An Examination of Crisis Preparedness at Christian-Affiliated Institutions of Higher Education

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AN EXAMINATION OF CRISIS PREPAREDNESS AT CHRISTIAN-AFFILIATED
INSTITUTIONS OF HIGHER EDUCATION

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The purpose of this study was to examine crisis preparedness at Christian-affiliated institutions of higher education. Second, this study examined Christian-affiliated institutions of higher education presidents’ perspective of their institution’s ability to prepare for crises based upon the four critical indicators of organizational crisis preparedness as described by Zdziarski (2001): a) the types of crisis institutions prepare for, b) the phase of crisis prepared for, c) the systems in place to respond to crisis, and d) the stakeholders involved and considered in preparations. Implications from this study provided recommendations for crisis preparedness that are specific to Christian-affiliated colleges and universities.

A total of (n=77) presidents of Christian-affiliated institutions of higher education completed the Campus Crisis Management Questionnaire. Overall, results indicated that presidents of Christian-affiliated colleges and universities perceived their institutions to be well-prepared to respond to campus crises. This study adds to the crisis preparedness
literature in higher education on how smaller private, specialized institutions with limited resources prepares for crisis.

Key Words: crisis preparedness, crisis management, higher education, Christian higher education.
DEDICATION

Brothers, I do not consider myself yet to have taken hold of it. But one thing I do; Forgetting what is behind and straining toward what is ahead, I press on toward the goal to win the prize for which God has called me heavenward in CHRIST JESUS (Philippians 3:13-14, New International Version).

This dissertation is dedicated to the service of my Heavenly Father, for it was HE who impressed on my heart to pursue this degree from the beginning. It was HE, who helped me endure through its completion and it was HE who foreknew before I was born that this moment would eventually come. May GOD be continuously glorified in everything I have done and all that I am called to pursue in this life. For without GOD’s love, I am nothing (1 John 4:8).

In loving memory of my ancestors, whose rich legacy of faith, dedication, and commitment I humbly stand upon. All they ever wanted for their family was to love GOD and have opportunities to pursue GOD’s will for their lives. It is important for me to have their names printed within this document because they did not have the academic opportunities or financial resources that I was afforded. But they ensured that generations to come would have those means. This is as much their accomplishment as it is mine. They are the true trailblazers. I am a mere benefactor.
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helped me to accomplish this now. “You were right, Big Daddy, I am better because of it and you!”

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“For I know the plans I have for you,” declares the Lord, “plans to prosper you and not to harm you, plans to give you hope and a future. . .” (Jeremiah 29:11, New International Version).

Susan Taylor, former editor of Essence Magazine, once wrote “Life is a journey and not a destination.” Well on my life’s journey, I have been tremendously blessed to have had a lot of people to cross my path and help me along the way. As the scripture above signifies, they have played an important role in the much larger plan orchestrated by GOD to get to this expected end.

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CHAPTER I

INTRODUCTION

Research assessing the state of crisis preparedness for American higher education institutions is limited and in its infancy phase (Mitroff, Diamond, & Alpaslan, 2006). However, there remains a need for academicians and practitioners to understand crisis preparedness for all types of institutions, especially given the crisis incidents that have occurred on several campuses (i.e. Virginia Tech Massacre, Northern Illinois University shootings, and the University of Mississippi fraternity house fire). The literature shows that most research studies about crisis preparedness have been conducted within large public college and university environments (Akers, 2007; Catullo, 2008; Hartzog, 1981; Mitroff et al., 2006; Wilson, 1992; Zdziarski, 2001). Nonetheless, higher education consists of other types of institutions, such as Christian-affiliated colleges and universities. These smaller private institutions are not as widely researched in the area of crisis preparedness.

Over the years, Christian-affiliated colleges and universities have established themselves as credible and competitive institutions of higher education often being listed in such familiar college guides like the Princeton Review’s The Best 257 Most Interesting Colleges and The National Review College Guide: American’s Top Liberal Arts Schools (Muntz & Crabtree, 2006). Students choose to attend Christian-affiliated colleges and
universities for their desire to integrate their evangelical faith, learning, and living into their academic pursuits. Cross and Slater (2004) stated:

These evangelical colleges are invariably conservative both morally and politically. Their students for the most part are “born-again” Christian from mainstream Protestant denominations which put major emphasis on spreading the word of the Christian gospel. The curriculum at these schools is similar to that found at many secular liberal arts colleges with more emphasis on religious and moral values (p. 391).

Another reason students choose to attend Christian-affiliated colleges and universities is for their strong sense of community (Duemer & Cejda, 2003). Students are required to uphold the rituals, behavioral expectations, and articulations of a common purpose needed to live more harmoniously both academically and morally. Rollo and Zdziarski (2007) stated, “Families choose to send their children to smaller institutions with the belief that they will receive more personalized attention there” (p.5). Christian-affiliated higher education institutions use caring campus environment and small classroom size as distinctives in recruiting students (Basko, 2007). Within this study, the terminology Christian-affiliated institutions of higher education, Christian-affiliated higher education institutions, and Christian-affiliated colleges and universities are used interchangeably to describe four-year Evangelical Christian liberal arts colleges and universities as well as other four-year postsecondary Christian-affiliated institutions known as Bible Colleges.
Purpose of the Study

The purpose of this study was to examine crisis preparedness at Christian-affiliated institutions of higher education. Second, this study examined Christian-affiliated institutions of higher education presidents’ perspective of their institution’s ability to prepare for crises based upon the four critical indicators of organizational crisis preparedness as described by Zdziarski (2001): a) the types of crisis institutions prepare for, b) the phase of crisis prepared for, c) the systems in place to respond to crisis, and d) the stakeholders involved and considered in preparations. Implications from this study provided recommendations for crisis preparedness that are specific to Christian-affiliated colleges and universities.

Crisis management experts believe that most higher education institutions are vulnerable to crises due to their lack of planning (Dolan, 2006; Mitroff et al., 2006). Colleges and universities trail behind corporations and other business organizations in crisis preparedness as their chief administrators are unfamiliar with broader crisis management concepts (Fox, 2008). Mitroff and Anagnos (2001) argue that having top executives directly involved in the pre-planning phases allow crisis preparedness procedures to be interwoven throughout the entire organizational system. For most colleges and universities, the president is expected to demonstrate leadership (Fanelli, 1997). Within Christian higher education, the president is considered the most important administrative position (Smith, Filkins, Schmeltekopf, & Bateman, 2005).

Religiously-affiliated and smaller private institutions, like Christian-affiliated colleges and universities, are oftentimes hampered in their crisis preparations by fewer financial, physical, and human resources as compared to the majority of colleges and
universities with bigger budgets and larger staff (Akers, 2007). Whereas, the president of larger institutions have the ability to delegate the oversight of crisis preparedness to a senior administrator such as the Vice President of Student Affairs (Zdziarski, 2006), this may not be the norm for Christian-affiliated colleges and universities who may depend more heavily upon the oversight of the president regarding the institutional response to crisis. A study conducted by Jenkins (2008) found that top college leadership provides a significant influence on any planning and crisis preparedness efforts of the institution.

The definition of crisis for higher education is “an event, which is often sudden or unexpected, that disrupts the normal operations of the institution or its educational mission and threatened the well-being of personnel, property, financial resources, and/or reputation of the institution” (Rollo & Zdziarski, 2007, p. 28). The major characteristics of this definition are a negative event or outcome, the element of surprise, limited response time, disruption of operations, and a threat to the safety and well-being of people (Zdziarski, 2006). To give clarity of what is meant by crisis within this study, the definition developed by Rollo & Zdziarski will be used.

Mitroff et al. (2006) defined crisis management as a systematic approach to avoid crises or to manage crisis incidents that occur within an organization. The term “crisis management” encompasses all activities when an organization prepares for and responds to crisis (Sherwood & McKelfresh, 2007). In general, crisis management models examine a wide range of crisis incidents that generally exceeds the scope of most emergency plans.

Koovor-Misra (1995) defined crisis preparedness as the capability to prevent, contain, and recover from crisis and learn from the experience. Crisis preparedness is an
aspect of crisis management that focuses on the preparation activity that happens before a crisis incident and how learning from these experiences can prevent future crisis. Therefore, preparedness is considered a phase within some crisis management models (Zdziarski, 2001). Similar to Zdziarski’s study (2001), the foundational three-phase crisis management model (pre-crisis, crisis, and post crisis) will serve as the theoretical premise of this study. This study will also focus on crisis preparedness in evaluating crisis management concepts. Doing so, keeps the developing terminology within higher education consistent with previous studies (Catullo, 2008; Zdziarski, 2001).

More importantly, this study builds upon the research conducted by Zdziarski (2001) who assessed the state of crisis preparedness from a student affairs perspective. Student affairs chief administrators who were members of the National Association of Student Personnel Administrators (NASPA), and who were at institutions with a full-time enrollment of 8,000 students or greater were surveyed. Institutions with a lesser student enrollment were not surveyed because they “were not perceived to have the resources and personnel to support an in-depth crisis management system” (Zdziarski, 2001, p. 41). A review of the institutions that were a part of Zdziarski’s study revealed that Christian-affiliated higher education institutions were not surveyed. This is most likely due to the fact that many of these types of institutions are not members of NASPA and may not have an enrollment greater than 8,000 students. Therefore, the results cannot be over generalized to institutions that were not a part of the study’s population.

Zdziarski (2001) used Mitroff, Pearson, and Harrington’s (1996) model to serve as the practical framework for assessing how well these institutions perform, based upon the four critical indicators a) types, b) phases, c) systems, and d) stakeholders.
Furthermore, Zdziarski (2001) developed Mitroff’s et al. (1996) framework into terminology more relevant to higher education as: a) the types of crisis institutions prepare for, b) the phase of crisis prepared for, c) the systems in place to respond to crisis, and d) the stakeholders involved and considered in preparations. Using these four critical indicators of organizational crisis management, allows an organization to identify its strengths and weaknesses for potential crises from a holistic perspective (Booth, 1995). Mitroff (1994) stated these four critical indicators are vital in the assessment of whether an institution is crisis prepared or crisis prone. A crisis prepared institution is one that attempts to do what it can to be well prepared in each of the critical indicators. On the other hand, crisis prone institutions do poorly in all of the critical indicators as they focus their plans on one or two indicators, excluding the rest. Therefore, using this multifaceted approach to assess the crisis preparedness of Christian-affiliated institutions will facilitate a better understanding of the cause, treatment, and preventions of most major crisis incidents.

The one study found that evaluated different types of institutions, including religiously-affiliated colleges, was conducted by Akers (2007). Interestingly, in this study, religious-affiliated institutions consistently scored lower on each significant survey items related to crisis preparedness. In fact, it was stated in Akers’ study that these types of institutions are often hampered in their crisis preparations by limited financial, physical, and human resources. Sherwood and McKelfresh (2007) suggested institutional size will have a significant impact on the type of resources smaller private campuses can access. A small institution can easily become overwhelmed when faced with crisis
because it does not have adequate resources and personnel for an effective response (Rollo & Zdziarski, 2007).

Like most religiously-affiliated institutions, Christian-affiliated colleges and universities face challenging operating conditions because they are highly tuition dependent (Obenchain, Johnson, & Dion, 2004). Factors such as organizational size, structure, resources, and culture have been found to influence Christian colleges and universities ability to adopt newer innovations. It was concluded from Akers (2007) study that religious-affiliated institutions must work to improve the framework and structure of their crisis response preparations. Assessing crisis preparedness of Christian-affiliated institutions of higher education will provide recommendations in how these types of institutions can best prepare for crisis.

**Significance of the Study**

The image of higher education as a safe haven, protected from the troubles that plague society has been replaced by the latest media coverage of the pandemonium, caused by campus crisis incidents (Dolan, 2006). Unfortunately, college and university administrators are facing the daunting realization that their campuses are not immune to crises (Fanelli, 1997). The escalation of highly publicized campus incidents such as the violent acts of the Virginia Tech Massacre in 2007, where 32 people were killed by a student gunman; and the natural disasters caused by hurricanes Katrina and Rita in 2003 on higher education institutions in Mississippi, Louisiana, Alabama, and Texas. National crises like the September 11th terrorist attacks in 2001 and the Swine Flu pandemic in 2009 also had significant ramifications on American higher education institutions in
preparing for future crises. Mitroff and Pauchant (2001) predicted that we will live in an era where crises will grow in scope and magnitude.

Christian colleges and universities have also experienced an escalation of crisis incidents such as a) Taylor University’s fatal van accident of students and staff in 2006; b) Bluffton University’s baseball team tragic bus accident in 2007; c) Bob Jones University’s infectious disease epidemic in 2007; and d) Union University’s devastating EF-4 tornado that destroyed most of the campus’ residential halls in 2008. Although these crises were not as widely publicized, they had a profound impact on Christian college and university communities (K.C. Thornbury, Ph.D., personal communication, August 5, 2008).

Given the lack of research studies on Christian-affiliated higher education institutions, and the growing concern with crisis preparedness in academia, this study examined the state of crisis preparedness of Christian-affiliated colleges and universities to expand the growing literature on American higher education institutions. This study is significant because it a) examined the state of crisis preparedness of Christian colleges and universities; b) provided new empirical data on the state of crisis preparedness as perceived by the presidents of these type of institutions, and c) expanded the literature on crisis preparedness for higher education by focusing on smaller private, specialized institutions with limited resources for crisis preparations.

**Statement of the Problem**

There is very little evidence that research exists for the assessment of crisis preparedness for Christian-affiliated institutions of higher education. A review of the
populations from several previous research studies on crisis preparedness revealed that institutions classified as Christian-affiliated colleges and universities were not surveyed. The current escalation of crisis incidents on college campuses nationwide serves as a constant reminder for the need to understand crisis preparedness on a broader scale and the importance of including all types of American higher education institutions (Mitroff et al., 2006).

Historically, Christian-affiliated colleges and universities have faced challenging operating conditions as they are highly tuition dependent (Obenchain et al., 2004). Typically smaller institutions can easily become overwhelmed when faced with crisis (Rollo & Zdziarski, 2007). Implementing crisis preparedness practices, could become difficult due to limiting factors as organizational size, structure, resources, and institutional culture. Religiously-affiliated colleges, like Christian-affiliated colleges and universities, are often hindered in their crisis preparations by fewer financial, physical, and human resources (Akers, 2007).

Private independent institutions, like Christian-affiliated colleges and universities are not typically a part of a university system and may not have established alliances with other institutions in their geographical areas to assist them when faced with an immediate crisis (Jenkins, 2008). Regardless, if the institution is private, public, commuter, residential, or religiously-affiliated, the institution’s culture and distinctives can drive the decisions and applications of crisis management for their campuses (Rodriguez, 2008).

The implications from this study may shed new insights into the current state of crisis preparedness for Christian-affiliated colleges and universities and the types of resources smaller, private and more specialized institutions can access to respond to
crisis. Specifically, this study provides recommendations for crisis preparedness that is specific to this type of institution. In conclusion, it built upon existing crisis preparedness research literature within American higher education.

**Research Questions**

This study built upon research conducted by Zdziarski (2001). Zdziarski’s study assessed the state of crisis preparedness in higher education. Replication research is used to strengthen the results of the original research and is an acceptable practice (Schneider, 2004). Zdziarski’s (2001) research assessed NASPA member institutions with a full-time enrollment of 8,000 students or greater. This study will use as its population, Christian-affiliated institutions of higher education as identified in the Integrated Postsecondary Education Data System (IPEDS).

Zdziarski’s (2001) research assessed the perspectives of student affairs administrators, while this research will assess the perspectives of Christian-affiliated institutions’ presidents. Repeating an original study with different participants in the same or different settings will increase the generalizations of the findings (Fraenkel & Wallen, 2003; Gay & Airasian, 2000). This study will answer the following research questions:

1. What type of crises are presidents prepared to respond to at Christian-affiliated colleges and universities?

2. How do crisis management plans at Christian-affiliated colleges and universities address each phase of crisis?
3. What crisis management systems are in place at Christian-affiliated colleges and universities?
4. Which stakeholders are involved or considered in crisis management preparedness at Christian-affiliated colleges and universities?

**Justification for Study**

This study is important because it continues the development of crisis preparedness literature started by Zdziarski (2001). In choosing to examine Christian-affiliated institutions of higher education, the assessment of a type of institution not previously surveyed was examined. There is the assumption that Christian or religious higher education issues are of little importance to mainstream higher education researchers (English, Fenwick, & Parson, 2003). This viewpoint has to change to meet the growing demographic of students choosing to study at Christian-affiliated higher education institutions (Cross & Slater, 2004).

In addition, studying the perspectives of Christian-affiliated colleges and universities presidents provided empirical evidence on whether or not these chief executive administrators are prepared for a crisis. There is a general assumption that all college and university administrators are making crisis preparedness a priority for their campuses (Dolan, 2006; Mitroff, Diamond, et al., 2006). However, there are limited studies validating these assumptions.

More importantly, this research is useful in developing recommendations for crisis preparedness practices specific to this type of institution within higher education. At the Council for Christian Colleges and Universities International Conference planning
session in 2008, the Board of Directors recognized the need for the association to address crisis preparedness as an initiative (M. Barnard, personal communication, September 2008). The CCCU International for 2010 conference planning committee was asked to include workshop sessions that discussed crisis management. The CCCU Board’s recognition of the need for crisis preparedness and the lack of information specific to their institutions provided additional motivation and justification for this study.

**Limitations of Study**

The first limitation of this study was the use of Christian-affiliated colleges and universities, who were identified in the Integrated Postsecondary Education Data System (IPEDS). These Christian-affiliated institutions of higher education are typically members of associations like the Council for Christian Colleges and Universities (CCCU) and the Association for Biblical Higher Education (ABHE). Therefore, generalizations are limited to only those institutions who decided to participate in this research study. Implications should be analyzed within this context and not interpreted beyond this population.

A second limitation was responses from the Christian-affiliated institutions of higher education presidents are self-reported on a questionnaire and subject to biases. Biases may also arise due to the increased amounts of media coverage of crisis incidents on college campuses. The outcome from the data should be limited to the interpretations and perspectives of the presidents who filled out the questionnaires.

The third limitation was this study does not take into account crisis incidents that occurred prior to or during data collection. This includes the influences of highly
publicized crisis incidents like September 11\textsuperscript{th}, the Swine Flu Pandemic, the Virginia Tech Massacre, and the impact of Hurricanes Katrina and Rita on higher education institutions in Mississippi, Louisiana, Alabama, and Texas.

**Definition of Terms**

The following terms are used throughout this study:

1. Association of Biblical Education (ABHE): Recognized by the U.S. Department of Education as a national accrediting agency for approximately 100 postsecondary institutions throughout North America specializing in biblical ministry formation and professional leadership education (www.abhe.org).

2. Council for Christian Colleges and Universities (CCCU): A tax-exempt 501(c)(3) nonprofit organization headquartered in the historic Capitol Hill district of Washington, D.C. It serves as one of the primary professional association for Christian higher education (www.cccu.org).

