Chief Student Affairs Officers’ Perceptions of Institutional Crisis Management, Preparedness, and Response

Heather Studenberg
Nova Southeastern University, lancin@gmail.com

This document is a product of extensive research conducted at the Nova Southeastern University College of Arts, Humanities, and Social Sciences. For more information on research and degree programs at the NSU College of Arts, Humanities, and Social Sciences, please click here.

Follow this and additional works at: https://nsuworks.nova.edu/shss_dcar_etd

Part of the Social and Behavioral Sciences Commons

Share Feedback About This Item

NSUWorks Citation

This Dissertation is brought to you by the CAHSS Theses and Dissertations at NSUWorks. It has been accepted for inclusion in Department of Conflict Resolution Studies Theses and Dissertations by an authorized administrator of NSUWorks. For more information, please contact nsuworks@nova.edu.
Chief Student Affairs Officers’ Perceptions of Institutional Crisis Management, Preparedness, and Response

by

Heather Nicole Lancin Studenberg

A Dissertation Presented to the
College of Arts, Humanities, and Social Sciences of Nova Southeastern University
in Fulfillment of the Requirements for the Degree of
Doctor of Philosophy

Nova Southeastern University
2017
Nova Southeastern University
College of Arts, Humanities, and Social Sciences

This dissertation was submitted by Heather Studenberg under the direction of the chair of the dissertation committee listed below. It was submitted to the College of Arts, Humanities, and Social Sciences and approved in partial fulfillment for the degree of Doctor of Philosophy in Conflict Resolution Studies at Nova Southeastern University.

Approved:

5/16/17
Date of Defense

Robin Cooper, Ph.D.
Chair

Elena Bastidas, Ph.D.

Gay Holliday, Ed.D.

5/22/17
Date of Final Approval

Robin Cooper, Ph.D.
Chair
Dedication

This research is dedicated in memory to my loving parents, Larry and Sandra Lancin.
Acknowledgements

My dissertation journey took longer than I had anticipated when I first began, and became more than a thesis required for completion of my degree program. The dissertation process became an exercise in self-exploration and discipline. Life happens while we write, and during the time I worked on my dissertation I experienced challenges that made me question my commitment to this goal. Major life events may have paused my writing, but ultimately gave me motivation to persist.

I would like to thank my chair, Dr. Robin Cooper, for leading me through my dissertation journey. You were always available, sincere, and insightful. Thank you for never giving up on me. To my committee, Dr. Elena Bastidas and Dr. Gay Holliday, your expertise, guidance, and commitment to my dissertation process has been beyond invaluable.

I would like to thank Dr. Eugene Zdziarski, whose research spurred my interest in pursuing this research topic. I am grateful for his generosity in granting me permission to modify and utilize his survey instrument.

I would like to thank the staff within the Research and Policy division at NASPA for their willingness to support my research. I would also like to thank the participating Chief Student Affairs Officers for taking the time to support my dissertation research.

Most important for me, I want to express my most sincere thanks to my husband, Daus Studenberg. I would have never been able to complete my dissertation without his unwavering support throughout this journey. I am truly honored to have such an amazing partner.
# Table of Contents

List of Tables .............................................................................................................................. v

List of Figures ............................................................................................................................ vii

List of Abbreviations ....................................................................................................................... ix

Abstract ......................................................................................................................................... x

Chapter 1: Introduction .................................................................................................................. 1

Statement of the Problem ................................................................................................................. 3

Purpose and Goals ......................................................................................................................... 3

Significance of Study ......................................................................................................................... 5

Need for Research .......................................................................................................................... 6

Research Questions and Hypothesis ............................................................................................... 10

Definition of Terms ......................................................................................................................... 12

Overview of Study .......................................................................................................................... 13

Chapter 2: Literature Review ......................................................................................................... 15

Defining Crisis ............................................................................................................................... 15

Crisis as a Matrix ........................................................................................................................... 17

Historical Context .......................................................................................................................... 19

National Perspective ....................................................................................................................... 19

Post-Secondary Education Perspective ......................................................................................... 21

Crisis Management System/Plan ................................................................................................. 27

Types ............................................................................................................................................ 28

Phases ........................................................................................................................................... 29
Ethics

Summary

Chapter 4: Results

Descriptive Statistics

Institutional Control

Size of Enrollment

Geographic Location

Crisis Management Plan

Campus Crisis/Emergency Response Team

Internal and External Stakeholders

Perceptions of Preparedness to Respond to Crisis

Perceptions of Preparedness to Respond to Different Types of Crisis

Perceptions of General Manner of Institutional Crisis Response

Inferential Statistics

Enrollment Size by Perception of University Preparedness to Respond to Crisis

Size of Enrollment by Perception of General Manner of Crisis Response

Size of Enrollment by Perception of Crisis Management Training Adequacy

Trainings Provided to Crisis Management Team by Perceptions of Institutional Preparedness

Delivery Methods Utilized by Perception of Preparedness to Respond to Campus Crisis
Director of Emergency Management and Perception of University

Preparedness to Respond to Crisis ................................................................. 121

Summary ......................................................................................................... 124

Chapter 5: Discussion, Conclusions, and Recommendations ........................... 126

Purpose .......................................................................................................... 126

Key Statistical Findings .................................................................................. 128

Major Implications from This Study ................................................................. 133

Expected Contribution .................................................................................... 134

Higher Education Administration/Student Affairs ......................................... 135

Crisis/Emergency Management ................................................................... 136

Limitations of the Study ................................................................................. 137

Recommendations for Future Research ......................................................... 137

Concluding Comments ................................................................................. 138

References ..................................................................................................... 140

Appendix A: Survey Cover Letter/Consent Form ............................................. 155

Appendix B: Survey Instrument ...................................................................... 156
List of Tables

Table 1. Institutional Control ................................................................. 84
Table 2. Institutional Size of Enrollment ............................................... 85
Table 3. Participating NASPA Member Affiliation ................................. 86
Table 4. Years University Crisis Management Implemented ...................... 87
Table 5. Occurrence of Conducting a Crisis Audit .................................. 88
Table 6. Comprehensive Crisis Management Plans for Varying Types of
  Natural Crisis ....................................................................................... 91
Table 7. Comprehensive Crisis Management Plans for Varying Types of
  Facility Crisis ..................................................................................... 92
Table 8. Comprehensive Crisis Management Plans for Varying Types of
  Criminal Crisis .................................................................................. 93
Table 9. Comprehensive Crisis Management Plans for Varying Types of
  Human Crisis. .................................................................................... 94
Table 10. Position that Coordinates Crisis Response on Campus ............... 95
Table 11. Responsibilities of Crisis Management Committee or Team ........ 96
Table 12. Perception of University Preparedness to Respond to Various
  Types of Crisis ..................................................................................... 99
Table 13. Cross Tabulation for Size of Enrollment by Preparedness to
  Respond to Crisis ................................................................................ 106
Table 14. Spearman’s rho Correlation Output – Size of Enrollment and
  Perceived Institutional Preparedness to Respond to Crisis ...................... 106
Table 15. Cross Tabulation of Size of Enrollment and General Manner of Response

Table 16. Spearman’s rho Correlation Output - Correlation between Institutional Size and Perceived General Manner of the Crisis Response

Table 17. Cross Tabulation – Size of Enrollment and General Manner of Crisis Response

Table 18. Spearman’s rho Correlation Output – Size of Enrollment and Adequacy of Training

Table 19. Cross Tabulation for Total Delivery Methods and Institutional Preparedness

Table 20. Spearman’s rho Correlation Output – Number of Crisis Training Topics and Perceptions of Institutional Preparedness to Respond to Crisis

Table 21. Spearman’s rho Correlation Output – Total Delivery Methods and Perceived Institutional Preparedness

Table 22. Group Statistics for Director of Emergency Management by Perceived Preparedness and Manner of Response to Crisis

Table 23. Two-Sample t-Test Assessing Significance of Director of Emergency Management Position and Perceived Institutional Preparedness to Respond to Crisis
List of Figures

Figure 1. Frequency participants report their institution reviews their crisis management plans.................................................................88

Figure 2. Frequency of the various modes of communicating the crisis management plan..................................................................................89

Figure 3. Relative frequency percentages for various types of crisis management training topics........................................................................97

Figure 4. Adequacy of crisis management training.........................................................................................................................98

Figure 5. Internal stakeholders’ level of participation in crisis management, planning and response.................................................................100

Figure 6. External stakeholders’ level of participation in crisis management, planning, and response........................................................................102

Figure 7. Chief student affairs officer’s perception of university’s preparedness to respond to crisis..............................................................104

Figure 8. Chief student affairs officers’ perception of student affairs division’s preparedness to respond to crisis..................................................105

Figure 9. Chief student affairs officers’ perception of their university’s general manner of response to crisis........................................................108

Figure 10. Size of enrollment by perceived institutional preparedness to respond to crisis................................................................................112

Figure 11. Size of enrollment by institutional participants perceived general manner of their university to respond to crisis...............................115
Figure 12. Size of enrollment by institutional participants perceived adequacy of crisis management training’s efficacy to respond to crisis. ................................. 117

Figure 13. Spectrum of the general manner of crisis response, from reactive to proactive, by the number of types of crisis management training provided on college campuses. ................................................................. 119

Figure 14. Institutional preparedness to respond to crisis relationship to the number of modes utilized to communicate the crisis management plan to the campus community. ................................................................. 121

Figure 15. Existence of a Director of Emergency Manger position on campus by institutional preparedness to respond to crisis. ................................................................. 123
List of Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSAO</td>
<td>Chief Student Affairs Officer</td>
</tr>
<tr>
<td>FBI</td>
<td>Federal Bureau of Investigations</td>
</tr>
<tr>
<td>FEMA</td>
<td>Federal Emergency Management Agency</td>
</tr>
<tr>
<td>NASPA</td>
<td>Student Affairs Administrations in Higher Education</td>
</tr>
<tr>
<td>NIMS</td>
<td>National Incident Management System</td>
</tr>
<tr>
<td>SPSS</td>
<td>Statistical Package for the Social Sciences</td>
</tr>
</tbody>
</table>
Abstract

This dissertation examined chief student affairs officers’ perceptions of institutional crisis management, preparedness, and response. A goal of this study was to uncover findings that can benefit crisis management protocols or best practices regarding crisis management team training, plan communications, and emergency management personnel on campus, as well as, learn if size of enrollment impacts crisis preparedness and response. Research questions assessed if a significant relationship exists between preparedness in responding to crisis with the number of training topics covered with a crisis management team, the number of modes used to communicate the crisis management plan, size of enrollment and the impact of a director of emergency management position on campus. Next, the study assessed if significant relationships exist between size of enrollment with adequacy team training and perceived manner of crisis response. The sample comprised of Chief Student Affairs Officers from either institutions that previously participated in a similar study in 2001 and 2007, or are NASPA domestic member institutions that are four-year, public or private with an enrollment of 5,000 students or more. It was discovered that four to five training topics delivered and between three to six modes used to communicate the crisis management plan were optimal frequencies for this population. Institutions with a director of emergency management perceived themselves as more prepared, and institutions with 10,000-20,000 students enrolled perceived themselves as the most prepared and proactive. In contribution to the field of conflict resolution studies this research study connected crisis management to conflict management through a systems design approach.
Chapter 1: Introduction

Since the start of the 21st century, there are two significant tragedies that have redefined perceptions of safety and emergency response. On a national perspective, the terror attack of September 11, 2001, elevated the importance of effective crisis response in America. Ian Mitroff (2004), a well-known crisis management scholar, stated that September 11, 2001, was a defining event in crisis management that adversely impacted the future of emergency management policy and procedures (Mitroff, 2004). In the realm of higher education, the defining event that effected crisis management in post-secondary education was the mass shooting that took place at Virginia Tech April 16, 2007 (Bosselait, 2010). Both unexpected tragedies that not only resulted in mass fatalities, but these events traumatized both local communities and the nation who watched the crises unfold in the media.

