of organizing, as showcased in organizational theory (Shaffritz et al. 2005).

### **Interethnic Communication Theory**

Interethnic communication theory serves as the primary theoretical framework for this research study. Professionals in the field of emergency management must be able to communicate effectively with all citizens that fall within their purview and responsibility. This theory is relevant for this research project because most of the emergency management professionals in the United States are Caucasian males, and the next largest category is Caucasian females; these demographics contrast strongly with many of their constituents. This demographic disparity is a problem because if the emergency managers (who are predominately Caucasian) are not comfortable or capable of communicating with minorities such as African Americans; then information is not provided that could mitigate the impact of a disaster or an emergency. People tend to interact with people that they are comfortable associating with on a regular basis. Holdeman (2014) observes that,

If we are going to have a greater level of understanding of cultural differences, increased ability to be effective and a greater impact on our capability to relate to our constituents, it will require that when they see emergency managers, some look like them. (Holdeman, 2014)



Despite the veracity of Holdeman's statement, the percentage of the professionals being Caucasian is not the focus of this particular study; but their ability to communicate effectively with their constituents is the main concern of this research. Emergency managers need to be able to communicate effectively to the citizens for whom they are responsible when it comes to disaster mitigation, regardless of their personal background.

The ability or desire to communicate takes into consideration Kim's (2005) contextual theory of interethnic communication. The theory examines the interethnic behavior of a single communicator to explain communication behaviors (or activities) of individuals to "be meaningfully understood without taking into account a set of historical, situational, and psychological forces that make up the context for particular interethnic behaviors" (Kim & McKay-Semmler, 2009). The single communicator selected in this particular study is the local emergency management professional(s). The communication-related question investigated by this study was whether single communicators engaged in consistent activities or otherwise attempted to initiate communication with local minority populations to inform them of emergency management information in a timely manner.

Interethnic communication theory addresses how people interact in specific situations and how they communicate with each other. Based on this theory, different ethnic groups' ways of communicating may differ from other groups' communication styles. Modes of communication include speaking and behavior. Even though most emergency managers are white, they need to be able to communicate effectively with their constituents who may have modes of communication that differ from the managers' communication styles. Emergency managers must be able to have effective dialogues and interactions with their constituents – African-Americans

or other minorities – regardless of the situation, in order to provide sufficient preparation for emergencies. (Kim & McKay-Semmler, 2009).

Kim's contextual theory of interethnic communication has eight theorems to explain the behavior of communication.

Table 1

*Kim's (2005) Contextual Theory's Eight Theorems*

Theorem 1	The more inclusive (exclusive) the communicator's identity orientation, the more associative (dissociative) his or her interethnic communication behavior
Theorem 2	The more secure (insecure) the communicator's identity orientation, the more associative (dissociative) his or her interethnic communication behavior
Theorem 3	The greater the ethnic proximity (distance) between the communicator and the other(s) involved in interethnic communication, the more associative (dissociative) the communicator's interethnic behavior
Theorem 4	The greater the shared (separate) goal structure between the communicator and the other(s) involved in interethnic communication, the more associative (dissociative) the communicator's interethnic behavior
Theorem 5	The more (less) ethnically integrated the communicator's personal network structure, the more associative (dissociative) the communicator's interethnic Behavior
Theorem 6	The greater the institutional equity (inequity) across ethnic groups in the environment, the more associative (dissociative) the communicator's interethnic behavior
Theorem 7	The greater the relative strength (weakness) of the communicator's ethnic ingroup in the environment, the more associative (dissociative) the communicator's interethnic behavior
Theorem 8	The greater the competition intensifying environmental stress, the more dissociative the communicator's interethnic behavior

Theorem 1 of Kim's theory seems to reflect the intent of this research in that the theorem states that the more a communicator feels inclusive or exclusive in their identity orientation, the more associative or dissociative their interethnic communication behavior will be. If an EMP feels included by the members of a community, then his or her interethnic communication behavior will reflect how comfortable they will be engaging with a member of a minority community such as an African American. Theorem 2 indicates that the level of security a communicator feels when interacting with another person also plays a role in interethnic communication. A person's level of comfort or security depends on how often he or she interacts with someone. If an EMP is insecure with communicating with African Americans, the

lack of effective interethnic communication could subsequently affect how information is distributed. The EMP's success in developing a relationship with minorities of any ethnic origin could be affected if the EMP does not feel secure in communicating with minorities. Theorem 3 also deals with the proximity of a communicator. It is difficult to communicate if there is a great deal of physical distance between the EMP and his or her constituents.

Kim's (2005) theory is the primary theory for this case study because of its focus on communication. The aspect of communication or lack of communications is one element of the research that is questioned during the period in between events. The relationship between this research and interethnic communication is that this particular theory highlights the importance of reflecting upon the nuances of how effectively CEM personnel are communicating with their minority constituents. Research is necessary to determine if in fact there are communication concerns between the emergency management professionals and his or her minority constituents, and to gain a better understanding of the effectiveness of the communication flow between the managers and their minority constituents. The objective is to determine if interethnic communication is connected with how effectively, emergency managers are communicating with minorities.

Edward Hall is credited in founding the intercultural communication field during the period of 1951-1955 (Rogers, Hart, & Miike, 2002). According to this theory, "for a variety of reasons, minority ethnic groups prefer to communicate and access information through interpersonal networks and contacts" (Peguero, 2006). Ethnicity can be examined from several topical areas, such as bidialectalism (ability to use two dialects of the same language), communication styles, and nonverbal communication (Orbe, 1995). Diversity among African Americans, which includes their disparate modes of communication, may have been neglected or

not taken into consideration by emergency management professionals in the process of utilizing the CEM to distribute information.

Interethnic communication theory also contends that ethnic minorities have long-standing cultural preferences for methods of communication (Peguero, 2006). Peguero (2006) also notes, “Racial and ethnic minorities display a clear preference for interpersonal networks, particularly family members and other relatives.” when it comes to getting information and all information resources. According to Rodriguez et al., (2007) and Slovic (2000),

The adoption of a recommended action also appears to be correlated with ethnicity and race, with the resulting implication that minorities will be less likely to adopt the recommended action in cases of severe weather events relative to their majority counterparts (Rodriguez et al., 2007). It also reported that minorities are more likely to report higher levels of perceived risk, are less likely to receive the warnings that would allow them to take protective action, and may have limited access to protective resources (who is the author? p. 13).

It is therefore crucial that emergency managers have the ability to effectively communicate across racial and ethnic boundaries when provide information in a timely and accurate manner to the public (Dalib, 2011). The public is ethnically diverse and professionals in the field of emergency management should be cognizant of the demographics of the communities and citizens that are serving. The demographic makeup of the U.S. is changing, for example, the U.S. Census Bureau projected that due to the rapid increment of racial minority groups in the U.S., especially among the Hispanic and Asian populations, there will no longer be a racial majority by year 2042 (Humes, Jones, & Ramirez, 2011).

### **Punctuated Equilibrium Theory**

Punctuated equilibrium is a theory that states unexpected and sudden changes arise out of evolutionary biology and paleontology by Niles Eldredge and Stephen Jay Gould applied to the decisions sciences, physics, organizational theory, and group behavior. It was adapted to social science by social scientist Baumgartner and Jones (Sabatier, 2007) to explain the politics of stability and instrumentalism. It describes policymaking as going through periods of stasis and then something occurs such as an emergency or disaster, which caused changes to take place. For instance, a hurricane would be the catalyst for change. Prior to the changes that take place because of the hurricane, the situation was static or in a period of equilibrium. The changes are primarily focused at policies. The theory has been used in social theory to explain change in complex social systems.

I studied this theory from the perspective of what takes place with disaster mitigation preparation during a period of stasis regarding efforts to establish emergency plans, with special emphasis upon investigating whether emergency management professionals are preparing citizens for these events. Additionally, I looked at minority perspectives about what transpires before an emergency event, particularly when they perceive that their readiness to survive the emergency is adversely affected by a lack of preparation to mitigate the damage from such an event.

When applied to disasters, punctuated equilibrium theory can be interpreted to describe communities are stable or in a state of punctuated equilibrium before a disaster takes place. When a disaster takes place, however, organizations such as governments or churches can do much to mobilize people to action and effect change. The nature of this change can be proactive, with actions taken before a disaster happens. Once a disaster occurs, affected people are no

longer in a state of equilibrium; therefore, the time for preparation has passed, and mobilization is crucial to the safety of the people impacted by the emergency.

Baumgartner and Jones (1993) first presented the theory as a model of policy change. It stipulates that policy generally change incrementally due to several constraints such as institutional cultures, stakes, and the bounded rationality of individual decision-makers. The theory states that policy change punctuated by changes in conditions such as political parties in control, changes in public opinion and changes in society or government. In other words, a situation occurs such as those associated with gun control or “hot” topics that are controversial in nature that create social responses (Dziengel, 2010).

These situations can be large or small and responded to at various levels. The levels are those that may be as large as a government (national, state, or local) or an organization such as a church, civic club or down to the individual him or herself. Prior to whatever the issue or situation that suddenly occurs, it causes the stability or stasis to change and thus it compels some type of action or response to take place. When this is applied to natural and or a manmade disaster, prior to the event, people and life in general is in a state of stability or punctuated equilibrium. However, as a direct result of the disaster or emergency a change takes place.

This is applicable to this research because people tend to not prepare or take steps to mitigate the impact of a disaster or emergency until the event actually is imminent or occurs. However, the contention of this research is that with the right interaction and involvement with EMPs this can be changed. Efforts to take action can begin before the event takes place. This would be the role of the EMPs who provide information regarding preparing and mitigating actions to taken before an emergency or disaster occurs.

However, if EMPs are not communicating effectively with their local constituents, or if the individuals are complacent and simply do not take action to prepare for an emergency, then people are not prepared for the emergency or disaster. This lack of preparation could possibly have been the case of the residents of New Orleans during Hurricanes Katrina and Rita. It is the duty of EMPs to take ensure people, especially minorities are aware of the resources and services that are available in the event of an emergency or disaster. They are also capable of providing training and information to citizens to develop emergency plans and take steps to mitigate the damage should such an event happens like a tornado, earthquake or hurricane.

Punctuated equilibrium also explains how a crisis can affect policy change. The changes may be in policies that are as intricate as the methods used by national, state, or local governments or an individual. There may be years in which current policies, laws or regulations are in place. However, a change in public opinion may cause these policies, laws or regulations to be changed, modified, or removed.

### *Organization Theory*

Organization theory serves as the third theoretical framework for this case study research. This theory is included within the framework because the local emergency management office is an organization. It has its own nuisances and characteristics that are unique to that entity as an organization. In like manner, the church and other organizations involved in the research have their unique attributes as well. Therefore, I wanted to show the impact of how these organizations interact with each other in order to cooperate with preparing and mitigating before an incident occurs. Ultimately, the people that comprise an organization are the ones that must engage with the process of either working with the EMPs or supported by these organizations at



the local level. The interaction and ability to effectively work together will dramatically help in the preparation and mitigation before a disaster occurs and certainly afterwards

Organization theory's roots go back to ancient and medieval times and it is the study of how and why complex organizations behave as they do (Thompkins, 2005). This theory studies formal structures their internal processes, external constraints, and the ways organizations affect and are affected by their members" (Thompkins, 2005). The relevancy to this study is because every emergency management office at every level has structure and has nuances unique to that organization and the members that comprise it. Every local office is different because of the people, location, cities; state or county where to office is located. Thus, each is unique. However, the standard practices and CEM are the same. In addition, organizations involved in preparing and mitigating efforts has its own structure and personality.

This theory is pertinent to this study because the various organizations that deal with disasters and emergencies are very diverse and complex. It includes agencies at the local, state, and federal level. The organizational and intergovernmental arrangements related to emergency preparation and response is shaped in large measure by federal requirements and funding (Rubin, 2012). Organizations have functions that pertain to materials and machines. However, managerial functions apply only to people (Shafritz & Ott, 2001). The managerial functions that deal with communicating to the people that reside in communities must perform this function. However, each organization or local emergency management office may perform this function differently, but it is necessary in order to provide critical information during a disaster or emergency.

In this particular study, the primary focus was on the local office that supports the city of Radcliff, Kentucky, and the perceptions that the participants in this study have towards that

office. Replication of this case study may be possible throughout the US in similar communities that are predominantly minority (US Census Bureau, 2012). According to the US Census Bureau, the minority population increased by 1.9%, and was 37% of the total population in July 2012. By mid-century, minorities could be the American majority. So it is certainly not a stretch to hypothesize that in many cities across the nation that there are communities that are predominantly minority. However, this does not necessarily mean that this will increase the amount of contact and communication with emergency management professionals because most of them are Caucasian male Caucasians according to data provided by the Emergency Management Demographics statistics.

The local emergency management office that provides support to the residents of Radcliff, Kentucky, is located in the adjacent city of Elizabethtown, which is only about eight miles south. As a professional, an emergency management professional is part of an organization and is the best strategic factor in an organization (Shafritz, Ott, & Jang, 2005). The EMPs must have and maintain a sense of purpose and a moral code for the organization, including a set of ethical visions that established “right or wrong” in a moral sense, of deep feelings, of innate conviction, not arguable; emotional, not intellectual in character (Shaffritz & Ott, 2001). From this perspective, EMPs should have a sense of purpose that compels them to want to ensure that they perform their duties in a manner indicative of the responsibility to protect the residents of their respective communities.

Organizations conduct their day-to-day operations differently and have a culture unique to that organization as to how they do things, how they function, and what makes the people in the organization “tick”. Such organizations include entities such as local emergency preparedness departments that are responsible for cities and counties, to larger organizations at

the state and federal levels, such as the Red Cross, FEMA, and the Department of Homeland Security (DHS), which includes civilian and military emergency responders.

Consequently, understanding how these organizations function and the management practices associated with these organizations will be helpful in engaging these organizations to assist with responding to emergencies and disasters and understanding their relationship with the people that they serve and support. It is more feasible to seek the support and active engagement of an organization if the organization has a vision and values which are adopted by the members or employees of the organization that support a willingness to help when a disaster or emergency occurs (Thompkins, 2005). If the organization's culture ties members together for the common cause of responding to people and communities that need help, then understanding the intrinsic satisfaction, social cohesion, and commitment to the organization's purposes are helpful when it comes to seeking collaborations and networks to respond to emergencies and disasters.

**Comprehensive Emergency Management Model/Concept.** There is no single overarching theory that ascribes emergency management and it may be impossible to develop a theory that captures every single variable and issue associated with natural and manmade disasters. The CEM model is not a theoretical framework for this case study research. However, it is the process that serves as the guideline for carrying out of all emergency functions necessary to mitigate, prepare for, respond to, and recover from emergencies and disasters caused by all hazards, whether natural, technological, or human caused" (Blanchard et al., 2007, p. 4). A theory of emergency management must take into account the observations of those working within a wide variety of theoretical orientations including sustainability and social vulnerability (Rodriguez et al., 2007). This theory should be predictive and take into consideration different

programs and activities that exist behaviorally in societies throughout the world rather than just a “how to” model.

Emergency management contains eight principles: (a) comprehensive, (b) progressive, (c) risk-driven, (d) integrated, (e) collaborative, (f) coordinated, (g) flexible, and (h) professional. These principles provide the policies and procedures within which communities reduce vulnerability to hazards and cope with disasters. They provide the basis and structure for professionals in the field of emergency management discussed below (Blanchard et. al., 2007):

*Principle 1: Comprehensive*

The first principle, comprehensive, involves emergency managers considering and taking into account all hazards, phases, impacts, and stakeholders that are relevant to disasters (Blanchard et al., 2007). First, as part of their in-depth risk assessment, emergency managers must consider all hazards within a jurisdiction and prioritize based on the impact and likelihood of occurrence. Second, the CEM model defines four phases of emergency management:

- Mitigation - prevents or reduces losses from a disaster.
- Preparedness - is focused on the development of plans and capabilities for
- Effective disaster response - response is the immediate reaction to a disaster.
- Recovery consists of activities to continue beyond the emergency period to restore critical community functions and manage reconstruction.

Third, all impacts relating to infrastructure, human services, and the economy must be analyzed and addressed. Fourth, a close working relationship among all stakeholders, to include all levels of government, the private sector, and the general public is essential for effective emergency management.

**Principle 2: Progressive**

The second principle, progressive, involves emergency managers anticipating future disasters and taking preventative and preparatory steps to build disaster-resistant and disaster-resilient communities (Blanchard et al., 2007).

**Principle 3: Risk-Driven**

The third principle, risk-driven, involves emergency managers using sound risk management principles, such as hazard identification, risk analysis, and impact analysis, in assigning priorities and resources (Blanchard et al., 2007).

**Principle 4: Integrated**

The fourth principle, integrated, involves emergency managers ensuring unity among all levels of government and all elements of a community (Blanchard et al., 2007).

**Principle 5: Collaborative**

The fifth principle, collaborative, involves emergency managers creating and sustaining broad and sincere relationships among individuals and organizations, thus encouraging trust, team atmosphere, consensus, and communication (Blanchard et al., 2007).

**Principle 6: Coordinated**

The sixth principle, coordinated, involves emergency managers synchronizing the activities of all relevant stakeholders to achieve a common purpose (Blanchard et al., 2007).

**Principle 7: Flexible**

The seventh principle, flexible, involves emergency managers using collaborative and innovative approaches in solving disaster challenges (Blanchard et al., 2007).

**Principle 8: Professional**

The eight principle, professional, involves emergency managers valuing a science and knowledge based approach based on education, training, experience, ethical practice, public stewardship, and continuous improvement (Blanchard et al., 2007).

The evolution of the functions and profession of emergency management in the United States (U.S.) achieved a major milestone in the late 1970s by the development of comprehensive emergency management taxonomy (Rubin, 2012). Comprehensive emergency management has organized emergency management functions into useful but perhaps, overly simplified, disaster phases and has been the traditional theory of emergency management (McEntire, 2004). CEM evolved in the latter part of the 1980s and early 1990s. For years, authorities considered CEM a sub-discipline of public administration and public safety, however, emergency management has started to take an identity of its own (Baumgartner, 2008).

Emergency management owes its existence to two disciplines of study: geography and sociology (McEntire, 2004). Geography provides the understanding of characteristics of hazards. Sociology provides an understanding of the social causes of and human behavior in disasters. As emergency management theory continues to grow and evolve, scholars should retain findings from previous research in the field. Concepts such as disaster, hazard, convergence, and emergence are included as well as new concepts such as compound disasters and sustainability. There are principles incorporated in emergency management theory such as disaster prevention, preparedness, and improvisation (McEntire, 2004). In addition, chaos or system theory appears to be gaining recognition in emergency management as well as in other disciplines (Koehler et al., 2001).