3. Christian-affiliated institutions of higher education: Evangelical Christian liberal arts colleges and universities as well as other Christian postsecondary institutions of higher education (i.e. Bible Colleges).

4. Crisis: An event which is sudden or unexpected, that disrupts the normal operation of the institution or its educational mission, and threatened the well-being of personnel, property, financial resources, and/or reputation of the institution. (Zdziarski, 2001; Zdziarski & Rollo, 2007); its disruptions impact the entire institution (Zdziarski, 2006).
5. Crisis incident: an unstable event that occurs which significantly alters the normal operation of an organization or institution (Mitroff & Anagnos, 2001); its disruptions impact only part of the campus community (Zdziarski, 2006).

6. Crisis management: a systematic approach to avoid crises or to manage crisis incidents that do occur (Mitroff et al., 2006).

7. Crisis preparedness: the capability to prevent, contain, and recover from crisis and learn from the experience (Zdziarski, 2001).

8. Disaster: an unexpected event that disrupts normal operations of not only the institution but the surrounding community as well (Zdziarski, 2006).

9. Integrated Postsecondary Education Data System (IPEDS): The National Center for Education Statistics’ website for data on colleges, universities, technical and vocational postsecondary institutions in the United States (www.nces.ed.gov/ipeds)

10. Phases: a series of stages in which action is taken on one to build upon the action of another (Mitroff et al., 1996).

11. Stakeholder: individuals and groups most impacted by crisis which may include, for higher education institutions: students, faculty, staff, parents, alumni, governing bodies, regulatory agencies, vendors, and athletic organizations (Mitroff et al., 2006).

12. Systems: the organizational layers that govern an organization’s behaviors and culture (Mitroff et al., 1996).
13. Types: the different kinds of crisis an organization prepares for or could experience (Mitroff et al., 1996). For example: natural, facility, criminal, and human.
CHAPTER II
REVIEW OF LITERATURE

To provide a better understanding of crisis preparedness of Christian-affiliated higher education institutions, this chapter discusses several topics. The areas of discussion are as follows: a) the definition of the term crisis; b) crisis preparedness and crisis management; c) crisis management models; d) the critical indicators of crisis; e) crisis management research in higher education; f) an overview of Christian Higher education; g) the role of the president in crisis management; and h) the summary of reviewed literature.

Definition of the Term Crisis

There are multiple meanings, definitions, and implications for the term crisis (Boin, 2004; Catullo, 2008; Coombs, 1999; Hermann, 1972; Mitroff et al., 1996; Zdziarski, 2001). Fink (1986) categorized crisis as a certain degree of risk and uncertainty. This categorization of the word crisis derived its meaning from the Chinese symbol for crisis—wei-ji—which is a combination of two words (wei) “danger” and (ji) “opportunity.” Crisis is often a ‘dangerous opportunity’ (Ulmer, Sellnow, & Seleger, 2007) that can be viewed both as being negative and positive (Catullo, 2008, Zdziarski,
2001). It is negative in the sense of the danger it causes and positive in the constructive outcomes that come about as a result of the crisis.

Governmental agencies like the United States Department of Education (USDE) and the Federal Emergency Management Agency (FEMA), on the other hand, use the Webster’s Ninth Collegiate Dictionary (1987) definition for crisis. This definition is derived from the Greek word *krisis*, meaning ‘decision.’ It is important to understand how these agencies define crisis as they are tasked with making decisions in response to national crises as well as for those that impact the American educational system, including higher education. The USDE defines crisis as “an unstable or crucial time or state of affairs in which a decisive change is impending, especially one with the distinct possibility of a highly undesirable outcome (USDE, 2007, p. 6-2).”

Boin (2004) recognized the need to better understand the meaning of crisis from multiple disciplines such as disaster sociology, public administration, political science, international relations, political and organizational psychology, epidemiology, and information technology. In an attempt to develop a more universal definition, Rosenthal, Charles, and ‘t Hart (1989) defined crisis as “a serious threat to the basic structure or the fundamental values and norms of a social system, which—under time pressure and highly uncertain circumstances—necessitates making critical decisions (p. 167).” Subjectively, crisis can be defined as an unprecedented phenomenon (Ulmer et al., 2007).

Likewise, Zdziarski (2001) acknowledged having similar difficulties in defining crisis within the framework of higher education. Using definitions primarily from organizational crisis management, Zdziarski cited several authors (Barton, 1993; Fink, 1986; Hermann, 1963; Pauchant & Mitroff, 1992) as being commonly known within the
literature for defining crisis. These more frequently cited definitions by Zdziarski for crisis include:

1. “An organizational crisis 1) threatens high-priority values of the organization, 2) presents a restricted amount of time in which a response can be made, and 3) is unexpected or unanticipated by the organization” (Hermann, 1963, p. 63).

2. “An unstable time or state of affairs in which a decisive change impending—either one with the distinct possibility of a highly desirable and extremely positive outcome” (Fink, 1986, p. 15).

3. “A disruption that physically affects a system as a whole and threatens its basic assumptions, its subjective sense of self, and its existential core” (Pauchant & Mitroff, 1992, p. 12).

4. “A major unpredictable event that has potentially negative results. The event and its aftermath may significantly damage an organization and its employees, products, services, financial conditions, and reputation” (Barton, 1993, p. 2).

There are some common characteristics of crisis from these definitions that were significant in establishing a more common definition for higher education (Catullo, 2008; Zdziarski, 2001). Rollo and Zdziarski (2007) summarized these characteristics as a negative event or outcome, the element of surprise, limited response time, disruption to operations, and the threat to safety and well-being of people. These characteristics were the guiding premises for the development of a definition of crisis for higher education.

Crisis for higher education is defined as, “an event, which is often sudden or unexpected, that disrupts the normal operations of the institution or its educational mission and threatened the well-being of personnel, property, financial resources, and/or reputation of
the institution” (Rollo & Zdziarski, p. 28). This meaning for crisis will be used throughout this study as it supports the researcher’s intent to build upon existing crisis preparedness literature within American higher education.

Due to multiple definitions and interpretations of the term crisis, Zdziarski (2001) and Catullo (2008) synthesized pre-existing concepts to focus the context of developing research within higher education towards the terminology of crisis preparedness. Catullo noted that narrowing the focus to crisis preparedness allows the research to concentrate on the distinctiveness of how crisis is further researched within higher education. Using this focus allows institutions to concentrate on how to best prepare, prevent, and address potential crises (Catullo; Zdziarski).

Crisis Preparedness and Crisis Management

Crisis Preparedness

Kovoor-Mirsa (1995) defined crisis preparedness “as an ongoing process of developing organizational capabilities to prevent, contain, and recover from crises, and learn from the experience (p. 146).” This definition came from the Multidimensional Approach developed by Kovoor-Mirsa to address crisis preparations for technical organizations. This model assessed the relationships between specific features of crisis and the dimensions of organizations. Specifically, it considers the causes, types, and consequences of crisis that are rooted in the technical, human, social, economic, political, legal, and ethical dimensions of an organization. Building upon prior models for crisis (Fink, 1986; Pearson & Mitroff, 1993), the Multidimensional Approach emphasizes the
importance of learning from near misses and actual experiences of crisis by an organization (Kovoor-Mirsa, 1995).

This study will focus on ‘crisis preparedness’ in evaluating crisis management concepts. Doing so, keeps the developing literature within higher education consistent with previous studies (Catullo, 2008; Zdziarski, 2001). Emphasizing crisis prevention strengthens the containment and recovery of future crisis (Pauchant & Mitroff, 1992). Practitioners agree that focusing on crisis preparedness establishes new standards within higher education by which every institution can design a crisis response that is comprehensive (Rodriguez, 2008). It is important to make the distinction that crisis preparedness is an aspect of the much broader concept of crisis management (Kovoor-Mirsa, 1995).

The primary focus of crisis preparedness is on the preparation activity that happens before a crisis incident and learning from these experiences to prevent future crises. Crisis management encompasses all activities that an organization prepares for and responds to in a crisis (Sherwood & McKelfresh, 2007). Pauchant and Mitroff (1992) suggested that in order for an institution to be prepared for crisis, it must have the capabilities to address the different magnitudes and scopes from a crisis management paradigm. According to Zdziarski (2001), crisis preparedness is the establishment of preparations by higher education institutions to develop and implement a comprehensive institutional crisis management plan.
Crisis Management

Historically, the roots of crisis management evolved from principles within emergency/disaster management and civil defense (Mitroff, et al., 1996; Pauchant & Mitroff, 1992). Civil defense was a global concept that was popular in the mid-1940s until the early 1990s during the Cold War Era, when tensions existed between the United States, the Soviet Union, and their allies (Pauchant & Mitroff, 1992). The theoretical premise in America for civil defense was rooted in preparing civilians for military attack. More specifically, civil defense practices were to prepare for the aftermath of a nuclear war. It was theorized that advance preparations could accelerate the re-establishments of a society; therefore, preventing more calamity and decreasing the number of deaths from hunger and disease.

The modern field of crisis management has been in existence in the United States for twenty years (Mitroff & Alpaslan, 2003; Mitroff, Diamond, et al., 2006). The September 1982 Tylenol poisonings, where seven people died after taking cyanide-laced capsules brought from local stores, is known as the beginnings of the modern field of crisis management in America (Dolan, 2006; Mitroff, 2002; Mitroff & Alpaslan, 2003). Mitroff (2002) stated that crisis incidents like the Los Angeles riots that follow the acquittals of the Rodney King beating (1992), the Oklahoma City bombings (1995), the World Trade Center and Pentagon attacks (2001), and the collapse of Enron (2001) have all help refined the crisis management field.

Boin (2004) described crisis management as the managerial aspects of preventing, preparing, responding, and recovering from disruptive non-routine phenomena. Pauchant and Mitroff (2001) explained crisis management as managing the structure and culture of
an organization to deal with the cause of breakdowns and defects within its systems to significantly decrease the impact of crisis. Within higher education, crisis management moves beyond addressing basic campus emergency plans (i.e. weather, fire, bomb threat) to addressing and planning for a wide range of crises (Mitroff, Diamond, et al., 2006). Also, crisis management now goes beyond the scope of security management (Pauchant & Mitroff, 1992). It incorporates security related functions into the overall management plan of the system. However, institutions are advised to consider approaching crisis management as something that is undertaken and practiced systematically as crises are systemic in both their nature and impact (Mitroff et al., 2006).

**Crisis Management Models**

It is important to understand that crisis management models are not meant to prescribe a single course of action (Zdziarski, 2006). Rather crisis management models are designed to reflect a process that is ongoing, cyclical, and adaptive in nature (Jablonski, McClellan, & Zdziarski, 2008). It is not certain who developed the foundational model for crisis management (Catullo, 2008; Coombs, 1999; Koovor-Misra, 1995; Ogrizek & Guillery, 1999; Zdziarski, 2001). However, its principles have been used to establish the theoretical foundation of most crisis management models.

Similar to both Zdziarski (2001), the foundational three-phase crisis management model (pre-crisis, crisis, and post crisis) will serve as the theoretical premise of this research study. It is referred to as the three-phase model as it consists of three phases: a) pre-crisis, b) crisis, and c) post-crisis. Coombs (1999) refers to the three-phase model as a macro model that serves as the framework for other future crisis management models.
The pre-crisis phase signifies everything that happens prior to crisis. The crisis phase involves things that occur during a crisis, and the post-crisis phase implies action taken after a crisis.

Models of crisis management still use phases from former civil defense emergency operations including: a) prevention, b) mitigation, c) preparation, d) response, and e) recovery. Government agencies like the United States Federal Emergency Management Agency (FEMA, 2003), Department of Homeland Security (DHS, 2003), and the United States Department of Education (USDE, 2007), as well as professional organizations within higher education like the National Association of Student Personnel Administrators (Jablonski et al., 2008) have adopted varied versions of this phase model.

The guide outlining strategies for emergency management planning for institutions of higher education developed by the U.S. Department of Education, listed its crisis management model as four phases consisting of a) prevention/mitigation, b) preparedness, c) response, and d) recovery (USDE, 2007). The Prevention-Mitigation phase assess the action needed to decrease hazardous situations within the environment while taking action to reduce risks, damages, injuries, or deaths that may occur in an emergency or crisis incident. This phase is oftentimes overlooked in the crisis management process (Zdziarski, 2006).

The Preparedness phase focuses on the development of policies and protocols for a coordinated response that includes systems, training, planning, and coordinating exercises for potential incidents. The FEMA (2003) model is used interchangeably by higher education associations and this phase is also referred to as the Planning phase.
(Zdziarski, 2006). Rather than planning for every conceivable emergency/crisis incident, it focuses on planning for the major components of the response and recovery efforts.

The *Response* phase outlines actions to be implemented to effectively contain and resolve an emergency or crisis incident. Last, the *Recovery* phase consists of procedures and services that assist the campus community in restoring the educational, residential, administrative, and cultural operations. Resuming normal operations of the campus becomes the top priority (Zdziarski, 2006).

Similar to the four-phase model, higher education literature added a fifth phase called *Learning*, taken from Kovoor-Mirsa’s (1995) Multidimensional Approach. This phase emphasizes the importance of learning from near misses and actual experiences of crisis by an institution. Zdziarski (2006) highlighted the importance of this phase for institutions, that is to closely observe the actions that were taken to prevent crisis, the preparation that were made to handle crisis, the steps that were followed to contain the crisis and limit the damage, and the plans implemented to recover from the crisis. Doing so provides opportunities for continuous improvements. According to Zdziarski, “Higher education can benefit from a five-phase crisis management process: 1) prevention and mitigation, 2) planning, 3) response, 4) recovery, and 5) learning” (p. 6). Figure 2.1 displays the five-phase crisis management model for higher education.
In addition to these crisis management models, Zdziarski, Rollo, and Dunkel (2007) developed a crisis matrix that can be used to assess various types of crisis situations that can occur within higher education institutions. The basis of the crisis matrix identifies crisis response in a scalable form, important to the crisis preparedness of any campus. The crisis matrix is three-dimensional and consists of a) level of crisis, b) intentionality of crisis, and c) types of crisis. Figure 2.2 displays the crisis matrix.
The *Level of Crisis* addresses the scope or magnitude of the crisis. Zdziarski (2006) identified three levels of crisis that impact higher education institutions: a) disasters, b) crisis, and c) critical incidents. What distinguishes these levels from one another is the intensity that the impact has on the operations of the institution and/or the surrounding community. Disasters impact the normal operations of not only the institution but the surrounding community as well. Crisis, described as the level of crisis, disrupts the entire normal operations of the institutions, while critical incidents cause disruptions only to parts of the campus community. Fink (1986) advocated for comprehensive and integrated crisis plans that ensured integration across dimensions and levels of crisis.
The *Intentionality of Crisis* distinguishes between two types a) intentional, and b) unintentional (Zdziarski et al., 2007). Unintentional crisis occurs by accident while intentional crisis occurs as an individual or group of people purposefully takes action to cause an event that harms others. In an intentional crisis there is always a victim and a perpetrator.

The *Types of Crisis* refers to the different kinds of crisis a campus prepares for or could potentially experience (Zdziarski et al., 2007). Within higher education there are three types that are most common a) environmental, b) facility, and c) human. Environmental crisis originates with the environment or are acts of nature such as hurricanes, earthquakes, and floods, whereas, facility crisis originates in some sort of structure like building fires and power outages. Human crisis is initiated by human beings, whether through human error or conscious act.

Rodriguez (2008) commented that the crisis matrix is flexible and very applicable to any institution in higher education. Using the outlined concepts can easily serve as the critical foundation for any effective campus crisis management plan. Mitroff et al. (2006) stated the ideal crisis management structure has four essential components: a) preparations for broad range of crisis types; b) mechanisms for picking up and amplifying the early warning signals that accompany all crises and are generally perceptible far in advance of the event; c) a well-trained, interdisciplinary crisis-management team; and d) the inclusion of a wide variety of both internal and external stakeholders in crisis plans, polices, and procedures. These terms will be discussed further as the critical indicators of crisis.
The Critical Indicators of Crisis

Mitroff et al. (1996) identified four critical indicators for organizational crisis preparedness in its simplest form: a) types, b) phases, c) systems, and d) stakeholders. Zdziarski (2001) expanded and related these four critical indicators to higher education as: 1) well-prepared organizations develop plans and procedures to address the different types of crises that might occur; 2) well-prepared organizations address each of the different phases of crisis in their plans and procedure; 3) well-prepared organizations develop systems within the organization to support the effective management of crisis and 4) well-prepared organizations involve and consider a broad group of stakeholders in planning and responding to crisis.

Using these four critical indicators of organizational crisis management allows an organization to identify its strengths and weaknesses for potential crises from a holistic perspective (Booth, 1995). Mitroff (1994) stated these four critical indicators are vital in the assessment of whether an institution is crisis prepared or crisis prone. A crisis prepared institution is one that attempts to do what it can to be well prepared in each of the critical indicators. However, crisis prone institutions do poorly in all of the critical indicators because they focus their plans on one or two indicators, excluding the rest. Addressing these critical indicators in the preparedness phase of crisis management helps institutions cultivate what FEMA describes as “a culture of preparedness” (2003, p. 4). This means institutions implementing effective prevention and preparedness programs educate their campus communities on how to best prevent and respond to the threats of crises.
Types of Crisis

The years 2007 through 2009 will be remembered in the history of higher education for the highly publicized escalation of campus crisis incidents, especially those intentionally caused by individuals. The Virginia Tech Massacre (2007), where 32 people from Virginia Tech were killed by a student gunman, is now known as the deadliest campus crisis in United States history (Altamirano, 2007). In 2008, a copy-cat crisis incident involved a Northern Illinois University graduate student killing five of his classmates and then himself (Herrmann, 2008). Other publicized campus crisis incidents (both man-made and of natural causes) during this time period include two separate shooting instances at Delaware State University (Shulman, 2007); the Ocean Isle Beach house fire involving students from the University of South Carolina and Clemson University (Kittle, 2008); the classroom shootings of the Louisiana Technical College (Alford, 2008); the bacterial meningitis outbreak at Texas A & M University (Bresciani, 2008); the domestic violence and murder of a Jackson State University student (Nicklaus, 2007); the Central Arkansas student shootings (Lambert, 2008); and the murder by and suicide of a University of Georgia professor (Associated Press, 2009). The Swine Flu pandemic in 2009 is a newer type of crisis that is challenging higher education to address threats on local, national, and global borders.

Pearson and Mitroff (1993) stated crisis preparedness begins with an understanding of the nature of specific types of crisis within an organization. It is important to note that crisis management paradigms have to consider and plan for a wide range of crises, especially their interactions (Mitroff et al., 2006). However, it is impossible to believe that an organization can prepare for every conceivable type of crisis.
Mitroff et al. (2006) identifies the most likely types of campus crises as: a) serious outbreaks of illness; b) major food tampering; c) employee sabotage; d) fire, explosions, and chemical spills; e) environmental disasters; f) significant drops in revenues; g) natural disasters; h) loss of confidential/sensitive information or records; i) major lawsuits; j) terrorist attacks; k) damage to institutional reputation; l) ethical breaches by administrators, faculty, and trustees, m) major crimes, and n) athletic scandals.