As major crises events have shaped national policy, crises that have occurred on college campuses have shaped policy, crisis response protocols, and expectations of the government and the students who attend (Akers, 2007; Bosselait, 2010; Walters, 2013). The brutal rape and murder of Jeane Clery in 1986 on the otherwise seemingly safe campus of LeHigh University was the tipping point that forced public officials to become more vigilant towards better crime reporting and warning on college campuses (Walters, 2013). In 1990, the Jeane Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act, better known as the Clery Act, was passed as a protection for students as consumers to be made aware of crime on campus (Walters, 2013). The Department of Education has the authority to fine institutions for violating the Clery Act (U.S. Department of Education, 2009). For example, by not either truthfully reporting
crime statistics or failing to provide sufficient emergency notification to campus, college institutions can be fined up to $35,000 per violation. For example, Virginia Tech University was fined $32,500 for failure to provide a timely warning during the shooting incident. Virginia Tech also settled out of court with the families of the victims for $11 million (CNN, 2016). In 2016, the Department of Education fined Penn State a record amount of $2.4 million for the violations surrounding the Sandusky child sex abuse scandal in 2011 (Thompson, 2016). Therefore, it is not only imperative to provide effective crisis response to mitigate potential harm to the campus community, the financial stakes of effective crisis management are high and must be a top priority for crisis leaders on campus.

To further establish the importance and need for this research, this chapter will define the purpose and goals, along with the research methods. A statement of the problem will outline why this research is necessary, then the significance of the research discussed. The need for this research will be detailed to provide a base of understanding of institutional preparedness through key findings from previous studies on the subject (Akers, 2007; Burrell, 2010; Catullo, 2008; Covington, 2013; Mitroff, Diamond, & Alpaslan, 2006; Zdziarski, 2001). Implications from their research shaped this study’s fundamental research questions and hypotheses. The study’s limitations will be presented, and then key term definitions are shared to assist in the general understanding of terminology reference throughout the course of the dissertation. Lastly, an organization of the overall dissertation will be covered.
Statement of the Problem

Every university needs to have a comprehensive emergency plan for a multitude of potential hazards, and there is an expectation for the institution’s employees to have an ability to respond effectively (Duff, 2007). Best practices and recommendations have been provided by the Federal Emergency Management Association’s Building a Disaster Resistant University report, the Department of Education’s Handbook for Campus Safety and Security Reporting, NASPA’s In Search of Safer Communities, and the Department of Homeland Security’s National Incident Management System (FEMA, 2003; NASPA, 2008; NIMS, 2008; U.S. Department of Education, 2016). Institutions can begin conducting risks assessment to either provide a baseline to create a crisis management plan or as a part of their plan review. The guidelines outline types of crises to prepare for, phases of crisis to address, crisis leadership on campus, crisis management teams and trainings for effective crisis response, stakeholder involvement, and crisis communications to involve the campus community. A descent amount of research on crisis preparation and management in higher education exists, but data has not been collected and assessed on this population in ten years. Directly following the last study with this population, the Virginia Tech mass shooting took place, which was referred to as the September 11, 2001, of higher education by the former Governor of Virginia (Walters, 2013). Over the past ten years, crises have continued to occur, new federal policies have been put in place that affect crisis response and reporting, and the proliferation of social media usage has added a new element to emergency notification. Therefore, it is imperative to ascertain an updated perspective on crisis management and preparedness.
Purpose and Goals

There is a responsibility for institutions of higher education to be as prepared as possible in order to effectively respond to crisis for the safety of their students, staff, and university community, along with maintaining business operations and institutional reputation. A thoughtfully designed, practiced, and well-communicated crisis management plan is the key element in fulfilling this responsibility (Mitroff, Diamond, & Alpaslan, 2006). The purpose of this study was to examine perceptions of the current state of crisis management and institutional preparedness to respond to crisis. The targeted sample to participate in this research study were Chief Student Affairs Officers (CSAOs) at medium and large sized institutions of higher education. Participation criteria was two-pronged, participants could either be a CSAO at an institution that had participated in either the 2001 (Zdzdiarski, 2001) or 2007 (Catullo, 2008) studies or they were a CSAO from a four-year, public or private, domestic NASPA member institution with 5,000 or more degree-seeking students enrolled in the spring of 2016. The research used a quantitative research design employing survey methodology conducted via a web-based survey tool, the survey instrument was a modified version of Zdziarksi (2001) campus crisis management survey. Data collected was then coded and into the software program, Statistical Package for the Social Sciences (SPSS), for statistical analysis.

A goal of this study is to uncover findings that can further benefit crisis management protocols or best practices regarding crisis management team training, crisis management plan communications, and emergency management personnel on campus. Another goal of this study is to examine the impact of institutional size of enrollment on crisis preparedness, crisis management team training, and crisis response. Cross-
tabulations will be created to gain a descriptive analysis of how two variables potentially relate. Spearman’s rho will be utilized to discover significant relationships between each of the ordinal variables. Then to assess if the existence of a Director of Emergency Management position has a significant impact on perception of institutional preparedness to respond to crisis a two-sample t-test was used. All tests will be analyzed with an alpha level of 0.05 and 95 % C.I.

**Significance of Study**

With the growing number of national and university based crisis occurring in the United States there is an increasing need for university administrators to be even more prepared to respond to crisis. Since 2007, when Catullo (2008) examined the state of crisis management on college and university campuses, each of the four crisis types categories have continued to occur within the higher education setting: criminal, human, facility and natural disaster (Zdziarski, Dunkel, & Rollo, 2007). It is imperative that Universities are prepared to respond to crises; to not be prepared could be perceived as an abdication of responsibility (Farrell, 2001).

Efforts to mitigate crisis and effectively respond to crisis are essential skills needed and practiced within the field of higher education occurs (Mitroff, Diamond, Alpaslan, 2006). Therefore, professionals from various backgrounds, academic fields and experience need to be brought together to form a crisis management team and intentionally design a plan of action that involves multiple areas of the university, local emergency responders, and other stakeholders. Planning in a collaborative nature requires communication skills, an ability to understand systems design and a desire for a common positive outcome (Constantino & Merchant, 1996). The common ground of students’
wellbeing and safety, and legal mitigation for the University helps to keep the relationship between these stakeholders focused on the importance of the crisis management plan’s holistic approach and effectiveness (Zdziarski, Dunkel & Rollo, 2007). Therefore, this study sought to provide an updated view on the current state of crisis management for, institutional preparedness and response, and look for significant relationships between perceived preparedness to respond to crisis with size of enrollment and components of a crisis management systems.

**Need for Research**

Institutional preparedness to respond to crisis has been assessed through survey research seven times since the turn of the 21st century. Four times for medium to large, public and private institutions have been surveyed, once to Christian affiliated institutions, once to small, public and private institutions, and once as perceived by students at a large institution. Three of these studies took place right before major crises that indelibly impacted the future of emergency management (Akers, 2007; Catullo, 2008; Zdziarski, 2001).

Eugene Zdziarski (2001), who originally surveyed NASPA member institutions’ CSAOs about their perception of their university’s preparedness to respond to crisis. His study assessed the four factors in determining preparedness to respond to crisis: types of crises, phases of crises, systems set in place to respond to crisis, and finally the stakeholders involved in the official crisis response (Zdziarski, 2001). Zdziarski originated a survey instrument that would be used across five of the next studies named *Campus Crisis Management*. His findings demonstrated a wide variety of crisis types were address, though institutions did not prepare for the pre crisis phase of crisis.
Therefore, he claimed that institutions of higher education tend to be reactive in nature for crisis response. Zdziarski (2001) did note that institutions with more than 30,000 students perceived themselves to be more prepared, but that according to reported preparedness indicators institutions with 10,000 – 20,000 were the most prepared. Linda Catullo’s (2008) study aimed to see if there had been a perceived increase institutions’ preparedness to respond to crisis from the time of the attack on America on September 11, 2001, to the time of her study that completed just before the Virginia Tech mass shooting in April of 2007. She does this by expanding upon the findings from Zdziarski’s (2001) study, and directly compared the findings of institutions who participated in both surveys and saw an increase in percentages of institutions that have crisis response plans for each type of crisis, how different types of institutions address each phase of the crisis, changes in crisis management plans, along with the increased stakeholder involvement in crisis management.

Mitroff, Diamond, and Alpaslan (2006) interviewed university provosts and provided recommendations for crisis management systems. A major finding for their study was that institutions were generally prepared to the types of crisis that they had already experienced, and that the more the crisis management teams met the more proactive the provosts rated their institutions. They consider a proactive institution to be one who prepares for at least one type of crisis in each broad category to create a comprehensive crisis portfolio. This was similar for the Covington’s (2013) findings for small institutions with 5,000 students or under. Covington (2013) also noted that small institutions mostly only prepared for one type of crisis per crises category. The vice president of student affairs as the crisis leader, and campus drills were a favored training
protocol at small institutions. Akers (2007) performed a robust mixed methods study assessing various institutional types against their crisis response protocols and policies. This study provided rich information on impact of size an institution has on crisis management, and thus far the only study found to address it as direct. Overall his study stated that each type of campus has different factors of crisis management to plan for, that one type of institution is not better or worse, but it is imperative for an administrator to be aware of their institutional challenges and address them in their crisis management plan.

Bosselait (2010) who study looked at the impact of the Virginia Tech shootings on other institutions’ crisis planning, policy, and protocol. She shared that the institutions within her survey had adopted a National Incident Management System approach to coordinated emergency management planning and response. Whereas, Grimsley (2015) discussed preparedness to respond as perceived by students. This new angle of crisis preparedness research provided an outlook on emergency notification system preferences and effectiveness. Grimsley’s study also discussed the factor of urgency in emergency notifications and how students’ intake a message as urgent or simply informative.

While past researchers have taken institutional size of enrollment into consideration, no one since Zdziarski in 2001 has looked directly at what institutional size begin to impact perceived preparedness or other components of a crisis management system. It may be the case that larger campuses have greater resources to protect its students when compared to smaller universities. Then conversely, larger universities may be too decentralized, rendering crisis management not as effective. This study aims to examine the correlation of size of enrollment on perceived institutional preparedness to
respond to crisis, as well as manner of crisis response and adequacy of crisis management training. If a particular size category of an institution is discovered to perceive themselves in a more positive outlook towards crisis management it would next need to be explored further as to what are those contributing factors outside of the general indicators of preparedness listed in various guidelines.

Past studies have not included specific emergency management professionals, other than the chief of university police, as potential crisis leaders (Catullo, 2008; Covington, 2013; Zdziarksi, 2001). Bosselait (2010) learned that institutions in her study were adopting a National Incident Management System, though does not directly mention if institutions are employing a director of emergency management. The rise of the emergency management field is discussed in emergency management literature (Phillips, 2003; Anna Maria, n.d.). Therefore, this study aims to learn if institutions have this position on campus, what their role is in crisis leadership, and if it affects perceived preparedness to respond to crisis.

Each of the previous studies detail the most popular forms of communications used to disseminate the crisis management plan and crisis management team training topics. Yet, only one research article was discovered that examined optimal frequencies. Stephens, Barrett, and Mahometa (2010) discussed the “magic number” of three emergency notifications that need to be sent for the message to be viewed as urgent over simply being informative. Thus, this study will aim to discover a “magic number” of frequencies of training topics delivered or delivery modes used to communicate the crisis management that impact perceived preparedness to respond to crisis.
Research Questions and Hypothesis

The following research questions and hypotheses guided this research study:

1. Is there a significant correlation between institutional size of enrollment and the perception of institutional preparedness to respond to crisis?

   *Null Hypothesis*

   \( H_0:1 \): There is no significant correlation between institutional size and their perception of preparedness to respond to crisis.

   *Alternative Hypothesis*

   \( H_1:1 \): There is a significant correlation between institutional size and their perception of preparedness to respond to crisis.

2. Is there a significant correlation between institutional size of enrollment and the perceived general manner of response to campus crisis?

   *Null Hypothesis*

   \( H_0:2 \): There is no significant correlation between institutional size of and their perception of general manner of response to crisis.

   *Alternative Hypothesis*

   \( H_1:2 \): There is a significant correlation between institutional size of and their perception of general manner of response to crisis.

3. Is there a significant correlation between the number of topics addressed in the crisis management training provided to the crisis management team with perceptions of institutional preparedness to response to crisis?

   *Null Hypothesis*
H₀₃: There is no significant correlation between the number of crisis management training topics addressed with perceptions of institutional preparedness to response to crisis.

*Alternative Hypothesis*

H₁₃: There is a significant correlation between the number of crisis management training topics addressed with perceptions of institutional preparedness to response to crisis.

4. Is there a significant correlation between total delivery methods utilized to communicate the crisis management plan to the campus community and the perception of institution preparedness to respond to crisis?