The all-hazards approach came into use based upon advances in technology especially in the field of communications (Alexander, 2002). This approach takes into account a wide range of exigencies in the emergency planning process. FEMA, under the direction of John Macy in 1979, began the development of the all-hazards approach that included “direction, control, and warning systems which are common to the full range of emergencies from small isolated events to the ultimate emergency war (Congressional Digest, 2005). Thus, the ability to disseminate information is a key tool in the management of disasters. Americans are not prepared for emergencies (Paek et al, 2010).

Although there has been much discussion about the role of the government in the process of responding to natural and manmade disasters, the Preamble of the Constitution appears to provide the stipulations for how the government will respond and who has responsibility for responding (Baumgartner, 2008). To that regard the Preamble states that the people of the United States, in ordaining the Constitution, seek to “. . . establish justice, insure domestic tranquility, provide for the common defense, promote the general welfare, and secure the blessings of liberty . . .” for present and future generations of Americans. The federal government’s role in disaster preparedness and relief grew bigger still during the New Deal era of the 1930s.

President Franklin Roosevelt worked aggressively to expand the reach and activity of the federal government in a variety of ways in the face of the Great Depression. A number of public works projects were launched to avert or reduce the impact of natural disasters. The Flood Control Act of 1936 and subsequent amending legislation authorized the U.S. Army Corps of Engineers to design and construct flood control projects around the country (Arnold, 1988; Baumgartner, 2008). The federal government assumed the lead for major disasters; it is the primary legal and political responsibility of state and local officials for dealing with most

disasters, which includes the responsibilities for the initial planning, preparation, and response (Reddick, 2007; Waugh & Streib, 2006).

If there were a gap that exists in this process, it would appear to be during the mitigation or preparation phases of the CEM process. This assumption is made due to the understanding that it is during the mitigation in which any action or steps to prevent or reduce the loss of life will be addressed (Blanchard et al., 2007). Secondly, there is an assumption that during the preparation phase, actions and steps made to create plans and examine capabilities. Regardless as to which phase one would use in order to take emergency preparedness steps, it would have been done based upon whether there is a reason to take such action during the implementation of the CEM process. Failure to take action during one of these phases indicates the CEM is not utilized to take preventative actions, thus, confirming a gap in the implementation of the CEM model. This researcher will endeavor to investigate this implementation gap further within the CEM model.

Consequently, local emergency managers undertake a variety of steps in the implementation of the CEM model (Rodriguez et al., 2007). In implementing the CEM model, gaps or the lack of getting information out in a timely manner can lead to disastrous situations such as what occurred during the Saragossa Tornado in 1987, Hurricanes Katrina and Rita disasters in 2005; and more recently, Hurricane Sandy in 2012 (Aguirre, 1988; Rodriguez et. al., 2007). The majority of an emergency manager's time is spent attending meetings, promoting more stringent disaster policies, educating the public, creating plans, updating resource lists, and conducting exercises (Rodriguez et. al., 2007). The effective distribution of information is necessary to initiate measures and actions to plan, prepare, mitigate, and recover from natural



and manmade disasters and emergencies, thus, it is imperative that timely, accurate, relevant information and guidance provided to affected populations (Patricelli, et al., 2008).

### **Current Research Literature**

This section is organized in the following subsections: emergency management communication processes and challenges, comprehensive emergency management plans, disaster mitigation, emergency management and stakeholders' involvement, and emergency management and minority population considerations.

#### **Emergency Management Communication Processes and Challenges**

This organization of this subsection is as follows: mass media and communication of risk and warnings, and interoperable communication.

**Mass media and communication of risk and warnings.** A variety of sources from which the public may obtain information regarding hazards and extreme weather conditions or disasters, such as radio, television, and newspapers (Rodriguez, et. al, 2007). The ability of professionals to communicate effectively by providing timely and accurate information to the public is essential to ensure that people are able to mitigate and prepare for an emergency, which lends support to the importance of communication theory.

In the aftermath of Katrina, communication issues became quite apparent (Dynes & Rodriguez, 2005). Reports regarding looting, babies being raped, and thousands dead were allegedly taking place in the Superdome in New Orleans. Later reports indicated that a lot of the information was inaccurate and sometimes promulgated by elected officials, which was widely disseminated by the mass media.

Decisions made by people impacted by a hurricane or some other disaster are based upon information (Dynes & Rodriguez, 2005). The important influence of extended families and social

networks demand better community based communication and preparation strategies. If information is disseminated to the public, then there will be decisions made based on the receipt of that information. However, if information is not disseminated, then decisions may not be made because of a lack of receiving that information. This could have a major impact on whether appropriate decisions are made in the event of a disaster or emergency.

Effective distribution or dissemination of information correlates with the second central principle of the theory of communication (von Bertalanffy, 1968). The objective is to ensure that information is provided to people in the path of a natural or manmade disaster, with the goal to have residents relocate or evacuate. The effectiveness of how well the communication process takes place could be extrapolated by the safe and timely evacuation of citizens to safer zones. This is especially important for vulnerable populations such as minority communities (Eisenman et al., 2007). The vulnerability of these minority communities appears to be related to the lack of high economic status and resources, however, cultural ignorance, ethnic insensitivity, racial isolation, and biases might potentially lead to lower levels of preparedness, fewer resources for evacuation, and disparities in access to relief and recovery (Eisenman et al., 2007).

**Interoperable communications.** The importance of effective and timely communications pertaining to emergency preparedness and response is illuminated by studies, such as the study discussed in the 2006 testimony by William Jenkins, Director of the DHS and Justice Issues. In his testimony before the Little Hoover Commission of the State of California, Jenkins (2006) indicated that there are currently gaps in the ability to meet interoperable communications challenges as well as closing those gaps (Jenkins, 2006). The study considered interoperable communications as illustrative of the general challenge of identifying

requirements, current gaps in the ability to meet those requirements and assess success in closing those gaps, and doing this on a multi-districtional basis.

Jenkins (2006) also addressed differences in state, regional, and local needs and conditions; as well as defining the roles of federal, state, and local governments and other entities in addressing interoperable communications needs. Several of the challenges contained in the study included asking questions, such as who needs to communicate what, with whom, when, for what purpose, and under what conditions? A failure to communicate effectively to warn citizens could result in tragedies such as when a tornado destroyed half of Saragossa, Texas back in 1987 (Aguirre, 1988).

### **Comprehensive Emergency Management Plans**

When it comes to implementing a comprehensive emergency management plan (CEMP), an actual plan that deals with planning for an emergency by a county or municipality must be developed. The CEMP “specifies the purpose, organization, responsibilities and facilities of agencies and officials of the political subdivision in the mitigation of, preparation for, response to, and recovery from emergencies and disasters” (Municipal Research and Services Center of Washington, 2013, para. 1).

Within the CEMP is a *Basic Plan*, which describes the various types of emergencies that are likely to occur in Hardin County in Kentucky (Commonwealth of Kentucky, 2013). It also provides for the dissemination of warnings; establishing fundamental policies, program strategies, and assumptions. The plan also establishes a concept of operations for direction and control; defines responsibilities for elected and local government officials; and explains roles and functions of not only government agencies, but private industries, volunteers, and civic organizations. The CEMP of Hardin County is located in the adjacent city of Elizabethtown,

Kentucky, outlines the roles and responsibilities of local government, state and federal agencies, and volunteer organizations. These entities are critical to ensuring that the public is actively involved and engaged with ensuring that there is a comprehensive approach to mitigation, planning, response, and recovery from identified hazards. The effectiveness of this system will determine if Hardin County residents and municipalities, which include the closely situated cities of Radcliff, Elizabethtown, and Vine Grove are adequately prepared to deal with the occurrence of emergencies and disasters.

This elements of the *Basic Plan* is directly associated with the study because this plan is supposed to actively engage civic organizations. If civic organizations are not aware of this basic plan and even more so their responsibilities, then this will identify one problem associated with the CEMP and its basic plan in that people do not know about the various resources and information available to them. Hence, industries and businesses must play a role in disaster mitigation.

Dunaway (2010) published an article that focused on the role of the private sector and industry having a role in the safety, security and resilience of their communities. According to Dunaway, eight years after September 11, 2001, only a fraction of U.S. businesses and non-profits organizations have taken adequate measures to protect their assets, properties, and employees from the threat of harm and natural disasters or human caused incidents. The intent of the study was to examine four factors that influenced the adoption of business continuity plans and emergency preparedness within the private sector. One of the factors was *organizational proximity* or *collaboration*, which pertains to whether the private sector entity participates in a collaborative organization for regional emergency planning and preparedness.

Dunaway (2010) found that the participation of the private sector in the initial efforts pertaining to emergency planning and the preparedness effort is critical to actively engaging the organization in all hazards disaster mitigation. The results of the research revealed that participation in an organization dedicated to collaborative planning and mutual support could have a motivating effect on preparedness. This would be equivalent to experience in a disaster or an increase in capability equal to the difference between a small and a medium-size business. Thus, an individual does not necessarily have to go through a disaster in order to engage in the preparation process.

Hardin's County CEMP is structured to parallel the state and federal activities set forth in the State of Florida CEMP and the Federal Response Plan. The county's plan also describes how state, federal, and other outside resources will be coordinated to supplement county resources and response. The CEMP's purpose, which includes organization and responsibilities of all four phases of emergency management, is directly related to the problem statement of this case study research because the main problem is exploring the communication problems plaguing the CEM process through the use of minorities lived experiences and whether minorities are receiving information in a timely and accurate manner.

This study is concerned with the following processes: (a) evacuation; (b) shelter; (c) post disaster response and recovery; (d) rapid deployment and pre-deployment of resources; (e) communications and warnings systems; (f) conducting of annual exercises to assess the ability of the local governments to respond to an emergency; and (g) whether communities are informed about these activities. Furthermore, this study considers whether county, municipality, division, or departments through an emergency support function (ESF) approach have clearly defined responsibilities with respect to planning and operations.

## **Disaster Mitigation**

Disaster mitigation pertains to activities designed to prevent or reduce the losses from disaster (Blanchard et al., 2007). This subsection is organized in the following areas: disaster mitigation act of 2000 (DMA2K), public awareness and disaster mitigation, individualism and disaster mitigation, community awareness and disaster mitigation, and faith-based organizations and disaster mitigation.

**Disaster Mitigation Act of 2000 (DMA2K).** Although the phases of the CEM model are the same, the actual hazard mitigation emergency plans developed by cities versus those developed by counties may be very different (Rodriguez et al., 2007). State emergency management agencies across the country are providing guidance on the creation and implementation of hazard mitigation plans, in large part due to the passage of the Disaster Mitigation Act of 2000 (DMA2K). Current planning emphasis seems too focused on the management of disjointed federal programs and an ad hoc provision of technical planning driven by political pressures or in isolated areas that have had significant damage in the past. Adopting a more active posture regarding new emergency support functions is now included as part of the National Response Plan (NRP). It remains to be determined whether a more formal institutionalization of the process will be proactive in developing pre-disaster plans for recovery. The pre-disaster activities would naturally take place during the mitigation planning or the preparedness phases of the CEM process.

In order to improve disjointed federal programs, more emphasis on state and local capacity-building would need to take place and this is not currently in practice today, however, this seems to be changing (Schwab, 2005). Evaluation of recovery planning at the state and federal levels is virtually nonexistent, which may indicate a need for future research in this area.

Cities with planning mandates on hazard mitigation elements were compared with those cities in states without such mandates. The plan developed by Houston-Galveston Area Council was further analyzed to provide a detailed review of the DMA2K multijurisdictional hazard mitigation plan (Olonilua, 2011).

It is interesting to note that the DMA2K does not specifically require the development of hazard mitigation actions for actions of manmade hazards and that FEMA has strongly recommended the incorporation of these types of hazards into hazard mitigation action plans (Olonilua, 2011). In addition, if a local government failed to provide plans approved by FEMA on or before November 1, 2004, they would not be eligible for pre-disaster mitigation (PDM) funding. Disaster plans need to be evaluated on how well they were developed to deal with not only natural and manmade disasters or emergencies, but also terrorist technologically hazardous events. Thus, evaluation of these plans must be multifaceted and take into consideration a multitude of various issues and concerns.

The DMA2K is a federal regulation that requires the incorporation of earlier federal programs such as the Integrated Emergency Management System (IEMS) and Comprehensive Emergency Management (CEM), which were designed to encourage the different levels of government to include all hazards into a single hazard mitigation plan (Olonilua, 2011). DMA2K also focuses on pre-disaster hazard mitigation rather than post-disaster hazard mitigation. Furthermore, included in this legislation is the requirement that hazard mitigation plans address multiple hazards in one single plan.

Another aspect of all-hazards mitigation plans that should be clearly illuminated is that prior to the DMA2K plan, plans were hazard-specific, such as focusing only on floods or earthquakes, if an area was typically threatened by that particular hazard (Olonilua, 2011). What

is recommended by the new legislation is to incorporate multiple hazards and within most hazard plans, there are the same basic elements such as evacuation, sheltering, provision for special needs population, and public information and awareness. The DMA2K also addressed the requirement for stakeholders such as businesses, academic communities, and the news media to be a part of the collaborative efforts in hazard planning. This should be included both in the planning phases and in the mitigation action plans. Public awareness mandated by the DMA2K in order to make sure the public is aware of the risks associated with hazard events. The study by Olonilua serves as a policy learning opportunity to FEMA, states, local, and tribal jurisdictions. Now, one limitation of this study was that the research only evaluated plans approved by FEMA at the time the research conducted and the plans evaluated. Therefore, the study did not include any changes of adjustments made later or subsequent to the evaluation of the plans.

Olonilua (2011) study also focused on the differences between hazard mitigation action plans developed by cities and those developed by counties. Additionally, the plans of cities with existing state planning mandates on hazard mitigation elements compared with those cities in states without such mandates. The plan developed by Houston-Galveston Area Council was analyzed to provide a detailed review of the DMA2K multijurisdictional hazard mitigation plan.

**Public awareness and disaster mitigation.** According to Rodriguez et al. (2007) *Hand Book of Disaster Research*, informing the public and communicating information is the most important function during the planning and preparation phases of the CEM, which is due to the need to generate effective response and recovery efforts during and following disasters. An interesting aspect of the evaluation was that some cities and counties did not include public awareness in their mitigation action plans, and that the level of collaboration with FEMA was generally slow. In addition, studies, such as Finch et al. (2010), suggest that Black communities,



poor, renters, the unemployed, and under educated suffer disproportionately negative consequences in natural disasters. Peguero (2006) reported that media sources that focused primarily on the Black community might be more reliable than other media sources. This report directly relates to this research because it indicates that minorities are still not receiving information in a timely and accurate manner, which indicates gaps in the CEM process.

Cutter et al. (2010) found that counties performed better than cities with getting information out to the public, however, the differences were not statistically significant. Cutter et al. (2010) findings supports the need to take into consideration the social vulnerabilities associated with members of communities impacted by a disaster. These social vulnerabilities include considerations such as age, race, health, income, type of dwelling unit, and employment. Another finding from their research was that evaluation of disaster plans was important to the training provided to emergency and community planners and other local officials. The plans are commendable and definitely worthy steps towards multi-hazard mitigation planning; but even more thorough reviews of plans, policies, and procedures undertaken to be sure that critical issues are addressed in approved plans. These approved plans evaluated in terms of how effectively they are implemented as well. These plans should be a continuous effort to reduce losses to human life and property because of the occurrence of these hazards.

**Individualism and Disaster Mitigation.** Preparing for and having a disaster plan is something that individuals should do, thus taking responsibility for themselves and their families (Miller & Douglas, 2009). During the preparedness phase of the CEM, process the development of plans for effective disaster response takes place. Having an emergency plan is something that is an individual responsibility; however, Miller and Douglas (2009) provided their critique of individualism. The researchers contended that resources must be thought of in broad, collective

terms rather than individualistic terms in order to respond effectively to emergencies, which generally characterize the day-to-day lives of ordinary citizens. The researchers also highlighted the risks of applying an individualistic approach to disaster mitigation and management.

Another concept that Miller and Douglas (2009) emphasized in their research was that effective resource management should be coordinated with a concept of people sharing resources in common with others and not as individuals. The intent is to respond not merely as individuals, but from a perspective of the common good when preparing for and responding to disasters in more collective ways. Care to prevent having too narrow a scope when it comes to the planning process sh.

From a planning perspective, Miller and Douglas (2009) contend that from an individual perspective, poor people are less able to prepare and face a storm or manmade disaster. In addition, poor people face more obstacles if they have to evacuate or seek shelter because they may not be in a position to be able to evacuate their current location. Furthermore, the researchers related that when a disaster occurs, it exposes the level of inequality facing poor people. The impact of disasters on the poor includes economic concerns, such as not having the resources to be able to prepare for and recover after a disaster. Consequently, since the poor financial situation is less strong, they face more obstacles during and after evacuating.

As a result, the recovery process of the poor takes longer and even though they have limited resources, *individualism* was still the rule (Miller & Douglas, 2009). Individuals tend to see disasters as extraordinary and rare events and after experiencing a disaster, complacency may set in even by those who live in places such as flood zones or in states that yearly deal with hurricanes or the threat of hurricanes. In Florida for instance, the residents know that hurricane season will occur, but each year that the season comes and goes, as long as the hurricane does

not hit near; residents may feel that everything will be all right. Due of this type of thinking, there may be a sense that it cannot or will not happen to them. Furthermore, some people simply do not have the financial resources at their disposal to purchase insurance to recover lost property and items associated with the recovery process. This dire situation would not necessarily be the case for the rich or corporations who have insurance policies and government support for private enterprises.

**Community Awareness and Disaster Mitigation.** Community coordination is the cooperation of independent units for eliminating fragmentation gaps in service delivery, and unnecessary (as opposed to strategic) duplication of services (Gillespie, 1991; Rodriguez et.al., 2007). This definition is relevant to human service systems and disaster responses in particular. It pushes the profession of emergency management into a framework, orientation, and vision that reflect the turbulence, diversity, and scope of the social systems that comprise disaster responses according Rodriguez et al. (2007) *Hand Book of Disaster Research*. Emergency managers and professionals should be aware of these systems in order to engage the various phases of the CEM model. Their abilities to initiate communities to be partners in the continued delivery of services established during the mitigation and preparedness phases of the CEM model. This also means that the professional has to interact with the communities that they serve regarding the awareness of resources available to local communities and the residents that reside in those locals.

One of the lessons that emerged from the immediate and long-term aftermath of Katrina has been the role that community organizations and community-based networks played in all stages of disaster preparedness and recovery (Patterson et al., 2009). Communities play a significant role in the ability of local communities to recover in the aftermath of a disaster. However, emergency managers must initiate the organization of the emergency management

process during the mitigation and preparation phases of the CEM process. It requires high levels of horizontal and vertical differentiation as part of the niche of the emergency manager (Rodriguez et al., 2007). The local emergency management professional is a community coordinator in terms of engaging the all-hazards approach.