Understanding the nature of the types of crises that are more likely to occur within an organization is important in the prevention, treatment, and general containment of incidents for two basic reasons (Mitroff, 1994). First, every crisis has a distinct and unique feature. This will guide the organizations’ logic in preparing for whatever type of crisis that has the greatest potential to impact their operations. Second, crisis prepared organizations have a strategy that deliberately prepares for at least one type of crisis in each crisis type. Crisis types refer to crisis groups that form various clusters or families. These clusters form distinctive crisis typologies (Coombs, 1999; Koovor-Mirsa, 1995; Mitroff et al., 1996; Zdziarski, 2001; Zdziarski, 2006).

Zdziarski (2006) identified four typologies of campus crisis most common for higher education: natural, facility, criminal, and human. These are defined as the following:

Natural crisis include tornados, floods, hurricanes, and earthquakes. Facility crisis include fires, explosions, chemical leaks, loss of utilities, loss of computer data, and evacuation of buildings or campus. Criminal events include sexual assaults/batteries, sexual harassment, homicides, assaults, hate crimes,
burglary/robbery, domestic abuse, vandalism, terrorist threat, and kidnapping/abduction. Human crises include injuries, deaths (including suicide and alcohol/drug overdose), emotional/psychological crises, infectious disease, racial incidents, campus disturbance/demonstration, and missing persons (Zdziarski, 2006, p. 16)

These typologies are the variables that will be evaluated more intentionally within this research study.

**Phases of Crisis**

Mitroff et al. (1996), defined phases of crisis as a series of stages in which action is taken in one to build upon the action of another. Crisis unfolds over a period of time where there are distinct, identifiable mechanisms/activities that tend to be associated with each of the different time periods (Mitroff, 1994). Phases identify the generic time phase through which all crises move while understanding what is needed to manage each phase (Pearson & Mitroff, 1993). Threats and opportunities are intrinsic to each phase. Ultimately, the assessment determines whether organizations are being reactive or proactive in its response to crises.

Several crisis management models have already been discussed; however, it is important to understand their relevance in regard to the assessment of phases of crisis. The ability to manage crisis is to properly manage each phase of the process (Pearson & Mitroff, 1993). In addition to the foundational three-phase model (pre-crisis, crisis, post crisis), the four-phase models used by government agencies (prevention/mitigation, preparedness/planning, response, and recovery) and the five-phase model recommended
for higher education (prevention and mitigation, planning, response, recovery, and learning), others models within the field of organizational crisis management have contributed to the development of models used in higher education.

The first model, Fink’s (1986) crisis life cycle, was developed to better understand crisis behaviors. It consists of four distinct phases that resemble medical terms: a) prodromal, b) acute, c) chronic, and d) resolution. During the **prodromal stage**, issues that have the potential to become a crisis appear small and minor in nature; creating no real potential threat to the organization. If the organization recognizes the potential triggers as precursors, it can implement strategies to benefit or reduce the negative impact of the potential threat. The **acute stage** moves beyond the threat of the crisis to the happenings of an actual crisis incident. At this phase, the result of fiscal, physical, or emotional damage to an organization and its stakeholders are evident. It is critical that the organization responds to and manages the impact. The **chronic stage** consists of cleaning up, post mortem, self-analysis and healing. Lastly, the **resolution stage** is brought about when the organization is returned to normal operations and the routine of business is restored. The organization functions under a new improved state as a result of the learned experiences encountered because of the crisis incident and its management.

A second model by Mitroff (1994) used the premise of the three-phase model to identify its impact within the four critical indicators of crisis: a) types, b) phases, c) systems, and d) stakeholders. The **before (pre-crisis) phase** builds these actual capabilities. The **during (crisis) phase** is the actual crisis. This phase is concerned ideally with enacting the capabilities that have been developed before the crisis. The **after (post-**
crisis) phase is for learning lessons from the crisis, redesigning the organization’s crisis capabilities, and instituting the systems necessary to perform before the next crisis occurs.

A crisis management model does not only deal with the physical or structural aspect of a crisis, it should also address the psychological ramifications of individuals involved in the crisis. A third model by Glass (1959) identified a five phase model of response to the psychological needs of individuals. The Pre-Crisis phase identifies the individual in a state of stability or equilibrium. The Impact phase precipitates the events and creates great stress that increases tensions and disturbing feelings begins to surface. The individual may begin to display some dysfunctional behavior. The Recoil or Crisis phase reveals the individual in a state of shock, and anxiety levels are extremely high. The individual may experience a period of confusion and disorientation while coping skills may be adaptive or maladaptive. The Resolution or Adjustment phase is when the individual regains control over their emotions and works towards a solution. Their anxiety levels tend to significantly decline to a more manageable level. In the Post-Crisis phase, the individual resumes normal activities and comes out of the emotional state of crisis.

Crisis Management Systems

Mitroff (1994) describes crisis management systems as the interactions between the technologies of an organization and its structure. It identifies the causes of most crises within an organization. When an organization has a broader understanding of its systems, it is able to prevent the threat arising from chain reactions of other imminent crises. These
can involve day-to-day operations, product failures, employee problems, accidents, or incidents (Gorman, 2006). From the perspective of higher education, during the assessment of the preparedness phase of crisis management, it entails developing plans, assembling response teams, training key personnel to respond, as well as appraising the psychological impact of the crisis (Jablonski et al, 2008).

Kennedy (1999) stated that a crisis management plan is a framework that allows people to respond more effectively. No crisis is going to conform to any one plan. Gorman (2006) suggested that organizations are typically at one of three levels with their crisis management plans. First, no plan exists. Second, the plan is outdated and not relevant to the organization’s potential of current threats. Lastly, there is a plan that has been passed down from previous leadership that needs to be assessed, analyzed, tweaked, or even rewritten. Rollo and Zdziarski (2007) stated “the existence of a written crisis management plan is perhaps the single most important crisis management tool a campus can have (p. 74).” The plan consists of two fundamental parts: a basic plan and a set of crisis protocols.

The basic plan recaps the institutional purpose of the plan, list procedures for activation, it names the key authorities, and it summarizes the procedures for implementation. It is important to recognize that this may or may not be one document but a culmination of several supporting documents that makes up one strategic crisis management plan. Phelps (1986) suggested that recognizing the key personnel who should be involved in preparing the document and the type of information that should be covered in the document are the critical factors in developing a crisis plan. Equally
important, crisis management plans should be viewed as living document that require on-going development and continuous updating (USDE, 2007).

Sherwood and McKelfesh (2007) stated forming a crisis management team is essential for any institution. The team must be able to work together under extreme pressure and each individual must understand their role and responsibilities. Zdziarski (2006) identified several purposes for a crisis management team. Team members are responsible for 1) developing and maintaining a crisis management plan; 2) implementing the plan; and 3) dealing with contingencies that may arise that are not addressed by the plan. In order for this to be done effectively, it is advisable that membership on the team is kept to a manageable size of eight to ten people.

Jablonski et al. (2008) listed training as the most important component in the execution of any crisis management system. Gorman (2006) considered scenario development an inexpensive procedure for institutions to practice the key elements of their crisis management plan. Scenarios are hypothesized situations that are most likely to occur within an organization. It allows responders to think through real and specific threats in attempts to minimize the potential vulnerabilities. Similar, tabletop exercises are an effective way to evaluate roles and responsibilities of campus administrators (USDE, 2007). Training exercises are a way to examine the feasibility of the crisis management plan; test the effectiveness of the crisis management team; assess crisis communication devises; and increase awareness of crisis preparations to the broader campus community. Sherwood and McKelfesh (2007) concluded, “when comprehensive teams are assembled, and there is effective team leadership, team operations are clearly
defined, and there is training, crisis management teams can effectively manage any campus crisis” (p. 71).

Mitroff and Anagnos (2001) summarized what is considered system complexes in the “Onion Model of Crisis Management” as: a) technology, b) organizational structure, c) human factors, d) culture, and e) top management psychology. The Onion model is described as peeling off the outer layers of an organization in order to reach its cultural behaviors. Phelps (1986) describes culture as the attitudes, needs of an organization, strategic inquiry, balance sheet issues, cash flow, human factors, market attitudes, and any pertinent attributes of a business or institution. When cultural factors are not closely monitored in regards to an organization’s overall operations their impact to cause dangerous situations is significantly increased. Because it organization’s cultural factors are different, The Onion Model is one paradigm that outlines what should be taken into consideration as an organizations develops and examines its crisis management systems (Mitroff & Anagnos, 2001).

**Stakeholders**

Stakeholders are the large and complex number of individuals, interest groups, and institutions that are involved in crisis (Mitroff, 1994). Colleges and universities of higher education are often categorized as:

Urban, rural, public, private, large, small, faith-based, secular, commuter, residential, and other terms are used to categorize our institutions. Yet despite our tendency to separate institutions into groups that seek to establish commonalities across what appears to be a diverse array of entities, one absolute that binds them
all together is their core of students, faculty, and staff who live and learn at their campuses. With this interplay of people and institutions, the inevitable reality is that incidents and events that are characterized as crises are certain to occur. The impact of crises on the facilities and the institutions’ ability to accomplish their educational mission must be addressed, but it is human side of the equations that begs our attention as educators committed to serving our communities (Rollo & Zdziarski, 2007, p. 3).

In the booklet produced by FEMA entitled, *Building a Disaster-Resistant University* (2003), it states:

There are differences in the way that small verses large institutions, private verses public institutions, and primarily research based or teaching institutions will plan and adopt the actions described herein. Wherever possible, care has been taken to provide a wide range of ways that the process can be adapted based upon the particulars characteristics of an institution (p.2).

A considerable amount of care must be given to individuals within the collegiate environment. Ethic of care is providing critical support to the individuals of the campus community in critical times in order to maintain and enhance their human experience (Rollo & Zdziarski, 2007). Pauchant and Mitroff (1992) considered ethical practices for the welfare of others in crisis preparedness as the fundamental fabric of what it means to be human. They stated, “Failure to address crisis management leads invariably to ethical deterioration” (p. 184).

Participation by on- and off-campus stakeholders increases the success of any institution’s crisis management plan. These individuals bring the commitment,
knowledge, and enthusiasm needed to complete the planning process. Mitroff et al. (2006) identified the universities’ internal and external stakeholders as students, faculty, staff, parents, governing bodies, regulatory agencies, vendors, and athletic organizations. Stakeholders are very important in the consideration of preparedness by any institution. All groups across academia—administration, faculty, staff, and students should be involved at the beginning of the planning phase (Building a Disaster-Resistant University, 2003). Kennedy (1999) referred to university campuses as the focal point of the external community in which it resides. Therefore, considerations must be made in how to best prepare the entire community in the event of crisis.

Crisis Management Research in Higher Education

A survey of research (Akers, 2007; Catullo, 2008; Hartzog, 1981; Jenkins, 2008; Marlette, 2007; Mitroff, Diamond, et al., 2006; Wilson, 1992; Zdziarski, 2001) reveals not only the vastness in terminology for crisis and crisis management within higher education but it also serves as a blueprint for newer research strategies.

Hartzog (1981) analyzed public four-year institutions of higher education with at least an enrollment of 5,000 students, using the framework of four planning elements a) objectives; b) strategies, policies, and plans; c) organization; and d) review and evaluation. Institutional size and proportion of students who live in on-campus residential housing were also analyzed. The results revealed that mid-size to very large higher education institutions were actively engaged in emergency management planning because they had the abilities and resources to plan. It was recommended that the study of
crisis management planning within higher education be expanded to include institutions of all sizes and types.

Wilson (1992) examined the crisis management processes at three U.S. higher education institutions through case study methods. Specifically, the study proposed to a) determine whether a crisis management plan had been developed; b) identify how the presence or absence of such a plan may affect decision-making, before, during, and after the crisis; c) determine the nature of crisis management plans at these higher education institutions; and d) determine whether these institutions were more likely to develop new or redesign existing crisis management plans after experiencing a crisis. Interestingly, the results suggest that the pre-existing crisis management plans were insufficient to meet the needs of the institution once they encountered crisis. This study attempted to understand the pre-planning preparations for crisis within higher education. Like Hartzog (1981), the researcher recommended that a comprehensive survey of U.S. colleges and universities be done to Zdziarski (2001) is the first known comprehensive survey of crisis preparedness within higher education since the study conducted by Hartzog (1981). The time lapse between the two studies validates the gap in literature as mentioned by Wilson (1992). Zdziarski (2001) assessed the current state of crisis preparedness in higher education from a student affairs perspective. The study examined Mitroff et al. (1996) four critical factors associated with organizational crisis preparedness: a) types, b) phases, c) systems, and d) stakeholders. Student Affairs administrators who were members of the National Association of Student Personnel Administrators (NASPA) and who were at institutions with a full-time enrollment of 8,000 students or greater were surveyed.
The outcome of the study suggests that these higher education institutions consider themselves prepared to respond to a campus crisis; however, the researcher also cautioned, like Wilson (1992), that most colleges and universities are prone to be more unprepared than prepared, once faced with a campus crisis incident. An important notation to make from Zdziarski’s (2001) research is its effort to identify best practices for crisis management preparedness in higher education, an important consideration for future research.

Crisis management experts Mitroff et al. (2006) conducted a survey of U.S. colleges and universities to assess their level of crisis management preparations. Their study included a survey 350 major U.S. colleges and universities of various sizes, types, and geographical locations. It was determined that American colleges and universities were still inadequately prepared for campus crises. The survey results as well as the researchers’ expertise in the field of organizational crisis management informed their recommendations of best practices for higher education which includes: a) developing a crisis portfolio; b) listing the types of businesses the institution conducts; c) understanding all exogenous and internal events that threaten the institution; d) forming a multi-departmental crisis management team; e) reviewing other crises incidents experienced by other institutions; f) training the crisis management team; g) preparing for various types of crises; h) clarifying the chain of command for decision-making during a crisis; i) ensuring adequate communication systems are in place; and j) supporting the crisis management leadership when encountering crisis. The researchers also offered recommendations on how to develop both a crisis management plan and team for higher education administrators.
Marlette (2007) addressed the limitations within the crisis research in regards to the crisis management preparedness of small private colleges. Prior literature (Hartzog, 1981; Wilson, 1992; Zdziarski, 2001; Mitroff & Alpaslan, 2006) was conducted on large and mainly public universities. In fact, Zdziarski (2001) states within the description of the research methodology, “…institutions with an enrollment of less than 8,000 students were not perceived to have the resources and personnel to support an in-depth crisis management system” (p. 41). However, Marlette saw the need within the research to begin to understand the differences smaller college campuses with smaller student populations may encounter in their crisis management preparedness. “The lack of literature, research, or information existing about critical incident response specifically on a small college campus showed a need for this topic to be addressed” (p. 24). Using case study methodology, this research primarily addressed the question, “What are best practices for critical incident response on a college campus with a small population?” The outcomes of this research is not meant to be used as a prescribed methodology for all small higher education institutions; however, it is intended to serve as a tool that could be used to address their institutional uniqueness as they prepare to handle campus crises. Further Marlette, recommends the need to examine the differences that exists between how larger and smaller higher education institutions are able to prepare and respond to a campus crisis, as well as how various institutional types (i.e. private, public, religiously-affiliated, non-religiously affiliated) prepare for crises. Doing so will broaden the literature and give more of an in-depth understanding to the uniqueness of various types of higher education institutions’ crisis management preparedness.
Akers (2007) conducted a study that evaluated the different types of institutions which included religiously affiliated and non-religiously affiliated institutions. Interestingly, among these institutions, “religiously affiliated institutions scored consistently lower on each significant survey items (p. 158). In fact it was concluded that religious affiliated institutions, “must work to improve the framework or structure of their plans, particularly in the areas of education, preparation, and training of the crisis response team and first responders, and the evaluation and execution of the plan” (p. 158). Also, it was revealed, “smaller institutions are often hampered by fewer financial, physical, and human resources, which can negatively impact service, training, and any second wave of staff (p. 160). Finally when comes to institutional size, “smaller institutions can become victims of complacency” (p.160), believing that their campus will not be impacted by crises like larger campuses. Akers’ study sheds new insight into the complexes different type of institutions face when dealing with crisis. This also validates Marlette’s (2007) study in understanding the uniqueness of crisis management response for smaller college campuses.

Catullo (2008) addressed the changes in institutional preparedness between the events of September 11th and the Virginia Tech Massacre as well as measured the level of preparedness for specific types of crises. Specifically, this study focused on the information deficiency with regards to the preparedness of chief student affairs administrators to handle crisis at residential universities. The population used for this study were selected based on the following criteria: a) doctoral degree granting institutions; b) total enrollment of 5,000 students or more; c) had residence halls; and d) were institutional voting members of NASPA. Results of the study revealed that a lot of
progress had been made in regards to crisis preparedness since September 11th (2001) and prior to the Virginia Tech Massacre (2007). Similar to the results of Zdziarski’s (2001) study, chief student affairs administrators perceived themselves prepared to handle various types of crisis incidents. This study was significant because it shed new insights on the challenges residential campuses faced in preparing for a crisis. Likewise, a study focusing on Christian colleges and universities can also expose complexities in this type of institution’s preparations for various types of crises.

Jenkins (2008) explored factors that influenced crisis preparedness among Texas Community Colleges with a residential student population. His study examined factors that influenced administrators’ abilities to adequately prepare for crisis situations. Jenkins analyzed the crisis response plans from 19 Texas Community Colleges and other data pertaining to administrator’s perceptions of preparedness. He concluded that administrators of Texas Community Colleges with a residential student population have not developed adequate crisis and/or emergency response plans. It was also discovered that top executive leadership provided a significant influence on any planning and preparedness efforts conducted by administration of the institution. The researcher summarized the key factors in the evaluation of an organization’s preparedness for crisis is institutional leadership, institutional culture, exposure to previous crises or emergency situations, and the geographic location/close proximity to other institutions that can serve as a resource when faced with a major crisis incident. Jenkins’ study is significant because it identified the important top executive leadership has on the crisis preparations of an institution. Also, it evaluated how smaller specialized institutions of higher education prepare for campus crisis.
An Overview of Christian Higher Education

Historically, Christian-affiliated institutions of higher education have dealt with crises of various aspects. The demise of some early colonial Christian colleges was due to poor locations, internal dissension, low enrollment, and natural disasters such as fires and tornadoes (Woodrow, 2004). During the development of the modern university, Christian colleges and universities were impacted by the crisis of purpose in which the secularization of modern culture challenged its premise to integrate faith and knowledge (Adrian, 2003). In more modern times, Christian colleges and universities constantly deal with financial crisis because their institutions are highly tuition dependent and face extreme pressures for funding (Obenchain et al., 2004).