*Null Hypothesis*

H₀₄: There is no significant correlation between total delivery methods utilized to communicate the crisis management plan to the campus community and the perception of institution preparedness to respond to crisis.

*Alternative Hypothesis*

H₁₄: There is a significant correlation between total delivery methods utilized to communicate the crisis management plan to the campus community and the perception of institution preparedness to respond to crisis.

5. Does the existence of a Director of Emergency Management position have a significant impact on perception of institutional preparedness to respond to crisis?

*Null Hypothesis*
H₀₅: There is no significant impact from the existence of a Director of Emergency Management on perceptions of institutional preparedness to respond to crisis.

*Alternative Hypothesis*

H₁₅: There is a significant impact from the existence of a Director of Emergency Management on perceptions of institutional preparedness to respond to crisis.

**Definition of Terms**

**Campus crisis.** Campus crisis is defined as “an event that disrupts the orderly operation of an institution or its educational mission, and threatens the well-being of personnel, property, financial resources, or reputation of the institution” (Zdziarski, 2001, p.5).

**Chief student affairs officer.** The highest-ranking student affairs professional within the university setting. Each university will have varying titles for this role depending on the institutional history and structure. This role will oversee most, if not all, student service related departments outside of academic areas.

**Conflict management.** Conflict management is the process of limiting the negative effects, where the aim is to enhance group-learning outcomes, including effectiveness of performance in a group setting (Rahim, 2002, p.208).

**Crisis management.** Crisis management is the discipline that address both how to keep crisis from reoccurring or to less the impact of crisis when it does happen (Crandell, Parnell, & Spillan, 2014).
Crisis management systems. The plans, procedures and policies used by institutions to manage campus crisis (Zdziarski, 2001).

Critical indicators of preparedness. There are four critical indicators of preparedness: type of crisis prepared for, phases of the crisis that are prepared for, systems in place to respond to crisis, internal and external stakeholders involved in planning to respond and responding to crisis (Mitroff, Pearson, & Harrington, 1996).

Institutional size of enrollment. As defined by the Carnegie Classifications of Higher Education institutions with 3,000 – 9,999 degree-seeking students enrolled are considered medium sized universities, whereas institutions with 10,000 or more degree-seeking students are considered large in relation to size (The Carnegie, n.d.).

General manner of response to crisis. There are two manners or strategies or response: reactive – reacting to the past rather than anticipating the future and proactive – acting before a situation becomes elevated (Champlin, 1991).

NASPA. National Association for Student Personnel Administrators is a global professional association serving as a guiding force in the field of higher education for administrators and faculty founded in 1918 (NASPA, n.d.).

Stakeholders. Stakeholders are “individuals, departments, organizations, and agencies, both internal and external to the institution, which affect or can be affected by the crisis” (Zdziarski, 2006, p.7).

Overview of Study

This study provides data to update the current state of crisis management and institutional preparedness to respond to crisis since the last study conducted with this population in 2007 (Catullo, 2008). In a time when crisis incidents occur seemingly more
often, contributions to the research on preparedness to respond to crisis and best practices of crisis management plans will further assist universities in their pursuit to mitigate and respond in an effective manner. This research should also demonstrate that strategic and comprehensive planning to mitigate and respond to crisis could reduce the risk of further conflict during crisis.

This introductory chapter has shed light on topical area, presented the research questions and covered the significance of the research. Chapter two will provide a holistic review of the literature on crises and crisis management through a conflict resolution perspective. An outline of the study’s methodology will be provided in the third chapter. All research findings will be presented in chapter four, along with an analysis of the data. Lastly, in chapter five a review of the overall study and key statistical findings will be discussed, along with recommendations for future research and implications of the research study.
Chapter 2: Literature Review

This research paper seeks to study the current state of crisis management, institutional preparedness, and crisis response as perceived by Chief Student Affairs Officers. Fundamental elements must be examined in order to provide a common basis of understanding. This chapter will expound upon the concept of crisis through various definitions and through a lens of crisis as a matrix. First, it will examine a historical context of crisis management from a national perspective, and then this study will examine crisis from the postsecondary education setting. Then, this paper will explore in-depth presentation of the components of crisis management systems and indicators of preparedness. The consequence and costs of crisis will also be discussed. A review of significant studies conducted that also examined institutional preparedness and crisis management systems will be provided, along with a critique of the literature presented. Lastly, this chapter will present two theories in relation to this research study. Systems design theory as it relates to crisis management systems whole and interrelated parts working in conjunction with each other (Constantino & Merchant, 1996), and Maslow’s (1987) hierarchy of needs as an explanation for the social contract of a university or college to fulfill base level needs of safety for its campus community.

Defining Crisis

Crises have continually captured media headlines, whether it is severe weather event such as a hurricane or flooding, to the rise of bullying or sexual harassment, or even an active shooter in a public setting (Crandell, Parnell, & Spillan, 2014). Major crises have demanded for greater awareness and the need for strategic and comprehensive crisis management plans for businesses, governments, and educational institutions. Most
definitions of crisis arise from organizational business perspective (Coombs, 1999). Fink (1986) shared that the term crisis and emergency are both used conversely, and even depending on the magnitude or type of crises it could also be referred to as disaster or catastrophe.

Crisis has been defined as:

- A disruption that physically disrupts a system (Pauchant & Mitroff, 1992, p.12).
- A major unpredictable event that has potentially negative results (Barton, 1993, p. 2).
- Unstable time of affairs in which a decisive change is impending – either one with a distinct possibility of a highly undesirable outcome or one with a highly desirable outcome (Fink, 1986, p. 15).
- Organizational can be described crisis in three ways: threatens high-priority values, limited response time for decision to be made, and is unanticipated by the organization (Hermann, 1963, p. 63).
- Organizational crisis is a low-probability, high-impact event that threatens the viability of the organization and is characterized by ambiguity of cause, effect, and means of resolution, as well as by a belief that decisions must be made swiftly (Pearson and Clair, 1998, p. 60).
- A crisis is the perception of an unpredictable event that threatens important expectancies of stakeholders and can seriously impact an organizations performance and generate negative outcomes (Coombs, 2007, pp. 2-3).
The various definitions of crisis have described crisis from the realm of business, yet few have defined crisis from the context of the educational setting or institution of higher education. Since this research examines crisis management within the context of high education, this study will employ Dr. Eugene Zdziarski’s definition of campus crisis:

Campus crisis is an event, often sudden or unexpected, that disrupts the normal operations of the institution or its educational mission and threatens the wellbeing of personnel, property, financial resources, and/or reputation of the institution (Harper, Paterson, & Zdziarski, 2006, p. 5).

Crisis as a Matrix

In 2007, Zdziarski, Rollo, and Dunkell published a major work examining crisis management in the postsecondary setting called *Campus Crisis Management: A Comprehensive Guide to Planning, Prevention, Response and Recovery*. In the book, they conceptualized crisis as a matrix that “provide[d] a basic framework for assessing a crisis, determining its impact on the campus community, and identifying considerations for response” (pp. 36-37). This matrix provided a systematic three step approach towards thinking about crisis: (1) if the level of crisis is a critical incident, campus emergency, or disaster; (2) if the crisis is an environmental, human, or facility derived event; and lastly (3) if the impetus for the crisis event was intentional.

The first approach is to determine the level of crisis between an incident, campus emergency, or a disaster. An incident is a localized event that doesn’t disrupt the entire campus, an emergency does effect the entire campus, and a disaster effects the campus and surrounding community. For example, Hurricane Katrina forced many universities to
collaborate with local communities and other colleges to mitigate the impact of flooding, therefore, it can be defined as a disaster (Hounsell, 2014; McCullar, 2011). The second approach is to determine the type of crisis between an environmental, facility, or human crisis. Examples of framework crises types include environmental crisis such as hurricanes or flooding, while a facility crisis includes crises in buildings or structures such as a fire or a chemical leak, and human crises originates from people that could be a criminal act, self-harm, or abduction.

Lastly, the third approach is to determine intentionality would be to assess the impetuous for the resulting disruption. It would be unintentional if the crisis event were either an act of God or accident, though if the crisis occurred by due to someone’s action to make an effect on others than it would be labeled intentional (Zdziarski, et al., 2007). Therefore, institution can plan and/or respond more effectively once it can determine the level of crisis, type of crisis, and intentionality of the crisis.

**Mental health as a crisis.** There is another form of crisis that can be just as devastating, and this psychological form of crisis is defined by the individual rather than an actual event (Pitcher & Poland, 1992). A psychological crisis affects one’s mental health and could be described in layman’s term as a personal crisis, identity crisis, or a mid-life crisis. Crisis at this level is from perceived stress to the extent that normal coping mechanisms are not sufficient (Poland & McCormick, 1999). This stress can be built up from the pressures of the individual’s life or from the result of stress from a greater crisis event. There has been a rise in mental health concerns on college campuses as more students are coming to college medicated and seeking counseling or psychiatric services on college campuses (Corley, 2013).
Historical Context

National Perspective

Crises and emergencies have been in existence since the beginning of time, though the American emergency management can formally be traced back to the Congressional Act of 1803 (Phillips, 2003). This was the first national legislation to provide disaster relief to those affected by the devastation, and was the first case related to fires in Portsmouth, New Hampshire. This precedent of emergency relief continued over the next one-hundred years. It helped cities rebuild after such tragedies as the Chicago fires in 1871, and the San Francisco earthquake in 1906 (Anna Maria, n.d.). Roosevelt’s New Deal was also noted as a relief effort to rebuild American spirits, economy, and infrastructure after national disaster from the great depression (History.com Staff, 2009; Phillips, 2003).

National administration’s focus then shifted to support efforts for World War II and then the nuclear war scare of the 1950s (Phillips, 2003). The 1960s and 1970s were plagued with several natural disasters such as hurricanes and earthquakes, and the Federal Disaster Assistance Administration led many of these emergency relief efforts (Anna Maria, n.d.). These crises led to the revision of the 1950 Disaster Relief Act, which enabled Governors to request federal relief funding from the President, in 1974. The revision clarified policy and procedural changes from the National Flood Insurance Act in 1972 following Hurricane Agnes’ widespread destruction (FEMA Training, n.d.).

After the Three Mile Island nuclear power plan accident in 1978, national scrutiny of siloed emergency response efforts led to the 1979 executive order that created the Federal Emergency Management Agency (FEMA) (Anna Maria, n.d.). FEMA has led
emergency response, along with local emergency responders, on various crisis events such as Hurricane Andrew in 1992, the World Trade Center Attack in 1992, and the Oklahoma City bombing in 1993.

Again, fragmented response efforts were exposed in emergency response the terror attacks of September 11, 2001 (9/11 Memorial, n.d.). This national tragedy threw America into the war on terror. In 2002, the Department of Homeland Security was created and was given oversight of FEMA (Anna Maria, n.d.). The Department of Homeland Security was charged with holistic and efficient coordination between federal agencies in disaster preparedness and response. Agencies that fall under the Department of Homeland Security include the U.S. Customs and Border Control, the U.S. Citizenship and Immigration Services, the U.S. Coast Guard, FEMA, the U.S. Immigration and Customs Enforcement, the U.S. Secret Service, and the Transportation Security Administration (Homeland Security, 2017). In 2004, the Department of Homeland Security issued the National Incident Management System (NIMS), which provided a template for various organizations, federal and non-governmental, to work together to plan, mitigate, and respond effectively to crisis (NIMS, 2008). From their provided framework and best practices many organizations have adopted the use of a National Incident Command System into their crisis management plans.

Field of emergency management. Emergency management is “the discipline of dealing with risk and risk avoidance” (Haddow & Bullock, 2003, p.1). Even though emergency management has taken place for years, it is a relatively new field of study. Emergency management is a practitioner-based field where most professionals are seasoned from experience rather than knowledge gained in the classroom (Phillips,
2003). This trend may shift as emergency, disaster, or crisis management studies program emerge at many colleges and universities connecting theory to practice. FEMA coordinates the Emergency Management Institute, which offers free online courses for emergency management personnel (FEMA, n.d.). These courses are designed for new crisis managers, and for continued training of crisis teams. There are two main professional associations leading the field the National Emergency Management Association and The International Emergency Management Society (Phillips, 2003). Emergency management is a hybrid field that can relate to a broad range of industries which could result in new careers in crisis management (Anna Maria, n.d.). The continued threat of crises produces a demand for trained professionals in this field.