Meeting housing demands absent disasters are difficult to meet but it becomes more challenging when a disaster occurs and resources are stretched thin due to the greater demand (Frimpong, 2011). Frimpong (2011) conducted an exploratory case study research in all 88 counties in the State of Ohio. The research population consisted of all 88 county directors of emergency management agencies. This research explores the challenges involved in the implementation of recovery and disaster housing programs in the aftermath of disasters.

In a 2011 study, Frimpong found that

Some of the barriers to successful implementation of shelters and housing programs in the aftermath of disasters were politics and bureaucracy” (p. 1).

Additionally, a lack of adequate knowledge about laws governing recovery, lack of recovery plans for functional/special needs population, lack of back-up power to operate emergency operation centers and political interference in the hiring of personnel working for county EMAs leading to less qualified people being hired. The above findings show that most county directors need to upgrade their knowledge and skills in emergency management through professional continuous development by getting higher education beyond the high school level. It also shows that county political leaders need to be educated in the basics of emergency management so that they would be in line to help resource the counties to deal with recovery after disasters. (p. 1)

In Kentucky, the Project Recovery initiative was started to cover all aspects of communities when a disaster occurs (Grubbs, 2005). This stance is corroborated by a study conducted by the Citizen Corps research project, which is a part of the 2002 Presidential initiative U.S.A. Freedom Corps as they relate to community awareness and applicability. Their study was conducted in Orange County Florida, which is the county that Orlando, Florida predominantly encompasses (Citizen Corps, 2010). Manmade Research by Citizen Corp (2010), was done with surveys, indicated that most residents of the county have experienced some form of disaster and are in need of governmental support in the form of response and personal emergency training. Follow-up studies may determine if the efforts of organizations, such as Citizen Corps, is actually reaching the public concerning preparedness, response, mitigation, and recovery. One of the findings of the study was that there was very limited knowledge of the Citizen Corps programs. Many citizens may not have any knowledge of the FEMA website that is available for individuals and families to register with the State of Florida's disaster mitigation site to initiate disaster plans.

In examining the effects an individual's demographics had on preparedness levels, Citizen Corps (2010) suggested a need to look at demographic characteristics for individuals and communities to determine how and where training efforts should be concentrated. It is interesting to note that the research indicated no correlation between educational level and preparedness. Another interesting outcome of the research conducted by Citizen Corps was that even though an individual may have had previous experience with a disaster, data from the National Center for Disaster Preparedness (NCDP) indicated that this did not mean it would compel people to better prepare for the next emergency. These findings appear to indicate that there is a gap between

getting information out to the public and then the public applying that information in the future to help prepare for the next event.

A positive finding from the Citizen Corps (2010) study was the relationship between people that survived a disaster and had training experience with Citizen Corps. Training experience with Citizen Corps organizations helped people to be more prepared and better able to assist themselves, their families, and neighbors. Increasing knowledge about these programs and learning what citizens already know with respect to how to prepare and survive a disaster proved to be invaluable. In addition, increasing the familiarity of people with Citizen Corps or any organization that educates and trains people will be helpful, especially for those that reside in the Orange County area.

**Faith-based Organizations and Disaster Mitigation.** Implicit in the present research project was an assumption that the degree of security and resilience attained in a community is a function of the level of coordination by emergency managers and involvement between the local government, local response agencies, and the private sector to include businesses, nonprofit associations, faith-based groups, and private voluntary organizations. In order for any organization, such as faith-based organizations (FBOs), to become involved in disaster mitigation of any sort, there needs to be some understanding of the CEM model (De Vita & Kramer, 2008). There have not been many studies of how FBOs function during emergencies. However, De Vita and Kramer (2008) reported that the response by charitable groups was more effective than federal, state or local government agencies during Katrina and Rita in 2005.

The active engagement and interaction of faith-based organizations were instrumental in the recovery efforts that took place because of Katrina and Rita (De Vita & Kramer, 2008). The two storms were the largest single natural disaster on U.S. soil in the past 100 years.

Additionally, the breaking of the levees also devastated New Orleans and the surrounding parishes and communities; as well as the coastal regions along the gulf coast areas of Louisiana, Mississippi, and Texas. There was a lot of media coverage and debate because of the apparent lack of immediate response by the government at all levels when it came to dealing with this disaster. In stark contrast to the slow response of the government, it showed a willingness of people to aid others; especially when it seems the government responded too slowly.

FBOs participated in relief and recovery efforts, provided various services, such as giving money, dry goods, and clothing items through networks and collaborations (De Vita & Kramer, 2008). This use of networks and collaborations is important to this study because it shows that communities and nonprofit organizations and churches could effectively engage and provide services to people in need on short notice. This interaction and cooperation illustrate a complex network of public and private faith-based and secular organizations. While religious conviction may have provided personal motivations to respond to the disaster, the overall humanitarian response and specific catalyst for involvement is often indistinguishable between religious and secular organizations.

The literature review of FBOs was important because the sample population obtained from members and leadership of A Kentucky Missionary Baptist Church (AKMBC), which has a predominantly Black and minority congregation. As part of the minority population in Radcliff, Kentucky, this sample population is crucial to exploring minorities' perceptions of the CEM's process of distributing disaster mitigation information. The study also investigated the timeliness and accuracy of the information minorities received, which will assist in making further improvements in the CEM model before the next disaster, either natural or manmade. According

to DHS (2008), “communities cannot effectively respond to, or recover from, incidents without strong cooperative relations with the private sector” (p. 18).

A fundamental principle of comprehensive emergency management (CEM) is that emergency management involves a partnership with different levels of government and private agencies for dealing with the full range of hazards that a community may face (Hughey & Tobin, 2006). In many communities, churches are part of the strongest private agencies or organizations, which are part of cooperative relationships. A widespread response within a community in the event of a disaster can still leave a substantial number of minority residents who do not receive aid. Therefore, faith-based organizations help provide a degree of security and resilience a community can attain as a function of coordination and involvement with the local government, local response agencies, and the private sector (Dunaway, 2010). De Vita and Kramer (2008) studied secular and faith-based organizations dealing with the various conditions associated with the natural disasters. Each organization had particular missions, such as emergency and primary health care, advocacy and services for displaced children, long-term recovery services, reduction of violence through prayer and volunteerism, unification of Vermilion Parish faith community for disaster-related services, reintegration of homeless women from adult detention centers or substance abuse programs, and shelter for abused and neglected children.

Consequently, events such as the September 11 attacks, tornadoes in Kentucky, and Katrina and Rita clearly show that there are limitations to the nation’s emergency management capacity to respond effectively to catastrophic events, especially when disasters overwhelm state and local response capabilities and assets. When it comes to distributing disaster mitigation information, secular and faith-based organizations must be prepared to respond, thus helping emergency preparedness professionals publicize the available resources and services to those



affected by a disaster. This additional information dissemination will thus save the lives of first responders and people affected by disasters and the consequences of terrorism.

### **Emergency Management and Stakeholders' Involvement**

This subsection is organized as follows: networks and information distribution; governmental and organizational networks; volunteer, citizen responders, and emergent groups; and community involvement.

**Networks and Information Distribution.** The coordination of the complex network of interrelated events that must take place during the CEM process is essential to ensuring that the phases of the CEM are effectively engaged (Rodriguez, et. al., 2007). The necessity of intergovernmental and inter-organizational coordination within local, state, and federal agencies increasingly gained legitimacy in the eyes of their counterparts. The emergency manager is the coordinator for this effort; therefore, it is essential that the emergency manager is mindful of the different networks and organizations within their areas of responsibility in order to coordinate and effectively engage individuals and organizations during the implementation of the CEM model at the local and state levels.

When the local and state levels of government are included, along with the myriad of voluntary and private sector units, the scope of the managerial task becomes much clearer (Rodriguez et al., 2007). Effectively managing this coordination is a testament to the emergency manager's ability to interact with various individuals and organizations that are responsible for dealing with disasters and emergencies. The initial communication with these organizations should take place during the early phases of the CEM process, particularly during the mitigation and preparation phases. Subsequently, when an actual event takes place, the initial connections

already established becomes a matter of engaging networks to respond and recover from an emergency or disaster.

In the Caribbean Islands, the Caribbean Disaster and Emergency Response Agency (CDERA) is a network comprised of the disaster management organizations of sixteen independent small-island developing nations with a geography that predisposes them to natural hazards (Thompson, 2010). The relevance of discussing the CDERA in relation to this research is that the Thompson (2010) presented the results on the effects of organizational form, organizational capacity, and organizational learning on the effectiveness of the CDERA in its responses to disasters. Findings from the study indicated that disaster response and planning require complex organizations.

Thus, the use of networks may enhance the ability of communities to prepare for emergencies and disasters (Thompson, 2010). Networks can be entities such as churches and pastoral clergy, organizations such as the American Legion and nonprofit organizations, as well as for-profit businesses that interact together to prepare, plan and recover from disasters or emergencies. This familiarity may also enhance the desire to cooperate and assist each other and in the event of an evacuation, help assist with the relocation of members of communities to safer locations long before government agencies are mobilized and available to assist in the immediate aftermath of a disaster or emergency. Patterson, Weil, and Patel (2007) explored the importance of social networks where communities fit into the conceptual framework concerning disaster decision making. Their research focused on citizens and notions of community. Findings indicated that institutions that act together in a community setting, such as churches, voluntary associations, and the press are able to take immediate action to address issues that face the community in the event of a disaster or emergency.

**Governmental and Organizational Networks.** As early in the CEM process as possible, emergency management professionals should actively seek out local governmental and nongovernmental organizations as part of the CEM process (Rodriguez et al., 2007). President Carter took a tentative first step toward developing a program that sought out collaboration across all levels of government and emphasized natural disaster response (Rubin, 2012). President Clinton expanded this approach by using presidential authority and the emergency management system to improve the capacities of the federal, state, and local governments. In order to be effective, the CEM process required that emergency managers understood how networks functioned. Network organizations can be either governmental or nongovernmental and they have constitutional independence, which means that they cannot be required to participate. Therefore, the advantages and benefits to being involved are emphasized, such as the mission, which is to serve the public good; values, such as loyalty, patriotism, or humanitarianism; and budget, reputation, and legitimacy.

There is a need for multi-organizational interaction for successful policy solutions and implementations (Kapucu, Arslam, & Collins, 2010). The effectiveness of disaster response is precariously balanced on effective governmental and multi-organizational collaborative networks (Kapucu et al., 2010). The use of intergovernmental and inter-organizational responses to coordinate operations in the event of a catastrophic disaster was not successful in responding to Katrina and Rita (Kapucu, et al., 2010). Research suggested that more investments made at both the state and local levels in communities for successful and effective partnerships to respond in the event of a disaster. Disasters and other events, such as a pandemic are outside the scope of any one agency.

When public and private organizations work well together as integrated and interdependent entities, they have the ability to create solutions to problems larger than any one organization. Each organization should be able to pull its own weight and fulfill its responsibilities. Additionally, each entity in the collaboration must have the resources available to contribute to the collective effort. The collective effort should also achieve FEMA's all-hazards emergency management approach, which consists of mitigation, preparedness, response, and recovery. Furthermore, the all-hazards process is taking measures to prevent disasters or lessen the effects of the ones that are likely to occur.

Miller and Douglas (2009) highlighted the risks of applying an individualistic approach to disaster mitigation and management. They advocated the use of governance networks as a means of improving public safety with respect to natural and manmade disasters. They discussed the use of collective networks in Walker County, Texas, where the county's leadership thought that they had a well thought out and put together plan. That plan drew on the extensive experience of the county's emergency management coordinator and the decades of law enforcement and emergency response work of the plan's authors. However, the plan did not take into account the back-to-back havoc on the county by both Katrina and Rita.

Alexis de Tocqueville's view in his empirical and theoretical accounts of modern democratic societies contends that free citizens who act together in a community using organizations such as churches, voluntary associations, and the press are able to take immediate action to address issues that face them (as cited in Patterson et al., 2009). Citizens do not wait for higher authorities to help them, but instead they take the initiative to solve problems themselves. This is consistent with Miller and Douglas (2009) research, which states that effective resource management, should be coordinated with a concept of people sharing resources .with others.

They contend that in the event of a disaster or emergency, the response should not be merely as individuals, but collectively from a perspective of the common good when preparing for, responding to disasters, thus, not being too narrow in scope when it comes to the planning process.

**Volunteers, Citizen Responders, and Emergent groups.** In the U.S., people tend to want to help each other in times of disaster or during emergencies, even if they are victims of the disasters themselves (Rodriguez et al., 2007). Volunteers, such as first responders and people who respond to disasters and emergencies, play vital roles in the overall planning, preparation, response and recovery as well as mitigation efforts associated with all-hazards disaster mitigation. Emergent groups (e.g., unaffiliated volunteers) should be aware of the different phases associated with the CEM model in order to execute certain actions based upon the CEM model (Rodriguez et al., 2007). They perform functions in a variety of issues and activities, including the following: (a) educating a community about earthquakes, (b) opposing a location of a hazardous chemical waste site, (c) informing citizens about the dangers of a nuclear power plant, (d) protecting a creek from pollution, (e) replanting trees destroyed by a tornado, and (f) filling sand bags.

Another entity that can be included in the discussion about volunteers is citizen response teams. An appreciative inquiry study by Drabczyk (2005) investigated the Citizen Emergency Response Team (CERT) values and themes emerged from the various stories provided by citizen responders to emergencies and disasters. The study identified 94 values, such as functioning/task related values, development/change related values, and stability/status quo values. Findings suggested that this study would contribute to the expansion of the CERT into industries and schools. The intent was to improve urban and rural CERT strategic planning, as well as

supplement the CERT training curriculum. In addition, the study sought to foster a deeper appreciation for the shared experiences among CERT partners. Knowledge from this study is intended to improve recruitment, training, and sustainability of volunteer citizen responders, improve job satisfaction of professional emergency responders, and strengthen municipal disaster management capability.

According to Drabczyk (2005), the empowerment of citizens as conservators of national security was a tangible and key element of social change. According to the template of the CERT initiative, trust and collaborative capacity in American communities was the essence of the partnerships. In addition, these partnerships between professionals and citizens are novel and different from historical civil defense initiatives, for example, the mid-1940s civil air patrol.

When communities' partner with volunteers trained to respond to emergencies and disasters, everyone is better prepared to handle emergencies and disasters (Drabczyk, 2005). One of the main hypotheses of Drabczyk (2005) study is that the combined efforts of individuals developing disaster plans, combined with the support and assistance of the CERT members, will result in the prevention or reduction of many of the horrors associated with natural or manmade disasters and emergencies. This hypothesis is in agreement with the belief that a sharing of values and building trust between citizens and emergency responders increases the likelihood of effective disaster management.

**Community Involvement.** An initiative launched to engage Citizen Corps Councils in each state that directed back in 2005 by President George W. Bush (Rubin, 2012). This directive increased volunteerism in the U.S., with the intent of enhancing national emergency preparedness and disaster management. This was an indication of the importance of the average

citizen playing an important role in the process of emergency preparedness and disaster mitigation.

The community plays an important role in disaster preparedness and mitigation initiatives and is vital to communities surviving in the immediate aftermath of a disaster (Norris, Stevens, Pfefferbaum, Wyche, & Pfefferbaum, 2008). Disaster resilient communities (DRCs) are designed to create quality of life communities to deal with the physicality, environmental, social, economic, and emotional harm caused by disasters. The goal is to change the way of thinking for people that live in natural hazard areas, such as seismic, coastal, and watershed locations; and the focus is on improving the design and building of these locations. Communities affected by emergencies should be prepared to expect a lag time of at least 72 hours before emergency personnel would be able to reach some of them. In other words, communities and individuals are going to be on their own for three days before help can arrive and assistance is available.

Independent values are shared by both the professional and volunteers (Norris et al., 2008). There are psychological aspects of volunteerism, which include pro-social or helping personality characteristics or traits, which are very important and essential to the two entities working together to prepare, respond to, and recover from a disaster. As of May 2004, there were 1,163 CERT listed on the national CERT registry. According to FEMA back in 2002, the goal was to increase the number of CERT to 600,000 by 2004, and there was an urgency to understand the CERT in order to achieve this objective.

In addition, the Center for Excellence in Government (2004) noted that 62 percent of Americans would be willing to assist with homeland security through training and practice drills, and 86 percent of professionals believe that citizens would be willing to help in an emergency or disaster. People tend to have a propensity to help each other during times of difficulty and

disaster immediately following the event and it is important that every possible step taken to preposition supplies and equipment to be able to deal with the first 3 days following a disaster.

Olonilua (2011) emphasized engaging the public in participating in the mitigation process. This public participation will be important because many of the decisions involved with all-hazard disaster mitigation plans will affect the public. Public awareness of the available resources and services that can be available to the average citizen when a disaster occurs will be critical to all aspects of the emergency response efforts for individuals and families, which includes those services provided by local, state, and federal agencies and organizations.

### **Emergency Management and Minority Population Considerations**

This subsection is organized as follows: information gaps, ethnicity, minority populations, and demographic considerations.

**Information gaps, Ethnicity, and Minority Populations.** Review of current literature supports the implication that there are problems with the dissemination of information associated with disaster mitigation to the minority population (Peguero, 2006). According to Peguero's (2006) research of Latinos in Florida, not all citizens are prepared to deal with the situation of an actual or pending disaster. His study focused on the problems associated with communication, such as language, which affect the preparation and protection of people when a disaster hits. Peguero hypothesized that Latino homeowners use family relationships as an important source of hurricane information in comparison to Caucasian families.

Peguero (2006) used the Florida Statewide Mitigation Survey (SMS) as the source for the data in his study. The SMS collects information related to perceptions of risk, information sources, and mitigation status. I used three dependent variables (immediate family and relatives; neighbors, state and local government publications) and several independent variables, such as



language, income, education, and previous experience with disasters in order to arrive at conclusions associated with disaster mitigation.

Findings from the study indicated that Latinos were less likely to use reports by government publications compared to Caucasian families (Peguero, 2006). This finding lends credence to the statement of the problem in this study, that there is a gap in the CEM process when it comes to distributing information to minorities. The findings further validate the contention that the acquisition of accurate and reliable mitigation information and an effective disaster plan are crucial to the survival of people during a disaster (Bolger, 2003).

Although Peguero's (2006) research focused on comparing ethnic and minority populations with Caucasian populations, findings also indicated a correlation between socioeconomic differences, language barriers, minority preference for particular information sources, and distrust of governmental authorities, which appears to be associated with racial and ethnic minorities being more vulnerable to disasters. Moreover, research studies pertaining to Hurricane Andrew suggest the need to review psychological symptoms related to disasters from political, social, economic, and historical perspectives (Perilla et al, 2002).