Lack of funding and challenging financial pressures has become more of a reality for some institutions like Cascade College, a small Christian college located in Portland, Oregon, that closed in 2008 amidst severe enrollment decline and mounting institutional debt (Pope, 2008). Vennard College, a small Christian college in Iowa, was also forced to close the same year—two years shy of its 100th anniversary. Paul Quinn College, a Christian college located in Dallas, TX that is affiliated with the African Methodist Episcopal (A.M.E.) church, in 2009 lost its Southern Association of Colleges and Schools (SACS) regional accreditation due to institution’s inability to generate substantial revenue to sustain it operations (Hacker, 2009). Other Christian-affiliated institutions are either eliminating programs from their academic curriculum or significantly downsizing their institution’s operational budgets to survive economic hardships (Pope, 2008).

On December 2, 2008, the Council of Christian Colleges and Universities (CCCU), the main association for Christian-affiliated institutions of higher education,
held an economic crisis webinar to address concerns in regards to the national economic situation impact on Christian higher education (CCCU, 2009). Pope (2008) noted before the economic crisis, many small colleges were battling long-term challenges from demographic changes to enrollment challenges. Non-profit institutions like Christian-affiliated institutions of higher education can face a cultural crisis where internal and external influences foster higher levels of bureaucratic control and therefore inhibit necessary innovations (Obenchain et al., 2004).

In general, American higher education has a rich and progressive history. However, a lesser known fact is that the beginnings of many present-day higher education institutions have their roots in Evangelical Protestant Christianity (Ringenburg, 1984). According to the U.S. Department of Education, National Center for Educational Statistics (2002), there are about 4,200 degree-granting institutions of higher education in the United States. Approximately, 1,600 of those are private, non-profit, four-year campuses and about 900 of these colleges and universities are self-defined as religious-affiliated. These are institutions that have distinctively combined the religious with the academic (Muntz & Crabtree, 2006). Furthermore, there are about 300 Christian-affiliated institutions of higher education (USDE, 2002).

However, in the U.S. there are approximately 108 Christian-affiliated institutions that are members of the Council for Christian Colleges and Universities (CCCU, 2008). Approximately, another 100 Christian-affiliated postsecondary institutions belong to the Association for Biblical Higher Education (www.abhe.org). The Council for Christian Colleges and Universities serves as one of the professional association for Christian Higher education (Patterson, 2005). Founded in 1976, CCCU sought to form greater
collaboration among evangelical colleges primarily to address financial, enrollment, and identity issues. The stated mission of the CCCU is “to advance the cause of Christ-centered higher education and to help our institutions transform lives by faithfully relating scholarship and service to biblical truth” (p.15, CCCU 2008-2009 Profile). The association represents evangelical schools of different sizes, organizational structures, lifestyles, denominational traditions, and doctrinal allegiances (Patterson, 2005).

The CCCU is a tax-exempt 501(c)(3) nonprofit organization headquartered in the historic Capitol Hill district of Washington, D.C. Over time, it has emerged as an international association with 111 members in North America (three institutions are located in Canada) and 70 affiliate institutions in 24 other countries. In general, CCCU has two types of memberships within its association—members and affiliates. For an institution to be considered as a member of CCCU it must have a) a strong commitment to Christ-centered higher education; b) be located in the United States or Canada; c) obtain full regional accreditation; d) primarily four-year comprehensive college and university; e) exhibit a broad curricula rooted in the arts and sciences; f) hired Christians for all full-time faculty and administrative positions; and g) demonstrate responsible financial operations. Affiliate institutions are required to a) have a strong commitment to Christ-centered higher education, b) any level of post secondary education, and c) can be located anywhere in the world. Affiliate institutions comprise of Bible colleges, seminaries, and other types of Christian-affiliated institutions of higher education.

The Association for Biblical Higher Education (ABHE) is located in Orlando, Florida and is recognized by the U.S. Department of Education as a national accrediting association for faith-based postsecondary institutions. The ABHE mission is “to enhance
the quality and credibility of higher education institutions that engage students in biblical, transformational, experiential, and missional higher education.” The association’s membership is recognized by the Department of Justice, the Veteran’s Administration, and other relevant federal agencies in the United States.

Above all, Christian colleges and universities adhere to the educational distinction of preparing students for careers, which reflects God’s excellence by training them to demonstrate the relevance of Jesus Christ in every facet of life and to impact the world for God’s kingdom (Basko, 2007). Muntz and Crabtree (2006) stated Christian colleges and universities develop strong character traits, such as integrity, reliability, honesty, responsibility, and honor.

Bible colleges also uphold the same commitments to Christ-centered higher education and scholarship in biblical truth. The differences between these of types of Christian-affiliates institutions, Bible colleges tend to be narrower in their academic focus by educating students who are interested in ministry vocations (i.e. pastors, missionaries, Christian school teachers). Therefore, students who attend Bible colleges typically graduate with a Bachelor of Arts in Biblical Studies, which they are required by ABHE to take 30 credit hours of study in the Bible.

Overall, Christian colleges and universities represent a small percentage of institutions in American higher education (Muntz & Crabtree, 2006); however, these institution annually educate approximately 319,289 students (CCCU 2008-2009 Profile). Moreover, enrollment at Christian colleges and universities has been increasing in the past years (Cross & Slater, 2004). In some cases, they have tripled the enrollment rate of their secular four-year private liberal arts college counterparts. Green (2005) reported
CCCU campuses grew 70.6% from 1990 to 2004, whereas all public four-year campus grew 12.8%, all independent four-year campuses grew 28 %, and all independent religious four-year campuses grew 27.5 %. Green attributed the CCCU campuses’ growth to overall quality, academic freedom, faith commitment, expansion to new markets and a strong sense of community on campus. Furthermore, these institutions have made significant progress where racial diversity within its student body is concerned that have led to greater enrollment (Cross & Slater).

In general, there is the assumption that Christian or religious higher education issues are of little importance to mainstream higher education researchers (English, Fenwick, & Parson, 2003). This ideology is shifting somewhat with such journals as Christian Higher Education that presents research on Christian issues in higher education and studies on Christian-affiliated institutions. Presently, research on Christian colleges and universities focuses on the role of Christian higher education and service learning (Chapman, 2007; Ng, 2005; Schaffer, 2004; Woodrow, 2004); governance and leadership (Cejda, Bush, & Rewey, 2002; McNight, McIntire, & Stude, 2007; Obenchan et al., 2004; Patterson, 2005; Woodrow, 2006); sense of community (Bohus, Woods, Chan, 2005; Duemer & Cejda, 2003); women who work at CCCU (Hall, Anderson & Willingham, 2004); and profiles of Christian college and universities presidents (Smith et al., 2005, 2005).

Crisis Incidents at Christian Colleges and Universities

Tragically in 2007, four members of the Bluffton University’s baseball team and two others were killed when their team bus fell from an overpass in Atlanta, Georgia
(CNN, 2009). The University had to make swift arrangements to get administrators from Ohio to the site of the accident as well as respond to the urgent care of more than 29 injured teammates who were scattered among local area hospitals.

Prior to the Bluffton University’s accident, Taylor University mourned the death of four students and one staff member. Five of the six individuals were killed in a van accident while returning to campus after setting up an event for the new president’s inaugural celebrations (Kim, 2006). It was later discovered that the coroner’s office mixed-up the identity of one of the victims with the only survivor. This shocking error came five weeks after the accident, when the family had already memorialized who they believed was their daughter, while another family held on to hope for a recovery.

During the fall semester 2007, Bob Jones University had to dismiss one week early because the university had 30 confirmed cases of whooping cough, an infection of the respiratory system that is highly contagious (WYFFA4 News, 2007). Bob Jones University administrators found themselves working with the state’s Department of Health and Environmental Control to contain the spread of the bacterial disease.

During the spring semester 2008, a tornado ripped across the campus of Union University where 80 percent of the residential halls were destroyed, causing approximately $40 million in damages. University officials were challenged to relocate over 350 students in temporary housing and reopen classes for the semester within two weeks of the incident (Cawvey, 2008).

*God in the Whirlwind* (Ellsworth, 2008) recounted numerous stories of students, staff, and emergency responders who were involved in the EF-4 tornado that touched
down on the campus of Union University in Jackson, Tennessee on February 5, 2008. A sophomore student recalled how this crisis incident impacted his campus community:

The tornado was huge. I got to my room and shut the door behind me and told everyone that I saw it and it was huge. As soon as we shut the bathroom door and crouched down, the lights went out and the hail started. Within seconds the building was shaking and the ceiling tiles were rattling. I heard Jordan Atwell praying for God to help us and protect us. I found myself praying and holding on to a toilet. I felt like I was going to die and was so helpless. It seemed like an eternity, but the rumbling and glass shattering finally subsided. . . I am thankful to be alive. God had a hand on us, and I am thankful for the mercy He gives and of which I am so undeserving (p. 63).

When the tornado was over, 70% of Union’s residential halls were destroyed and approximately 800 students had to be relocated to temporary housing for the remainder of the semester (Cawvey, 2008).

Union University president, David Dockery, and the other chief administrators were challenged with several pressing issues consisting of assessing structural damage, figuring out how to save the spring semester, deciding how to best start cleanup efforts, and determining how to effectively communicate important information to students, parents, faculty, and staff (Ellsworth, 2008). Under Dockery’s guidance, the Senior Leadership Team created a five-phase recovery plan that consisted of a) phase one: a forty-eight hour plan that addressed the immediate challenges the crisis incident; b) phase 2: concentrate on the pressing needs of students and how to go about salvaging their belongings; c) phase 3: considerations for restarting the spring semester; d) phase 4:
preparation for long-term rebuilding endeavors; and e) sustaining critical communication efforts with all stakeholders. The president’s leadership was instrumental in Union’s quick recovery (K.C. Thornbury, Ph.D., personal communication, August 5, 2008).

This illustration of a recent crisis incident at Union University not only depicts the impact crisis can have on an individual campus and its key stakeholders, but it also demonstrates the importance of the university’s president hands-on leadership in times of crisis. Many students who were affected in the EF-4 tornado were reassured by President Dockery’s presence on campus immediately after the crisis (Ellsworth, 2008). Dockery stated, “I couldn’t do much, but my presence indicated that things were quasi-under control (p. 146).” Mitroff and Anagnos (2001) asserted that it is imperative that an organizational champion at the highest executive level be engaged in crisis preparedness.

Having top executives directly involved in the pre-planning phases allows crisis management procedures to be interwoven throughout the entire organizational system. For most colleges and universities, the president is expected to demonstrate leadership and managerial skills necessary to deal effectively with crises (Fanelli, 1997). These expectations include and are not limited to the following: a) keeping trustees or board of directors informed; b) outlining a course of action for recovery, c) being in touch with the college community, d) communicating with internal and external stakeholders, and e) dealing with the media. Within Christian higher education, the president is considered the most important administrative position (Smith et al., 2005).
The Role of the President in Crisis Preparedness

There are many expectations placed on the president of an institution (Nelson, 2007). Presidents of higher education institutions are expected to act as the chief administrative head by determining the educational direction of the administration, raising funds to support the mission of the institution, and continuing to improve the public image of the institution. It is expected that the person occupying this leadership role can be able to navigate the complexities, challenges, and uncertainties that an institution will encounter. Trombley (2007) expressed that the role of the presidency can oftentimes be considered as a symbol, politician, fundraiser, financial officer, problem-solver, human-resource manager, or even that of a “target”. The symbolization of a target carries with it the implication of power and control. The role of the president has the responsibility of everything that is good about the institution as well as everything that is bad about the institution. Nelson (2007) considered the primary asset of the person who holds the highest institutional position is that of a leader.

Fain (2007) stated, “When calamity strikes . . . it is the president’s power that becomes conspicuous (p. A17).” In the aftermath of events like September 11th (2001) and Virginia Tech (2007), the expectation of leadership priorities of the university president has expanded to ensure that it is a person who can command the authority of literally everyone very quickly in time of crisis. When crisis strikes a campus, people expect the president to be in charge as well as to be a voice of reassurance in its response.

Jablonski et al. (2008) believed the President’s role is central to any institutional crisis management system, “His or her actual level of involvement may differ based on the size and the type of institution, the nature of the crisis, and his or her individual
personality” (p. 18). This was also affirmed by Fanelli (1997) who also stated, in the time of crisis the President must “communicate, communicate, and communicate” (p. 65).

The role of the President amidst crisis became most scrutinized when former United States President, George W. Bush was continually criticized on his handling of the response efforts of Hurricane Katrina, which ravaged the Gulf Coast states (Hendrickson, 2008). Even university presidents have now become targets of public scrutiny. Virginia Tech’s President Charles W. Steger became recognizable as a result of praises and scrutiny of his handling of the Virginia Tech Massacre (Fain, 2007). President Steger was criticized for some of the decisions he made in communicating the potential threat of danger, while also being praised for being “an honorable man facing the impossible (A-18).” Other presidents who received accolades for their leadership during times of crisis are Tulane University’s President, Scott Cowen, in his response and recovery after Hurricane Katrina and Duke University’s President, Richard H. Brodhead, for his handling of the racially sensitive rape allegations against the men’s lacrosse team (2006).

The president’s authority to make decisions regarding the institutional response could be heavily influenced by his/her personality (Zdziarski, 2006). A study conducted by Smith et al. (2005) assessed how the profiles of CCCU presidents and Lilly Fellows Program Network of Colleges and Universities (LFN) differed from the national profile of the American Council on Education (ACE) college presidents. It was determined that major profile differences existed between ACE college presidents and the two smaller Christian college samples. The proportion of women presidents serving at ACE institutions doubled from 9.5% in 1986 to 21.1% in 2001. In contrast, 2% of CCCU
presidents were women and 5% were women presidents at LFN institutions. Minority presidents comprised 12.8% of the ACE sample, while none were reported to be serving at a CCCU and 1.9% serving at LFN. Others findings include: 1) Christian college presidents stayed in the position longer than their counterparts; 2) Christian college presidents highest degree was other than the field of education; 3) faculty were viewed as Christian college presidents greatest challenge; and 4) Christian college presidents reported spending considerably more time in planning and fund-raising duties than the general population of presidents.

In regard to crisis preparedness, presidents at Christian-affiliated institutions of higher education who tend to stay longer in their position can foster higher consistency in crisis planning and response that becomes uncertain with new leadership. Also, presidents who remain longer in their positions are more knowledgeable of the institution’s operations that can promote better continuity. On the contrary, longevity can also hinder preparations in crisis preparedness. Smaller institutions, like Christian-affiliated institutions of higher education can become complacency in their preparations (Akers, 2007). Also, being preoccupied with other institutional responsibilities such as fund-raising and strategic planning could hamper the president’s involvement in crisis management plans.

Zdziarski (2006) stated presidents may not be necessarily involved in crisis preparations. Yet, it is important to have the president involved in the pre-planning phases to ensure crisis preparedness procedures are properly address throughout the institution’s operations (Mitroff & Anagnos, 2001). During campus crisis, it is the president’s decisions that will have a critical impact on the functionality of the crisis
management plan and its effectiveness (Jablonski et al, 2008). Having them involved in the planning phases minimizes cause for mistakes or breaches in the crisis management systems.

**The Impact of Institutional Culture in Crisis Preparedness**

Mitroff (2001) stated, “one of the first and most important discoveries regarding crisis management is the identification and assessment of organizational culture (p.45)”.

Organizations use various defense mechanisms to justify their lack of practicing crisis management. Like individuals, organizations are susceptible to classic defense mechanisms due to their denial of their vulnerability to major crises. Mitroff identifies seven organizational defense mechanisms as: a) denial, b) disavowal, c) idealization, d) grandiosity, e) projection, f) intellectualization, and g) compartmentalization.

Those in the *denial* believe that crises only happen to other organizations around us because our organization is invulnerable. *Disavowal* suggests that the impact of crises is minimal to the organization and downplays its seriousness. Crises not happening to good organizations are the premise for *idealization*. Being overly confident in the magnitude and power of the organization as a way of protecting itself from crises embodies *grandiosity*, while *projection* passes the blame of crises happening onto someone else who is doing intentional harm to the organization. *Intellectualization* relies on the odds of occurrence and the probability of something happening as a case for inaction. Lastly, *compartmentalization* tends to minimize the effect on the whole organization because crises are viewed as only impacting parts that are independent from one another. Unfortunately, if an organization subscribes to any of these defense
mechanisms, it will not only dramatically increase the odds that crises will happen but it will also severely lengthen the time of recovery (Mitroff, 2001).

Phelps (1986) warns that top executives like the president must consider the long-term view in addressing potential cultural threats of an organization. Executives are the prime motivators in the development of a crisis management recovery strategy as well as ensuring that the plan is well communicated throughout the organization. Also, they are primarily responsible for combating cultural traps within the organization that can sabotage crisis management innovations. These traps can be one or a combination of the following: 1) human nature obstacles, notions that ‘it can’t happen to us’; 2) organizational obstacles— unbalanced power when the president in overshadowed; 3) information obstacles— lack of appreciation for the serious problems a crisis incident can cause; 4) staffing obstacles— keeping the level of interest high for crisis preparedness; and 5) communications obstacles— ensuring that all key responders frequently review the plan as a group to ensure continuity when executed.

Pauchant and Mitroff (1992) mentioned that a president’s failure to address the impact of an organization’s cultural norm in its crisis management systems invariably leads the organization to ethical deterioration. Because ethics is at the base of crisis management practices it is imperative that presidents protect an organization from a major crisis as a responsibility towards its employees and the surrounding communities. President Cowen of Tulane University stated “staying true to the institution’s mission” will help an organization’s recovery when faced with crisis (Cowen, 2006). Tulane’s administrators considered their crisis management plan relatively sound; however, once faced with the devastation caused by Hurricane Katrina in 2005, President Cowen
reflected on some of his decisions that could have been made differently. Furthermore, a poignant statement by President Cowen was:

Progress lies in how you handle the darkness and the light. All of us who went through Katrina learned a lot about ourselves, at our very core. The days immediately after the hurricane and subsequent flooding were dark days of the soul for most of us. It was hard to see beyond the despair and the destruction. As I flew out of New Orleans toward Houston after being stranded for four days, I realized that I could either focus on the darkness, or I could try to see beyond it and focus on the light (B12).

Presidential leadership in the midst of crisis should always keep insight the larger picture for an organization’s recovery. When a president takes the lead in crisis preparedness of an institution, ultimately he/she takes ethical responsibility for its constituents and their well-being.