**Post-Secondary Education Perspective**

Faculty and staff have been held responsible for their students’ academic performance, wellbeing, and the overall college experience since the inception of the higher education system (Duncan & Miser, 2000). This is known as *in loco parentis*, which refers to the culture where administrators and faculty regulate over student conduct like a parent instead of the law (Sloan & Fisher, 2011). In the court case, *Gott v. Berea College* in 1923, the court ruled in favor of *in loco parentis* unless the discretion of the administrators and faculty were either unlawful or against public policy (Walters, 2013). Power granted to institutions of higher education was a system of trust from the public and government that the students’ best interest was paramount as institutions of higher education prepared them for the future (Kaplin & Lee, 1995).

This autonomy of power would later be restricted with the shift of involvement form the federal government. Federal involvement first came through land-grants and
funding towards the creation of state institutions of higher education to focus on education in agriculture and the mechanical arts in the Morrill Act of 1862 (Kaplin & Lee, 1995). In the second Morrill Act of 1890, institutions were provided opportunity to grow through grants in various subject areas. Then in 1944, the G.I. Bill or Serviceman’s Readjustment Act provided a paid opportunity for all servicemen returning home from war to attend college. This was not only an effort to bolster the economy, but the spirits of returning veterans. As institutional enrollment grew, the Higher Education Act of 1963, provided low-interest government loans to universities in order to repair and build new facilities. The largest piece of funding legislation to affect institutional growth and access since the first Morrill Act was the Higher Education Act of 1965 that established a large-scale student financial program (Kaplin & Lee, 1995). As the federal government has now provided funding to support the continued growth of college and universities, it established a new power dynamic in which higher education must now be accountable to the states or else risk losing funding (Walters, 2013).

Notable crisis events, such as the University of Texas sniper shootings in 1966, students killed by the Ohio National Guard at Vietnam War protest at Kent State in 1970, and the Southwest Airways plane crash in 1970 that killed 37 members of the Marhall University football team, became nationally known due to their presence in the media (Akers, 2007). Most institutions of higher education have had crisis events occur on campus, but in the past with no formal regulation most incidents were kept confidential as they were dealt with internally. Therefore, for the most part, the public was unaware of safety or crisis issues on campuses. This changed in 1990 with the passage of the Jeane Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act,
better known as the Clery Act (Walters, 2013). The Clery Act is a federal mandate that requires that all colleges report safety procedures and truthful crime statistics (Walters, 2013). Named after Jeane Clery, who was raped and murdered in her residence hall at LeHigh University in 1986. LeHigh University hid safety issues on their campus, and Jeane had purposely chose LeHigh University over Tulane University in New Orleans because she thought it would be safer.

Since 1990, there have been other various crises that have played out in the national media such as the student murders at University of Florida in 1992, the murder of Matthew Shepard by fellow University of Wyoming students deemed as a hate crime in 1998, and the student deaths from the bonfire log collapse at Texas A&M bonfire in 1999 (Akers, 2007). The terror attacks of September 11, 2001, has elevated crisis response in the public eye along with the expanded ability to share information through the internet and social media (Assalin, 2012). Mitroff (2004) noted that while the scope and size of crisis have increased, the time between the crises have decreased. The devastation of Hurricane Katrina in 2005 (Nelson, 2006), the Duke lacrosse rape incident in 2006 (Wolverton, 2006), the mass shooting at Virginia Tech in 2007 (Catullo, 2008), the collapse of the bridge next to the University of Minnesota during fall orientation in 2007 (Louwagie, 2012), the destruction from flooding at the University of Iowa in 2008 (Hounsell, 2014), the mass shooting at Northern Illinois University in 2008 (Roade, 2011), the student suicide at Rutgers University in 2008 from apparent online bullying (Foderaro, 2010), the child abuse scandal that rocked Penn State University in 2011 (Ganim, 2011), the viral video of University of California-Davis student protestors sprayed with pepper spray by university police in 2011 (Kingkade, 2013), the faculty
shooting at the University of Alabama in 2012 (Associated Press, 2012), the three Muslim students killed at University of North Carolina-Chapel Hill in 2015 (Three Muslim Students, 2015), a rope found around the neck of a statue of the first black student to attend the University of Mississippi in 2015 (Newswire, 2015), a viral video of an Oklahoma University fraternity member singing a racially offensive song in 2015 (Svrluga, 2015), and the rape of an unconscious student at Stanford University whose attacker was given a mild sentence for his actions in 2016 (Fantz, 2016). This is not a complete listing of crises events in higher education since 2001, but it is evidence that a crisis management system within institutions of higher education is imperative.

The crises have ranged in type and scale, and have presented the field of crisis/emergency management and student affairs a variety of lessons learned (Mitroff, 2004). Caring for the student experience has grown in scope, and there are functional areas within the administration of higher education that are built around the ethos of care for students and their college experience. For example, colleges and universities often provide a student health services to aid sick students, student counseling services to assist with mental health issues, university police to ensure safety and security, dean of students staff to uphold community standards set within the university’s code of conduct, residence life staff to oversee students’ well-being in their on-campus residence halls, and student development professionals that engage students outside of the classroom (Komives, Woodard, & Associates, 1996). Student personnel administrators must encompass a greater coordination of skill and resources to ensure a holistically safe college environment, not only for the student but also for the campus community (Zdziarski, Dunkel, & Rollo, 2007).
After the prominence of the terror attack of 2001, and the mass shooting at Virginia Tech in 2007, best practices and recommendations were issued by various agencies. In 2003, FEMA released a report, *Building a Disaster Resistant University*, commonly referred to as the DRU Report, as a guide to crisis mitigation planning (FEMA, 2003). The DRU Report emphasized the importance of a crisis management plan and cited crises experience from six universities to aid in their call to action to use their hazard mitigation plan. These federal guidelines to establish a crisis management plan include a four-phase plans: (1) organize resources, (2) conduct a crisis risk assessment, (3) develop a mitigation plan, and (4) adoption and implementation of the plan (FEMA, 2003). In 2008, NASPA released a special supplement to the journal New Directions for Student Services called “In Search of Safer Communities”. This supplement report outlined a model of crisis management for campus violence. NASPA’s model was also a four-phase crisis management plan that includes: (1) prevention, (2) preparedness, (3) response, and (4) recovery (NASPA, 2008). In 2011, the Department of Education’s Office of Postsecondary Education released *The Handbook for Campus Safety and Security Reporting* (U.S. Department of Education, 2016). This handbook provides guidance for crime statistics reporting for compliance with the campus safety and security requirements for the Higher Education Act of 1965 and the Clery Act, as well as recommended standards of emergency planning, procedures, response, and notifications. An updated version of the handbook was released in 2016, in response to the reauthorization Violence Against Women Reauthorization in 2013 which affected the Clery Act. In 2013, the Violence Against Women Act’s Campus SaVE Act provision expanded the definition of what type of incidents need to be
reported, including domestic violence, dating violence, and stalking violence, to remain compliant in accordance with the Clery Act (Hogan Lovells, 2014). The standards provided in these handbooks and reports aid universities in goal of federal compliance, but more importantly outline steps towards safer university communities.

**Addressing Mental Health.** There have been a few crisis incidents where mental health issues were raised as a potential factor to why negative actions were acted upon either by either a student or staff member committing suicide, a campus shooting, bullying event, etc. Mental health and behavioral concerns were revealed about the Virginia Tech shooter, which further led to a national change in addressing student’s potentially harmful behavior to themselves or others (Report, 2007). Before this type of crisis many institutions privacy policies kept various campus departments from sharing their student concerns. A positive outcome of the incident has resulted in universities adopting a standard of hosting a student behavioral concerns committee to intake concerns of students and staff behavior that could be disruptive or harmful towards others (Ells & Rockland-Miller, 2011). For instance, if the concerns that were posed by various faculty or administrators about the student who opened fire and killed his fellow students at Virginia Tech in April of 2007, were shared and discussed in a student behavioral concerns committee, an intervention could had taken place and lives potentially could have been saved (Report, 2007). Further supporting the role of student mental health programs and psychologists on campus to intervene as a strategy to assist the student in developing coping skills (Pitcher & Poland, 1992; Pruett & Brown, 1990).
Crisis Management System/Plan

Both Hermann (1962) and Barton (1993) deem that crisis has an element of surprise, and therefore it is unpredictable. Coombs (2007) noted that even though the timing is unknown, crisis is inevitable for an organization. Even though components of a crisis can be unpredictable, Koover-Misra (1996) and Coombs (1999) argued that crisis should be expected, and therefore plans should be in place to mitigate, prevent, and/or act should crisis arise. Koover-Misra (1996) defined crisis preparation as the ability to prevent, contain, recover, and learn from the crisis. This definition directly relates to the structure of a recommended crisis management system or plan by Mitroff et al. (2006). Mitroff et al. (2006) posed that a well-written, comprehensive crisis management system or plan requires three essential components: preparation for a broad range of crises, awareness of phases of crisis addressed in the plan, and the inclusion of a variety of internal and external stakeholders in crisis plans, policy and procedures. Below each section will further provide details about these three components.

To declare a plan as comprehensive a crisis audit must take place as the plan originates and upon each time the plan is reviewed (Littleton, 1983; Mitroff, Pearson, & Harrington, 1996). A crisis audit is an evaluation of all potential risks that an organization can face whether internally or externally. Priority in planning should be given to the crises most likely to occur (Littleton, 1983). Yet, to have a comprehensive crisis management plan all crises, including the ones with low probability to occur, need contingency plans as their impact could be just as devastating (Mitroff, Pearson, et al., 1996). While universities should be equipped to handle all types of crisis, Lueke (2004) have argued that it is not simply possible to be prepared for every possible crisis scenario.
Only when institutions perform a detailed crisis audit will their crisis management plan be tailored to their campus’ unique needs and risks (Lueke, 2004; Mitroff & Anagos, 2001). Crisis audits can be performed internally or external consultants from other institutions could be invited in to evaluate (Stubbart, 1987).

**Types**

Types of crisis refer to various kinds of crises an organization can potentially experience and should be prepared to address (Mitroff & Anagnos, 2001). Extensive lists were created of every possible type of crisis imaginable, in hopes to create best practices for crisis preparation (Coombs, 1999). In the 2001, Zdziarski created a master list of potential crises to assess institutional preparedness, and they were clustered into the types: natural, facility, criminal or human. Natural crisis types are related to environment causes such as tornado, hurricane, earthquake, flood, or severe weather. A facility crisis involves a building or physical structure from where the crisis emerged such as a fire, explosion, chemical leak, evacuation of campus, evacuation of buildings, corruption/loss of computer data, loss of utilities (e.g. electricity, A/C, telephone, etc.). A criminal crisis involved unlawful activity and harm towards others such as homicide, assault, sexual assault/rape, sexual harassment, domestic abuse, burglary/robbery, kidnapping/abduction, hate crime, terroristic threat, vandalism. Then a human crisis originates from people and the crisis act is either directed inwards toward oneself or others, examples are student death/injury, faculty or staff death/injury, suicide, an emotional or psychological crisis, a missing person, alcohol/drug overdose, infectious disease, racial incident, or a campus disturbance/demonstration.
Five years later, Mitroff, Diamond, and Alpaslan (2006) created a new list of what his research found as the most prevalent types of crisis on a college campus. They include:

- environmental or natural disasters, drops in revenue, athletic scandals, major illness outbreak, loss of confidential records, ethical breaches by administrators, faculty and/or trustees, explosions, fires, employee sabotage, damage to institutional reputation, major crimes (p. 62).

**Phases**

A best practice in a crisis management plan is when all phases of crisis are addressed (Coombs, 2007; Crandell, Parnell, & Spillan, 2014; Pauchet & Mitroff, 1992). When all phases are considered, crisis managers will be able to prevent crisis, detect early warning signs, act during a crisis, and assist its organization effectively in the aftermath (Mitroff et al., 2006). There are various frameworks describing the phases of crisis, though most popular are three-phase frameworks with pre-crisis, crisis and a post crisis phase (Fink, 1986; Crandall et al., 2014; Pauchant & Mitroff, 1992; Richardson, 1994). Frameworks with a fourth phase usually address a recovery stage that involves reflection and learning from the crisis experience (Crandell et al., 2014; Pearson & Mitroff, 1993). The fourth stage could be described as a proactive approach to capture lessons learned from the crisis experience. Lueke (2004) spoke of the importance of recording the crisis as it happens, so that afterwards learning can happen through reflection in order better prepare for future crisis.