According to research by Hughey and Tobin (2006), a gap exists in the literature concerning vulnerability and the hazard management capabilities of small communities. Their research focused on small communities in Falmouth, Kentucky. Findings indicated that small communities many times lack the professionally trained personnel, resources, and authority necessary for responding to, recovering from, and mitigating disasters effectively. The location of the sample population used in this case study research is Radcliff, Kentucky; however, is believed that the study can be replicated in any predominantly community in the US

**Demographic Considerations.** According to the U.S. Census Bureau (2012), in 2004, 9,000 Missionary Baptist Churches reported 5,000,000 members, who are predominantly African American or Black. In Kentucky, there are approximately 22 churches with 3282 members (Association of Religious Data Archives [ARDA], 2010). The size of the churches vary in number but average out to be approximately 140 members. The membership of A Kentucky Missionary Baptist Church (AKMBC) is approximately 450 to 550 members. It is important that emergency managers actively engage with members of these churches in order to adequately prepared them for an emergency, which includes making sure that they know their local emergency manager and are informed of the various resources available to them before, during, and after a disaster.

Therefore, emergency management professionals should take into consideration the demographic make-up of the communities that they support or serve. According to Omi and Winant, postwar U.S. sociology has attempted to apply a Caucasian ethnic immigrant framework to radicalized minorities including African Americans, Latinos, American Indians, and Asians, which obscures class and cultural differences (as cited in Rodriguez et al., 2007). In examining the effects that an individual's demographics had on preparedness levels, Andrulis, Siddiqui, and Purtle (2011) reported longstanding inequities that exist in times of emergencies and disasters. The researchers also reported demographic characteristics for individuals and communities to determine how and where training efforts should be concentrated, along with disparities affecting diverse communities. They related that local, state, and national organizations have drawn attention to the needs of racially and ethnically diverse communities, because there are higher rates of morbidity, mortality, loss of homes.

Consequently, demographic considerations were a focus of this study, as minorities' perceptions of the CEM's process of distributing disaster mitigation information, along with exploring whether minorities are receiving this information in a timely and accurate manner.

### **Summary and Conclusions**

The literature review indicates a gap in the distribution of information on disaster preparedness and mitigation to the minority population (Perry & Greene, 2007; Rodriguez et al., 2007; Slovic, 2000; Waugh & Streib, 2006; Weber & Hsee, 1998). Information distribution should take place during the first two phases of the CEM model, which are the mitigation or planning phase and the preparation phase. These two phases take place before the response and recovery phases of all-hazards disaster mitigation. The ability for people to receive information in a timely manner is critical for an effective response to emergencies and disasters. The literature examined socioeconomic information, ethnicity, race and other demographic profiles, and the vital role that information plays in preparing, responding, recovering, and mitigating the effects of disasters and emergencies. When information is not received in a timely manner, it tends to affect the emergency responses negatively, which in turn will likely leads to more situations similar to the aftermath of Katrina and Rita.

Chapter 2 reviewed the literature search strategy; theoretical foundation; current literature review, which included emergency management communication processes and challenges, comprehensive emergency management plans, disaster mitigation, emergency management and stakeholders' involvement, and emergency management and minority population considerations; and summary and conclusions.

## Chapter 3: Research Method

### **Introduction**

This chapter describes the research plan for this research project, including the method of inquiry and an explanation of the choice of the qualitative research approach for the study. It discusses the comprehensive emergency management model and the attributes of the model. This chapter also attempts to emphasize the importance of the communication process with respect to how emergency managers communicate.

I designed this research study to provide a greater understanding of the effectiveness of emergency managers to distribute information to a predominantly minority population. The chosen method for this exploration was a case study research design. Case studies are commonly associated with a qualitative design in which there is an intensive effort to understand a single unit of study within a complex context (Rudestam & Newton, 2007). Case studies focus on a single individual, organization, event, program, process, or as described by Stake (2000) “as a specific, unique bounded system”.

The complexity of the emergency management field stems from its use of the comprehensive emergency management model (McEntire, 2007). The field of emergency management applies science, technology, planning, and management to deal with the extreme events that disasters cause. Emergency managers combine these disciplines to reduce the occurrence of disasters and successfully deal with their impacts. Research should be conducted on any one or combination of areas of comprehensive emergency management. However, this particular study aimed to delve into the ability of emergency managers to communicate information effectively. Case studies allow a researcher to understand a single unit of study within a complex context such as emergency management. This instrumental case study

attempted to shed light on the single issue of how effective emergency managers distribute information to predominantly minority populations, a scope and goal consistent with descriptions of case studies by Stake (2000). This method also allowed me to seek greater clarity on the “how” and “why” information is distributed.

This research focused on communications to a population of minority citizens of the actions and steps that took place during the preparation and mitigation phases of comprehensive emergency management (CEM) model. Emergency managers gear these two phases towards training and warning people (Alexander, 2002). The CEM process involves direct communication and interaction between people they protect. This particular study sought to gain a more comprehensive understanding of the effectiveness of emergency managers to communicate to a predominantly minority community. Most emergency managers are Caucasian males and the focus of this study sought to gather a greater understanding as to the ability of these professionals to engage with minority communities. It did so specifically by soliciting the feedback of a selected pool of minorities from a typical Black church pertaining to their relationship with local emergency managers.

Qualitative research seeks out the why, not the how of an event, culture, or phenomena through the analysis of unstructured information (O’Neal, 2011). This method allows a researcher to be flexible and spontaneous in exploring phenomena in its natural environment. Researchers use this method to make informed business decisions, policy formation, communication, and research (O’Neal, 2011). The method offers a researcher the opportunity to understand meanings socially constructed within a specific community (Crotty, 1998). Therefore, the specific purposively selected participants to this study were all minorities that attend a local church in rural Kentucky.

Qualitative research designs do not prove or test a theory. According to Rudestam et al (2007), “a theory will emerge once the data is collected; which is an inductive approach rather than the traditional quantitative deductive approach” (Rudestam & Newton, 2007). This approach also allows the researcher to focus and structure the study from a conceptual framework with regard to whom and what will or will not be studied (Rudestam & Newton, 2007).

Qualitative methods are linked to a constructivist theory of knowledge because qualitative methods tend to focus on understanding experiences from the point of view of those who live them. This is pertinent because one objective of this study delves into the lives of the participants and their perception of disaster mitigation during periods of punctuated equilibrium. Using this method allows a researcher to enter into the world of the participant subject without a fixed agenda and maintains sufficient scientific rigor in the process. Researchers bring their own realities and are not detached from the research process. Therefore, it is important for researchers to understand, acknowledge, and share their own underlying values, assumptions, and expectations. My interest is based upon the debacles of Hurricane Katrina and Rita and the EMP seemed to fail to communicate to the citizens the full magnitude of the storm. It also seemed to me that there were different options and alternatives to get more people out of New Orleans such as engaging churches and civic organizations to bus people out of the city. The EMP also failed, in my opinion, to develop relationships actively with the minority population, which would have helped the EMPs distribute critical information in a timely manner.

This case study collected data using in-depth face-to-face interviews in order to understand the lived experiences of minorities in relation to the comprehensive emergency management’s (CEM) process of distributing disaster mitigation information. It specifically

sought to determine whether minorities receive information in a timely and accurate manner. This study did not suggest that minorities are receiving the information earlier, later, or not at all in comparison to non-minorities. However, the study sought to determine from the perspectives of the participants to this study made aware of the various resources and services available to them prior to and after a disaster. It also strived to determine if the local emergency management professionals (EMPs) were effectively reaching out to participants to convey information and training to establish emergency plans and taking steps to mitigate the damages should such an event take place.

I used a convenience sampling method to select a participant pool consisting of 13 minority members (both male and female) of a Kentucky Missionary Baptist Church (AKMBC) in Radcliff, Kentucky. The in-depth interviews were transcribed and analyzed for themes and codes. The key to thematic analysis is to make notes and comments to each question and response made by the participants. Each participant answered 10 questions during the interview process. The first three questions were designed to provide definitive responses to whether the participants knew their local EMP; if they had attended a EM meeting of any kind; and did they know what disaster mitigation was. For questions 1–3, the coding was a simple “yes” or “no” based upon the response of the participants. These questions were transformed into graphs for additional visual presentation and explanation.

The next seven open ended questions were more subjective and allowed each participant to delve into their inner perceptions and understanding regarding planning, preparing, responding and the recovery aspects of disaster mitigation and planning. In order to categorize the responses, I made notes for each question on separate paper. For example, question 1 was a closed-ended question that also allowed each participant to elaborate on why he or she did not know the local

EMP if this was the case; only one participant knew an EMP. This particular question was later depicted as a graph. Key words were derived from the consistent use of a word in sentences by the participants and then counting the times that word was used. For instance, the word “military” was used over 43 times in sentences during the transcribing process. Due to the frequency of the use of the word military, an overarching theme was identified, indicating that having some type of interaction with the military increased a propensity to have some knowledge of disaster/emergency preparedness, especially if the participant served in the military.

The prevailing themes were produced from making notes of each participant transcribed comments/responses to the 10 questions, then comparing the notes with the other participants. A comparison of the notes produced repeating words or phrases. Notes from each participant allowed me to go from one participant to another quickly.

The study was conducted in accordance with the parameters established by Walden University’s Institutional Review Board (IRB) to ensure the ethical protection of research participants. The IRB # is 02-27-14-0105387 for this research project.

### **Research Design and Rationale**

There are four contemporary approaches adopted in qualitative social dissertations: case study, ethnographic inquiry, grounded theory and narrative research. The case study approach selected for this particular study uses a small number of participants, which is typical of qualitative research (Creswell, 2009). Case studies used in disciplines such as education, social work, management science, urban planning and public administration. Emergency management is a quintessential public service and government officials at the federal, state, and local levels expect the service to continue to benefit citizens (Waugh, 2006). Emergency management and the role of government have been expanding for most of the past century (Rubin, 2012).



Therefore, case studies will likely continue as well to address and gain greater understanding of research issues and concerns.

The qualitative methodology allows the researcher to evaluate the CEM model based upon three theories that form the theoretical context of this research. Those three theories as indicated earlier are interethnic communication, punctuated equilibrium, and organizational theories. While there are alternatives to the case study approach, such as the phenomenological, narrative, and ethnographic approaches (Clandinin & Connelly, 2000; Creswell, 2003), the case study method was more appropriate for this study. It was appropriate because participants are asked how EMPs use the CEM's process to distribute disaster mitigation information and whether they are receiving this information in a timely and accurate manner.

### **Research Questions**

The central core of this research is getting a better understanding of the relationship of the local EMP and the minorities in the community that they serve from the perspective of the minorities themselves. This research addresses the following research questions pertaining to the interaction of local minority residents of a community and their local emergency management professional:

1. Does interethnic communication play a role in whether local emergency management professionals effectively communicate with minority residents?
2. What challenges exist from the perspective of the minority participants in this study regarding acquiring information and training opportunities from local emergency management professionals?

3. What potential hindrances influence the effectiveness of emergency management professionals from communicating with predominantly minority populations regarding disaster mitigation information?

### **Data Collection**

Data were collected via in-depth face-to-face individual and group interviews. Then, transcribed and analyzed for themes and codes. The case study method applies a method to a single case (Rudestam & Newton, 2007). The purpose of this case study was to shed light on the nature of the interethnic communication between local emergency managers and a minority population. A convenience sample of 13 members of AKMBC was used in this study.

### **Role of the Researcher**

I had three roles in this case study. First, I served as the person doing the in-depth face-to-face interviews with the sample population, who were members of AKMBC. I conducted all interviews. Second, I had the data transcribed from all the tape-recorded interviews verbatim, as this information led to understanding the perceptions of minorities in relation to the CEM's process of distributing information, as well as an understanding as to whether residents are receiving disaster mitigation information in a timely and accurate manner by interviewing members at AKMBC. Third, I analyzed the data to find common themes throughout the transcribed data. The findings may lead to further improvements in the CEM model by emphasizing the improvement of communication and dialogue by EMPs providing disaster mitigation information to minorities before the next disaster, either natural or manmade, which in turn will save lives.

It must be noted that I am a former member of AKMBC, which is the primary location where the bulk of the participants reside. However, there was no power differential between the

research participants and the researcher. Furthermore, the researcher held no biases against member of the church that did not participate in the research project.

### **Methodology**

This section is organized in the following subsections: participant selection, instrumentation, procedures, and data analysis.

#### **Participant Selection**

This study has two assumptions. The first assumption is that in nearly every city in every state in the United States, you will find communities that have predominantly minority populations. Within those communities, there are churches and organizations that are predominantly minority. Replication of this research is possible because minority populations are available to explore the effectiveness of communication between the members of that minority community or organization and their local emergency management professional.

The second premise is this population was selected is because minorities tend to be disproportionately affected by disasters and emergencies (Peguero, 2006). This study explores the effectiveness of the process that emergency management professionals use to distribute information specifically to minority populations. The International Association of Emergency Managers (IAEM) statistics indicate that 87 percent of EMPs are Caucasians aged 46 -51 (Cwiak, at. el., 2012). This lack of diversity in this profession may contribute or enhance communication barriers and other hurdles that are associated with how effectively information is distributed to local citizens. Inadequate planning and ill-informed people or organizations exacerbate the tragedies associated with disasters and emergencies (Gerber, 2007).

I was able to gain the participation of a small sample size of 13 minority participants for this research project. Mason (2010) reported that compared to quantitative studies, qualitative

studies normally use a much smaller sample. Qualitative studies use smaller sample sizes because having more data does not necessarily lead to more information since the occurrence of a piece of data or code is all that may be necessary in understanding the process behind the topic, since qualitative data is concerned with meaning instead of making generalized hypothesis statements (Ritchie, Lewis, & Elam, 2003). In qualitative research, using large sample sizes can be time consuming and impractical.

I obtained approval to conduct the research with members and attendees of the church, and to conduct the research on the church property. Once approved by the Walden University Institutional Review Board (IRB) process, the study was conducted with those that have agreed to participate in the research. Upon receiving the letter of cooperation from the pastor (see Appendix A) to conduct the study, I sent an email invitation via the church secretary inviting (see Appendix B) all adult minority church members at AKMBC, alerting them of the opportunity to participate in the research project.

In addition to the use of email, I personally invited/recruited adult members by word of mouth. I took advantage of the opportunity to give some insight into the research project during Bible study one Wednesday night. It was after that bible study service that I actually got several of the members to participate. I also sought out several friends and co-workers regarding this project and invited them as well. One member of the church heard about the research and volunteered as well.

I was careful to not force or coerce anyone to participate in this project. It was very important that the participants were voluntary and not forced to be a part of the research. This was important to me even if the person was a friend. Ultimately, a convenience sample of 13

people voluntarily agreed to participate in the research. I personally knew all of them except one female. .

### **Instrumentation**

I developed questions for the in-depth face-to-face interviews (see Appendix C), which were designed to answer the research questions. Thirteen minority participants discussed their perceptions of the CEM's process of distributing disaster mitigation information, and whether they are received this information in a timely and accurate manner. I interviewed the participants are interviewed separately, except for one married couple at locations that is convenient for them. The majority of the interviews occurred at AKMBC. Individual interviews took approximately one hour each. Interviews were recorded and transcribed verbatim to collect data, a practice typical of phenomenological research studies (Creswell, 2009). One participant participated, but provided responses to the 10 questions via handwritten comments. Therefore, there were only 12 transcribed interviews but 13 total participants.

### **Procedures**

The case study research design explored how effective EMPs use the CEM process of distributing disaster mitigation information and whether minorities are receiving this information in a timely and accurate manner. Data collection strategy included in-depth face-to-face group and individual recorded interviews. Data were manually transcribed to ensure accuracy of the data provided from each participant. Each participant was provided with a copy of the transcript via email for his or her review. After each participant replied he or she was satisfied with the transcript, the data analysis using the thematic process could begin.

After receiving approval to conduct the study from the Walden University Institutional Review Board (IRB), the project was introduced to the pastor and other church leaders of

AKMBC, seeking permission to conduct the research with church members. Additionally, I provided the pastor and other church leaders with any further information they may require in order to obtain consent to perform research. Upon receiving the letter of cooperation from the pastor, (see Appendix A) to conduct the study, I emailed (see Appendix B) all adult minority church members at AKMBC, alerting them of the opportunity to participate in the research project. A convenience sample of 13 volunteers participated in the study.

Prior to participating in the study, each participant read and signed a consent form (see Appendix D). Participants were interviewed separately at a location convenient for them. Interviews took approximately 1 hour. The coding process is covered in the “data analysis” section below.

Data is secured in a locked file cabinet and password protected computer where only I will have access to the records, and kept for a period of at least 5 years, as required by Walden University.

### **Data Analysis**

Analysis of the data included recorded conversational analysis, content analysis of the qualitative data, and a review of peer-reviewed literature. The ten interview questions elicit information from the participants to determine if they knew who their local emergency manager was, and if they had attended an emergency preparedness briefing. Not knowing whom the local EMPs may indicate that the processes used to engage the local community, especially minorities could need adjusting or improvement. The next few questions dealt with whether the participants had heard of disaster mitigation and if they understood what disaster, mitigation was.

The interview questions also attempted to obtain their thoughts on disaster mitigation, and sought to get the participants thoughts on how emergency managers could improve how they

distributed disaster mitigation information. The participants were asked if they had an emergency plan, what was contained in the plans they had, and what barriers existed that prevented them from having one. Additionally, question seven asked each participant if they were aware of websites that provided information on emergency preparedness. Question 8 asked the participants to delve into their feelings regarding emergency planning and the importance of planning for an emergency.

The final two questions asked if the participant knew or had a place to go in the event of an emergency such as an emergency shelter or friend or relative; and, what they would do if they found themselves in a situation of an emergency or disaster. Each question was analyzed for themes, patterns, and consistencies. The thematic analysis process identified patterns within the data in order to set some protocols for the coding of the research. This process also supports the interpretation and conceptualizing of the data. Thematic analysis provides a flexible and useful research tool, which can potentially provide a rich and detailed, yet complex account of data (Braun & Clarke, 2006).