Summary of Reviewed Literature

The review of literature establishes the premise of crisis preparedness as a variable for studying in higher education. Christian-affiliated colleges and universities are credible and competitive institutions of higher education. However, there was no evidence that literature existed for the examination of crisis preparedness at these institutions. The few available research studies on crisis preparedness have been conducted within large public college and university environments (Akers, 2007; Catullo, 2008; Hartzog, 1981; Mitroff et al., 2006; Wilson, 1992; Zdziarski, 2001). These studies found the need for the continued research to close the gaps within the literature in regards
to crisis preparedness in American higher education; crisis preparedness research should include institutions of various sizes and types; and studies need to be conducted to examine how smaller specialized higher education institutions are able to prepare for campus crises. In conclusion, the escalation of crisis incidents on Christian-affiliated colleges and universities campuses serves as a constant reminder for the need to know the best crisis preparedness practices for these institutions.
CHAPTER III

METHOD AND METHODOLOGY

There remains a need for academicians and practitioners to understand crisis preparedness for all types of higher education institutions (Mitroff et al., 2006). The few available research studies on crisis preparedness have been mostly conducted within large public college and university environments (Akers, 2007; Catullo, 2008; Hartzog, 1981; Mitroff et al., 2006; Wilson, 1992; Zdziarski, 2001). Higher education consists of many types of institutions; some like Christian-affiliated institutions of higher education are not as widely researched in the area of crisis preparedness.

This chapter highlights the methods and procedures that were used to examine crisis preparedness at Christian-affiliated institutions of higher education. The following topics will be discussed: a) research design, b) participants, c) instrumentation, d) validity and reliability, e) data collection procedures, and f) data analysis.

Research Design

The research design was a descriptive study using survey research methodology. Survey research method was used for this study because it allowed presidents at Christian-affiliated institutions of higher education to self-report responses on a questionnaire. This method is consistent with previous studies (Catullo, 2008; Zdziarski,
According to Gall, Borg, and Gall (1996), survey research is a method used to describe research that involves administering questionnaires. The purpose of survey research is to collect data from a selected sample that represents a population similar to the data analysis findings that can be generalized. Results of this study from quantitative analysis consisted of non-parametric measures of percentages and frequencies.

This study also replicates research conducted by Zdziarski (2001). Replication refers to repeating a study (Fraenkel & Wallen, 2003; Gay & Airasian, 2000). Repeating an original study with different participants in the same or different settings increases the generalizability of the findings (Fraenkel & Wallen, 2003; Gay & Airasian, 2000). Replication research is considered an acceptable practice, especially in strengthening the results of the original research (Schneider, 2004).

Zdziarski (2001) assessed the state of crisis preparedness of larger National Association of Student Personnel Administrators (NASPA) institutions in higher education from the perspective of the chief student affairs administrator. This study assessed the state of crisis preparedness of Christian colleges and universities from the president’s perspective. By replicating Zdziarski’s study, this study strengthened prior results and increased the generalizability of findings to include Christian-affiliated institutions of higher education.

**Participants**

The participants for this study were presidents at Christian-affiliated institutions of higher education across the United States. Presidents were selected to evaluate due to the nature of their role as chief executive decision-makers in the event of a campus crisis.
incident (Fanelli, 1997). Through the institutional data from the Integrated Postsecondary Education Data System (IPEDS) as well as listings of institutions on various Christian associations’ websites such as the Council of Christian Colleges (CCCU) and the Association of Biblical Higher Education (ABHE), 198 colleges and universities were identified as being Christian-affiliated institutions of higher education. These institutions primarily consisted of private four-year comprehensive colleges and universities that offer a broad curriculum in the arts and sciences. Other institutions were comprised of postsecondary education institutions known as Bible colleges. Demographic information for each institution such as association affiliation, regional location, student enrollment, and institution’s location (i.e. large city, mid-size city, large town, small town, rural area) was obtained from the demographic section of the questionnaire (see Appendix H).

The final population consisted of 153 institutions. Nineteen institutions were not included because their enrollment was less than 100 students. An additional six institutions indicated no president or an interim president and were conducting presidential searches. The remaining 20 institutions had an invalid e-mail address for the president that could not be rectified. The overall response rate for the study was 50%.

Instrumentation

The Campus Crisis Management Questionnaire

The instrumentation used for this study was a self-report questionnaire entitled, Campus Crisis Management (see Appendix A), which was developed by Zdziarski (2001). Permission to use this instrument was granted by the author (see Appendix B).
The *Campus Crisis Management* questionnaire was designed to reflect the four critical indicators of organizational crisis preparedness (types, phases, systems, and stakeholders) most applicable to higher education (Zdziarski, 2001). The questionnaire contained three parts.

Part one of the *Campus Crisis Management Questionnaire*, consisted of 14 questions (see Table 3.1). Question one, in part one, the score was based upon a 10-point scale ranging from “Unprepared” (1) to “Well Prepared” (10). Questions 2, 4, 10, 11 and 12 in Part 1, required a “yes or no” check-off. While the remaining questions 3, 5, 6, 7, 8, and 9 in Part 1, asked either to “check only one” or “check all that apply”. The second part of question 4 in Part 1 also asked to “check only one”.

According to Zdziarski (2001), part two of the questionnaire assesses the level of involvement and consideration of various internal and external stakeholders. On the original questionnaire, a four-point scale assesses respondents’ level of involvement as: a) stakeholders represented on crisis management committee or team, b) stakeholders involved in planning/respond as needed, c) impact/consequences of crisis on stakeholders is routinely considered, and d) stakeholders not significant to crisis planning/response or does not exist on their campus.

Part three of the questionnaire assessed the types of crisis institutions are prepared for and whether contingency plans for these types are addressed in each phase of crisis. Zdziarski (2001) gave formal definitions of the phases of crisis (pre-crisis phase, crisis phase, post-crisis phase) to give more clarity of expectation from participants’ selections of the items in this part. Additional definitions are given throughout the questionnaire.
which includes: crisis audit, on-call or duty system, stakeholders, and contingency plans (Catullo, 2008; Zdziarski, 2001).

Table 3.1
Description of Questions in Part One of the Campus Crisis Management Questionnaire

<table>
<thead>
<tr>
<th>Questionnaire Reference</th>
<th>Description</th>
<th>The Critical Factors associated with Organizational Crisis Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Question 1</td>
<td>Perceived preparedness</td>
<td>crisis preparedness</td>
</tr>
<tr>
<td>Questions 2 &amp; 4</td>
<td>Written crisis management plan</td>
<td>systems in place</td>
</tr>
<tr>
<td>Questions 3 &amp; 4</td>
<td>Person/position responsible for coordinating response</td>
<td>systems in place</td>
</tr>
<tr>
<td>Question 5</td>
<td>Number of years crisis management plan existed</td>
<td>systems in place</td>
</tr>
<tr>
<td>Question 6</td>
<td>Frequency crisis management plan is reviewed</td>
<td>systems in place</td>
</tr>
<tr>
<td>Question 7</td>
<td>Crisis audit</td>
<td>systems in place</td>
</tr>
<tr>
<td>Question 8</td>
<td>Phases of crisis</td>
<td>systems in place</td>
</tr>
<tr>
<td>Question 9</td>
<td>Crisis management plan communicated to campus community</td>
<td>systems in place</td>
</tr>
<tr>
<td>Question 10</td>
<td>Critical incident stress management/debriefing</td>
<td>systems in place</td>
</tr>
<tr>
<td>Question 11</td>
<td>Activation</td>
<td>systems in place</td>
</tr>
<tr>
<td>Question 12</td>
<td>Crisis management team</td>
<td>systems in place</td>
</tr>
<tr>
<td>Question 13</td>
<td>Assignment of crisis management team members</td>
<td>systems in place</td>
</tr>
<tr>
<td>Question 14</td>
<td>Crisis management training</td>
<td>systems in place</td>
</tr>
</tbody>
</table>
Revisions to the Campus Crisis Management Questionnaire

The Campus Crisis Management Questionnaire was used in its entirety as developed by Zdziarski (2001) with the revisions described in this section. To better assess presidents’ perceived crisis preparedness of their institutions, the following revisions were made.

The first question on the original questionnaire asked respondents to indicate how prepared their student affairs divisions were to respond to campus crisis using a 10-point scale ranging from “Unprepared” (1) to “Well Prepared” (10) (Zdziarski, 2001). The first question was revised to reflect the president’s perceptions of their institution’s preparedness and reads:

On a scale of 1 to 10, where 1 is unprepared and 10 is well prepared, please indicate how prepared your college/university is to respond to campus crisis.

Another revision includes, the term ‘student life’ next to statements listing student affairs. This will help the presidents of Christian-affiliated institutions identify with the terminology most applicable for their college or university. Question four was revised to reflect the intent for the college/university’s crisis management plan to be the primary plan assessed throughout the remainder of the questionnaire. However, institutions with a student affairs crisis management plan or no crisis management plan will still be assessed similar to previous studies (Catullo, 2008; Zdziarski, 2001). The re-write stated:

Please respond to the remaining questions as they relate to your college/university crisis management plan. If you do not have a written college/university crisis management plan, then respond to the remaining questions as they relate to your
student affairs/student life crisis management plan. If you do not have a written plan of any type, please answer as many of the remaining questions as possible.

The *Campus Crisis Management Questionnaire* was converted into an on-line survey format through a service provided by Survey Monkey. This company is based in Portland, Oregon and provides an on-line survey development tool that allows subscribers to create surveys electronically by using pre-existing templates, creative themes, as well as designs personalize questionnaires. It is important to note, Survey Monkey is a for-profit business that charges a fee for use of its service. Survey Monkey does not track the participants, collect the e-mail address, or use the IP address of the participants.

**Validity and Reliability**

Zdziarski (2001) used content and face validity to evaluate the *Campus Crisis Management Questionnaire*. Content validity bases judgments on the appropriateness of the instrument’s content while face validity judges the instrument based on the face value of the facts (Fraenkel & Wallen, 2003). The *Campus Crisis Management Questionnaire* was validated in several ways: a) the researcher used a review of the literature to develop survey items; b) a panel of experts reviewed the survey; c) revisions were made to the initial survey based upon feedback from a pilot study; and d) it was concluded that the crisis typology (natural, facility, criminal, and human crises) accurately reflects crisis planning in higher education (Catullo, 2008; Zdziarski, 2001). Fraenkel and Wallen stated, “An instrument is valid when it measures what it is supposed to measure and performs the functions that it purports to perform” (p. 53).
Data Collection Procedures

Approval was obtained from the Institutional Review Board for the Protection of Human Subjects in Research (IRB) at Mississippi State University to conduct the study (Appendix G). Once permission was granted, the researcher identified presidents’ names, e-mails, and other institutional contact information by obtaining institutional data from IPEDS as well as the institutions’ websites. A list of 198 institutions was generated. Nineteen institutions were excluded because their enrollment was less than 100 students and additional six institutions were excluded because they were conducting presidential searches. The remaining institutions were sent an introductory e-mail (see Appendix C). The introductory e-mail outlined the purpose of the research; what the results would be used for; an explanation of the confidentiality of participation; and gave a general statement about what the presidents can expect if they voluntarily participate. Also, the introductory e-mail contained the link to the questionnaire on-line survey through Survey Monkey. An additional 20 institutions were eliminated due to invalid e-mail addresses for presidents that could not be rectified. The final population of institutions consisted of 153 institutions yielding a response rate for the study was \( n = 77 \) or 50%.

Once presidents click onto the survey link provided within the e-mail, an informed consent form was displayed. Before taking the survey, the participants had to acknowledge reading the consent form by checking a box. At that time, the participants were able to print out the inform consent form. If the presidents did not wish to participate, they could select “no” and the link would take them directly to the ending page thanking them for their participation (see Appendix F). The consent page within Survey Monkey required a selection of either “yes” or “no” before participants was able
to proceed. A week following the first e-mail sent to participants, the researcher sent a reminder e-mail to all the participants (see Appendix E). After completing the survey, the participants read an on-line message from the researcher thanking them for their participation (see Appendix F). The data collection from the introductory e-mail to the final thank-you e-mail took three weeks.

**Data Analysis**

The Statistical Package for Social Sciences 17.0 (SPSS) was used in analyzing all statistical procedures on the collected data. Raw data scores collected from Survey Monkey was converted into a Microsoft Excel spreadsheet then formatted into SPSS 17.0. Descriptive statistics was computed for all variables. Frequency counts and valid percentages were made for categorical variables, while means and standard deviations were computed for all continuous variables. By using descriptive and nonparametric statistics, there was no attempt to manipulate the variables. The research questions to be answered were the following:

1. **What type of crises are presidents prepared to respond to at Christian-affiliated colleges and universities?** Descriptive statistics were used to assess types of crisis. This was answered by part three of the *Campus Crisis Management Questionnaire*.

2. **How do crisis management plans at Christian-affiliated colleges and universities address each phase of crisis?** Descriptive statistics were used to assess the types of crisis institutions are prepared for and whether contingency plans for these types of crisis are addressed for each phase.
This was answered by part three of the *Campus Crisis Management Questionnaire*.

3. What crisis management systems are in place at Christian-affiliated colleges and universities? Descriptive statistics were used to assess crisis management systems. This was answered by part one of the *Campus Crisis Management Questionnaire*, questions 1 - 14.

4. Which stakeholders are involved or considered in crisis management preparedness at Christian-affiliated colleges and universities? Descriptive statistics were used to assess the level of involvement and consideration of internal and external stakeholders. This was answered by part two of the *Campus Crisis Management Questionnaire*. 
CHAPTER IV
RESULTS AND DISCUSSION

In this chapter results of the data are presented. The purpose of this study was to first examine crisis preparedness at Christian-affiliated institutions of higher education. Second, this study examined Christian-affiliated institutions of higher education president’s perspective of their institution’s ability to prepare for crises based upon the four critical indicators of organizational crisis preparedness described by Zdziarski (2001): a) the types of crisis institutions prepare for, b) the phase of crisis prepared for, c) the systems in place to respond to crisis, and d) the stakeholders involved and considered in preparations. Descriptive statistics were used to compute variables. Non-parametric measures consisting of frequency counts and valid percentages were made for categorical variables, while cross tabulations provided distribution analyses.

Descriptive Data

A total of 153 presidents of Christian-affiliated colleges and universities located in the United States were e-mailed for their participation in the electronic version of the Campus Crisis Management Questionnaire. Table 4.1 indicates 77 presidents (50%) participated in the survey. Table 4.1 indicates the respondents were predominately from institutions that were members of the Council for Christian Colleges and Universities.
(CCCU) (37%); respectively, followed by respondents from institutions that were members of the Association of Biblical Higher Education (ABHE) (28%); and respondents whose institutions were neither members of CCCU or ABHE (28%). The smallest group of responders was those respondents from institutions who were affiliated members of CCCU (2%).

The largest percentage of respondents were from institutions with a total enrollment of 1000 – 2999 (28%); followed by respondents from institutions with a total enrollment that was less than 500 (26%); respondents from institutions with a total enrollment of 500 – 999 (16%); and those respondents from institutions with a total enrollment of 3000 – 4999 (7%).

All geographical locations within the United States were represented in this study. The frequency of the respondents were predominately from institutions geographically located in the Southeast (22%) region; respectively, followed by respondents whose institutions were geographically located in the Great Lakes region (17%); respondents whose institutions were geographically located in the New England (8%) and Far West (8%) regions; respondents whose institutions were located in the Plains (7%) and Southwest (7%) regions; and respondents whose institutions were geographically located in the Rocky Mountains (6%) and Mid East (6%) regions.

Last, the largest percentage of the respondents were from institutions located in a mid-size city (24%); followed by respondents who were from institutions located in a large town (14%); in a small town (13%); in large cities (10%); in the urban fringe of a large city (10%); and those located in the urban fringe of a mid-size city (6%).
Table 4.1
Demographic Information

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>INSTITUTIONAL AFFILIATION</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Member of CCCU</td>
<td>37</td>
<td>48.1</td>
</tr>
<tr>
<td>Affiliate of CCCU</td>
<td>2</td>
<td>2.6</td>
</tr>
<tr>
<td>Member of ABHE</td>
<td>19</td>
<td>24.7</td>
</tr>
<tr>
<td>Neither</td>
<td>19</td>
<td>24.7</td>
</tr>
<tr>
<td><strong>TOTAL STUDENT ENROLLMENT</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 500</td>
<td>6</td>
<td>33.8</td>
</tr>
<tr>
<td>500 – 999</td>
<td>16</td>
<td>20.8</td>
</tr>
<tr>
<td>1000 – 2999</td>
<td>28</td>
<td>36.4</td>
</tr>
<tr>
<td>3000 – 4999</td>
<td>7</td>
<td>9.1</td>
</tr>
<tr>
<td><strong>GEOGRAPHICAL REGION</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New England (CT, ME, MA, NH, RI, VT)</td>
<td>8</td>
<td>10.4</td>
</tr>
<tr>
<td>Mid East (DE, DC, MD, NJ, NY, PA)</td>
<td>6</td>
<td>7.8</td>
</tr>
<tr>
<td>Great Lakes (IL, IN, MI, OH, WI)</td>
<td>13</td>
<td>16.9</td>
</tr>
<tr>
<td>Plains (IA, KS, MN, MO, NE, ND, SD)</td>
<td>7</td>
<td>9.1</td>
</tr>
<tr>
<td>Southeast (AL, AR, FL, GA, KY, LA, MS, NC, SC, TN, VA, WV)</td>
<td>22</td>
<td>28.6</td>
</tr>
<tr>
<td>Southwest (AZ, NM, OK, TX)</td>
<td>7</td>
<td>9.1</td>
</tr>
<tr>
<td>Rocky Mountains (CO, ID, MT, UT, WY)</td>
<td>6</td>
<td>7.8</td>
</tr>
<tr>
<td>Far West (AK, CA, HI, NV, OR, WA)</td>
<td>8</td>
<td>10.4</td>
</tr>
<tr>
<td><strong>LOCATION</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Large City</td>
<td>10</td>
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<td>Mid-size city</td>
<td>24</td>
<td>31.2</td>
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<tr>
<td>Urban fringe of large city</td>
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<td>Urban fringe of mid-size city</td>
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<td>7.8</td>
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<tr>
<td>Large town</td>
<td>14</td>
<td>18.2</td>
</tr>
<tr>
<td>Small town</td>
<td>13</td>
<td>16.9</td>
</tr>
</tbody>
</table>
Presidents’ Perceived Preparedness

This study was based upon examining crisis preparedness at Christian-affiliated institutions of higher education as perceived by the presidents. The first question in part one of the *Campus Crisis Management Questionnaire* asked respondents to assess their institution’s preparedness based upon a 10-point scale ranging from “Unprepared” (1) to “Well Prepared” (10). Table 4.2 reports the cross tabulations of frequency counts and valid percentages for preparedness by institutional affiliation and enrollment size.

Overall, results indicate that presidents at Christian-affiliated institutions who participated in this study perceived their institutions to be prepared to respond to campus crisis. Responses ranged from a low unprepared level of 4 (4%) to a high well prepared level of 10 (3%). The respondents who were predominately from institutions that were members of CCCU assessed their institution’s preparedness at a level 8 (32%) or level 9 (32%). Those respondents who were from institutions that were affiliates of CCCU assessed their institution’s preparedness at either a level 6 (50%) or level 8 (50%). Respondents who were predominately from institutions that were members of ABHE assessed their institution’s preparedness at a level 7 (37%) or level 8 (42%). Respondents who were neither from institutions that were members of CCCU or ABHE assessed their institution’s preparedness at a level 8 (32%) or level 9 (32%).