In 2006, Zdziarski expanded his earlier view of a three-phase business crisis framework to a five-phase framework. The five phases crisis management are: (1)
planning, (2) prevention, (3) response, (4) recovery, and (5) learning. Planning is the intentional step towards proactive risk and resource assessment in making strategic plans then informing and training stakeholders. Prevention occurs once crisis audit has been conducted and management plan written this step has stakeholders actively working on crisis mitigation. Response is following the plan as a crisis event takes place, if a well-written plan has been practiced the response efforts fall into action. After the actual crisis, the recovery phase allows those affected, along with the campus operations, to recover. An example of the recovery phase are vigils held on campuses after a tragic event to start the healing process and bring people together for support. Lastly, the learning phase is a time for stakeholders to constructively debrief events to make improvement to plans in all the phases.

Stakeholders

Crisis Leaders on Campus. Student affairs administrators have long been a part of the university system whose main purpose is to ensure the safety and wellbeing of students (Jackson & Terrell, 2007). The Chief Student Affairs Officer (CSAO) has grown in the spectrum of institutional leadership, and has therefore served as an institutional or division-wide crisis leader (Jackson & Terrell, 2007). The person in the position of the CSAO oversees several functional areas that support the outside of the classroom experience, including but not limited to: student conduct, residential living, student organizations and involvement, orientation, leadership opportunities, and student counseling (Komives, Woodward, & Associates, 1996). This role serves as an advocate for students within the administration, and therefore has great responsibility to ensure a safe and healthy environment for them to learn within (Jackson & Terrell, 2007).
Mitroff (2004) described the title of a crisis manager as a reactive frame, whereas a crisis leader is being forward thinking and proactive. The CSAO must make comprehensive measures to prevent crisis and mitigate conflict, and take advantage of the education setting to create awareness and empower students (Jackson & Terrell, 2007). Those serving in this role should lead their staff to take clear stances on what are acceptable behaviors in their university through policy and public campaigns as it sets the tone of the community (Carroll & Bristor, 1993; Hobson & Guziewicz, 2002). For example, universities might have policies against harassment, violence on campus, anti-discrimination, or hazing, but if not openly campaigned how do students know or live into community standards or expectations. A university can promote shared community values and if the administration steps up to embody and role model these principles only then will the students adopt them (Jackson & Terrell, 2007). This is a positive way of striving to have a common vision for the university community on potential areas of threat, and having aligned macro-level goals with stakeholders can assist congruence in a crisis management plan (Mitroff, 2004).

**Crisis Management Team.** Enlisting the right people is the first critical step for ensuring an effective crisis management team (Coombs, 1999; Fink, 1986; Millar & Heath, 2004; Mitroff et al., 1996). Jim Collins (2011) stated “get the right people on the bus, the wrong people off the bus, and the right people in the right seats” (p. 13). Fink (1986) further stated that convening the right group together may be the first step, but then leaning on a team member’s areas of expertise for crisis. For example, a Greek Affairs professional may be of assistance with issues of hazing incident; an information technology professional may be more useful for technical crisis; and a physical plant
professional may be instrumental in facility crisis. Zdziarski’s (2001) assessed that the most typical stakeholders to serve on the crisis management teams were the vice president for student affairs, the university police, university relations, dean of students, student health, physical plant, student counseling services, residence life and environmental health and safety.

Sherwood and McKelfresh (2007) noted that a crisis management team’s responsibilities are “to develop the crisis management plan and guidelines, gather and analyze crisis information, make crisis decisions, communicate with the community, and report to the president” (p. 65). Augustine (2000) noted that for a crisis management team to be successful, it must not only be able to contain the crisis but protect the reputation of the university. To do so a proactive approach to crisis management needs to be in place and practice. Training is an essential component to a successful crisis management plan (U.S. Department of Education, 2007). Team members should be trained on a wide variety of crisis response topics in general, along with the content within and procedures of the crisis management plan. Active learning in the form of simulations or table-top exercises are recommended by the U.S. Department of Education (2009). More institutions have increasingly began to favor table-top exercises and drills as a part of their crisis management team training since Zdziarski’s study in 2001 (Catullo, 2008; Harvey, 2011; Zdziarski, 2001).

**Internal and External Stakeholders.** Internal and external stakeholders are individuals who represent internal departments and external agencies that aid in crisis management planning, response and recovery efforts (Zdziarski, 2001). Internal stakeholders are comprised on members from within the campus administration, such as
the president, vice president of business affairs, vice president of student affairs, dean of
students, director of physical plant, chief of university police, media relations, athletics,
and director of residence life. External stakeholders have representatives from the local
police and fire departments, local hospital or mental health facilities, parents and alumni
council. Each of the internal and external stakeholders has varying degrees of
involvement and responsibilities in crisis planning and management (Zdziarski, 2001).
Level one is the highest level of involvement where stakeholders are essential in all
campus crisis. Level two would be involved in most campus crisis, and level three only
through periodic involvement. Subsequently, level four would be considered in crisis but
not essential to response efforts. For instance, not all stakeholders would serve on a crisis
management team, some would only be considered in crisis response but not actually be a
part of the planning (Zdziarski, 2006). An example of this would be the importance of
important for general counsel and the university president to be informed of the plan and
major communication, but they wouldn’t necessarily need to set on the crisis
management team routine tasks.

**Stakeholder Communications.** Communication within a crisis management
plan that clearly outlines the team and stakeholders’ role and hierarchy of decision-
making is essential (Coombs, 1999). Millar and Heath (2004) emphasized that successful
crisis management teams know the importance of having a shared crisis communication
plan. The communication with these individuals needs to take place well before crises
occur so that a rapport and trust is built between individuals (Mitroff, 2004). This rapport
eases the planning process and helps for greater buy-in of the crisis management plan.
There is a potential for not all stakeholders to recognize a crisis or even be in denial,
therefore having a sense of trust between stakeholders will encourage open dialogue and group cohesiveness to trust the process (Coombs, 2007). Lack of communication or miscommunications can cause conflict within the stakeholders, which can further add damage during crisis if not managed properly (Smits and Ally, 2003). Communication with stakeholders is also essential as to further control what information or opinion is shared with media in times of crisis (Millar & Heath, 2004; Mitroff, 2004).

**Crisis Communications.** There is a need for more than the university’s main stakeholders and crisis management team to be aware of crisis response plans, so that when a crisis occurs staff, students, and the university community, who might be found in the center of the crisis, can respond effectively (Duff, 2007). This is not only important for the safety of the staff or students, but for the university as a business in a litigious society (Duff, 2007; Farrell, 2001; Merriman, 2006). Many universities are now exercising best practices in educating their campus community about how to report any misconduct, suspicious activity or outreach for help when in crisis, along with emergency practice drills, posting steps to follow in case of emergency in offices and classrooms, and emergency alert communications (Zdziarski, et al., 2007). These measures are essential for a university to become proactive in caring for their community as a means of being more prepared to respond to crisis.

A common proactive approach is the use of an emergency notification system (ENS), and commons forms of communication within an ENS include email, text, and websites (Staman, Katsouros, & Hach, 2009). Virginia Tech’s failure to issue a timely emergency warning led to unnecessary student deaths and endangerment of lives on campus (Bosselait, 2010). In response, the following year emergency notification
legislation was introduced to congress as the H.R. 5735 the Virginia Tech Victims Campus Emergency Response Policy and Notification Act (Congress, H.R. 5735, 2008). This bill did not pass in its original form known, however in 2008, emergency warning requirements were added to the Clery Act’s disclosure of campus security policy and campus crime statistics (Carter, n.d.). The Clery Act does not provide exact time interval an emergency warning should be disseminated, but it does call for immediate notification upon issues of campus health and safety as well as annual notification of emergency procedures. The only exception is when the emergency response efforts could be comprised by a notification.

While quick and efficient, these notifications have limitations. For instance, people could choose not to participate; professors may force the students to silence their phone during class time; there may be poor wireless reception; not everybody use a personal electronic device; and the personal communication device may filter emergency notifications as spam (Grimsley, 2015; Fox & Savage, 2009; Johnson, 2012; Staman, Katsouros, & Hach, 2009). Grimsley’s (2015) discussed the difference between redundancy and urgency. If the ENS is not utilized effectively, then recipients will notification messages as another drill. It is for this reason that Gulum and Murray (2009) stated, “Without a sense of urgency, the awareness itself is not enough” (p.1469).

Therefore, it is important to note that Stephens, Barrett, and Mahometa (2010) found that a student’s attention is captured after receiving more than three notifications, as this could establish a protocol for ENS usage in a crisis management plan and response.

Social media also play a role, and potentially less formal role, in emergency notification. The use of this crowd-sourced platform can be instantaneous is which
excellent for timeliness in crisis response, yet many universities have yet to adopt the use of social media as a component of their emergency notification systems (Hughes & Palen, 2012). Students, community members, police, and local news organizations all have access to share information via social media, though with greater avenues of crisis reporting could potentially lead to shared misinformation (Assalin, 2012). Assalin (2012) also found that social media’s influence on campus incidents has increased campus disciplinary issues from a spectrum of issues from inappropriate postings with demonstrated aggressive or offensive behaviors. Regardless, she recommends social media networks should be strategically addressed in a crisis management plan and utilized in the dissemination of crisis response information.

The Cost of Crisis

A crisis event is a powerful, shared experience that can bring the parties involved closer, or it can divide a community (Coombs, 1999). For example, the campus shooting at Northern Illinois University provided the opportunity for the university and the community to rally around and support one another in a movement of solidarity with the motto, “Forward Together Forward” (Roade, 2010). On the other hand, the Duke University lacrosse rape scandal stemmed from the team hiring a local stripper for a party, whom later accused members of the lacrosse team of sexually assaulting her (Wolverton, 2006). The alleged victim oman was also a student from the neighboring historically black college, North Carolina Central University. Tensions rose between faculty and the president for how the students were being adjudicated on campus, along with tensions between the two colleges and communities. The conflict worsened with the media framing the case with undertones of privilege and race. Therefore, effective crisis
management requires universities to be proactive rather than reactive in recognizing and preventing possible crisis (Mitroff, 2004; Zdziarski, 2001). The outcome of a crisis can sway perceptions, and it can also leave a positive or negative impact on the organization and its reputation (Mitroff, et al., 2006).

According to Mitroff (2004), the potential to mitigate crisis events through a well-thought crisis management plan can save lives. Sivulich (2000) and O’Neal (2009) argued that had a crisis management plan been in place, the outcome could have been different for the student injuries and deaths from the Vietnam War protest at Kent State University in 1978. Mitroff (2004) stated that universities have an ethical concern to provide quality care for its students and the community, though liability is a primary driving force for university’s preparedness. In fact, Farrell (2001) found an increase in litigation and out-of-court settlements with universities due to the failure to provide adequate safety policies and procedures. Walters (2013) framed the loss of in loco parentis, due to the continued involvement from the federal government in university policy resulting in a loss of autonomous control, along with the movement towards students as consumers in the college setting, as tipping point of colleges being held to the same legal standards of corporate America (Farrell, 2001).

Being proactive not only helps to keep the safety and wellbeing of students, faculty and staff a priority, it also minimizes any potential areas of neglect that could result in detrimental legal action against the university or create a spin of negative publicity that could irreparably harm its’ reputation (Griffin, Babin, & Attaway, 1991). The state of Virginia awarded the families of the victims a collective out of court settlement of 11 million dollars (CNN, 2016). Later the first two victims’ families sued
for negligence due to the delayed response to warn other students and won. The case was later overturned, but could have resulted in further financial loss for the institution (CNN, 2016). A negative media storm in relation to the negligence case harmed Virginia Tech’s reputation, and fear from the event resulted in the reduction of student enrollment numbers the following fall (Alvarez, 2012; Lipka, 2012).

Another potential cost of crisis is related to monetary fines imposed on institutions of higher education failure to comply with the Clery Act and the Violence Against Women Act’s Campus SaVE provision (Marshall, 2014). In 2014, over 85 colleges were involved in federal investigations due to reports of mishandled sexual assault judicial cases and reporting (Kingkade, 2014). Institutions can be fined up to $35,000 per compliance violation of the Clery Act, and this can add up to be an unexpected cost of crisis depending on the number of violations (Marshall, 2014). For instance, Virginia Tech was fined $55,000 for being too slow to issue an emergency warning to the campus after the first student deaths (Stratford, 2014). After a seven-year investigation into the Yale University for being non-adherent to the Clery Act, the U.S. Department of Education imposed a $165,500 fine. The Sandusky child abuse scandal at Penn State in 2011, resulted in a record fine from the U.S. Department of Education for Penn State to pay $2.4 million (Thompson, 2016).