Richards (2005) recommended a straightforward approach to qualitative coding: (1) storing and summarizing the responses from the participants, (2) topic coding based on the subjects discussed with the participants, and (3) analytical coding based on ideas that emerge as the data reflected upon by me. One method is to take the following steps (Richards, 2005):

1. Review each statement for how well it describes the experience.
2. Record all relevant statements
3. Remove redundant or overlapping statements
4. Organize the meanings into themes

5. Coalesce themes into descriptions of the textures of the experience and augment the description with quotations from the text
6. Use of imagination and taking multiple perspectives to find possible meanings in the text, along with a description of the structures of your experience
7. Create a textual-structural description of the meanings and essences of your experience

Common words or phrases are grouped and labeled for coding. Subsets of data are compared and contrasted for coding purposes. This approach involves two essential sub-processes: unitizing and categorizing. Unitizing is coding taking information units and isolating them. The second step, categorizing, is placing the data into similar categories to organize them. I searched for codes and made inferences from the different patterns (Rudestam & Newton, 2007). Data are categorized and grouped based upon key comments or phrases. To help ensure the accuracy of the coding and analysis, I obtained the assistance of an outside doctoral level reader, who reviewed the codes and themes for accuracy and provided feedback to me.

### **Issues of Trustworthiness**

This section is organized in the following subsections: validity and reliability and informed consent and ethical considerations.

#### **Validity and Reliability**

In a qualitative research study, establishing validity and reliability is different from a quantitative study. In this study, reflexivity, transferability, audit trails, and intracoder reliability.

Reflexivity establishes credibility or internal validity, as well as conformability, where the researcher will use reflection, thus being aware of what allows and inhibits seeing (Watt, 2007). Researchers carefully consider the phenomenon under study, as well as the ways the



researcher's own assumptions and behavior may be impacted by the inquiry. For this research study, times to reflect and interpret the answers given by the participants were taken into consideration, thus ensuring that data accurately interpreted without researcher bias.

In regards to transferability or external validity, findings from this study may be applicable to similar minority populations and environments. However, it is important to note that since findings of qualitative studies “are specific to a small number of particular environments and individuals, it is impossible to demonstrate that the findings and conclusions are applicable to other situations and populations” (Shenton, 2004, p. 69).

Dependability is established with audit trails, which “consist of a thorough collection of documentation regarding all aspects of the research” (Rodgers, 2008, para. 1). The documentation used in this study was the tape-recorded interviews and the transcriptions of those interviews, and the data authenticated by comparing the two forms of data.

### **Informed Consent and Ethical Considerations**

Rudestam and Newton (2007) presented five ethical considerations taken into account in this case study: confidentiality, coercion, consent, care, communication. The study, in accordance with the parameters established by Walden University's Institutional Review Board (IRB) ensured the ethical protection of research participants. In collecting the research data, I eliminated all identifiable information and used an alphabetical coding system to match each participant to their interview. Consent forms (see Appendix D) provided to each participant prior to beginning the interviews and a copy of the consent form to keep. I answered any questions participants may have had before and after the interviews. The consent form indicated that the interview would be audio recorded and that a verbatim transcription will be made and analyzed

later. The consent form informed participants that all data is secured by me and only shared with my supervising committee.

In addition, the consent form outlined the voluntary nature of the study, notifying participants that they can withdraw at any time. Physical and psychological risks that the participants might experience were outlined. This study did not pose any physical risk to the participants' safety or wellbeing. Being in this type of study involves some risk of the minor discomforts encountered in daily life, such as emotional upset. Data is kept in a locked file cabinet and password protected computer at my residence for at least 5 years, as required by Walden University. Only I will have access to data stored in his private office. I will only share data with the dissertation committee chairperson or committee members. Participants were provided with the contact information for me and the Dissertation Committee Chair in case they have any further questions or concerns about the research. Participants were provided with the contact information of the Walden University representative with whom they could privately talk to about their rights as a participant.

### **Summary**

In summary, the purpose of this qualitative case study was to understand the perceptions of minorities in relation to the CEM's process of distributing information within the context of interethnic communication theory and to explore if minorities are receiving disaster mitigation information in a timely and accurate. Data were collected using in-depth face-to-face and a convenience sample of 13 members (both male and female) from AKMBC, was used. The interviews were transcribed and analyzed for themes and codes. The study was conducted in accordance with the parameters established by Walden University's Institutional Review Board (IRB) to ensure the ethical protection of research participants.

Participants signed consent forms prior to the interviews and provided contact information for me and the Dissertation Committee Chair in case they had any further questions or concerns about the research. In addition, participants were provided with the contact information of the Walden University representative with whom they could privately talk to about their rights as a participant.

Chapter 3 included the research design and rationale, role of the researcher, methodology, issues of trustworthiness, and summary. Chapter 4 includes the setting, demographics, data collection, data analysis, evidence of trustworthiness, results, and summary. Chapter 5 includes the interpretation of the findings, limitations of the study, recommendations, implications, and conclusion.

## Chapter 4: Results

### **Introduction**

This section presents the results of the data collected for this dissertation study on minority perceptions of [insert description here]. The overall purpose of this qualitative case study was to understand the perceptions of minorities in relation to the CEM's process of distributing information and to explore if minorities are receiving disaster mitigation information in a timely and accurate manner. This study was crafted to answer the following primary research questions:

1. Does interethnic communication play a role in whether local emergency management professionals effectively communicate with minority residents?
2. What challenges exist from the perspective of the minority participants in this study regarding acquiring information and training opportunities from local emergency management professionals?
3. What potential hindrances influence the effectiveness of emergency management professionals from communicating with predominantly minority populations regarding disaster mitigation information?

The primary data used to answer these questions were collected from interviews of 13 study participants. Analysis of the data included recorded conversational analysis, content analysis of the qualitative data, and a review of peer-reviewed literature. Common words or phrases were grouped and labeled for coding. Subsets of data were compared and contrasted for coding purposes. This approach involved two essential sub-processes: unitizing and categorizing.

### **Setting**

The location for this research was A Kentucky Missionary Baptist Church (AKMBC). The church is a minority family-oriented church. The church has been serving the Radcliff community for 30 years as of November 2014, and has a total membership of nearly 525 members. The church congregation is predominantly composed of African Americans and other minorities, and the pastor of the church consented to allow congregants to participate voluntarily in this research. The church typically reflects the culture and communication preferences associated with previous research that has indicated that both communication and culture play important roles in how people experience communication (Orbe, 95).

### **Demographics**

A convenience sample of 13 minority members of AKMBC participated in this study. Seven participants were men, and six participants were women. All the males were of Black or African American descent. Five of the females were Black or African Americans and one was Hispanic. Each participant reported his or her annual income in the \$50,000.00 to \$120,000.00 range. The ages ranged from 27 to 60 years old. The average age of the men was 48. The average age of the females was 45. The minimum education certification was a high school diploma. The majority of participants had completed bachelor's degrees or master's degrees. One participant had a Juris doctorate degree and was an attorney. The majority had some military background or worked on a military facility. Three of the females were married and three not married. All the males were married except one.

### **Data Collection**

Data were collected via 12 in-depth, face-to-face individual interviews and one set of handwritten responses to the 10 interview questions. I developed questions for the in-depth face-

to-face interviews (see Appendix C), which were designed to answer the primary research questions of this study. The interviews were conducted over a five-day period from 24-28 March 2014. The participants, except for one couple, who met with the interviewer together at the church, were interviewed separately at a location that was convenient for them or in a classroom at AKMBC. Each individual interview session took approximately 1 hour.

### **Data Analysis**

All 10 of the interview questions were analyzed for themes and patterns of consistency, using the thematic analysis process developed by Holton and Merton (Holton-Merton) to identify patterns within the protocols for the coding of the research (Kuch, 1982). I concentrated on manifest or surface content of the responses (i.e. what the participant actually said) and identified prevalent themes (e.g., process, barriers, etc.). This analysis uses a “thema,” which is a belief deeply and often unquestioningly held that has an influence in determining what problems a researcher will find interesting (Kuch, 1982). According to Oliveira et al. (2013), the Horton-Merton process “is a widely used technique in qualitative research. It can be organized into three approaches: lexical analysis (nature and richness of the vocabulary), syntactic (verb tenses and modes) and theme (themes and frequency)” (p. 304).” Thematic research analysis provides a flexible and useful research tool, which potentially can provide rich, detailed and even complex data (Braun & Clarke (2006). Thematic analysis also has been used in the past to support the types of assumptions associated with this research. The assumptions that local EM are not effectively distributing and communicating with local minority populations were validated by the responses of the participants and thematic analysis. These responses reflect the realities of the lives and perceptions of the participants, which is associated with analysis provided by thematic research (Braun & Clarke, 2006).

The themes associated with this research pertained to the corroboration, explanation, or confirmation of individual responses to identical questions. The questions and response formats allow for individualized responses unique to the participants. Each question was designed to clarify whether or not EM professionals engaged actively and effectively in communicating with local a purposively selected minority population.

The use of thematic analysis interpretation allowed for more involvement in the categorizing and conceptualization of the data. Thematic analysis requires involvement and interpretation in order to conceptualize the data. Reliability is a concern because more interpretation goes into defining the data items (i.e. codes) as well as applying the codes to chunks of text. This concern is overcome by maintaining rigor with the following strategies: using two recording devices at the same time, checking for distortions in the transcribed data, providing written transcripts to the participants that they crosschecked for accuracy and comparing the transcripts with field notes. For qualitative research, the analysis of the text from the interviews is critical. The amount of text depends on the complexity of the questions and responses, which can be a simple yes or no, to a detailed lengthy response. The content analysis consisted of three stages: pre-analysis, exploration, and treatment and interpretation (Bardin, 2009). The interviewing of the participants provides data that is carefully reviewed, notes made during the interview process, and sorting of the data in this case study. Data is captured in oral form and transcribed into a Word document. In this particular research, descriptive coding was most appropriate. The first three questions were close-ended and the responses were tabulated based on the frequency of “yes” or “no” answers. The interpretation of the data allows for the development of inferences derived from the responses of the participants. The inferences for this research reflected primarily in the effectiveness of the ability of EM to communicate

information. The data analysis affirms or assesses the responses from the participants. The narrative data acquired through interviews were analyzed critically for trends and themes. Because thematic analysis is a process of encoding qualitative information, I was able to recognize trends from the coded data. My codes for the first three questions were “yes” or “no”; therefore, the data acquired were close-ended responses to the questions. The final seven questions were open-ended and the answers were acquired in narrative data form. Those answers were also analyzed for trends and themes using thematic analysis.

### **Evidence of Trustworthiness**

Establishing validity and reliability in a qualitative study differs from doing so in a quantitative study. In this study, I took time to reflect on and interpret the answers given by the participants to ensure that the data were accurately interpreted and free of researcher bias. I also engaged in the process of member checking, a process, suggested by Rudestam and Newton (2007), by presenting written transcripts of interviews to the participants for their review so that they could verify that the information captured was an accurate record of their answers and observations. Rudestam and Newton (2007) state that the researcher solicits feedback from participants about data gathered to ensure that statements participants have made are accurate. According to Rudestam and Newton (2007), it is “common in the qualitative literature for researchers to return to informants and present the entire written narrative as well as the interpretations derived from the information, with the intention of confirming the accuracy and credibility of the findings” (114). Harper and Cole (2012) state further that member checking is “a quality control process by which a researcher seeks to improve the accuracy, credibility and validity of what has been recorded during a research interview” (510). Each participant received a complete written narrative of his or her interview in the form of a transcript. The participants



validated the accuracy of the content in the transcripts. This study used formal and informal member checking. The formal checks were *a)* having the participant read the transcripts to verify that they contained the information he or she intended, or *b)* when I contacted the participants to verify a comment. Informally, I checked the transcripts without contacting the participants. I employed these strategies to be as accurate as possible during the data analysis. As participants clarified the accuracy of their statements as conversations proceeded. They also had the opportunity to also read their responses and formally make corrections or adjustments as needed.

## Results

The interview questions directly investigated the perceptions of a purposively selected minority population regarding how effectively local EM professionals are communicating with them. In order to confirm or negate the assumption that local EM professionals are not communicating effectively with minority populations, each participant responded to a series of ten questions that dealt directly with how effective interethnic communication was taking place in Radcliff, KY within members of AKMBC. The interethnic communication aspect related to the fact that the majority of EMPs (approximately 87 %) are male and female Caucasians. These professionals use the CEM to coordinate disaster mitigation and emergency preparedness. The ability of EM to convey the various components and nuances of implementing the CEM and disseminating information to local citizens is tantamount to the whole purpose of this research.

### **Questions 1-3**

The participants responded to ten interview questions relative to their perceptions of the CEM's process of distributing information, and if they received disaster mitigation information in a timely and accurate manner (Appendix C). These questions sought to establish if local

emergency managers communicated with minority populations. Thus, a minority voluntary participant pool of minorities was purposively selected for this case study research project.

Questions 1, 2, 3 are closed-ended in nature, and the results are reported by question. Graphs are also included to provide further clarification of the results. Questions four through 10 are more open-ended in nature and discussed according to the prevailing themes uncovered in the data analysis. Participants are designated as Participants A through M.

**Question 1. Do you know who your local emergency manager is?** In response to question one, the majority (12, or 92 percent) replied “no”. The lone respondent who replied “yes” (Participant C) indicated meeting the local emergency manager via “lot of e-mails talking about who he is and emergency procedures that we would have to take if certain situations arise.” *See the Error! Reference source not found. graph.*



Figure 1. Question 1 - Do you know who your local emergency manager is?

When constituents do not know who their emergency manager is, their the communication process between the emergency manager and the constituents could be hampered.

Question 2. Have you attended a briefing on emergency preparedness sponsored by any local, state, or federal agency or professional? If so, when and where? Was the meeting productive for you? Why or why not? The majority (9, or 75 percent) replied “no” to this question. Participants H, L, M, and I replied “yes”. Participants H, L, and I indicated that they received briefings through the military but not civilian briefings; Participant M’s briefing was a civilian one. The graph inserted below indicates the responses to the question of whether the participants had attended an emergency preparedness meeting sponsored by local, state, or federal agencies representatives. This is of particular importance because it directly addresses if EM professionals are engaging with citizens, specifically minority. See **Error! Reference source not found.**

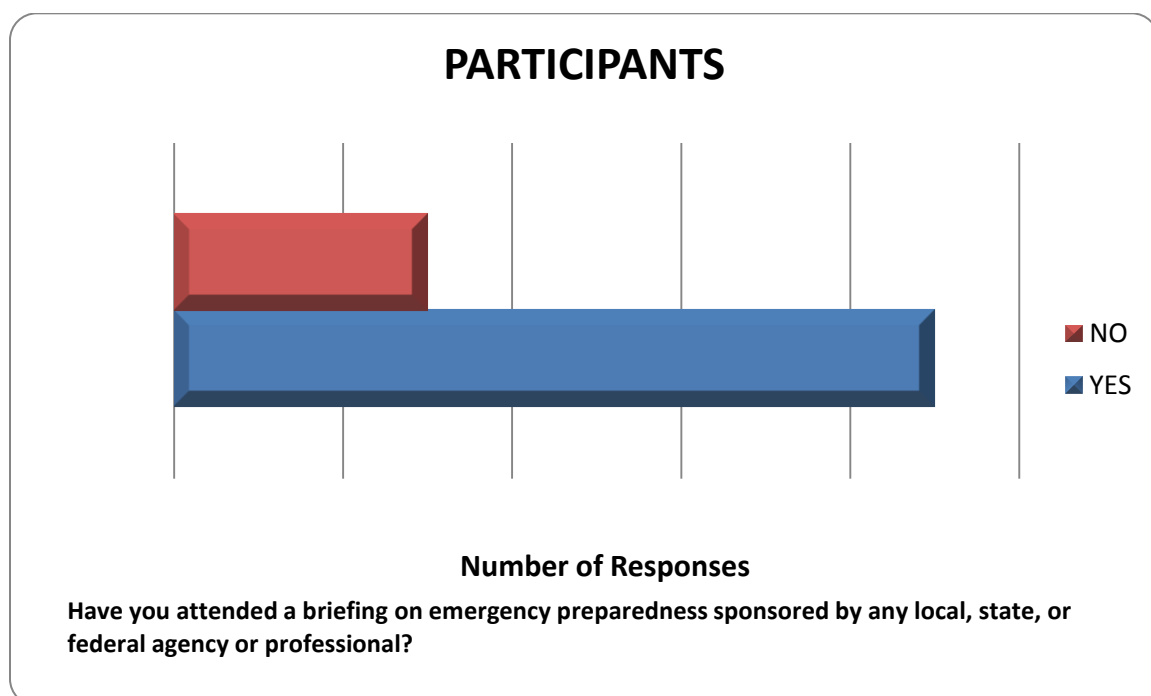


Figure 2. Question 2 - Have you ever heard of all hazards disaster mitigation and know what it is?

**Question 3. Have you ever heard of all hazards disaster mitigation and know what it is?** Eleven (85 percent) replied “no”. Participant K reported hearing about disaster mitigation “on mostly through major news networks like CNN, for example,” and Participant L simply answered “yes”. Participant B stated, “I’ve heard of disaster mitigation and I know that it’s used in times of earthquakes, floods, fires, disasters, tornadoes, but that’s all I know.” Participant M stated, “I never heard of it by that name to know what it is.” See Figure 3 *Error! Reference source not found.*

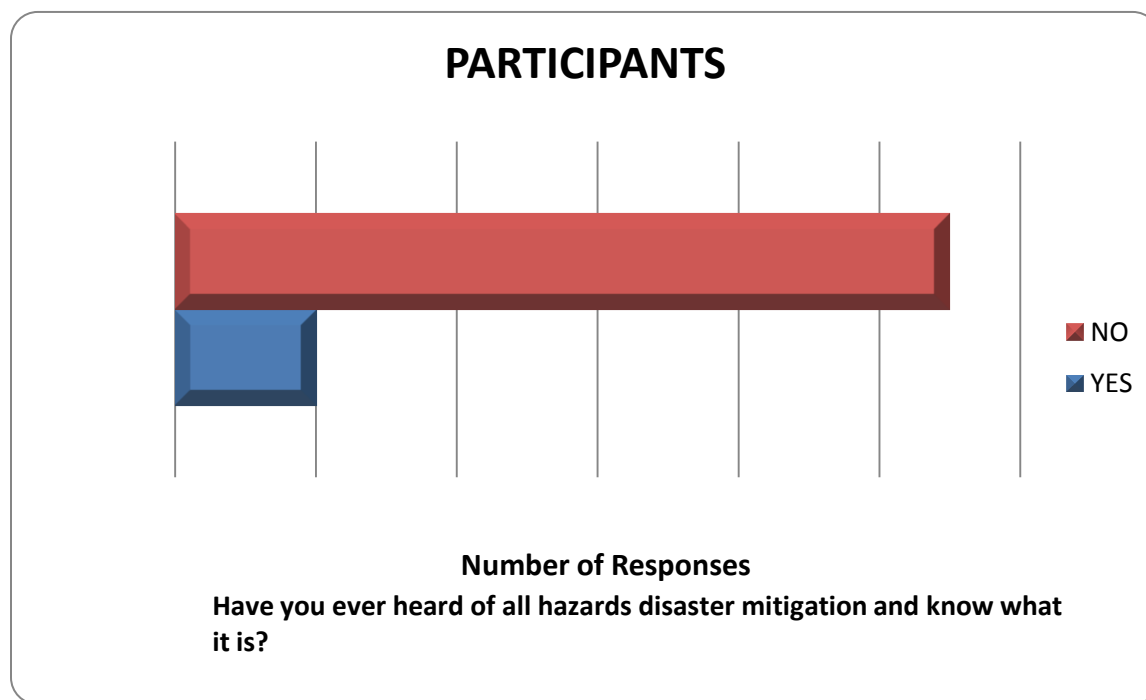


Figure 3. Question 3 - Have you ever heard of all hazards disaster mitigation and know what it is?