Furthermore, respondents from institutions with a total enrollment of 3000 – 4999 assess their institution’s preparedness levels the highest at a level 10 (27%). Respondents from institutions with a total enrollment that was 500 or less assessed their institution’s preparedness the lowest at a level 4 (12%) (see Table 4.2).
Table 4.2
Perceived Preparedness by Types of Institutional Affiliation & Enrollment

<table>
<thead>
<tr>
<th>Level</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
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</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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<td><strong>Institutional Affiliation</strong></td>
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<tr>
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<td>2</td>
<td>0</td>
<td>6</td>
<td>3</td>
<td>12</td>
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<td></td>
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<td>32.4</td>
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</tr>
<tr>
<td>Affiliate of CCCU</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
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<td>0</td>
</tr>
<tr>
<td></td>
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<td>Member of ABHE</td>
<td>Freq</td>
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<td>7</td>
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<td>5</td>
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<td>%</td>
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<td>0.0</td>
<td>11.5</td>
<td>57.7</td>
<td>19.2</td>
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<td>0.0</td>
</tr>
<tr>
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<td>19.5</td>
<td>35.1</td>
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</tbody>
</table>

*Note: Range: 1 = unprepared; 10 = well-prepared*
Research Question One

Research Question 1: What type of crises are presidents prepared to respond to at Christian-affiliated colleges and universities? Respondents were asked to indicate the various types of crises that were specifically outlined in their written crisis plan. Respondents could select as many types of crises that applied to their institutions. Types of crises were listed in four categories: natural, facility, criminal, and human. Overall 33 types of crises were listed.

As indicated in Table 4.3, the five types of crises for which Christian-affiliated institutions of higher education most frequently reported having a prepared written plan for were: infectious disease (89%); missing person (85%); student death (85%); death of a faculty or staff member (83%); and fire (83%). This top group heavily represents human types of crises; only fire represents another type of crisis (natural).

The five types of crises for which Christian-affiliated institutions of higher education least frequently reported having a prepared written plan were: flood (31%); earthquake (28%); domestic abuse (28%); evacuation of campus (27%); and hurricane (26%). This group heavily represents natural types of crises; only domestic abuse represents another type of crisis (criminal).

The type of crises for which Christian-affiliated institutions of higher education most frequently reported having a prepared written plan within each category of crisis were: severe weather (73%) for natural; fire (84%) for facility; rape (78%) for criminal; and infectious diseases for human (89%).
Table 4.3

Types of Crises Prepared by Christian-Affiliated Institutions of Higher Education

<table>
<thead>
<tr>
<th>Type</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Natural</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tornado</td>
<td>164</td>
<td>70.1</td>
</tr>
<tr>
<td>Hurricane</td>
<td>59</td>
<td>25.5</td>
</tr>
<tr>
<td>Earthquake</td>
<td>64</td>
<td>27.7</td>
</tr>
<tr>
<td>Flood</td>
<td>71</td>
<td>30.7</td>
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<tr>
<td>Severe Weather</td>
<td>169</td>
<td>73.1</td>
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<tr>
<td><strong>Facility</strong></td>
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<td></td>
</tr>
<tr>
<td>Fire</td>
<td>194</td>
<td>83.9</td>
</tr>
<tr>
<td>Explosion</td>
<td>127</td>
<td>54.9</td>
</tr>
<tr>
<td>Chemical Leak</td>
<td>132</td>
<td>57.1</td>
</tr>
<tr>
<td>Evacuation of Campus</td>
<td>63</td>
<td>27.2</td>
</tr>
<tr>
<td>Evacuation of Building</td>
<td>156</td>
<td>67.5</td>
</tr>
<tr>
<td>Computer Loss</td>
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<td>59.7</td>
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<tr>
<td>Loss of Utilities</td>
<td>164</td>
<td>70.9</td>
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<tr>
<td><strong>Criminal</strong></td>
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<td></td>
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<tr>
<td>Homicide</td>
<td>140</td>
<td>60.6</td>
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<tr>
<td>Assault</td>
<td>173</td>
<td>74.8</td>
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<tr>
<td>Rape</td>
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<td>Domestic Abuse</td>
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<tr>
<td>Burglary</td>
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<td>Kidnapping</td>
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<td>46.3</td>
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<tr>
<td>Hate Crime</td>
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<td>50.6</td>
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<tr>
<td>Terroristic Threat</td>
<td>131</td>
<td>56.7</td>
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<tr>
<td>Vandalism</td>
<td>138</td>
<td>59.7</td>
</tr>
<tr>
<td><strong>Human</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student Death</td>
<td>197</td>
<td>85.2</td>
</tr>
<tr>
<td>Faculty/ Staff Death</td>
<td>194</td>
<td>83.9</td>
</tr>
<tr>
<td>Student Injury</td>
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<tr>
<td>Suicide</td>
<td>193</td>
<td>83.5</td>
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<tr>
<td>Emotional Crisis</td>
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<tr>
<td>Missing Person</td>
<td>196</td>
<td>84.8</td>
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<tr>
<td>Alcohol Overdose</td>
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<tr>
<td>Infectious Disease</td>
<td>205</td>
<td>88.7</td>
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<tr>
<td>Racial Incident</td>
<td>111</td>
<td>48.8</td>
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<tr>
<td>Campus Disturbances</td>
<td>183</td>
<td>79.2</td>
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</table>
Research Question Two

Research Question 2: How do crisis management plans at Christian-affiliated colleges and universities address each phase of crisis? Respondents were asked to identify each type of crisis for which an individual written plan existed and each phase of crisis it addressed. The three phases of crisis were defined as: 1) Pre-crisis: actions to take prior to the onset of a crisis. These actions may include such things as preventive measures, preparation activities, and ways to detect a potential crisis; 2) Crisis: actions to take during a crisis event. These actions may include such things as activation of response procedures, means of containing a crisis, and steps to resume normal operations; and 3) Post crisis: actions to take after a crisis. These actions may include such things as methods for verifying that a crisis has past, follow-up communications with stakeholders, and mechanisms to revise or improve procedures for the next crisis.

Results indicated that written crisis management plans for Christian-affiliated institutions of education mostly addressed the crisis phase (100%); respectively, followed by the post crisis phase (94%), with the pre-crisis phase (90%) being the lowest. Table 4.4 displays the frequencies and percentages for the phases of crises that respondents indicated were addressed in their crisis management plans.

The five types of crises for which Christian-affiliated institutions of higher education most frequently reported having addressed in the pre-crisis phase of their written crisis management plans were: fire (94%), sexual assault/rape (94%), infectious diseases (94%), assault (90%), and sexual harassment (90%). The five types of crises for which Christian-affiliated institutions most frequently reported having addressed in the crisis phase of their written crisis management plans were: infectious diseases (88%),
tornado (86%), assault (86%), sexual assault/rape (86%), and missing person (86%). The five types of crisis for which Christian-affiliated institutions most frequently reported having addressed in the post crisis phase of their written crisis management plans were: missing person (86%), student death (84%), suicide (84%), infectious diseases (84%), and death of faculty/staff member (82%).

The five types of crises for which Christian-affiliated institutions least frequently reported having addressed in the pre-crisis phase of their written crisis management plans were: racial incident (48%), flood (39%), earthquake (29%), hurricane (27%), and domestic abuse (23%). None of the respondents reported having written plans at the pre-crisis phase for faculty/staff injury and emotional/psychological crisis. The five types of crisis for which Christian-affiliated institutions of higher education least frequently reported having addressed in the crisis phase of their written crisis management plans were: earthquake (47%), domestic abuse (33%), kidnapping/abduction (30%), hurricane (29%), and evacuation of campus. None of the respondents reported having written plans at the crisis phase for racial incidents and campus disturbance/demonstrations. The five types of crises for which Christian-affiliated institutions of higher education least frequently reported having addressed in the post crisis phase of their written crisis management plans were: domestic abuse (27%), hurricane (22%), earthquake (8%), flood (5%), and evacuation of campus (1%). None of the respondents reported having written plans at the post crisis phase for vandalism, racial incidents, and campus disturbance/demonstrations.
Table 4.4
Phases of Crises Addressed in Written Crisis Management Plan by Types

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<tr>
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<th>Pre-Crisis</th>
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<th>Crisis</th>
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<th>Post Crisis</th>
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<td>Freq.</td>
<td>%</td>
<td>Freq.</td>
<td>%</td>
<td>Freq</td>
<td>%</td>
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<td>66</td>
<td>85.7</td>
<td>33</td>
<td>42.9</td>
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<td>22</td>
<td>28.6</td>
<td>17</td>
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<td>28.6</td>
<td>36</td>
<td>46.8</td>
<td>6</td>
<td>7.8</td>
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<td></td>
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<td></td>
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<td>Fire</td>
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<td>1.3</td>
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<td>64.9</td>
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<td>74.0</td>
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<td>64.9</td>
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<tr>
<td><strong>Criminal</strong></td>
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<tr>
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<td>55</td>
<td>71.4</td>
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<td>35.1</td>
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<td>85.7</td>
<td>38</td>
<td>49.4</td>
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<td>93.5</td>
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<td>85.7</td>
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<td>54.5</td>
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<td>Sexual Harassment</td>
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<td>31</td>
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<td>Kidnapping/Abduction</td>
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<td>29.9</td>
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<td>49.4</td>
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<td>Hate Crime</td>
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<td>55.8</td>
<td>36</td>
<td>46.8</td>
</tr>
<tr>
<td>Terroristic Threat</td>
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<td>63.6</td>
<td>54</td>
<td>70.1</td>
<td>28</td>
<td>36.4</td>
</tr>
<tr>
<td>Vandalism</td>
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<td>75.3</td>
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<tr>
<td><strong>Human</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Student Death</td>
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<td>84.4</td>
<td>65</td>
<td>84.4</td>
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<td>81.8</td>
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<td>49.4</td>
</tr>
<tr>
<td>Suicide</td>
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<td>81.8</td>
<td>65</td>
<td>84.4</td>
<td>65</td>
<td>84.4</td>
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<td>Emotional/Psychological Crisis</td>
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<td>Missing Person</td>
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<td>85.7</td>
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<td>Alcohol/Drug Overdose</td>
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<td>Infectious Disease</td>
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</tbody>
</table>
Research Question Three

Research Question 3: What crisis management systems are in place at Christian-affiliated colleges and universities? Crisis management systems entail developing plans, assembling response teams, training key personnel to respond, as well as preparing for the psychological impact of the crisis. Respondents were asked a series of questions that assessed their institution’s mechanisms or structures that devise their crisis management systems (e.g. written crisis plans, coordinators & crisis audit, crisis management committee or teams, and Critical Incident Stress debriefings).

The first series of questions in part one of the *Campus Crisis Management Questionnaire* addressed the establishment of a written institutional crisis management plan. Respondents were asked to indicate whether or not their institution had a written crisis management plan. Results showed 92% of Christian-affiliated institutions of higher education who participated in this study had an established crisis management plan for their institution. Of the total number of institutions that responded to this question, 8% indicated their institution did not have a written crisis management plan. Respondents were asked to indicate how long their institution’s crisis management plan has been in existence. Results showed the majority of Christian-affiliated institutions of higher education who participated in this study had a written crisis management plan that existed for 1 to 5 years (57%); respectively, followed by institutions that had written crisis management plan that existed for 5 to 10 years (17%); respectively, followed by institutions that had a written crisis management plan that existed a year or less (13%) and more than 10 years (13%).
Respondents were asked to indicate how often their institution’s crisis management plan is reviewed. Results showed the majority of Christian-affiliated institutions of higher education who participated in this study reviewed their crisis management plan annually (95%); respectively, followed by institutions that reviewed their plans every 3 years (5%). There were no responses for crisis management plans that were reviewed every 5 years.

Last, respondents were asked to indicate how the crisis management plan is communicated to the members of the campus community. Results showed Christian-affiliated institutions of higher education who participated in this study mostly communicated their crisis management plan to the campus community by conducting drills and exercises (73%), making a copy of the plan available upon request (64%), in new student orientation (52%), by making it accessible on the web (44%) and through annual notification (44%). Christian-affiliated institutions of higher education least communicated their crisis management plan to the campus community in new employee training (38%), by optional training (16%), and by requiring training.

The second series of questions addressed who coordinates the institutional response to crisis as well as how often crisis audits are conducted. Respondents were asked to indicate who coordinated their institution’s response to crisis. As indicated in Table 4.5, results showed the majority of the Christian-affiliated institutions of higher education crisis response efforts were coordinated by the Vice President of Administration (21%), respectively followed by the Vice President for Student Affairs (14%), Chief/Director of University Police (13%), and the President (13%).
Table 4.5

Coordinators of the Institutional Crisis Response

<table>
<thead>
<tr>
<th>Coordinators</th>
<th>Freq.</th>
<th>%</th>
</tr>
</thead>
<tbody>
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<td>President</td>
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</tr>
<tr>
<td>VP Academic Affairs/Provost</td>
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<td>2.6</td>
</tr>
<tr>
<td>VP Administration/Business Affairs</td>
<td>16</td>
<td>20.8</td>
</tr>
<tr>
<td>VP Student Affairs/Student Life</td>
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<td>14.3</td>
</tr>
<tr>
<td>Chief/Director of University Police</td>
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<td>Director of Health &amp; Safety</td>
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</tr>
<tr>
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<tr>
<td>Director of Student Activities</td>
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</tbody>
</table>

Furthermore, a crisis audit refers to the process of assessing the internal and external environments to identify potential crises, and determine the impact and probability of various crises occurring. Respondents were asked to indicate when an audit had been conducted on their campus. Results showed that the majority of crisis audits are conducted each time the plan is reviewed (55%); respectively, followed by no audit is conducted (22%); when the plan was originally created (20%); annually audits (18%); and whenever a crisis occurs (13%).

The third series of questions addressed crisis management teams or committees. Respondents were asked to indicate whether or not their institutions had an established crisis management team. Results showed 92% of the institutions had an established crisis management team and 8% did not have a crisis management team established. When asked how individuals are assigned to the crisis management committee or team, the majority of the respondents indicated that individuals are appointed by a superior (55%);
followed by specified in job description (25%), recruited (39%), volunteered (23%), and self-appointed (4%). Table 4.6 indicates the responses of respondents when asked to indicate what type of training is provided to crisis management team members or individuals involved in responding to campus crises. Results showed that the majority of the training was conducted on campus crisis management procedures (75%), general crisis management procedures (75%), and as crisis stimulations and drills (60%).

Table 4.6
Training Provided to Crisis Management Team Members

<table>
<thead>
<tr>
<th>Type of Training</th>
<th>Freq.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Training Provided</td>
<td>11</td>
<td>14.3</td>
</tr>
<tr>
<td>Crisis Management (campus procedures)</td>
<td>58</td>
<td>75.3</td>
</tr>
<tr>
<td>Crisis Management (general)</td>
<td>58</td>
<td>75.3</td>
</tr>
<tr>
<td>Legal Issues/ Risk Management</td>
<td>26</td>
<td>33.8</td>
</tr>
<tr>
<td>Working with Law Enforcement &amp; Emergency Personnel</td>
<td>52</td>
<td>67.5</td>
</tr>
<tr>
<td>Responding to Civil Disturbance or Demonstrations</td>
<td>26</td>
<td>33.8</td>
</tr>
<tr>
<td>Suicide Intervention</td>
<td>17</td>
<td>21.1</td>
</tr>
<tr>
<td>Media Intervention</td>
<td>36</td>
<td>46.8</td>
</tr>
<tr>
<td>Campus Violence Issues</td>
<td>30</td>
<td>39.0</td>
</tr>
<tr>
<td>Substance Abuse</td>
<td>42</td>
<td>54.5</td>
</tr>
<tr>
<td>Grieving Process</td>
<td>14</td>
<td>18.2</td>
</tr>
<tr>
<td>Orientation to Community &amp; County Assistance</td>
<td>21</td>
<td>27.3</td>
</tr>
<tr>
<td>Critical Incident Stress Management/ Debriefing</td>
<td>29</td>
<td>37.7</td>
</tr>
<tr>
<td>Table-top Exercises</td>
<td>25</td>
<td>32.5</td>
</tr>
<tr>
<td>Crisis Simulations or Drills</td>
<td>46</td>
<td>59.7</td>
</tr>
</tbody>
</table>

The last series of questions in part one addressed issues related to Critical Incident Stress Management (CISM). Respondents were asked to indicate if their institution’s
crisis management plan addressed the mental/health of university caregivers who responds to campus crisis by providing CISM debriefings. Fifty-five of the respondents indicated that their crisis management plans addressed mental health issues for responders, while 46% indicated that their institution’s crisis management plans did not address mental health issues for responders.

**Research Question Four**

Research Question 4: Which stakeholders are involved or considered in crisis management preparedness at Christian-affiliated colleges and universities? Stakeholders are individuals or organizations that are affected by a crisis or could affect an institution's ability to respond to crisis. Respondents were asked to rate which the levels of involvement a list of 22 internal stakeholders and 20 external stakeholders had in their crisis management plan. Zdziarski (2000) noted that Campus Ministers were listed under both the internal and external stakeholders because of the different types of involvement these groups have with particular campuses. Table 4.7 displays the frequency and valid percentages of involvement for internal stakeholders and Table 4.8 displays the same information for external stakeholders.

The internal stakeholders at Christian-affiliated institutions with the greatest level of involvement were: VP of Student Affairs (95%), VP of Administration (84%), Dean of Students (82%), VP of Academic Affairs (81%), and University Police (75%). The internal stakeholders at Christian-affiliated institutions with the least level of involvement were: Student Counseling Services (12%), Campus Ministers (12%), Students (10%), General Counsel (4%), Student Activities (3%), and Athletics (3%). See Table 4.7.
In regard to assessing presidents’ at Christian-affiliated institutions level of involvement as an internal stakeholder, respondents indicated that majority of presidents are involved in planning and/or response as needed (61%), while the remaining respondents indicated that presidents are represented on the crisis management team and/or committee (39%).