**Crisis Management Studies in Higher Education**

There have been several studies looking at crisis in higher education, whether they are focused on an examination of a crisis event, lessons learned from a crisis experience, or an analysis crisis management systems, policy, or protocols. The bulk of the research has been conducted after the terror attacks of September 11, 2001. A
foundational study that assessed crisis management and preparedness in the postsecondary education setting that has spurred further studies and created a survey instrument that has been reused and reimagined is from Eugene Zdziarski (2001). He was a graduate student and student affairs professional at Texas A&M University during the tragic loss of twelve students during the annual bonfire build in 1999 (Zdziarski, 2001). His research topic had already been established, though this event gave it a greater meaning of importance from the experience of working with and near other professionals in the management of this crisis. His dissertation surveyed NASPA member institutions’ Chief Student Affairs Officers (CSAOs) at institutions with 8,000 or more students enrolled in the spring of 2001, and assessed the CSAOs’ perceptions of their university’s preparedness to respond to crisis and elements of their crisis management plan. The survey instrument that he developed titled Campus Crisis Management was based off crisis management literature, reviewed by a panel of experts, and then piloted with ten Texas universities. Of the 211 potential respondents, he had 146 usable survey packets for a response rate of 69.2%.

Since 2001, Zdziarski’s study has been conducted again in various formats. The first was Linda Catullo in 2007, whose research directly compared the findings of institutions who participated in both the 2001 and 2007 surveys, as well as established findings for a new grouping of institutions (Catullo, 2008). Catullo surveyed over 300 residential, doctoral-degree granting universities with an enrollment of 5,000 or more enrolled students in the spring 2007 semester and were voting members of NASPA. Of the 320 individuals invited to participate 154 responded (49.4%). Of the 154, 71 were institutions who had also participated in the 2001 survey. In 2009, Burrell utilized the
Campus Crisis Management instrument but focused solely on Christian-affiliated institutions of higher education. Burrell’s research had a 50% response rate with an N=77 (Burrell, 2009). As Zdziarski and Catullo both looked at medium to large institutions, Covington’s (2013) research filled in the gap in the literature pertaining to small institutions with 5,000 of less students. Covington (2013) gathered data twice in the administration of this study, 125 responses were gathered in 2010 and then due to a delay another 160 new responses were collected in 2013. Grimsley (2015) utilized a modified version of the Campus Crisis Management survey instrument and assessed the outlook on preparedness from the lens of students at the University of Tennessee. His study also aimed to learn about emergency notification system and communication strategy effectiveness (Grimsley, 2015).

**Evolution of Factors Related to Preparedness**

In 2001, the types of crises that institutions reported being most prepared for where fire, student death, sexual assault, suicide, and campus disturbance or demonstration. This changed some in 2007, as Catullo’s study reported that student death, fire, and suicide were still the most commonly prepared for crises, but that two new crises moved into the top five were infectious disease and evacuation of buildings. For Christian-affiliated institutions this altered some with missing person and death of a faculty or staff being in their top five types of crisis most prepared for along with infectious disease, fire, and student death. Whereas, Covington (2013) reported small institutions being most prepared for severe weather, sexual assault, student death, evacuation of buildings, fire, suicide, and infectious disease. In the fall of 2004, a survey was conducted with university provosts, Mitroff, Diamond, and Alpaslan (2006) found
that institutions were most prepared for the types of crisis that they had already experienced. The authors denote that a proactive organization prepares for at least one crisis in each major crisis category which creates a comprehensive crisis portfolio, but what their data showed was that most institutions did not have a comprehensive crisis portfolio. Covington (2013) reiterated this as it was discussed that not all small institutions had prepared for every type of crisis but had for at least one type in each category.

When phases of crisis addressed with contingency plans were addressed, Zdziarski (2001) found more than half the institutions he assessed reported having a contingency plan for each type of crisis. He learned that they least prepared phase overall was the pre-crisis phase leading him to claim that institutions were more reactive in nature to responding to crisis. This was a trend that continued throughout each of the subsequent studies (Burrell, 2009; Catullo, 2008; Covington, 2013). In the later studies, starting in 2007, an increase was preparation for the pre crisis phase was noted yet it was consistently the least prepared for phase of crisis. This led Zdziaski (2001) to claim that institutions were more reactive in their general manner to crisis response and this can still be found true in later studies. In effort to assess proactivity, Mitroff, Diamon, and Alpaslan (2006) assessed the sum of crisis prepared for minus sum crisis experienced. The higher they score they more proactive the crisis management team, and lower score was considered reactive. Data also showed that they more proactive crisis management teams met more frequent and whether a crisis had occurred or not.

Each study produced a glimpse of the state of crisis management and perceived preparedness for their specific population. Zdziarski’s (2001) study took place in the
summer of 2001, right before the terror attacks of September 11, 2001. Mitroff, Diamond, and Alpaslan (2006) study occurred in 2006 and then Catullo’s (2008) study was administered directly before the mass shooting at Virginia Tech in April of 2007. Therefore, the perceived preparedness assessed in their studies could have different results if the study was conducted six months to a year after each of the tragedies. Catullo (2008) noted that increases in types of crises addressed and those crises with greater reported contingency plans were most likely related to the awareness of crisis response after the terror attack of September 11, 2001, lessons learned from Tulane University after Hurricane Katrina. One study that chose to base their research on the phenomenon of “ripple effect of the Virginia Tech tragedy” to changes on crisis management policy and procedures surrounding campus security was Bosselait (2010). Bosselait (2010) conducted a qualitative research study that utilized a multiple-case study design examining three large public institutions through interviews of various internal stakeholders.

Over the years, changes in crisis management can also be seen in the involvement of internal and external stakeholders. In 2001, the most involved stakeholders were “university police, university relations, vice president for student affairs, residence life and student counseling were the most involved” (Zdziarski, 2001, p. 104). The most involved external stakeholders were “local based police, fire department, hospitals, emergency responders, and campus ministers” (Zdziarski, 2001, p.104). Internal stakeholders in 2007, saw a rise in involvement from the following positions the Vice President for Academic Affairs, Vice President of Administrative Affairs, Environmental Health, Dean of Faculties, Human Resources, Student Health and Employee Assistance.
The external stakeholders saw a trend of state and federal level agencies reported as higher levels of involvement from 2001 that most were represented by local emergency agencies. At Christian-affiliated institutions Burrell (2009) found that the crisis management was coordinated by Vice President of Administration, Vice President for Student Affairs, Chief of University Police, or the President. Covington (2013) found that at small institutions the most involved internal stakeholders were university relations, physical plant, residence life, the president, and university police; most involved external stakeholders were local fire, police, hospital, and emergency management. At larger institutions, it can be noted the involvement from federal agencies involved as an external stakeholder which could be resulting from procedures put in place after September 11, 2001. As changes stakeholders can be seen Bosselait (2010) reported that each of the three campuses she examined utilize the National Incident Management System (NIMS) protocol and are led by a central incident commander during crises. Therefore, this created clear hierarchy and guidelines for the crisis management team and all stakeholders involved in crisis response.

From 2001, the number of institutions assessed reporting a written crisis management plan has gone from a little under 90%, to almost 100% of respondents (Zdziarski, 2001; Catullo, 2008; Burrell, 2009; Covington, 2013). Institutions reported their crisis management plan was approximately 5-10 years old. Crisis management teams were prevalent at most institutions across the research studies, except for Christian-affiliated institutions. Training has become more active moving from mostly training on general crisis management procedures, how to work with law enforcement/emergency personnel, and media relations, to incorporating table-top exercises and simulated drills.
Student Perspective and Notification Preferences

Grimsley (2015) was the only research identified as perceived from the student experience. He invited 2,000 students to participate and garnered a 10.2% response rate. The results can only be generalized for this institution, but the findings desperately bring the student voice into crisis management planning. He found that students perceived the university to be moderately prepared but were unsure if a written crisis management plan existed. Most students reported a negative personal preparedness, and commonly responded that they would not know what to do in the case of an active shooter. Students recognized the most used modes to communicate the crisis management or response plans were mass emails, accessible plan on institution website, new student orientation, and drills. Responses indicated students were happy with the University’s emergency notification system. Students shared that the reason they signed up for the emergency notification system was that thought it was required. They also praised the university as being timely with emergency warnings and number of notifications sent. The study found that students’ preferred methods of emergency notification for an active shooter were ranked as text message alerts, outdoor sirens or broadcast messages; whereas they reported the least effective method would be to simply make a post on the institution’s website.

Impact of Institutional Type on Preparedness

Akers (2007) sought out to examine crisis response policies, strategies, and programs at various types of institutions. This made way for a robust study and institutional types ranged from public/private, two-year/four-year, historically black college or university or a predominately white institution, commuter/residential, liberal
Aker’s (2007) study was a mixed methods approach utilizing quantitative survey methods, qualitative interviews, assessment of crisis plans, and archival data. The survey instrument used was developed by the researcher, *Crisis Response Survey*, and garnered 51 hard copy completed surveys, along with 51 qualitative interviews.

Akers’ dissertation research learned that institutional type, geographic location, and size make an impact on an institution’s crisis management plans and response. In the assessment of what constitutes a crisis it was noted that smaller institutions interpret a suicide as a campus crisis, as with the smaller network of individuals it effects campus wide. Whereas, at a larger institution this would be classified as a student crisis. It was also discussed how most institutions reported having a student affairs crisis management plan, though Akers (2007) recommended that failing to recognize how it fits within the overall campus crisis management plan could lead to confusion and ineffective response.

As institutions discussed with Akers (2007) how they prepare for crisis response many mentioned practice drills and table-top exercises, but also admitted the need for improvement with their crisis response training. A theme that directly relates to this was the decentralized training that varies by functional areas on campus. As several interviewees mentioning that campus-wide training varies by departments. Akers (2007) reported that institutions further prepare for crisis by consulting external local, state, and federal emergency response agencies about their crisis management plans. As for working with stakeholders an importance was place on clear communications and strong relationships. Akers (2007) inquired about whose needs are being met in times of crisis.
and how are those needs addressed. All constituents need to be notified of campus crisis, as well as base level needs and psychological needs of the students and staff must be addressed in crisis response planning. To make sure crisis management plans are effective they must be evaluated and improved, institutions noted the importance of debriefing sessions, assessment of constituents, and measuring protocols against benchmarks and best practices.

Akers (2007) discovered that institutional types influence the institution’s crisis response efforts. Even though public institutions are generally larger and have more government funded resources, private institutions had less external influence on their crisis response efforts. As for residential or commuter campuses, they logistically pose differing increased crisis risks or response measures (Akers, 2007). For example, commuter campuses with most students residing off campus may experience a greater challenging in pushing emergency notifications, reaching a student’s emergency contact if the student does not reside with their legal guardians, or potential involvement with local emergency responders if the situation permits. Then with residential campuses a critical mass of students that are in close physical proximity at all times could lead to more crisis issues with students, though in turn provide greater opportunities for preparedness trainings, staff observation of student behaviors, and ease emergency notifications. Akers (2007) research found that non-liberal arts schools denoted as “Research 1 Institutions” could also be targets for potential attacks with such high stakes research involving nuclear materials or biohazards” (p. 150). It was also noted that institutions with affiliated hospitals have increased traffic and unassociated individuals on campus therefore resulting in increased security issues. He determined that being either a
historically black college or university or a predominately white institution did not affect crisis management and response.