### **Interview Data Themes – Questions 4-10**

The subjective responses to these questions were based upon individual responses; therefore, no graph was created. Additionally, these questions tended to reflect the importance of how minorities have preferences for methods of communications. The responses associated with questions 4 – 10 clearly support the importance of emergency managers being able to communicate across racial lines (Dalib, 2011)

**Inadequate process for disseminating disaster mitigation information. The responses to this question included the following** illustrative responses included: “I’ve never heard anything about emergency preparation at all. The only thing you do get is a tornado warning, and you get that from the TV” (Participant F); “TV or cell phone. . . I do get a note across the TV, but that's just saying that a storm is coming or something like that, but that's not telling me where to go or what to do” (Participant D). Participant A noted:

I do not have many formal, official, direct lines to the information, but I think by news, through the news, and people who I've been knowing in the community, I am able to find out some information, I guess to do what I need to do. I don't have all the specifics. According to Participant K:

I think that it [information] is distributed very poorly. If I were a person who didn't watch much TV, I don't feel I would get any information about disaster mitigation outside of what I see in the media. It's just my opinion that we don't even hear about disaster mitigation until we have a disaster.

Overall, most participants indicated a lack of an official process for disseminating information and obtained their information mainly from television, radio, warning sirens, cell phone alerts, and word of mouth.

Barriers to preventing persons from establishing a disaster plan and acquiring information to develop the plan primarily due to lack of knowledge of where to go or what to do in case of an emergency. Participant B stated:

I know the basics of what type of food and things I would need a disaster plan to get myself and my family at least in a safe environment for two or three days, but I've never received extensive information to help me deal with any type of emergency.

Participant A noted, "You can Google just about anything now. But I don't know all the specific websites." Participant E also mentioned Google as a source of information related to emergency planning. Participants B, F, J, and K were aware of FEMA websites. Participant K explained:

FEMA has websites that are specific to local areas. There's the national FEMA site, and then there are local sites, because FEMA generally has local office throughout each state, but you can get on your computer, Google, or just query and find out what sites or resources are available to you.

Participants C and E summed up this theme: "I really didn't know where to go to find the knowledge" and "My feelings would be that we could almost quote the Bible and say 'my people perish for lack of knowledge'."

**Other barriers.** In addition to the barriers of lack of more extensive information about dealing with emergencies and lack of knowledge about websites to access to learn more, other barriers cited concerned financial resources, communication, and personal individual characteristics. Participant D stated, "If you don't have money, then you're depending upon the kindness of others because now you can't afford to go to a hotel at least...Money is a big barrier. Right now, my biggest barrier would be money." Participant A noted, "I think barriers may be

communication, that's giving information and knowing who to give it to.” Participant A’s continuing response implied that finances may also be an underlying factor: “I don't know if they're [a local organization] staffed to get to everyone, or if they're proactive enough to reach everyone.”

Participants E and J suggested that one’s personal characteristics might be another barrier. Participant E observed:

I think the biggest barrier would be . . . self. It's not really something that we really say "ooh I need to plan, to be prepared for this . . . It won't happen to me, or it won't happen here. It's more of a reaction, I know a storm's coming, and then I'll make preparation.

Participant G agreed, stating, “I just think we don't reach out, and I say that because when you're uneducated -- just like you just told me about that. It's my job now to go reach out and get it.” Participant J believed, “I think that there is procrastination; that's probably an issue for me personally. But as far as barriers, I don't think there's anything precluding me from establishing a plan.”

The most predominant barriers cited by respondents were lack of more extensive information, particularly about how to deal with emergencies beyond getting one’s family in a safe environment or how much food would be needed, and lack of knowledge about websites to access to learn more about emergency planning.

**Importance of emergency planning.** Participant J described his emergency plan:

My wife and I decided that we would have flashlights in every room; we actually have two flashlights in our room. We keep some water on hand, and of course, we have a basement. In terms of other action we would take, we don't really have detailed plan, but

whenever there's a tornado warning, or things like that, I normally lay a jogging suit on the foot of the bed in case I need to get out in a hurry. I have my wallet and things that are in one place that I could get readily available and a cell phone, and I got a weather radio.

Participant A also purchased a generator, heaters, and extension cords. Participant G indicated that his home was built with the wiring underground and a fireplace and that he has propane heaters for cooking. In the event of a tornado, Participants B, H, and I know to go to in the enclosed place away from windows. However, Participant B indicated that she would not know what to do in the event of an earthquake or a hurricane. Participants H and I are also prepared with a “green duffel bag” that has at least 10 days’ worth of food and water supplies.

Participant F plans to keep copies of important documents in one location. Participant K expressed:

I always ensure that in my insurance policies that I include a clause or that there is literature in my insurance policy for my home, for example, that if I live in a state that is prone to tornadoes, we can get clauses that cater to that occurrence.

Nearly half of the participants in their emergency planning mentioned reliance on family and close friends. Participant A indicated, “I have close friends really close by, in driving distance, and I have family as close as 2 hours, so I have close-range and medium-range places to go to.” Participant J also indicated that he had several friends to whose homes he could go, but only “if my vehicles weren't destroyed, and if I had the ability to communicate”; otherwise, he would not have a designated area to which he could go.

Participant J, who stated, “I think it’s crucial, aptly summarizes the theme of the importance of emergency planning. I think a lot of times we take it for granted because we live



in small town America; nothing like that happens here,” and by Participant H: “It's important; that's just the bottom line, it's important. It's necessary.”

### **Recommendations for improvement to distribution of disaster mitigation**

**information.** Among the suggestions made by respondents were included emails, social media, infomercials, and more traditional media such as television and radio. Participant A suggested infomercials, Pandora ads, and Facebook posts and noted, “Information like that could be sent by letter mail to let people know, so they can take advantage of it.” Email was important to Participant C, and for those without access to email, “we'll just go old school: mail it out to them.”

Neighborhood watches and dissemination of information through the public schools were mentioned. Participant B had a unique suggestion: “Possibly utilizing the realtors, because when you are moving to a new location, they are the ones who would know what could happen in your area for example, if you're in a flood zone or something like that.” Participant D suggested holding group meetings and exhibiting sample emergency kits to appeal to people who are visual in how they process information. Churches as sources of information were cited. Participants D, E, F, and I expressed that they would be comfortable with an emergency manager coming to their church or in a classroom setting. As Participant D put it, “You need to have as many people from those organizations there, so the people's questions can get answered then.” According to Participant I, “I think its best in a church, because you're already going to church, whereas, if you tell them to come to a town hall meeting to hear about disaster mitigation, they probably wouldn't go.”

Participant J suggested a broader approach that includes local government:

I think that if emergency management personnel would get involved with the local city council, and at the local city council meetings if they would present information to the council that could be distributed to the public or each district about emergency management procedures, the location of shelters, what type of assistance would be available in the case of an emergency. Having periodic meetings that are announced through the same system as the emergency test system is being done. Actually just knowing who to contact, where FEMA is located, or who the responsible individuals in the area are. There could be posters or a billboard put up on 31W to distribute the information. Get civic organizations and local churches involved, or even an emergency awareness day.

As anticipated, all of the participants expressed the conviction that emergency planning is important. Several discussed their own individual emergency plans in the absence of an official plan. These plans included using generators and flashlights in case of a power failure, having adequate food and water supplies, having adequate insurance, and reliance on family and friends in the event of a disaster.

### **Overarching Themes**

An overarching theme that emerged from participants' responses was that participants who were most knowledgeable about and aware of emergency planning and procedures had served in the military (Participants A, G, H, and J). Each of these participants indicated that there was nothing for civilians. Participant F observed, "In this community, for most of the people -- and it's a military community so it's a little bit different -- the military normally takes very good care of their people in training them and providing the information all the time. But those outside of that don't get that." The recommendations made by respondents to improve distribution of

disaster mitigation information could address the gap between an informed and uninformed citizenry.

### **Summary**

In this chapter, the results of the data collected for this study were presented and analyzed. Seven male and six female minority members of AKMBC, were interviewed about their perceptions of the CEM's process of distributing information and if minorities they are receiving disaster mitigation information in a timely and accurate manner. Results of the data analysis were reported in narrative form. Five prevailing themes and one overarching theme were identified from the interview data.

In Chapter 5, the findings of this study are interpreted and the research questions are answered. Limitations of the study, recommendations for further study, and implications for social change are discussed.

## Chapter 5: Conclusions and Recommendations

### **Introduction**

The purpose of this qualitative case study was to understand the perceptions of minorities in relation to the comprehensive emergency management (CEM)'s process of distributing information and to explore if minorities are receiving disaster mitigation information in a timely and accurate manner. This chapter presents the interpretations of the findings and answers to the research questions. This chapter also provides a discussion of the limitations of the study and recommendations for further study, followed by implications for social change.

### **Interpretation of the Findings**

The findings from three research questions are presented in this study.

1. Does interethnic communication play a role in whether local emergency management professionals effectively communicate with minority residents?
2. What challenges exist from the perspective of the minority participants in this study regarding acquiring information and training opportunities from local emergency management professionals?
3. What potential hindrances influence the effectiveness of emergency management professionals from communicating with predominantly minority populations regarding disaster mitigation information?

Research question 1: Does interethnic communication play a role in whether local emergency management professionals effectively communicate with minority residents? The majority of participants had never spoken to or met their local emergency management professional (see Figure 2). In response to the first part of research question 4, only one person, Participant C, reported meeting an EMP and described how they met. Participant C reported

meeting their EMP via email, stating, “They sent out a lot of e-mails talking about who he is and emergency procedures that we would have to take if certain situations arise.” Participant C also indicated that he knew the location of the EMP. A significant contextual detail of this response is that Participant C was the only participant who had met their EMP in a civilian context, rather than a military context.

Overall, the majority of participants stated that they have not met the local EMP because of lack of information. Inadequate communication on both sides was cited; participants did not know how to access information about EMPs and EMPs did not reach out to members of the community so that they would know to whom to give information. Participant B was especially candid, noting:

Personally, I believe that most of these people who work in these emergency organizations only come out when an emergency happens. I don't think that they take the necessary steps to inform and protect the citizens. They're only around to get a paycheck. That they're not really serving as public servants to help the citizens because proactive measures would probably save more lives than waiting until an actual emergency to try to give instructions to people who have so many other things going through their minds at that time.

This comment validates the necessity for effective and timely communication between EMPs and their constituents to address the scenarios raised by Participant B. This participant placed particular emphasis on EMPs' perceived negligence in preparing constituents for disasters or emergencies. The participant expressed the sentiment that EMPs seem only interested in being paid; therefore, their constituents feel that they are not only neglected, but are ultimately unprepared for potential emergencies.

The answer to research question 1 is, therefore, affirmative: interethnic communication competence does play a role in whether local emergency management professionals and local resources (such as support centers/shelters) are available to minority residents.

Research Question 2: What challenges exist from the perspective of the minority participants in this study regarding acquiring information and training opportunities from local emergency management professionals? Respondents cited barriers to information about disaster mitigation that went beyond getting one's family in a safe environment and how much food would be needed. Participants also mentioned lack of knowledge about websites to access to learn more about emergency planning. Other cited barriers included financial resources, communication, and personal individual characteristics such as procrastination or a belief that "it can't happen to me." Minorities are more likely to report higher levels of perceived risk, are less likely to receive the warnings that would allow them to take protective action, and may have limited access to protective resources (Rodriguez et al. (2007) and Slovic (2000). Finch's (2010) study also suggested that Black communities suffer disproportionately negative consequences in natural disasters, therefore emphasizing the urgent need for EMPs to provide comprehensive disaster mitigation information to them. In general, respondents perceived themselves at great risk for disasters. The primary source of disaster mitigation information that they cited was what they saw in newspapers, on television, or the Internet, and that they often did not hear about disaster mitigation in their areas until after a disaster occurred.

Research Question 3: What potential hindrances influence the effectiveness of emergency management professionals from communicating with predominantly minority populations regarding disaster mitigation information? The answer to research question 3 is related to the answer to research question 1: The chief hindrance cited was a lack of interethnic

communication competence on the part of EMPs. More specific hindrances identified by respondents included a lack of knowledge of whom the local emergency manager is; a lack of knowledge about or attendance at briefings on emergency preparedness sponsored by local, state, federal, or professional authorities; and a lack of knowledge about all-hazards disaster mitigation.

To address some of these hindrances, four of the participants suggested utilizing churches by inviting their EMPs to address the congregation and answer members' questions. This suggestion reflects the importance of churches in minority communities; Dunaway (2010) and De Vita and Kramer (2008) found that in minority communities churches form cooperative relationships with private agencies and organizations. When disasters occur, churches provide a level of security and resilience for the community by working together with these agencies.

One participant suggested that EMPs become more involved with local government officials, specifically the city council. This participant recommended that EMPs become more involved with local government, particularly through attendance at city council meetings, where they can utilize that forum to address both the city council and citizens in attendance and to distribute disaster mitigation information. These suggestions are in line with both punctuated equilibrium theory and organization theory. In punctuated equilibrium theory, controversial topics create social responses (Dziengel, 2010). With respect to organizational theory, it reflects the importance of the coordination of the efforts of the EMPs. If this coordination of effort does not include the ability to communicate to all members of society to provide emergency management and mitigation services; then, an important component will be lacking. That component in this case is the lack of ensuring that EMPs effectively communicate to all segments of the community. A lack of knowledge of emergency management and disaster

mitigation procedures and participants not knowing their local EMP generated controversy in the community studied.

According to Peguero (2006), racial and ethnic minorities place much greater importance on information provided by interpersonal and familial networks in comparison to Whites. Word of mouth is especially significant in terms of interethnic cultural communication theory, which posits that racial and ethnic minorities prefer interpersonal networks, particularly family members and other relatives, to obtain information (Rodriguez et al., 2007). This is because there is more reliance on each other rather than information provided by government and mass media (Peguero, 2006). Some of the respondents in this study cited personal sources of information that included people they knew in the community. Other respondents who had any kind of emergency plan noted that they relied primarily on family and close friends. The answers to the research questions indicated that the minorities in the participant pool were not receiving disaster mitigation information in a timely and accurate manner, and there were still gaps in their local CEM process.

Organization theory also applied to and supported participants' recommendations because the local EMP office is an organization. Their responses suggested that their local EMP organizations needed to interact more with churches and local government officials before disasters occur. Further, according to Frimpong (2011), EMPs should continuously update their knowledge and skills in emergency management by obtaining education beyond the high school level and with ongoing professional development. Political leaders need to be educated in the basics of emergency management so that they are in a better position to help their constituents.



### **Limitations of the Study**

This research had several limitations. First, the research took place in one church in one geographical region with a small sample size ( $n = 13$ ). Therefore, the results of the study relative to the perceptions of minorities of the CEM's process of distributing disaster mitigation information, whether they receive this information in a timely and accurate manner may not generalize to all minorities.

Second, participants may not have given an accurate report of their beliefs, feelings, attitudes or behaviors and may have answered according to what they believed the researcher expected or with neutral answers. Thus, the accuracy of the data depended on participants' honesty and candor.

Finally, I may have had an influence on the participants studied, although every effort was made to minimize bias by repeatedly examining the data to ensure that themes uncovered in the data analysis made sense and reflected the true nature of participants' responses. To minimize this I maintained a perspective of critical subjectivity as participants answered questions. Letherby, Scott, and Williams (2013) defined critical subjectivity as a researcher has heightened self-awareness as they progress through the research process. When researchers possess heightened awareness, they are conscious of their psychological and emotional states before, during, and after the research.

### **Recommendations**

This study focused on minorities' perceptions of the CEM's process of distributing disaster mitigation information, and whether minorities receive this information in a timely and accurate manner. Therefore, the study only included minority participants and excluded Caucasians who were members of the church where the study took place. Future studies should

be conducted to compare and contrast the perceptions of Caucasian members of the church with those of minority members of the church. Future research conducted on a broader scale with larger sample sizes and more samples that are diverse. Comparisons among churches in different communities in other states, or in other organizations about the effectiveness of disaster mitigation efforts should be conducted.

I also recommend duplicating this study at logical points in time to determine if any trends related to disaster mitigation are evident. Such studies may lead to a more proactive approach to communicating information about disaster mitigation information more quickly and accurately.

Based on participants' responses, those who were most knowledgeable about and aware of emergency planning and procedures had served in the military (Participants A, G, H, and J). Each of these participants indicated that there was nothing for civilians. The majority of respondents obtained their information about disaster plans from television, radio, warning sirens, cell phone alerts, and word of mouth. Therefore, further research is needed that takes into consideration the recommendations made by respondents who both served and did not serve in the military to improve distribution of disaster mitigation information in a civilian context.

A final recommendation concerns a theory of CEM. The theoretical framework of this study is based on interethnic communication theory, punctuated equilibrium theory, and organization theory. The field of comprehensive emergency management is ever changing, and new theories should be investigated. The CEM model is a guideline for carrying out necessary emergency procedures to mitigate, prepare for, respond to, and recover from all emergencies and disasters (Blanchard et al., 2007). However, no single overarching theory exists for CEM, and new theories developed that not only explain variables associated with disasters but also consider

vulnerability of diverse social groups. Further, such a theory should be predictive and address best practices. Developing a CEM theory would not only further add to the existing body of knowledge concerning disaster mitigation, especially in minority communities, but would also assist emergency management professionals to better communicate and distribute information about disasters to citizens of the community in a more timely and accurate manner.

### **Implications of this Study**

The results of this study added to the existing literature about emergency preparedness, disaster mitigation, and communication issues associated with disasters. The results also provided insight into how to improve communications about emergencies and disasters to local citizens, especially within the minority community. Such insight will assist CEM organizations, EMPs, and government officials responsible for community safety to enact policies and design programs that will protect citizens in the event of any disaster and minimize the effects of the disaster.