The external stakeholders at Christian-affiliated institutions with the greatest level of involvement were: Local Police/Sheriff, Local Fire Department, Local Health Department, Local Hospital, and Parents. The external stakeholders at Christian-affiliated institutions with the least level of involvement were: Alumni Association (30%), Hometown Alumni Clubs (30%), Campus Ministers (8%), FBI (5%), and Local Emergency Management (4%). See Table 4.8.
## Table 4.7

Involvement of Internal Stakeholders at Christian-affiliated Institutions

<table>
<thead>
<tr>
<th>Internal Stakeholders</th>
<th>Freq.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>President</td>
<td>30</td>
<td>39.0</td>
</tr>
<tr>
<td>VP Academic Affairs</td>
<td>62</td>
<td>80.5</td>
</tr>
<tr>
<td>VP Administrative Affairs</td>
<td>65</td>
<td>84.4</td>
</tr>
<tr>
<td>VP Student Affairs/Student Life</td>
<td>73</td>
<td>94.8</td>
</tr>
<tr>
<td>General Counsel</td>
<td>3</td>
<td>3.9</td>
</tr>
<tr>
<td>University Police</td>
<td>58</td>
<td>75.3</td>
</tr>
<tr>
<td>University Relations/PIO</td>
<td>57</td>
<td>74.0</td>
</tr>
<tr>
<td>Physical Plant</td>
<td>57</td>
<td>74.0</td>
</tr>
<tr>
<td>Environmental Health</td>
<td>33</td>
<td>42.9</td>
</tr>
<tr>
<td>Dean of Students</td>
<td>63</td>
<td>81.8</td>
</tr>
<tr>
<td>Dean of Faculties</td>
<td>39</td>
<td>50.6</td>
</tr>
<tr>
<td>Human Resources</td>
<td>43</td>
<td>55.8</td>
</tr>
<tr>
<td>Student Health Service</td>
<td>44</td>
<td>57.1</td>
</tr>
<tr>
<td>Student Counseling Services</td>
<td>9</td>
<td>11.7</td>
</tr>
<tr>
<td>Employee Assistance</td>
<td>42</td>
<td>54.5</td>
</tr>
<tr>
<td>Residence Life</td>
<td>51</td>
<td>66.2</td>
</tr>
<tr>
<td>Student Activities</td>
<td>2</td>
<td>2.6</td>
</tr>
<tr>
<td>Athletics</td>
<td>2</td>
<td>2.6</td>
</tr>
<tr>
<td>International Student Services</td>
<td>51</td>
<td>66.2</td>
</tr>
<tr>
<td>Campus Ministers</td>
<td>9</td>
<td>11.7</td>
</tr>
<tr>
<td>Students</td>
<td>8</td>
<td>10.4</td>
</tr>
<tr>
<td>Faculty</td>
<td>40</td>
<td>51.9</td>
</tr>
</tbody>
</table>
Table 4.8

Involvement of External Stakeholders at Christian-affiliated Institutions

<table>
<thead>
<tr>
<th>External Stakeholders</th>
<th>Freq.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>FBI</td>
<td>4</td>
<td>5.2</td>
</tr>
<tr>
<td>Local Police/Sheriff</td>
<td>64</td>
<td>83.1</td>
</tr>
<tr>
<td>State Police</td>
<td>31</td>
<td>40.3</td>
</tr>
<tr>
<td>Local Fire Department</td>
<td>63</td>
<td>81.8</td>
</tr>
<tr>
<td>State Fire Marshal</td>
<td>28</td>
<td>36.4</td>
</tr>
<tr>
<td>Local Hospital</td>
<td>47</td>
<td>61.0</td>
</tr>
<tr>
<td>Local Health Department</td>
<td>50</td>
<td>64.9</td>
</tr>
<tr>
<td>State Health Department</td>
<td>27</td>
<td>35.1</td>
</tr>
<tr>
<td>Local Mental Health</td>
<td>28</td>
<td>36.4</td>
</tr>
<tr>
<td>State Mental Health</td>
<td>23</td>
<td>29.9</td>
</tr>
<tr>
<td>Local Emergency Mgmt.</td>
<td>3</td>
<td>3.9</td>
</tr>
<tr>
<td>Campus Ministers</td>
<td>6</td>
<td>7.8</td>
</tr>
<tr>
<td>Red Cross</td>
<td>40</td>
<td>51.9</td>
</tr>
<tr>
<td>Victims Assistance Programs</td>
<td>26</td>
<td>33.8</td>
</tr>
<tr>
<td>Local Gov. Officials</td>
<td>42</td>
<td>54.8</td>
</tr>
<tr>
<td>State Gov. Officials</td>
<td>25</td>
<td>32.5</td>
</tr>
<tr>
<td>Alumni Association</td>
<td>23</td>
<td>29.9</td>
</tr>
<tr>
<td>Hometown Alumni Clubs</td>
<td>23</td>
<td>29.9</td>
</tr>
<tr>
<td>Parents</td>
<td>42</td>
<td>54.5</td>
</tr>
<tr>
<td>Local Community Members</td>
<td>39</td>
<td>50.6</td>
</tr>
</tbody>
</table>

Discussion

In conclusion, the overall results indicate that presidents of Christian-affiliated institutions perceived their institutions to be well-prepared to respond to campus crises. Furthermore, president’s self-reported perceived preparedness showed that although the enrollment of Christian-affiliated institutions of higher education were much smaller (e.g. less than 5,000) than Zdziarski’s (2001) enrollment population (e.g. greater than 8,000), the results were similar yielding a preparedness level of 8 and above. Similar, Catullo’s
(2008) assessment of NASPA institutions with residential communities and an enrollment of 5000 or greater found these institutions were a level 8. Results may be an indication of the national urgency that has been placed on crisis preparedness throughout American higher education in the past five years, after such highly publicized campus incidents like the Virginia Tech Massacre and the Northern Illinois University shootings.

Also, Zdziarski’s (2001) study indicated that private institutions level of preparedness tends to be higher than other institutions. Again, results for Christian-affiliated institutions of higher education which are private institutions indicate the same level found in Zduarski’s study. Akers (2007) noted that private institutions may not have to meet as many state and federal regulations as public institutions.

The five types of crises for which Christian-affiliated institutions of higher education most frequently reported having a prepared written plan were: infectious disease (89%), missing person (85%), student death (85%), death of a faculty or staff member (83%), and fire (83%). This top group heavily represents human types of crises; only fire represents another type of crisis (natural). These results were similar to Zdziarski’s (2001) study which was fire (92 %), student death (89%), and sexual assault (88%). Catullo’s (2008) study was similar as well indicating the five types of crises most frequently reported as student death (90.3%), fire (90%), infectious diseases (87%), suicide (86%), and evacuation of buildings (86%).

Results for Christian-affiliated colleges and universities may indicate their strong sense of community. Christian-affiliated colleges and universities are perceived as caring communities that place high value on its constituents (Duemer & Cejda, 2003). Akers (2007) noted private institutions tend to score higher when addressing students’ concerns
in crisis preparedness. The results in regard to missing person and student death may have been influenced by the death of a missing Yale student that was widely publicized during data collection. Also, results for infectious diseases may indicate the impact the Swine Flu Pandemic (2009) has had on the crisis preparedness of American higher education institutions. Many of these institutions may have established protocols after working with such local and federal agencies as the Center for Disease Control (CDC) in a national initiative to combat a global pandemic (CDC, 2009).

The five types of crises for which Christian-affiliated institutions of higher education least frequently reported having a prepared written plan were: flood (31%), earthquake (28%), domestic abuse (28%), evacuation of campus (27%), and hurricane (26%). Zdziarski’s (2001) study showed that the least frequently reported respondents having a prepared plan for were hurricane (30%), earthquake (37%), flood (44%), tornado (51%) and kidnapping/abduction (57%). Furthermore, Zdziarski stated most institutions address procedures for natural types of crises (i.e. hurricane, earthquake, flood, and tornado) in contingency plans for severe weather instead of as individual contingency plans.

In addition, results indicated written crisis management plan for Christian-affiliated colleges and universities mostly addressed the crisis phase (100%), followed by the post crisis phase (94%), with the pre-crisis phase (90%) being the lowest. This is similar to Zdziarski’s (2001) study where results for the student affairs plan were the crisis phase (100%), followed by the post crisis (92.2%), and the pre crisis (8.8%).

Furthermore, respondents were asked to indicate whether or not their institution had a written crisis management plan. Results showed 92% of Christian-affiliated
institutions of higher education, who participated in this study, had an established crisis management plan for their institution. Of the total number of institutions that responded to this question, 8% indicated their institution did not have a written crisis management plan. Again, this was similar to Zdziarski’s (2001) study which showed 85.4% said yes in having a plan while 14.6% indicated not having a plan. The presidents were also asked to indicate how long their crisis management plan was in existence and how often they reviewed the plan. The results from this study indicated similar findings from Zdziarski’s study as well as Catullo’s (2007). Results also showed that the majority of the training was conducted on campus crisis management procedures (75%), general crisis management procedures (75%), and as crisis stimulations and drills (60%). These crisis management procedures tend to be more cost-efficient ways of preparing campuses for crises (Kennedy, 1999).

Last, this study showed that Christian-affiliate institutions of higher education indicated the top three involvements of internal stakeholders were a) Vice President of Student Affairs b) Vice President of Administration/Business Affairs, and c) Dean of Faculties. This differed from Zdziarski’s (2001) study, who showed that the top three involvements of internal stakeholders were a) Dean of Faculties, b) Employee Assistance, and c) Faculty. Catullo’s (2008) study indicated the top three involvements of internal stakeholders were a) University Police, b) Vice President of Student Affairs, and c) University Relations.

The Vice President of Student Affairs involvement for Christian-affiliate colleges and universities may suggest again these institutions emphasis on the care for students.
involvement may suggest the value placed on the institution’s operations. For smaller institutions any disruptions of its normal operations can have much greater consequences than larger institutions. Christian-affiliated colleges and universities already face challenging operating conditions due to being highly tuition dependent (Obenchain et al., 2004).

Overall, the president of Christian-affiliated colleges and universities may need to delegate the oversight of crisis preparedness to other senior administrators. This is evident in presidents’ at Christian-affiliated institutions level of involvement as an internal stakeholder; respondents indicated that majority of presidents are involved in planning and/or response as needed (61%); while the remaining respondents indicated that presidents are represented on the crisis management teams and/or committees (39%).

In addition, when asked about the external stakeholders’ involvement, Christian-affiliated institutions indicated that the top three were the local police (83%), the local fire department (82%), and the local health department (65%). This was also different from Zdziarski’s (2001) research which showed that the top three external stakeholders were hometown alumni clubs, alumni association, and the FBI. However, Catullo’s (2008) research lists the greatest level of involvement as local hospitals, local emergency management, and local health department. Akers (2007) noted that smaller institutions have the ability to establish better partnerships with local authorities, partly out of necessity to identify additional resources and assistance for crisis response.
CHAPTER V
SUMMARY, CONCLUSIONS AND IMPLICATIONS, AND RECOMMENDATIONS

This chapter presents a summary of this study. Also, included are implications and recommendations based on the findings from this study. Recommendations for future research and a conclusion are provided.

Summary

This study was undertaken to examine crisis preparedness at Christian-affiliated institutions of higher education as perceived by presidents. Given the lack of research studies on Christian-affiliated higher education institutions, and the growing concern with crisis preparedness in academia, this study will add to the literature on the state of crisis preparedness of Christian-affiliated colleges and universities in American higher education institutions.

The final population for this study consisted of 153 Christian-affiliated institutions colleges and universities. An introductory e-mail outlining the purpose of the research; what the results would be used for, explanation of the confidentiality of participation, and a link to the on-line questionnaire through Survey Monkey was sent to solicit presidents’ participation. Seventy-seven (n = 77) presidents volunteered to participate in this study, yielding a 50% response rate.
The instrumentation used for this study was a self-report questionnaire entitled, *Campus Crisis Management* (see Appendix A), which was developed by Zdziarski (2001). The *Campus Crisis Management* questionnaire was designed to reflect the four critical indicators of organizational crisis preparedness (types, phases, systems, and stakeholders) most applicable to higher education (Zdziarski, 2001). The questionnaire contained three parts. Non-parametric measures consisting of frequency counts and valid percentages for categorical variables were used. While cross tabulations provided distribution analyses. This was similar to Zdzarski’s analysis, which allowed results to be compared to the study conducted by Zdziarski. Results suggest the following:

First, presidents at Christian-affiliated institutions perceived their institutions to be prepared to respond to campus crisis. This provides empirical evidence that presidents at Christian-affiliated institutions of higher education are making crisis preparedness a priority for their campuses; cautiously, there is more to be done. This counters some crisis management experts’ belief that American higher education institutions are unprepared to handle crisis due to their lack of planning (Dolan, 2006; Mitroff et al., 2006). It appears that Christian-affiliated colleges and universities administrators are implementing broader crisis management concepts for their campuses (Fox, 2008).

Second, the majority of the Christian-affiliated colleges and universities who participated in this study had a written crisis management plan for their institution. More than half of these institutions had an existing crisis management plan for 1 to 5 years. The development of these crisis management plans may be a result of highly publicized national (i.e. September 11th) and campus (i.e. Virginia Tech Massacre) crisis incidents, which occurred during the same timeframe. Also, these crisis management plans may
have been developed due to mandates placed on these institutions by local, state, and federal agencies as a result of increasing threats of national crises.

Third, the written crisis management plan for Christian-affiliated institutions addressed all three phases of crises (pre-crisis, crisis, post crisis). Only half of these institutions indicated that their crisis management plans addressed mental health issues for responders, while the remaining half indicated that their institution’s crisis management plans did not address mental health issues for responders. Akers (2007) also found religiously-affiliated and smaller institution scored lower in addressing symptoms and stages of acute traumatic stress. Dewitt (2007) urged smaller campus to establish relationships with mental health professionals that are trained to handle psychological trauma and distress:

The smaller colleges, with more limited budgets, may not have the financial resources available to address mental health issues. The career development and placement counselor or campus nurse is often the individual designated to handle students requiring personal counseling. This arrangement may be acceptable in cases of minor developmental problems. However, too frequently, the career development counselor does not have the skills or training commensurate with assisting a student requiring long-term follow-up (p.4)

There are opportunities for Christian-affiliated institutions of higher education to improve in the area of providing Critical Incident Stress Management (CISM) debriefings for their crisis responders as well as preparing to address the impact of psychological/emotional issues when their campus encounters crisis.
Christian-affiliated institutions of higher education most frequently reported having a prepared written plan for these human types (e.g. infectious disease, missing person, and death of a student, faculty or staff member). Results may indicate these institutions strong sense of community. Also, these results may indicate the impact the Swine Flu Pandemic (2009), and the highly publicized missing person and murder of a Yale University student (2009) that occurred during the data collection period.

This study reveals Christian-affiliate institutions of higher education indicated that their crisis response efforts were coordinated by the Vice President of Administration, Vice President for Student Affairs, Chief/Director of University Police, or the President. The top three involvements of internal stakeholders were Vice President of Student Affairs, Vice President of Academic Affairs, and Dean of Faculties. Interestingly, presidents are involved mostly in the planning/response phase as needed. A study conducted by Jenkins (2008) found that top college leadership provides a significant influence on any planning and crisis preparedness efforts of the institution. Having the president more involved on the crisis management committee or team needs to be evaluated due to growing scrutiny place on the president’s leadership abilities when campus crisis occurs.

Conclusions and Implications

The goal of this research study was to examine the crisis preparedness at Christian-affiliated institutions of higher education. The results of this research study form the basis for several conclusions and implications for practitioners within higher education.
Results indicated half of Christian-affiliated institutions of higher education’s crisis management plans did not address mental health issues for responders. Administrators should seek out the assistance of mental health practitioners in providing trainings in Critical Incident Stress Management (CISM) debriefings, on the grieving process, and suicide intervention. Based upon these findings, practitioners should involve internal stakeholders from the Student Counseling Services as well as external stakeholders from local and state mental health agencies more intentionally in the development of crisis management procedures and practices. Doing so, will help ensure effective mental health interventions and procedures are planned before their campus encounters crisis.

Results of this study indicated presidents are more likely to be involved in the planning/response phase as needed when their institutions are preparing for crisis. This must change given, the high scrutiny on the leadership abilities encountered by other presidents when campus crisis became public. A perceived negative leadership ability to restore a campus back to its normal operations or even a mediocre response has the potential to tarnish the institutions’ reputation of being a safe environment. Based upon these findings, practitioners should involve presidents more in the planning phase either on the crisis management committee or team. Top leadership provides a significant influence on any planning and crisis preparedness efforts of the institution (Jenkins, 2008).

Also, practitioners should work with professional associations like the Council for Christian Colleges and Universities (CCCU) and the Association of Biblical Higher Education (ABHE) to incorporate workshop sessions and round table discussions on
crisis management that is specific to the role of the president. This can help presidents become more knowledgeable about their roles during campus crises as well as increase the level of effective leadership during such incidents. It is recommended that presidents who have encountered campus crisis incidents should make available their executive summaries of lessons learned and recommendations for other presidents to review; if facilitated at the professional association level this can serve as an invaluable crisis management resource for member and affiliate institutions.

Forming a crisis management team is essential for any institution (Sherwood & McKelfesh, 2007). Results indicated some Christian-affiliated colleges and universities did not have a crisis management team. It is imperative that practitioners establish a crisis management plan as soon as possible. This significantly impacts the institution’s preparedness for crises. Training for crisis management teams is also very important. Results showed that the majority of the trainings are conducted on general and campus crisis management procedures as well as crisis stimulations and drills. Practitioners may need to diversify the type of training provided in order to increase the effectiveness of crisis response. For example, training exercises could be conducted in coordination with external stakeholders such as local fire, police, and health agencies. Also, it is recommended at the professional association level that practitioners develop a certification process for crisis management training to ensure there are standards being met for crisis preparedness among its member and affiliate members.

Practitioners should develop policies for crisis preparedness that ensures crisis management plans are easily accessible and generally understood by most internal stakeholders. Rollo and Zdziarski (2007) stated having a written crisis management plan
is essential for a college campus. However, it is not effective unless most of the campus constituents are familiar with its practices and procedures. Each crisis management plan is unique to each institution (Zdziarski, 2001).

Finally, Christian-affiliated institutions of higher education reported not having written plans at for racial incident and campus disturbance/demonstrations. Practitioners should build up existing written plans to address these specific types. Some Christian-affiliated institutions of higher education have become intentional targets for protest and demonstrations by gay and lesbian rights activist groups, who accuse these institutions of being discriminatory and insensitive to their issues. Gordon College hosted gay-rights activist in a series of presentations and conversations (Paulson, 2007) to respectfully share the differences in perspectives. Pre-establishing plans will significantly minimize the potential disruptions to the academic process and collegiate environment.

**Recommendations for Future Research**

The literature on the state of crisis preparedness at colleges and universities in American higher education needs continued expansion (Akers, 2007; Catullo, 2008; Hartzog, 1981; Mitroff et al., 2006; Wilson, 1992; Zdziarski, 2001). This is especially true for understanding factors that impact smaller private, specialized institutions with limited resources for crisis preparations, such as Christian-affiliated institution of higher education. This research was useful in developing recommendations for crisis preparedness practices specific to this type of institution within higher education. Based on the implications of this study, the following serve as recommendations for further study:
First, continued research needs to be conducted to add to the growing literature about crisis preparedness for U.S. higher education. Research should evaluate the crisis preparedness of other types of institutions (i.e. Historically Black Colleges & Universities (HBCUs), Hispanic-Serving Institutions (HIS), Tribal Colleges, technical colleges, and community colleges, to understand factors that impact various types of specialized institutions with limited resources for crisis preparations. Institutions could also be grouped based upon other factors such as university size, budget per capita and geographical region. This can result in providing training support and financial resources for these types of institution.