Lastly, Akers (2007) claimed that institutional size based on student enrollment and an institution’s geographic location did affect crisis response. Larger institutions may have more resources in terms of staffing and funding, but with increased number of students come increased number of responsibilities. Therefore, it may be hard to provide the expected level of care and response to a large university community. Whereas, smaller institutions crisis response tasks are more simplified due to less constituents to consider and mobilize, and a greater potential for staff to know each other across campus leading to stronger stakeholder relationships. Large institutions have more stakeholders and without clarified roles there could be confusion or overlapping crisis response plans across the institution. Akers (2007) clarified that all sizes of institutions have positive and negative aspects relating to crisis preparedness, and that it is important in recognizing this as part crisis management planning. Findings demonstrated that geographic location of the institution also influenced crisis response. This was most notable with respect to natural crisis and geographic locations being more prepared for the type of natural crisis most native to that area. For instance, coastal areas were most prepared for hurricanes, whereas Midwest institutions prepared for floods and tornados. Proximity to important landmarks or buildings, as well as being an urban campus both influenced crisis preparation policy and procedures.
Critiques of Existing Literature

Size Matters

Past researchers, such as Catullo (2008) and Covington (2013), took institutional size of enrollment into consideration but only made general inferences about size. Only Dziarski (2001), along with Rasmussen and Johnson (2008), looked directly at the impact institutional size on perceived preparedness or other components of a crisis management system. Dziarski (2001) found that large institutions with 30,000 or more students perceived themselves to more prepared, but that institutions with 10,000 – 20,000 students enrolled rated themselves as more prepared with the indicators of preparedness. Whereas Rasmussen and Johnson (2008) found that mid-size institutions with 5,000 – 9,999 students enrolled reported that they conducted safety reviews more frequently than other large sized institutions. They also reported that large institutions with 10,000 or more students had reported greater engagement in at least one staged drill over other sizes of institutions.

Akers (2007) discussed size of institution based off enrollment at length. There are positive and negative aspects to both small and large institutions regarding crisis management and response. His research shared that for smaller colleges, with 5,000 students or less, have a closer-knit community of professionals and stakeholders that can come together or mobilize with greater ease in a crisis (Akers, 2007). Large sized institutions may have greater resources to protect its students when compared to smaller universities. Then conversely, larger universities may be too decentralized, rendering crisis management not as effective. He noted the importance of being aware of these challenges, and addressing them in the crisis management plan.
The presented studies do not discuss how institutional size relates to the general manner of crisis response or its effect on crisis management training. If a size category of an institution is discovered to perceive themselves in a more positive outlook towards crisis management and team training it would next need to be explored further as to what are those contributing factors outside of the general indicators of preparedness listed in various guidelines.

**Emergency Management Trends on Campus**

Bosselait (2010) found that the institutions adopted the use of the Incident Command System, which is a part of the National Incident Management System. An element that is missing from crisis management and preparedness research in the higher education setting is the inclusion of emergency management professionals, other than the chief of university police, as potential crisis leaders (Zdziarksi, 2001; Catullo, 2008; Covington, 2013). In the discussion of the rise of the emergency management field, Phillips (2003) noted that emergency management positions were established in various industries. In 2014, the Bureau of Labor Statistics’ *Occupational Outlook Handbook* there were approximately 10,500 emergency management director positions in the United States. Altizer’s (2017) article on *Campus Safety Magazine*’s website centered around the skills that it takes to be a director of emergency management at a university. It is imperative to discover how many institutions have this position on campus and further learn what their role is in crisis leadership and if it affects perceived preparedness to respond to crisis.
**Frequency Matters**

Zdziarski (2001), Catullo (2008), Covington (2013) detail the most frequently reported forms of communications used to disseminate the crisis management plan and training topics covered with crisis management teams. Information was not captured or reported on average frequencies of the number of communication modes each institution utilized or training topics they covered. Grimsley’s (2015) research on *urgency versus redundancy* highlighted an article by Stephens, Barrett, and Mahometa (2010) that examined optimal communication frequencies as related to emergency notifications. Stephens, Barrett, and Mahometa (2010) found that the “magic number” of three emergency notifications was sufficient for users to be considered urgent rather than just informative. Their research also discussed the concept of *overload of messaging and information* as it pertains to emergency situations, stating that “when people are overwhelmed, they change their priorities by tuning in or ignoring the wrong types of information and suffer in their decision-making ability” (p. 234). Therefore, if frequencies were captured for the number of delivery modes used to communicate the crisis management plan along with the number of training topics covered, a better standard related to frequency could be established for crisis management protocol to avoid *overload of messaging and information*.

**Theory**

This chapter has provided a context of crisis and crisis management, an overview of crisis management systems, as well as a view and critique of various prior studies crisis management and preparedness in higher education. Though for a holistic perspective of crisis management, a theoretical analysis is necessary. A theoretical
approach in the explanation of crisis management were based off theories also utilized within the study of conflict resolution, systems theory and Maslow’s hierarchy of needs (von Bertalanffy, 1973; Maslow, 1987). These two theories were chosen as they represented the overall structure of crisis management systems, phases of crisis, and the needs and expectations associated with the responsibility of crisis management.

**Systems Theory**

Von Bertalanffy, who was a biologist and one of the founders of systems theory, likened systems to that of an “organisms as a whole or system” (von Bertalanffy, 1973, p. 37). In his works, von Bertalanffy further discussed systems as being open or closed. *Closed systems* do not allow for outside interaction or involvement, where *open systems* have an exchange with their environment. Constantino and Merchant (1996) stated that organizations are generally viewed as *open systems*, and that *open systems thinking* pushes the whole and the interaction of the parts within a system to be open and receptive to external changes. This is demonstrated in *sociocultural systems* described by von Bertalanffy as being open to receiving feedback from the environment and utilizing it to grow or evolve toward the pursuit of the system’s goals (1973). Prince (1920) who is a pioneer in disaster studies, noted in his social change theory noted that “catastrophe always means social change” (p. 21). Change may be positive or negative, but it is inevitable. This is validated as Constantino and Merchant (1996) denote the same sentiment about subsystems receptiveness to being examined and receiving feedback to improve their role within the whole system (Constantino & Merchant, 1996).

Costantino and Merchant (1996) examined conflict management as a system. They encouraged organizations to “recognize and identify conflict, learn how it operates,
and actively involve management and stakeholders in designing and implementing systematic procedures that decrease dissonance and dissatisfaction and enhance achievement in the organization’s goals” (p. 32).

The characteristics of their conflict management system have six components: *boundaries, purpose, inputs, transformation, outputs, and feedback*. *Boundaries* are distinct limits that separate systems. *Purpose* refers to the goal of the organization. *Inputs* are the various resources of time, funding, people, plans, training in preparation and the fulfillment of the systems purpose. *Transformation* refers to resources that change or transform due to the people or technology of the system. *Outputs* are what the system transfers back to the environment. *Feedback* is the final characteristic and is a reflective step to determine if the systems purpose has been met.

A crisis management system or plan is a sum of parts that create a dynamic whole or system to mitigate crisis and respond effectively. To view a crisis management plan as an open system, Constantino and Merchant’s (1996) six characteristics of a conflict management system will be used to demonstrate. *Boundaries* within a crisis management system at an institution of higher education describe various elements from the physical borders of campus and locations of buildings, to the separation of the whole into departments, committees, classes, and types of campus community members, to the hierarchical structures of administration and the crisis response team. The *purpose* is related back to the mission of the institution and more specifically the overall goals of safety and continuity of campus operations for the crisis management team. *Inputs* relates to the pre crisis phase of gathering a crisis management team, performing a crisis audit to assess potentials risks and their impact, and the writing a crisis management plan.
Transformation can be the active component of crisis mitigation, training for effective response, recovery from crisis, and moving forward with adopted changes from previous crisis experiences. Therefore, in line with either the pre crisis or post crisis phases. Outputs is aligned with the crisis phase where the action of crisis response takes place according to the inputs put into place. The feedback characteristics describes the learning phase of crisis with opportunity for debriefing, evaluation, and assessment of actions taken during past crises to result in improved response measures for the future preparedness and response.

Maslow’s Hierarchy of Needs

In 1943, Maslow had a desire to learn what motivates people’s behaviors (Maslow, 1987). He hypothesized that some needs have higher priority of others, and that need to be attained before other needs are possible. The needs are commonly presented a pyramid graphic to further establish the idea of base needs to build upon one another. The five levels are physiological needs, safety needs, belongingness and love needs, esteem needs, and self-actualization. These five levels are broken into two further subsets. The first subset includes basic needs which contain the two base level needs of physiological and safety, next the psychological needs which are the love and belongingness with esteem, and third self-fulfillment needs of self-actualization. The next subsets of needs is D-needs and B-needs (McLoed, 2016). The four base needs of physiological, safety, love and belongingness, and self-esteem, and they are referred to as D-needs as they motivate behavior when they are deficient. Whereas, self-actualization is deemed a B-need as it implies growth or being. Maslow’s theory proclaimed that life’s
disruptions or failure to meet basic needs prevents people from reaching self-
actualization (Maslow, 1987).

Below each of the five levels of needs are described in greater detail to explain
their makeup which ultimately drive motivations. Physiological needs are base level one
and include food, shelter, air, and water (Maslow, 1987). True elements necessary to
physically live. Safety is level two base need that refers to security, protection, law and
order, as well as financial security. The third level of needs love and belongingness
describe the need for interconnectedness, affection, love, acceptance, friendships, and
relationships. Whereas the third level describes a connection to others, the four level of
esteem needs reflects inward to internal needs. Esteem is the “need or desire for self-
respect, or self-esteem, or for the esteem of others” (Maslow, 1987, p.45). Last, the fifth
level or self-actualization is the need to fulfill our best self. Later in the life of Maslow’s
theory, he added a three additional and not as well know levels to the hierarchy design.
After the fourth level need of esteem, he added in a new fifth level of cognitive needs, a
sixth level of aesthetic needs, moved self-actualization to become the seventh need, and
added a final eighth level of transcendence (McLoed, 2016). Cognitive needs are noted
as knowledge, curiosity, exploration and understanding. Aesthetic needs are an
appreciation and search for beauty, and transcendence needs helping others achieve self-
actualization.

Maslow’s (1987) hierarchy of needs theory relates to crisis management in
postsecondary institutions in a several ways. First, it provides an outline of shared needs
in line with philosophy of care for both students and university faculty/staff. Students,
who pays tuition to attend an institution, have base level expectations for their campus to
have safe buildings and residence halls that are properly maintained, along with availability of food services. Their next level of needs and expectations is access to financial advising, and student loans if necessary, to ensure the finances to attend have been mutually agreed and contracted. Students also expect to attain the third level of needs and expectations which are love and belongingness. These can be attained through social interactions opportunities inside and outside the classroom, along with university intentional communications and services to further support student success, a sense of belongingness, and retention. The expectation for personal growth can be found in the fourth level of self-esteem which comes through supported student development from university administrators and faculty. Lastly, is the expectation that the institution supports students towards graduation and becoming employed. If the needs were viewed from other various perspectives, such as an administrator, community visitor, alumni, or family member, there is still an expectation and base need for the institution to meet safety and security needs, as they are shared human needs (Katz, Lawyer, & Sweedler, 2012). Therefore, the importance of a well-written crisis management plan to that is practiced and actively worked towards improvement is critical in ensuring the institution is meeting base level needs of its students and staff.

**Summary**

The literature provided a based level of understanding for what a crisis is in various settings of business and education. An historical context of crisis or emergency management was presented from a national landscape and then a postsecondary education setting. The national perspective discussed the history for disaster relief and governmental involvement. Which led to the creation of dedicated government agencies
who are charged with the oversight of national safety and emergency management, such as FEMA and the Department of Homeland Security (Anna Maria, n.d.). The evolution of the field of emergency management was touched upon. Then from the postsecondary education perspective, the social contract of higher education professionals care of students and autonomy of institutions of higher education were discussed, which led to the movement of governmental influence and oversight of universities and colleges. Major crises in higher education were outlined along with the corresponding legislation that impacted future crisis management response and reporting. Next, effective crisis management systems were presented in detail. Followed up by an overview of significant crisis management and preparedness studies since the turn of the 21st century. A critique of the literature further clarified the formulation of the study’s research questions and goals. Lastly, crisis management and preparedness was then discussed through a theoretical perspective of systems design theory (von Bertalanffy, 1973) and Maslow’s (1987) hierarchy of needs.
Chapter 3: Methodology

This quantitative research study aimed to gain a better understanding of the current state of crisis management, institutional preparedness to respond to crisis, and crisis response at higher education institutions as perceived by Chief Student Affairs Officers (CSAOs). The participants were recruited from domestic, private or public, four-year institutions with 5,000 or more students enrolled in the spring of 2016. This study looked again at the four indicators of preparedness as previously studied: types of crisis prepared for, the phases of crisis prepared for, systems in place to respond to crisis, and the stakeholders involved in preparation and response (Mitroff, Pearson & Harrington, 1996). To further expand upon previous studies, the perceived general manner of response and the existence of a Director of Emergency Management were assessed. The findings were used to discern whether correlations can be drawn between institutional characteristics or components of crisis management system to perceived general manner of crisis response and preparedness to respond to crisis.