Understanding the experiences of minorities relative to disaster preparedness and mitigation can lead to foster positive social change. In addition, understanding how CEM organizations function and the role EMPs may lead to greater engagement of these organizations and professionals in responding to emergencies and disasters and assisting the people that they serve and support. In accordance with punctuated equilibrium theory, people tend to not prepare or take steps to mitigate the impact of a disaster or emergency until the event actually is imminent or occurs. If citizens become familiar and more involved with EMPs in their communities and build avenues of two-way communication, they may be more likely to be prepared, and proactive steps taken before disasters occur.

Further, EMPs must recognize that U. S. citizens are more ethnically diverse, and they must effectively communicate with people of all races and ethnic backgrounds. Creating mutual dialogue between EMPs and citizens of the community can help ensure the safety of the community in the event of a disaster and of society overall.

### **Implications for Social Change**

The events of Hurricanes Katrina and Rita set the stage for this research project. What was shown on the various national television networks was predominantly minorities depicted in various traumatic situations. It is the belief of this researcher that some if not all of these situations could have been prevented or significantly reduced in their magnitude and impact. I felt that it all began with effectively communicating to minorities and ensuring that every possible remedy to lessen the impact of such an event could be mitigated. This mitigation would be provided by the emergency management professionals charged with protecting their constituents whether it was the local, state, or federal level of responsibility. The tragedy of those events seems to indicate that there was a lack of effective distribution of information, especially to minority communities. The intent was to determine if there was a lack of distribution of information.

The impact from a social change perspective from the local level would help emergency managers and professionals recognize the importance of communicating with not only the majority members of the community, but their minority citizens as well. It may raise the level of cultural awareness on both sides of the house. It also would create an environment in which citizens and EM professionals actively engage in preparing for a disaster or emergency prior to such an event-taking place. The focus was purposively geared towards a predominantly minority

population because the intent is to increase the level of awareness by minorities and for minorities in the future.

The findings of this study reveal that there is a lack of dialogue and interaction between the minority community and the local emergency management professionals. However, this included the state and federal level as well when it comes to being aware of the resources and services available to citizens. This was somewhat mitigated by those that had ties to the military. The participants that had family members or worked on a military facility generally provided with guidance regarding emergency planning from a military perspective. However, without the military's influence, there was little to no activity or interaction readily presented that indicated the participants had any knowledge of their local emergency manager.

### **Recommendations for Action**

An area of immediate attention must be for local emergency managers and professionals to establish contact and foster a path of communication between local minority citizens and the local EM office. The church is a splendid option and method to address this need. Several of the participants feel that this is a good means to tackle the problem of getting information out to the minority members of the community.

Another recommendation would be to diversify the training of emergency managers and professionals by introducing them to cultural awareness and understanding the various ethnically diverse members to whom they support. Ideally, local EM managers would reach out to the local organizations and arrange for meetings to take place whereby they can introduce themselves as well as present the various services and resources that they can provide to citizens.

However, it is not only the responsibility of the EMPs to be engaged in this effort at improving interethnic communication. All citizens, including minorities in local communities,

need to reach out to their EMPs. People have a tendency to be complacent about preparing for future emergencies, and this was prevalent in the responses from the participants in this study. The period between disasters and emergencies is the time to prepare and plan to mitigate the damage from an emergency or disaster, not after the disaster has occurred.

The development of emergency plans that is based on the individual, family, organization, and businesses can be effectively initiated in a manner that considers the capabilities and needs of each entity with the right training and distribution of information. It just needs to be initiated by both parties (emergency management professions and citizens).

Citizens can provide feedback regarding the needs of the community and the EM professionals can provide what is available to mitigate the impact of emergencies. Effective strategies and practices established that consider the nuances of the members of the community the EM professionals serve, while engaging the citizens in the process of helping themselves be better prepared.

The findings of this research also advocate the need to effectively emphasize the importance of emergency preparedness and reduce the propensity for complacency to set in during periods of punctuated equilibrium when no emergency occurs. It also captures the various intricacies associated with the various organizations that need or may become involved with emergency preparedness. Organizations, whether large or small, can become involved in the process of emergency preparedness when the flow of information is improved and the interaction is increased. Local business and other entities can also utilize this same idea.

### **Recommendations for Further Study**

This research has provided a glimpse through which eyes opened to the importance of how EM professionals need to improve in communicating with minority populations regarding a very important subject such as emergency preparedness.

Secondly, the basic training of emergency management professionals should seriously consider the inclusion of cultural awareness into the CEM curriculum. Having completed this study, a survey can be performed that reaches out to more minorities and citizens as a whole to firmly establish the need for addressing the interethnic communication concerns introduced in this research project.

Continued research on a larger scale would be an option for future research utilizing a larger and more diverse population that would capture the awareness and understanding of more than one segment of the population. Due to the nature of the interview process, it may be feasible to utilize a survey to capture a larger participant pool. However, a larger pool using that methodology would negate the ability of the research to gain as in-depth and intimate analysis as a qualitative study.

### **Researcher's Experience with the Research Process**

Having gone through more than 36 months of analysis to prepare the research proposal, I realized that I had no idea of the enormity of the process of conducting this qualitative study to produce an accurate and complete work. I certainly have a greater appreciation for research and the amount of work and effort that go into research.

In this project, I stressed particular importance on capturing the true feelings and thoughts of the participants with respect to their understanding and knowledge of how they received information regarding disaster/emergency preparedness. I was careful to record the comments

provided in the interviews and once transcribed, ensured that they received a copy and could make any corrections as need be. The intent was to assure the integrity of the collection process and analysis of the data. The careful documentation of the procedures, the recognition of themes, and conclusions were made to provide a path for others to determine differences in following research by others in the future.

Additionally, since I chose a purposively selected sampling pool, I recognize and acknowledge that results from this study cannot and should not be generalized outside the scope of this study. This study is intended to address any bias, as results were not drawn from a randomly selected population.

### **Conclusion**

The results of this study shed light on the experiences of minorities relative to disaster preparedness and mitigation, of which little is known. The responses of the participants in this study from a church congregation in Kentucky reflected their experiences and perceptions and supported the observations of researchers such as Peguero (2006), Rodriguez et al. (2007), Slovic (2000), and Finch (2010). The responses of these participants provided greater insight into more effective steps that can be taken to better prepare citizens for disasters when they occur and for the aftermath.

This research supports Kim's (2005) interethnic communication contextual theory, which places the behavior at the center within three contextual layers: the communicator, the situation, and the environment; it offers a comprehensive account for the nature of the relationship between interethnic behavior and key factors of the surrounding context. The structure of factors can be called an "interethnic communication system" (Kim & McKay-Semmler, 2009).



The research also concurs with the basic contextual theory associated with the structure of interethnic communication, which places the behavior at the center within three contextual layers: the communicator, the situation, and the environment (Kim, 2005). It offers a comprehensive account for the nature of the relationship between interethnic behavior and key factors of the surrounding context. The structure of factors can be called an “interethnic communication system” (Kim & McKay-Semmler, 2009).

This is important for application to this research because the behavioral factor of professionals in the field of emergency management may involve observable verbal and nonverbal activities as well as intrapersonal cognitive and affective processes. If emergency managers perform observable and nonverbal activities to distribute information, this would explain the communication in interethnic encounters which act “associatively” when they are motivated to engage themselves in meaningful interactions rather than as representatives of an out-group category. “Communication behaviors are characterized as “dissociative” when they are based on lack of interest, categorical, stereotypical, and depersonalized perceptions” (Kim & McKay-Semmler, 2009,

Climate change had made the role of CEM organizations and EMPs in disaster mitigation and management more important. As an organization, the Black church has historically been central and has promoted educational, business, and political activism (Dunaway, 2010). Working together, CEM organizations, EMPs, organizations such as churches, and local politicians can help communities ensure more safety for citizens in the event of a disaster and provide models of disaster mitigation and response that can benefit society as a whole.

## References

- Aguirre, B. E. (1988). The lack of warnings before Saragossa tornado.  
International Journal of Mass Emergencies and Disasters, 6, 65-74.
- Alexander, D. (2002). *Principles of emergency planning and management*. New York, NY:  
Oxford University Press.
- Andrulis, D. P., Siddigui, N. J., & Purtle, J. (2011). *Guidance for integrating culturally diverse communities into planning for and responding to emergencies: A toolkit*. Retrieved from  
[http://www.hhs.gov/ocr/civilrights/resources/specialtopics/emergencypre/omh\\_diversitytoolkit.pdf](http://www.hhs.gov/ocr/civilrights/resources/specialtopics/emergencypre/omh_diversitytoolkit.pdf)
- Arnold, J. P. (1988). *The evolution of the 1936 flood control act*. Washington, DC: United States Army Corps of Engineers. Retrieved from  
[http://publications.usace.army.mil/publications/eng-pamphlets/EP\\_870-1-29/EP\\_870-1-29.pdf](http://publications.usace.army.mil/publications/eng-pamphlets/EP_870-1-29/EP_870-1-29.pdf)
- Association of Religious Data Archives. (2010). *State membership report: Kentucky religious traditions, 2010*. Retrieved from  
[http://www.thearda.com/rcms2010/r/s/21/rcms2010\\_21\\_state\\_name\\_2010.asp](http://www.thearda.com/rcms2010/r/s/21/rcms2010_21_state_name_2010.asp)
- Bardin, L. (1998). *Analysis of content*. Paris, France: PUF.
- Baumgartner, F., & Jones, B. (1993). *Agendas and instability in American politics*. Chicago, IL: University of Chicago Press.

- Beady, C. H., Jr., & Bolin, R. C. (1986). *The role of the Black media in disaster reporting to the Black community*. Retrieved from <http://www.colorado.edu/hazards/publications/wp/wp56.pdf>
- Beaman, N. (2011). *Disaster simulation for promoting volunteerism of medical assisting students* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3440420)
- Berger, E. (2013, September 28). Most Texans don't believe humans are causing global warming. *The Houston Chronicle*. Retrieved from <http://blog.chron.com/sciguy/2013/09/most-texans-dont-believe-humans-are-causing-global-warming/>
- Berke, P. R., Kartez, J., Wenger, D., Berke, P. R., Kartez, J., & Wenger, D. (1993). *Recovery after disaster: Achieving sustainable development, mitigation, and equity*. *Disasters*, 17, 93-108.
- Bertaux, D. (1981). From the life-history approach to the transformation of sociological practice. In D. Bertaux (Ed.), *Biography and society: The life history approach in the social sciences* (pp. 29-45). Thousand Oaks, CA: Sage Publications.
- Blanchard, B. W., Canton, L. G., Cwiak, C. L., Goss, K. C., McEntire, D. A., Newsome, L., & West, D. (2007). *Principles of emergency management supplement*. Retrieved from <http://www.ndsu.edu/fileadmin/emgt/PrinciplesofEmergencyManagement.pdf>

- Blubaugh, J. A., & Pennington, D. L. (1976). *Crossing difference: Interracial communication*. Columbus, OH: Charles E. Merrill.
- Bolger, L. (2003). Scared or prepared? Disaster planning makes the difference. *Information Outlook*, 7, 26-32.
- Bolin, R. (1993). *Household and community recovery after earthquakes*. Boulder, CO: Institute of Behavioral Science, University of Colorado.
- Bolin, R., & Stanford, L. (1998). The Northridge earthquake: Community-based approaches to unmet recovery need. *Disasters*, 22, 21-38.
- Braun, V. and Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101.
- Bumgarner, J. B. (2008). *Emergency Management: A Reference Handbook*. Santa Barbara, CA: ABC-CLIO.
- Center for Excellence in Government. (2004). *From the home front to the front lines: America speaks out about homeland security*. Retrieved from [http://www.excelgov.org.usercedia/images/uploads/PDFs/Homeland\\_Full\\_Report.pdf](http://www.excelgov.org.usercedia/images/uploads/PDFs/Homeland_Full_Report.pdf)
- Charron, L. J. N. (1995). Qualitative thematic critical analysis of communication ethics in interpersonal communication textbooks. (Unpublished doctoral dissertation). University of Minnesota, Minneapolis, MN, 207-207. Retrieved from <http://search.proquest.com/docview/304221620?accountid=14872>. (304221620).

- Commonwealth of Kentucky. (2013). *Kentucky emergency management*. Retrieved from <http://kyem.ky.gov/Pages/default.aspx>
- Communications News. (2005). Home improvement. Retrieved from <http://www.comnews.com>
- Couch, A. R. & Coles, C. J. (2011). Community stress, psychosocial hazards, and EPA decision-making in communities impacted by chronic technological disasters. *Environmental Justice, American Journal of Public Health Supplement 1*, 140-148.
- Creswell, J. W. (1998). *Qualitative inquiry and research design: Choosing among five traditions*. Thousand Oaks, CA: Sage.
- Creswell, J. W. (2009). *Research Design: Qualitative, quantitative, and mixed methods approaches* (3rd ed.). Thousand Oaks, CA: Sage.
- Cutter, S. L., Boruff, B. J., & Shirley, W. L. (2003). Social vulnerability to environmental hazards. *Social Science Quarterly*, 84, 242-261.
- Cwiak, C., Cline, K., & Karlgaard, T., (2012). What can we learn from a comparative analysis of IAEM respondents and rural emergency managers? *Emergency Management Demographics*. Retrieved from <http://www.google.com/url?sa=t&rct=j&q=carol%20cwiak%2C%20kathy%20cline%20>
- Dacko, A. & Dacko, M. (2009). Management of the natural environment: A systemic approach. *Polish Journal of Environmental. Studies*, 18, 145-150.

- Dalib, S. (2011). What it takes to interact with "The other": A phenomenology of interethnic communication competence among students in an American university. *Human Communication, 14*, 221-239.
- De Vita, C., & Kramer, F. (2008). The role of faith-based and community organizations in post-hurricane human service relief efforts. Washington, DC: The Urban Institute.
- Drabczyk, A. L. (2005). Citizen and emergency responder shared values: Enabling mutual disaster management performance. *Prehospital and Disaster Medicine, 20*(2), s27
- Drack, M. (2007). On the making of a system theory of life: Paul Weiss and Ludwig Von Bertalanffy's conceptual connection. *The Quarterly Review of Sociology, 82*, 349-373.
- Dunaway, W. M. (2010). Four degrees of proximity: Key factors that influence private sector preparedness and continuity planning (Doctoral dissertation). The George Washington University, Washington, DC, 269.
- Eisenman, D., Cordasco, K., Asch S., Golden, J. F., & Glik, D. (2007). Disaster planning and risk communication with vulnerable communities: Lessons from hurricane Katrina. *American Journal of Public Health, 97*, 109–115. doi:10.2105/AJPH.2005.084335
- Elmore, D., & Brown, L. (2007). Emergency preparedness and response: Health and social policy implications for older adults. *Generations, 31*, 66-74.
- Federal Emergency Management Agency. (2006). *FEMA National Situation Reports*. Washington DC: Author.

- Federal Emergency Management Agency. (2013). *Disaster declarations for Kentucky*. Retrieved from [http://www.fema.gov/disasters/grid/state-tribal-government/49?field\\_disaster\\_type\\_term\\_tid\\_1=All](http://www.fema.gov/disasters/grid/state-tribal-government/49?field_disaster_type_term_tid_1=All)
- Finch, C., Emrich, C. T., & Cutter, S. L. (2010). Disaster disparities and differential recovery in New Orleans. *Population and Environment*, 31,179-202. doi:10.1007/s/11111-009-0099-8
- Fothergill, A., Maestas, E. G., & Darlington, J. D. (1999). Race, ethnicity and disasters in the United States: A review of the literature. *Disasters*, 23, 156-173.
- Frimpong, A. (2011). Sheltering and housing recovery after disasters: Dissecting the problems of policy implementation and possible solutions. *International Journal of Humanities and Social Science*, 1, 1-12.
- Geis, D. (2000). By design: The disaster resistant and quality-of-life community. *Natural Hazards Review*, 1, 151-160.
- Gould, S. (2007). *Punctuated equilibrium*. Cambridge, MA: Harvard University Press.
- Grubbs, R. (2005). *Reflections from the Project Director: KY Project Recovery* Rockville, MD: U.S. Department of Health and Human Services.
- Harper, M. and Cole, P. (2012). Member Checking: Can Benefits Be Gained Similar to Group Therapy? *The Qualitative Report* 17:2 (March 2012), 510-517.  
<http://www.nova.edu/ssss/QR/QR.17-2/harper.pdf>

- Holdeman, E. (2014). More diversity is needed in emergency management. *Emergency Management, September 19, 2014*. Retrieved from <http://www.emergencymgmt.com/training/More-Diversity-Needed-Emergency-Management-Opinion.html>
- Hughey, E. P., & Tobin, G. A. (2006). Hazard response capabilities of a small community: A case study of Falmouth, Kentucky and the 1997 flood. *Southeastern Geographer, 46*, 66-78.
- Humes, K. R., Jones, N. A., & Ramirez, R. R. (2011). Overview of race and Hispanic origin: 2010 census briefs. Retrieved from <http://www.census.gov/prod/cen2010/briefs/c2010br-02.pdf>
- Jenkins, W. O. (2006). Emergency preparedness and response: Some issuers and challenges associated with major emergency incidents. Retrieved from <http://www.gao.gov/new.items/d06467t.pdf>.
- Kapucu, N., Arslan, T. & Collins, M. (2010). Examining intergovernmental and inter-organizational response to catastrophic disasters: Toward a network-centered approach. *Administration and Society, 42*, 222-247.
- Kartez, J. D., Lindell, M. K. Kartez, J. D., & Lindell, M. K. (1987). Planning for uncertainty. *Journal of the American Planning Association, 53*, 487-500.
- Kasperson, R., Golding, D., & Tuler, S. (1992). Social distrust as a factor in citing hazardous facilities and communication risks. *Journal of Social Issues, 48*, 161-187.