Second, a qualitative research study should be conducted to better understand factors that affect crisis preparedness for smaller private colleges and universities. Through a qualitative study the researcher is allowed to investigate deeper constructs as it relates to the allocation of resources and finances for crisis preparedness, training practices of crisis management teams, and the implementation of crisis management systems. This will begin to help researchers understand the specific constructs that impact crisis preparedness for these institutions.

Third, a study should be conducted to assess key external stakeholders’ perceptions of crisis preparedness of institutions they are involved with as compared to the key internal stakeholders’ perceptions. This is especially important in the assessment of students’ perceptions as internal stakeholders and parents’ perceptions as external stakeholders. Results indicate the involvement of students in the planning phases as internal stakeholders key is low; yet they smaller schools, like Christian-affiliated institutions of higher education, have a sense of higher responsibility for their care.
Student representations in the planning phases of crisis could ensure their expectations of care during campus crises are properly planned for and addressed. Likewise, understanding parents’ perceptions as external stakeholders could help practitioners understand the factors that are most important to them in the safety and security of their greatest assess, their children.

Last, studies should be conducted to assess the knowledge of key stakeholders about crisis preparedness after specific type of crisis training is implemented to evaluate its’ effectiveness. Results indicate that Christian-affiliated institutions are conducting various types of crisis trainings for their campus; however, evidence does not exist for the effectiveness of these trainings. Even though each institution is unique and there is no way of planning for every conceivable campus crisis incident, evaluations could be helpful in establishing crisis management training standards for particular professional associations like CCCU and ABHE.

Conclusion

A review of the literature established the need for continued research to address the gaps within the literature in regards to crisis preparedness in American higher education (Akers, 2007; Catullo, 2008; Hartzog, 1981; Mitroff et al., 2006; Wilson, 1992; Zdziarski, 2001). Researchers suggested crisis preparedness research should include institutions of various sizes and types; this includes the need to examine how smaller specialized higher education institutions are able to prepare for campus crises. This study examined crisis preparedness at Christian-affiliated institutions of higher education as perceived by presidents. Furthermore, this study assessed crisis preparedness based upon
Zdziarski’s (2001) framework of the four critical indicators of organizational crisis a) the types of crisis institutions prepare for, b) the phase of crisis prepared for, c) the systems in place to respond to crisis, and d) the stakeholders involved and considered in preparations were reviewed in detailed. This study adds to the crisis preparedness literature in higher education on how smaller private, specialized institutions with limited resources prepares for crisis. It established crisis preparedness as a variable for examining in higher education. Finally, this study may provide practitioners with increased knowledge and understanding of crisis preparedness that is specific to Christian-affiliated institutions of higher education.
REFERENCES


APPENDIX A

CAMPUS CRISIS MANAGEMENT QUESTIONNAIRE
**CAMPUS CRISIS MANAGEMENT**

The purpose of this instrument is to gain insight into the current crisis management practices of Christian-affiliated institutions of higher education. Your responses to this survey will remain confidential. Your name or the name of your institution will not be identified in any published report or article. By responding to this survey you are giving your consent to participate in this study.

Please respond to each question by checking the appropriate box(es). This survey should take approximately 25 minutes to complete. This research study has been reviewed and approved by the Institutional Review Board at Mississippi State University. For related problems or questions regarding your rights as a research subject, please contact Mississippi State University Regulatory Compliance Office at 662-325-0994 and refer to research study #09-218.

### PART 1

Please respond to each question by checking the appropriate box(es).

1. On a scale of 1 to 10, where 1 is unprepared and 10 is well-prepared, please indicate how prepared your college/university is to respond to campus crises.

   - Unprepared
   - Well-prepared

2. Does your college/university have a written crisis management plan addressing campus crises?
   - Yes
   - No

3. Who coordinates your university’s response to campus crisis? *(Check only one.)*

   - President
   - VP Academic Affairs/Provost
   - VP Administration/Business Affairs
   - VP Student Affairs/Student Life
   - Chief/Director of University Police
   - Director of Public Information/Relations
   - Director of Health & Safety
   - Dean of Students
   - Director of Student Counseling
   - Director of Student Health Services
   - Director of Residence Life
   - Director of Student Activities
   - Other ________________________________

4. Does your student affairs division/student life department have a separate, written crisis management plan addressing campus crises?
   - Yes
   - No

   If yes, please indicate who coordinates the student affairs/student life response to campus crises. *(Check only one.)*

   - VP Student Affairs/Student Life
   - Chief/Director of University Police
   - Dean of Students
   - Director of Student Counseling
   - Director of Student Health Services
   - Director of Residence Life
   - Director of Student Activities
   - Other ________________________________
Please respond to the remaining questions as they relate to your college/university crisis management plan. If you do not have a written college/university crisis management plan, then respond to the remaining questions as they relate to your student affairs/student life crisis management plan. If you do not have a written plan of any type, please answer as many of the remaining questions as possible.

5. How long has this crisis management plan existed?
   - □ 1 year or less
   - □ 1 to 5 years
   - □ More than 10 years

6. How often is the crisis management plan reviewed?
   - □ Annually
   - □ Every 3 Years
   - □ Every 5 Years
   - □ Other __________________________________

7. A crisis audit refers to the process of assessing the internal and external environment to identify potential crises, and determine the impact and probability of various crises occurring. Has a crisis audit been conducted on your campus? (Check all that apply.)
   - □ No
   - □ Annually
   - □ When the plan was originally created
   - □ Whenever a crisis occurs
   - □ Each time the plan is reviewed
   - □ Other __________________________________

8. Please indicate whether the procedures in your crisis management plan address one or more of the following phases of crisis. (Check all that apply.)
   - □ Pre-crisis: Actions to take prior to the onset of a crisis. These actions may include such things as preventive measures, preparation activities, and ways to detect potential crisis.
   - □ Crisis: Actions to take during a crisis event. These actions may include such things as activation of response procedures, means of containing a crisis, and steps to resume normal operations.
   - □ Post Crisis: Actions to take after a crisis. These actions may include such things as methods for verifying that a crisis has past, follow-up communications with stakeholders, and mechanisms to revise or improve procedures for the next crisis.

9. How is the crisis management plan communicated to members of the campus community? (Check all that apply.)
   - □ Not communicated
   - □ New student orientation
   - □ Copy of plan available upon request
   - □ Optional crisis management training sessions
   - □ Plan accessible on the web
   - □ Required crisis management training sessions
   - □ Annual notification
   - □ Drills and exercises
   - □ New employee orientation
   - □ Other __________________________________

10. Does your crisis management plan address the mental/emotional health of university caregivers that respond to campus crisis by providing Critical Incident Stress debriefings?
    - □ Yes
    - □ No

11. An “On-Call” or “Duty” system is a system in which a particular individual is identified as the initial or primary contact to be notified. In such a system, the responsibility of serving as the initial or primary contact rotates to another individual at specific time intervals (e.g. weekly, monthly, etc.). Is there an “On-Call” or “Duty” system in place to respond to campus crises?
    - □ Yes
    - □ No

12. Is there an established committee or team of individuals identified to respond to campus crises?
    - □ Yes
    - □ No (Skip to Part 2)
13. How are individuals assigned to the crisis management committee or team? *(Check only one.)*
   - □ Self-appointed
   - □ Volunteer
   - □ Appointed by Superior
   - □ Specified in Job Description
   - □ Recruited
   - □ Other ___________________________

14. What type of training is provided to crisis management team members or individuals involved in responding to campus crises? *(Check all that apply.)*
   - □ No training provided
   - □ Campus Violence Issues
   - □ Crisis Management (campus procedures)
   - □ Substance Abuse
   - □ Crisis Management (general)
   - □ Grieving Process
   - □ Legal Issues/Risk Management
   - □ Orientation to Community & County
   - □ Agency Assistance
   - □ Working with Law Enforcement &
     Emergency Personnel
   - □ Critical Incident Stress Management/
     Debriefing
   - □ Responding to Civil Disturbance or
   - □ Table-top exercises
   - □ Suicide Intervention
   - □ Crisis simulations or drills
   - □ Media Intervention
   - □ Other ___________________________
PART 2

Stakeholders are individuals or organizations that are affected by a crisis or could affect an institution’s ability to respond to crisis. Please indicate the level of involvement of each of the internal and external stakeholders listed below. Check only one level of involvement for each stakeholder.

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<tr>
<th>Internal Stakeholders</th>
<th>Level 1 Represented on Crisis Management Committee or Team</th>
<th>Level 2 Involved in Planning/Response as needed</th>
<th>Level 3 Impact/Consequences of Crisis this Stakeholder is Routinely Considered</th>
<th>Level 4 Not Significant to Crisis Planning/Response</th>
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### PART 3

A contingency plan is a written procedure or checklist that supplements a basic management plan and addresses unique circumstances or issues for a specific type of crisis. Please identify each type of crisis for which individual contingency plans exist and each phases of crisis addressed. As noted earlier, the phases of crisis are defined as:

- **Pre-crisis**: Actions to take prior to the onset of a crisis. These actions may include such things as preventive measures, preparation activities, and ways to detect potential crisis.
- **Crisis**: Actions to take during a crisis event. These actions may include such things as activation of response procedures, means of containing a crisis, and steps to resume normal operations.
- **Post Crisis**: Actions to take after a crisis. These actions may include such things as methods for verifying that a crisis has past, follow-up communications with stakeholders, and mechanisms to revise or improve procedures for the next crisis.
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<th>Type of Crisis (Check all that Apply)</th>
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APPENDIX B

PERMISSION BY AUTHOR TO USE INSTRUMENT
Hi Stacy thanks for your message and Happy New Year to you. I am excited to hear about your study and the work you are doing in crisis management. You have my permission to use my instrument for your dissertation study. My only request is that you provide me with a copy of your study once completed.

I would also offer that my instrument was used in a follow-up study conduct by Dr. Linda Catullo as her dissertation study at Florida Atlantic University. Dr. Catullo successfully defended last Spring and I would imagine her study should now be available through dissertation abstracts. She currently works at Fredericksburg Academy.

Please let me know if I can be of any additional assistance.

Gene
APPENDIX C

INTRODUCTORY E-MAIL TO PARTICIPANTS
Dear President:

I hope that your preparations for the upcoming 2009-2010 academic year are going well. You have been selected to participate in a research study that will examine the crisis preparedness at Christian-affiliated higher education institutions. This survey will only take approximately 20 minutes of your time.

I am a doctoral student completing my dissertation and would greatly appreciate your participation in taking the on-line survey known as the Campus Crisis Management Questionnaire. Participating in this survey is completely voluntary and you can refuse to answer any questions that you wish. Be assured that your responses to this survey will remain confidential. Your name and the name of your institution will not be identified in any published reports or articles.

Your participation in this study is vital in contributing to existing research findings in the area of crisis preparedness for higher education as well as providing recommendations for crisis preparedness that is specific to Christian-affiliated higher education institutions. This can promote additional initiatives in crisis management. At the completion of the study, provisions can be made for you to receive a copy of the implications and recommendations.

To take the survey, please visit:
https://www.surveymonkey.com/s.aspx?sm=eEo2UM9aDRksseOzBFej6w_3d_3d

You will have until October 9, 2009 to complete the survey. Again, thank you for your time. If you have any questions or concerns regarding this research project, please contact me at burrellsm73@gmail.com or 817-584-1275. If you have additional questions regarding human participation in research, please feel free to contact Mississippi State University Regulatory Compliance Office at 662-325-3994 and refer to study #09-218.

Sincerely,

[Signature]

Doctoral Candidate
Mississippi State University
APPENDIX D

INFORMED CONSENT FORM FOR

PARTICIPATION IN RESEARCH
Title of Research Study: An examination of crisis preparedness at Christian-affiliated institutions of higher education.

Study Site: The population for this study will comprise of presidents at various Christian-affiliated institutions of higher education across the United States.

Researcher: Stacy M. Burrell, Mississippi State University

Purpose

The purpose of this project is to examine crisis preparedness at Christian-affiliated institutions of higher education. Specifically, this study will assess president’s perspective of their institution’s ability to prepare for crises based upon the four critical indicators of organizational crisis preparedness: (a) the types of crisis institutions prepare for, (b) the phase of crisis prepared for, (c) the systems in place to respond to crisis, and (d) the stakeholders involved and considered in preparations.

Procedures

If you participate in this study, you will be asked to complete an electronic survey about the crisis preparedness practices of your institution that will take about 20 minutes to complete.

Risks or Discomforts

Participating in this will not subject you to any specific risks. Due to the nature of the subject matter, it is important to understand some participants could experience some psychological discomfort when reflecting on crisis incidents.

Benefits

This research will build upon existing research findings in the area of crisis preparedness for higher education as well as to provide recommendations for crisis preparedness that is specific to Christian colleges and universities. This can promote additional initiatives in crisis management.

Confidentiality

Raw scores will be stored on the surveymonkey.com database that will only be accessible by a login and password by the primary researcher. It is important to note, SurveyMonkey is a for-profit business that charges a fee for use of its service. SurveyMonkey does not track the
participants, collect the e-mail address, or use the IP address of the participants. At the
collection for data completion, all data will be exported from SurveyMonkey to
an excel spreadsheet and SPSS data format which will be housed on the primary researcher’s
personal computer and USB drive for portability and as a data backup system precaution. The
computer and USB drives are password protected.

Please note that these records will be held by a state entity and therefore are subject to disclosure
if required by law.

Questions

If you should have any questions about the research project, please contact Stacy M. Burrell at
817-584-1275 or burrellsm73@gmail.com or Dr. Joan Looby at 662-325-3426 or
jlooby@colled.msstate.edu. For additional information regarding your rights as a research
subject, contact the MSU Regulatory Compliance Office at 662-325-3994 and refer to study # 09-
218.

Voluntary Participation

Please understand that your participation is voluntary. Your refusal to participate will involve
no penalty or loss of benefits to which you are otherwise entitled. You may discontinue your
participation at any time without penalty or loss of benefits.

If you decide to participate, your completion of the research procedures indicates your consent.
Please print this form for your records.

I have read the informed consent and understand the requirements for participation in this study.
Please check the appropriate response.

☐ Yes, I wish to continue as a participant in this study.
☐ No, I do not wish to continue as a participant in this study.
APPENDIX E

REMINDER E-MAIL SENT TO PARTICIPANTS
Dear President:

Last week, you received an e-mail inviting you to participate in a study that will examine crisis preparedness at Christian-affiliated higher education institutions. This e-mail is being sent to you as a reminder that you still have time to participate in this study. **If you have already taken the survey, I sincerely thank you for your time and ask that you ignore the following message.**

I understand that your time is valuable, this on-line survey will only take approximately 20 minutes. Your participation in this study is vital in contributing to existing research findings in the area of crisis preparedness for higher education as well as providing recommendations for crisis preparedness that is specific to Christian colleges and universities. This can promote additional initiatives in crisis management.

Be assured that your responses to this survey will remain confidential. Your name and the name of your institution will not be identified in any published reports or articles. To take the survey, please visit:
https://www.surveymonkey.com/s.aspx?sm=eEo2UM9aDRksseOzBFej6w_3d_3d

You will have until October 9, 2009 to complete the survey. Again, thank you for your time. If you have any questions or concerns regarding this research project, please contact me at burrellsm73@gmail.com or 817-584-1275. If you have additional questions regarding human participation in research, please feel free to contact Mississippi State University Regulatory Compliance Office at 662-325-3994 and refer to study # 09-218.

Sincerely,

[Signature]

Doctoral Candidate
Mississippi State University
APPENDIX F

THANK YOU MESSAGE TO PARTICIPANTS
Thank you for your time and interest. You have completed your involvement with this study. If you should have any questions about the research project, please contact Stacy M. Burrell at 817-584-1275 or burrellsm73@gmail.com or Dr. Joan Looby at 662-325-3426 or jlooby@colled.msstate.edu. For additional information regarding your rights as a research subject, contact the MSU Regulatory Compliance Office at 662-325-3994 and refer to study # 09-218.
September 24, 2009

Stacy Burrell  
8033 Hosta Way  
Fort Worth, TX

RE: IRB Study #09-218: An Examination of Crisis Preparedness at Christian-Affiliated Institutions of Higher Education

Dear Ms. Burrell:

The above referenced project was reviewed and approved via administrative review on 9/24/2009 in accordance with 45 CFR 46.101(b)(2). Continuing review is not necessary for this project. However, any modification to the project must be reviewed and approved by the IRB prior to implementation. Any failure to adhere to the approved protocol could result in suspension or termination of your project. The IRB reserves the right, at anytime during the project period, to observe you and the additional researchers on this project.

Please note that the MSU IRB is in the process of seeking accreditation for our human subjects protection program. As a result of these efforts, you will likely notice many changes in the IRB’s policies and procedures in the coming months. These changes will be posted online at http://www.orc.msstate.edu/human/aahrpp.php.

Please refer to your IRB number (#09-218) when contacting our office regarding this application.

Thank you for your cooperation and good luck to you in conducting this research project. If you have questions or concerns, please contact me at tDavis@research.msstate.edu or call 662-325-3994.

Sincerely,

Tina Davis  
Compliance Coordinator

cc: Joan Looby
APPENDIX H

DEMOGRAPHIC SURVEY

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1. Which association best describes your institution affiliation?

- [ ] Member of the Council of Christian Colleges and Universities (CCCU)
- [ ] Affiliate of the Council of Christian Colleges and Universities
- [ ] Member of the Association for Biblical Higher Education
- [ ] Affiliate of the Association for Biblical Higher Education
- [ ] Neither a member or affiliate of CCCU or ABHE
- [ ] Member of the Association for Biblical Higher Education (ABHE)

2. What is the total student enrollment at your institution?

- [ ] Less than 500
- [ ] 500 - 999
- [ ] 1000 - 2999
- [ ] 3000 - 4999
- [ ] 5000 - 6999
- [ ] 7000 - 8999
- [ ] 9000 - 10,000
- [ ] More than 10,000

3. Which region in the United States is your institution located?

- [ ] New England (CT, ME, MA, NH, RI, VT)
- [ ] Mid East (DE, DC, MD, NJ, NY, PA)
- [ ] Great Lakes (IL, IN, MI, OH, WI)
- [ ] Plains (IA, KS, MN, MO, NE, ND, SD)
- [ ] Southeast (AL, AR, FL, GA, KY, LA, MS, NC, SC, TN, VA, WV)
- [ ] Southwest (AZ, NM, OK, TX)
- [ ] Rocky Mountains (CO, ID, MT, UT, WY)
- [ ] Far West (AK, CA, HI, NV, OR, WA)

4. Which location best describes your institution?

- [ ] Large City
- [ ] Mid-size city
- [ ] Urban fringe of large city
- [ ] Urban fringe of mid-size city
- [ ] Large town
- [ ] Small town
- [ ] Rural Area

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