- Koehler, G. A., Kress, G. G., & Miller, R. L. (2001). What disaster response management can learn from chaos theory. In A. Farazmand (Ed.), *Handbook of crisis and emergency management* (pp. 293-308). New York Marcel Dekker, Inc.
- Kim, Y. Y. (1997). The behavior-context interface in interethnic communication. In J. Owen (Ed.), *Context and human behavior* (pp. 261-291). Reno, NV: Context Press.
- Kim, Y. Y. (2005). Association and dissociation. A contextual theory of interethnic communication. In William B. Gudykunst (Ed.), *Theorizing about intercultural communication* (pp. 323-349). Thousand Oaks, CA: Sage.
- Kim, Y. Y. & McKay-Semmler, K. (2009, May). Interethnic communication among college students: An examination of behavioral and contextual factors. Paper presented at the annual meeting of the International Communication Association, Marriott, Chicago, IL. Retrieved from [http://citation.allacademic.com/meta/p299936\\_index.html](http://citation.allacademic.com/meta/p299936_index.html)
- Kuch, T.D. C. (1982). Thematic analysis in information science: The example of "literature obsolescence". *Journal of the American Society for Information Science*, 33 (2), 69.
- Lall, S. V., & Deichmann, U. (2009). Density and disasters: Economics of urban hazard risk. *World Bank Research Observer*, 27, 74-105.
- Letherby, G., Scott, J., & Williams, M. (2013). *Objectivity and subjectivity in social research*. Thousand Oaks, CA: Sage.
- Lincoln Trail Area Development District. (2010). *Lincoln trail regional hazard mitigation plan*. . Retrieved from <http://www.ltadd.org/pdf/HMP-31-Introduction.pdf>

- Ljung, L. (2001). Black-box models from input-output measurements. Retrieved from <http://webber.physik.uni-freiburg.de/~hon/vorlss02/Literatur/ljung/publications/2001/2362.pdf>
- Lubitz, D. E. von, Beakley, J. E., & Patricelli, F. (2008). All hazards approach' to disaster management: The role of information and knowledge management, Boyd's OODA Loop and network-centricity. *Disasters*, 32, 561-585.
- Mason, M. (2010). Sample size and saturation in PhD studies using qualitative interviews. *Forum: Qualitative Social Research*, 11, 8.
- McCarthy, F. X., & Keegan, N. (2009). FEMA's pre-disaster mitigation program: Overview and issues. CRS Report RL34537. Washington, DC: Congressional Research Service. Retrieved from <http://www.crs.gov>. RL34537.
- McEntire, D. A. (2004, June). *The status of emergency management theory: Issues, barriers, and recommendations for improved scholarship*. Paper presented at the FEMA Higher Education Conference, Emmitsburg, MD. Retrieved from [https://training.fema.gov/hiedu/downloads/david mcentire - status of emergency management theory.pdf](https://training.fema.gov/hiedu/downloads/david%20mcentire%20-%20status%20of%20emergency%20management%20theory.pdf).
- Meihua, L. (2012). On studying interethnic communication between the Hakka and other ethnic groups in Taiwan. *Intercultural Communication Studies*, 21(3), 29-40.

- Miller, L., & Douglas, K. (2009). *Collective thinking keeps us safe: Lessons from hurricanes Katrina, Rita and Ike*. Retrieved from <http://www.shsu.edu/~lmm007/documents/CollectiveThinkingKeepsUsSafe2.pdf>
- Morrow, B. (1999). Identifying and mapping community vulnerability. *Disasters*, 23, 1-18.
- Morse, J. M. (1994). Designing funded qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (2nd ed., pp. 220-35). Thousand Oaks, CA: Sage.
- Municipal Research and Services Center of Washington. (2013). Comprehensive emergency management plans (CEMP). Retrieved from <http://www.mrsc.org/subjects/pubsafe/emergency/em-cemp.aspx>
- National Climatic Data Center. (2012). Billion dollar weather/climate disasters. Retrieved from <http://www.ncdc.noaa.gov/billions/>.
- Norris, F. H., Stevens, S. P., Pfefferbaum, B., Wyche, K. F., & Pfefferbaum, R. L. (2008). Community resilience as a metaphor, theory, set of capabilities, and strategy for disaster readiness. *American Journal of Community Psychology*, 41, 127-150.
- Oh, N. (2012). Strategic uses of lessons for building collaborative emergency management system: Comparative analysis of hurricane Katrina and hurricane Gustav response systems. *Journal of Homeland Security & Emergency Management*, 9, 1-20.
- Oliveira, M., Bittencourt, C., Teixeira, E., & Santos, A. C. (2013, January). Thematic content analysis: Is there a difference between the support provided by the MAXQDA® and

- NVivo® software packages? Paper presented at the European Conference on Research Methods. Retrieved from <http://connection.ebscohost.com/c/articles/88861241/thematic-content-analysis-there-difference-between-support-provided-by-maxqda-nvivo-software-packages>
- Olonilua, O. O. (2011). Towards multi-hazard mitigation: An evaluation of FEMA-approved plans under the disaster mitigation act of 2000. *Journal of Emergency Management*, 9(2), 37-49.
- Orbe, M. P. (1995). African American communication research: Toward a deeper understanding of interethnic communication. *Western Journal of Communication*, 59, 61-78.
- Patricelli, F. Beakley, J. E., Carnevale, A., Tarabochia, M., and von Lubitz, D. (2009). Disaster management and mitigation: the telecommunications infrastructure. *Disasters*, 2009, 33, 23 – 37. doi:10.1111/j.0361-3666.01060.x.
- Patterson, O., Weil, F., & Patel, K. (2009). The role of community in disaster response: Conceptual models. *Population Research and Policy Review*, 29,127-141. Doi: 10.1007/s11113-009-9133x.
- Peacock, W. G., & Girard, C. (2000). Ethnic and racial inequalities in hurricane damage and insurance settlements. In W. G. Peacock, B. H. Morrow, & H. Gladwin (Eds.), *Hurricane Andrew: Ethnicity, gender, and the sociology of disasters* (pp. 171-190). New York, NY: Routledge.

- Peguero, A. A. (2006). Latino disaster vulnerability: The dissemination of hurricane mitigation information among Florida's homeowners. *Hispanic Journal of Behavioral Sciences, 28*, 5-22.
- Perilla, J. L., Norris, F. H., Lavizzo, E. A., Perilla, J. L., Norris, F. H., & Lavizzo, E. A. (2002). Ethnicity, culture, and disaster response: Identifying and explaining ethnic differences in PTSD six months after Hurricane Andrew. *Journal of Social and Clinical Psychology, 21*, 20-46.
- Perry, R. W., & Green, M. R. (2007). The role of ethnicity in the emergency decision-making process. *Sociological Inquiry, 52*, 306-334.
- Perry, R. W., Lindell, M. K., Perry, R. W., & Lindell, M. K. (1991). The effects of ethnicity on decision-making. *International Journal of Mass Emergencies and Disasters, 9*, 47-68.
- Perry, R. W., & Mushkatel, A. H. (1986). *Minority citizens in disaster*. Athens, GA: University of Georgia Press.
- Perry, R. W., & Nelson, L. (1991). Ethnicity and hazard information dissemination. *Environmental Management, 15*, 581-587.
- Phillips, B. D. (1993). Cultural diversity in disasters: Sheltering, housing, and long-term recovery. *International Journal of Mass Emergencies and Disasters, 11*, 99-110.
- Phillips, B. D., & Ephraim, M. (1992). *Living in the aftermath: Blaming processes in the Loma Prieta earthquake*. Boulder, CO: University of Colorado.

- Pouvreay, D., & Drack, M. (2007). On the history of Ludwig von Bertalanffy's general systemology, and on its relationship to cybernetics. *International Journal of General Systems*, 36, 281–337.
- Reddick, C. G. (2007). Homeland security preparedness and planning in US city governments: A survey of city managers. *Journal of Contingencies and Crisis Management*, 15, 157-167. doi:10.1111/j.1468-5973.2007.00518.x.
- Ridge, T. (2005). Department of homeland security: National response plan. Retrieved from <https://www.fema.gov/national-response-framework>.
- Ritchie, J., Lewis, J., & Elam, G. (2003). Designing and selecting samples. In J. Ritchie & J. Lewis (Eds.), *Qualitative research practice. A guide for social science students and researchers* (pp. 77-108) Thousand Oaks, CA: Sage.
- Rodgers, B. L. (2008). Audit trails. Retrieved from <http://srmo.sagepub.com/view/sage-encyc-qualitative-research-methods/n25.xml>
- Rodgers, E. M., Hart, W. B., & Miike, Y. (2002). Edward T. Hall and the history of intercultural communication: The United States and Japan. *Keio Communication Review*, 24, 3-26.
- Rodriguez, H., Quarantelli, E., & Dynes, R. (Eds.). (2007). *Handbook of disaster research*. New York: Springer.
- Rubin, C. (2012). *Emergency Management: The American Experience 1900 –2010* (2nd ed.). Boca Raton, FL: CRC Press.

- Rudestam, K. E., & Newton, R. R. (2007). *Surviving Your Dissertation: A Comprehensive Guide to Content and Process* (3rd ed.). Los Angeles, CA: Sage.
- Schwab, J. (2005). Fixing the future. *Planning*, 14-19.
- Shaluf, I. M. (2007). An overview on disasters. *Disaster Prevention and Management*, 16, 687-703. Doi: 10.1108/09653560710837000.
- Shenton, A. K. (2004). Strategies for ensuring trustworthiness in qualitative research projects. *Education for Information*, 22, 63-75.
- Simerman, J., Ott, D., & Mellnik, T. (2005). Majority of New Orleans deaths tied to floodwalls' collapse. Retrieved from <http://news.google.com/newspapers?nid=1129&dat=20051230&id=IYdIAAAAIBA J&sjid=8HADAAAIBA J&pg=5375,5509817>.
- Slovic, P. (2000). *The perception of risk*. Florence, KY: Routledge.
- Stake, R. E. (2005). Qualitative case studies. In N.K. Denzin & Y.S. Lincoln (Eds.), *The Sage handbook of qualitative research*, 3<sup>rd</sup> ed., pp. 443-466. Thousand Oaks, CA: Sage.
- Stake, R. E. (2010). *Qualitative research: Studying how things work*. New York, NY: Guilford Press.
- Stein, R., Duenas-Osorio, L., Buzcu-Guven, B., Subramanian D., & Kahle, D. (2011). *How risk perceptions influence evacuations from hurricanes*. James A. Baker III Institute for Public Policy of Rice University. Retrieved from

<http://bakerinstitute.org/publications/POL-pub-SteinHurricaneRiskPerception-080311.pdf>.

Stone, L. R. (2012). The state of interoperability in the states. *Journal of Emergency Management* 10(1), 7-14. Retrieved from

<http://pnpcsw.pnpco.com/cadmus/testvol.asp?year=2012&journal=jem>

Thompson, D. (2010). Building effectiveness in multi-state disaster management systems: The case of the Caribbean Disaster and Emergency Response Agency (Unpublished doctoral dissertation), The Pennsylvania State University, State College, PA.

Timmermans, J. (2008). Punctuated equilibrium in a non-linear system of action. *Computation and Mathematical Organization Theory*, 14, 350-375. Doi: 10.1007/s10588-008-9031-5

U.S. Census Bureau. (2010). *Income, poverty, and health insurance coverage in the United States: 2009*. Retrieved from <http://www.census.gov/prod/2010pubs/p60-238.pdf>.

U.S. Census Bureau. (2012). *Statistical abstract of the United States*. Retrieved from <http://www.census.gov/compendia/statab/2012/tables/12s0076.pdf>

U.S. Department of Homeland Security. (2008). *National response framework*. Retrieved from <http://www.fema.gov/pdf/emergency/nrf/nrf-core.pdf>

University of California. (2013). *Types of samples*. Retrieved from <http://ucdavis.edu/van den>

Hoonard, W. C. (2008). *Inter- and intracoder reliability*. Retrieved from

<http://knowledge.sagepub.com/view/research/n223.xml> Vaughn, E. (1995). The



- significance of socioeconomic and ethnic diversity for the risk communication process. *Risk Analysis*, 15, 169-180.
- Waters, M. D. (2002). Cultural awareness program for the Oakdale fire department's emergency medical services personnel. In *Advanced Leadership Issues in Emergency Medical Services*. Retrieved from <http://www.usfa.fema.gov/pdf/efop/efo33672.pdf>.
- Watt, D. (2007). On becoming a qualitative researcher: The value of reflexivity. *The Qualitative Report*, 12, 82-101.
- Waugh, W. L., Jr., & Streib, G. (2006). Collaboration and leadership for effective emergency management. *Public Administration Review*, 66, 131-140. doi:10.1111/j.1540-6210.2006.00673.x
- Weber, E. U. & Hsee, C. K. (1998). Cross-cultural differences in risk perception, but cross-cultural similarities in attitudes towards risk. *Management Science*, 44, 1205-1217.
- Weick, K. E., & Roberts, K. H. (1993). Collective mind in organizations: Interrelating on flight decks. *Administrative Science Quarterly*, 38, 357-381.

Appendix A: Letter of Cooperation from A Kentucky Missionary Baptist Church

A Kentucky Missionary Baptist Church

Reverend Dr [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

June 30, 2013

Dear [REDACTED],

Based on my review of your research proposal, I give permission for you to conduct the study entitled “Minorities’ Perceptions of the Comprehensive Emergency Management Model of Distributing Information: A Phenomenological Approach” within A Kentucky Missionary Baptist Church (AKMBC). As part of this study, I authorize you to recruit members by sending them e-mail invitations to participate in your research project. You have indicated that each participant will be interviewed as part of the data collection process. It is agreed that each participant will be an adult 18 years of age or older and individuals’ participation will be voluntary and at their own discretion. Each participant will be able to have access to the results of the study and that their identities will be kept confidential.

We understand that our organization’s responsibilities include confirming to members the church’s corporation and permission to conduct the study at AKMBC and to provide space to interview each participant if participants desire to conduct their interview on AKMBC property. We reserve the right to withdraw from the study at any time if our circumstances change.

I confirm that I am authorized to approve research in this setting.

I understand that the data collected will remain entirely confidential and may not be provided to anyone outside of the research team without permission from the Walden University IRB.

Sincerely,

Rev. Dr. [REDACTED]

[REDACTED]

## Appendix B: Email Invitation to Participate in the Study

Dear Church Members,

My name is Lawrence Davis and you may already know me as a member of A Kentucky Missionary Baptist Church (AKMBC). Currently, I am earning my Ph.D. in public policy and administration through Walden University. I am conducting a research study of minorities' perceptions of the comprehensive emergency management (CEM) process of distributing disaster mitigation information. You are being sent this email because you are a minority adult who has valuable insight about the distribution of disaster mitigation information. I would greatly appreciate your input. I am asking church members to volunteer for a 2 hour face-to-face interview, where questions will be asked, and you can select an interview location that is convenient to you, to include the AKMBC location. The interview will be tape recorded and later transcribed in order to analyze common themes. Your participation is voluntary, but comes with my gratitude. I have obtained [REDACTED] and other church leaders' permission and cooperation to conduct the study. The purpose of this study is to understand the perceptions of minorities in relation to the CEM's process of distributing information and to explore if minorities are receiving disaster mitigation information in a timely and accurate manner. The results of the study will help in making improvements in the CEM's process of distributing disaster mitigation information, thus making continuous improvements in the area of emergency management, which will save the lives of residents and first responders who are affected by disasters and the consequences of terrorism. If you are interested in participating in an interview, please complete the following questions below in a reply email to me. Please feel free to email me directly with any questions.

Sincerely,

Lawrence Davis

1. What is your name?
2. What is your contact information?
3. What is your gender?
4. What is your ethnicity?
5. Would you be willing to share your perceptions and feelings about the distribution of disaster mitigation information during a face-to-face interview session lasting approximately 2 hours in length?

## Appendix C: Consent Form for Minority Church Members

### Minorities' Perceptions of the Comprehensive Emergency Management Model of Distributing Information: A Phenomenological Approach

You are invited to take part in a research study of minorities' perceptions of the comprehensive emergency management (CEM) process of distributing disaster mitigation information. The researcher is inviting minority adults who are members of A Kentucky Missionary Baptist Church (AKMBC) to be in the study. This form is part of a process called "informed consent" to allow you to understand this study before deciding whether to take part.

A researcher named Lawrence Davis, who is a doctoral student at Walden University, is conducting this study. You may already know the researcher as a member at AKMBC, but this study is separate from that role.

#### Background Information:

The purpose of this study is to understand the perceptions of minorities in relation to the CEM's process of distributing information and to explore if minorities are receiving disaster mitigation information in a timely and accurate manner at AKMBC.

#### Procedures:

If you agree to be in this study, you will be asked to:

- Take part in an in-depth face-to-face interview, which will take approximately 2 hours.

Here are some sample questions:

1. Do you know who your local emergency manager is?

2. Have you attended a briefing on emergency preparedness sponsored by any local, state, or federal agency or professional? If so, when and where? Was the meeting productive for you? Why or why not?
3. Have you ever heard of all hazards disaster mitigation and know what it is?
4. What are your thoughts about how disaster mitigation information is distributed to you?

#### Voluntary Nature of the Study:

This study is voluntary. Everyone will respect your decision of whether you choose to be in the study. No one at AKMBC will treat you differently if you decide not to be in the study. If you decide to join the study now, you can still change your mind later. You may stop at any time.

#### Risks and Benefits of Being in the Study:

Being in this type of study involves some risk of the minor discomforts that can be encountered in daily life, such as becoming emotionally\_ Being in this study would not pose risk to your safety or wellbeing.

Anticipated benefits include improvement in the CEM's process of distributing disaster mitigation information, thus making continuous improvements in the area of emergency management, which will save the lives of residents and first responders who are affected by disasters and the consequences of terrorism.

#### Payment:

No compensation is offered to participants.

Privacy:

Any information you provide will be kept confidential. I will not use your personal information for any purposes outside of this research project. In addition, I will not include your name or anything else that could identify you in the study reports. Data will be kept secure by being locked in the researcher's file cabinet and password protected computer where only I have access to the records. Data will be kept for a period of at least 5 years, as required by the university.

Contacts and Questions:

You may ask any questions you have now. Or if you have questions later, you may contact me via 386-697-4002 or [lawrence.davis@waldenu.edu](mailto:lawrence.davis@waldenu.edu). My dissertation chair is Dr. Kristie Roberts who can be reached at or by email at [kristie.roberts@waldenu.edu](mailto:kristie.roberts@waldenu.edu). If you want to talk privately about your rights as a participant, you can call Dr. Leilani Endicott. She is the Walden University representative who can discuss this with you. Her phone number is 404-314-7663.

The researcher will give you a copy of this form to keep.

Statement of Consent:

I have read the above information and I feel I understand the study well enough to make a decision about my involvement. By signing below, I understand that I am agreeing to the terms described above.

Printed Name of Participant

Date of consent

Participant's Signature

Researcher's Signature

---

---

---

---



### Appendix D: Interview Questions

1. Do you know who your local emergency manager is?
2. Have you attended a briefing on emergency preparedness sponsored by any local, state, or federal agency or professional? If so, when and where? Was the meeting productive for you? Why or why not?
3. Have you ever heard of all hazards disaster mitigation and know what it is?
4. What are your thoughts about how disaster mitigation information is distributed to you?
5. Do you have any recommendations on how emergency managers can improve the distribution of disaster mitigation information to you?
6. Do you have an emergency plan or are you familiar with what comprises this plan? Why or why not? Are there barriers that exist that prevent you from establishing a disaster plan and acquiring information to develop the plan?
7. Are you aware of the various websites available to the average citizen to develop an emergency plan?
8. What are your feelings regarding the importance of emergency planning?
9. Do you know of or have a place available to go in the event that you need to evacuate your residence?
10. Have you ever considered what you would do in the event that an emergency or disaster takes place?