The foundation of the research was built upon the instrument, Campus Crisis Management, developed by Eugene Zdziarski (2001) that took place before the terror attacks on September 11, 2001. A repeat of this study took place in 2007, again coinciding with a major crisis incident that forever changed the perception of crisis management and preparedness at institutions of higher education (Catullo, 2008). Since 2008, preparedness has been assessed from the viewpoint of Christian-affiliated institutions and at institutions with small enrollment (Burrell, 2009; Covington, 2013). This study will survey similar sized institutions to those who participated in the 2001 and 2007 studies (Catullo, 2008; Zdziarski, 2001). Considering many other crises that have
presented themselves since Catullo’s study in 2007, it is imperative to revisit the research and expand upon it.

**Research Design**

This study was first driven by two prior research studies who assessed similar populations that looked at the state of crisis management in higher education and preparedness (Catullo, 2008; Zdziarski, 2001). Both were quantitative studies utilized the same instrument survey instrument. Since the state of crisis management had not been assessed for this population since 2007, this study sought to establish a current state of crisis management ten years later (Catullo, 2008). Therefore, quantitative approach was selected that utilized survey research methods, not only to align findings with the two prior studies from 2001 and 2008, but it allowed findings to be inferred to the general population. Likewise, quantitative approach gave the assessment of perceptions greater validity and allowed for correlations between variables to be determined, which enabled the ability to answer the fundamental research questions of the study.

**Population, Sampling Method, Sample Size**

The National Association of Student Personnel Administrators has been a guiding professional association since 1918 for higher educational administrators and faculty (NASPA, 2015). There are over 15,000 members that represent all 50 states within the United States of America and 25 countries globally (NASPA, 2017). The mission of NASPA is to be the principal source of leadership, scholarship, professional development, and advocacy for student affairs (NASPA, n.d.). The voting authority to lead the direction of the global professional association is placed in the hands of the member institutions’ self-deemed Chief Student Affairs Officer (CSAO). The
administrator within this role could have various titles depending on the institutional type (public or private) or structure (two-year or four-year, for-profit or not-for profit), overseeing student affairs and student services. Whether this administrator is called a Chancellor, Dean, Executive Director, or Vice President for Student Affairs, the position is ultimately responsible for the student experience outside the classroom on a college campus. This is not only why CSAOs at NASPA member institutions were first chosen by Zdziarski (2001) as the individuals to gauge the preparedness of their institution, but it remained the reasoning to continue to study their perceptions about the status crisis management on college campuses.

Invitations were extended to two groups of administrators to encourage participation in the study. The first group was the CSAOs at institutions whom had previously participated either the 2001 (Zdziarski, 2001) or 2007 (Catullo, 2008) studies. A database was created with schools from the previously participating institutions, and a web search was employed to obtain current CSAO names, formal titles, and email addresses. Even though the person in the CSAO role at any of the previously participating institutions had most likely transitioned to a new person within the last 16 years, their institutions’ participation was welcomed. The criteria for invitation for the second group is the CSAO administrator at NASPA member institutions that are four-year, domestic, private or public, with an enrollment of 5,000 students or more in the spring of 2016. A list for this second group of CSAOs was requested from NASPA, and a spreadsheet detailing the name of the administrator and their institution’s name was provided. Then another institutional website search was completed to obtain all email addresses, formal titles, and confirm formal spelling of names from group two.
CSAOs’ email addresses were collected since both the invitation to participate and survey were distributed electronically. Some of the email addresses were the direct address of the individual in the CSAO role, and others were alias emails that are sent to an unknown recipient within the CSAO’s office. Due to the intense load of responsibilities associated with this position, the person receiving the alias email content could be the CSAO or their administrative assistant. It is acknowledged that could affect participation rates differently than the two previously mentioned past surveys in 2001 and 2007 that were sent hardcopy in the postal system (Catullo, 2008; Zdziarski, 2001). Therefore, if an alias email address was provided on the administrators’ departmental webpage the researcher then exhausted other means of searching on the institution’s website to locate the CSAOs direct contact. If it could not be found then the alias email address was confirmed as the electronic contact information for that institution. There were 19 institutions invited to participate with an alias email address.

After the first and second lists were cross-referenced to avoid duplication of any institution. This process resulted in 111 new institutions invited to participate for the first time, 71 institutions who participated in both the 2001 and 2007 study, 58 who participated in the 2007, and 140 who participated from the 2001 study (Catullo, 2008; Zdziarski, 2001). Those 380 institutions were reduced by 16 due to lack of contact information available for invitation to participate, there the total sample size was 363.

Outreach for participation began in the fall of 2016. There were two sets of correspondences created accordingly, one for each group, to garner participation. The content for the first group encouraged continued participation on behalf of their college or university in this important research. The correspondence for the second group only
shared “the why” behind the research and why they were asked to participate. All emails were sent through the mail merge feature via Microsoft Outlook to efficiently send personalized correspondence to each institution’s CSAO with their individual name, position title, institution name, and any of their formal degrees listed per their department’s webpage. Next, a follow-up and final email was sent a week later to any CSAO who had yet to participate to further encourage participation. The survey remained open until November 8, 2016, to allow time for additional submissions. The N for this survey was drawn from those CSAOs within the sample population who chose to participate in the research study. Once the survey closed, Survey Monkey utilized data collected and produced a coded data report to then be uploaded within the statistical package of the social sciences (SPSS) to conduct a statistical analysis.

Instrumentation

The survey instrument utilized in this study was derived from Eugene Zdziarski (2001), who developed this instrument from his extensive review of the literature. Expert panel of crisis management and student affairs professionals reviewed his instrument before it was piloted in ten state universities in Texas. He then moved forward to perform his research with this instrument, and later emerge as an expert in the field of crisis management in higher education. Since his dissertation in 2001, this instrument was again utilized in 2007 looking assessing as similar population, in 2009 assessing Christian-affiliated institutions, in 2013 for research regarding readiness to respond at small institutions based off enrollment, and again in 2015 as it was modified to survey student perceptions of preparedness for an active shooter scenario (Burrell, 2009; Catullo, 2008; Covington, 2013; Grimsley, 2015; Zdziarski, 2001).
Permission was gained to utilize the survey instrument from Eugene Zdziarski, and along with the later subsequent changes. The survey instrument is broken into the following parts:

Part 1 – Twenty-two questions which included demographic questions, then a series of questions to assess institutional preparedness to respond to crises, general manner of response to campus crisis, crisis management systems including coordination responsibility, existence of a crisis management plan, composition and responsibility of a crisis management team, types and adequacy of training, modalities of communicating the crisis management plan to the campus community, communication of the plan, and programs.

Part 2 – Four questions to assess internal and external stakeholders’ level of involvement in crisis management, and then follow-up, open-ended questions to inquire about potential competing needs or interests of stakeholders. There were seven administrator categories of internal stakeholders presented and ten external stakeholder groups.

Part 3 – Five questions to inquire if institutions have contingency plans for each phase of crisis or the existence of a comprehensive plan for various crises scenarios under the four major types of crises natural, facility, criminal, and human. Lastly, to rate institutional preparedness to respond to the four major types of crisis natural, facility, criminal, and human.

Linda Catullo (2008) replicated Zdziarski’s original instrument, but she also added a fourth component, which examined the importance placed on various crisis types.
The fundamentals of the original instrument are present, though changes were made to best fit the focus on this study. For instance, Catullo’s (2008) addition of a fourth part was removed. Four questions were removed from the original instrument due to irrelevance or redundancy. Ten questions were added, five of which were open-ended questions to uncover rich descriptions to supplement the quantitative data. Lastly, there were 12 other changes made to various questions either adding an option to a multiple-choice question, to gain specificity, alter 10 point scales to five point scales, and compressed answer options to aid with potential survey fatigue.

**Survey**

1. What type of institution do you work at? 4 Year Private 4 Year Public  
   **Rationale:** It is important to know what type of institution the participants work at to gain a perspective of population demographics. Possible responses include: 4 Year Private or 4 Year Public.

2. What is the size of your institutional enrollment?  
   **Rationale:** Capturing size of the institution based on student enrollment provides participant demographics, and allows for the discovery of relationships between size of enrollment and other variables. Selections include: 5,000 – 7,999, 8,000 – 10,000, 10,001 – 20,000, 20,001 – 30,000, and 30,000 or more.

3. Which NASPA Region is your institution a member of?  
   **Rationale:** Participants were asked to self-identify which NASPA region their institution was affiliated to provide geographic information about their
institution. Selections were: Region I, Region II, Region III, Region IV-E, Region IV-W, Region V, and Region VI.

4. Name of your institution.  
   
   Rationale: Participants were asked to write in the name of their institution, as opposed to selecting from a drop-down menu which could have resulted in a skewed selection if a participant accidentally selected the name of an institution near the name of their institution resulting in a potential duplication of institutional names. Participants were also informed that their answers to the survey would not be related to their institution within the research.  
   
   Rationale:  

5. On a scale of 1 to 5, where 1 is unprepared and 5 is well-prepared, please indicate how prepared your university is to respond to campus crisis.  
   
   Rationale: One of the key findings from this research study was to ascertain the perceived institution preparedness to respond to crisis. Therefore, answers from this question will be utilized to discover relationships with other variables. Selections include: (1) unprepared, (2) slightly prepared, (3) prepared, (4) moderately prepared, (5) well prepared.  

6. On a scale of 1 to 5, where 1 is unprepared and 5 is well-prepared, please indicate how prepared your student affairs division is to respond to campus crisis.  
   
   Rationale: In opposition to discovering perceived institutional preparedness to respond to crisis, this question was asked to determine if there was any perceived difference in student affairs division preparedness to respond to
crisis. Selections include: (1) unprepared, (2) slightly prepared, (3) prepared, (4) moderately prepared, (5) well prepared.

7. On a scale of 1 to 5, where 1 is reactive and 5 is proactive, please indicate how you perceive your university's general manner of response to crisis.

*Rationale:* Previous research had claimed that institutions did not prepare as well in the pre crisis phase and could therefore be seen as being reactive in their manner to respond to crisis. This question was asked directly to learn the perception of their institution’s general manner of response to crisis. Answers will be analyzed to assess if there is a relationship with institutional size of enrollment. Selections include: (1) reactive, (2) slightly reactive, (3) neither reactive or proactive, (4) slightly proactive, (5) proactive.

8. Describe any organizational factors that you may perceive as variables in your university responding to crisis in a proactive manner?

*Rationale:* This open-ended question was asked as to have participants elaborate on their perception of what makes an organization respond in a proactive manner. The survey provided a definition for proactive as acting before a situation becomes a source of confrontation or crisis.

9. Describe any organizational factors that you may perceive as variables in your university responding to crisis in a reactive manner?

*Rationale:* This open-ended question was asked as to have participants elaborate on their perception of what makes an organization respond in a reactive manner. The survey provided a definition for reactive as reacting to the past rather than anticipating the future.
10. Who coordinates your university's response to campus crisis?

*Rationale*: To determine which administrators serve in the role of crisis leader in the current state of crisis management on campus, participants were asked to select only one type of administrator from the following selection. Selections include: President, Vice President of Academic Affairs, Vice President of Administration/Business Affairs, Chief Student Affairs Officer, Chief/Director of University Police, Director of Public Information/Relations, Director of Emergency Management, Director of Health and Safety, Dean of Students, Director of Student Counseling, Director of Student Health Services, Director of Residence Life, and Director of Student Activities. A new selection of Director of Emergency Management was added to this version of the *Campus Crisis Management* survey (Zdziarski, 2001).

11. Does your university have a written crisis management plan addressing campus crisis?

*Rationale*: To assess the current state of crisis management it is essential to learn which institutions have a written crisis management plan as part of their overall crisis management system. Selections included a simple, yes or no.

12. Does your university have a Director of Emergency Management position?

*Rationale*: As institutions are adopting national emergency management protocol in their formal crisis management plans, this research aimed to learn if this carried over into a formal position emergency management position on campus. Answers from this question would analyzed for a relationship with perceived preparedness. Selections include: yes, no or unsure.
13. How many years has your university crisis management plan been implemented?

*Rationale:* Instead of supplying preset interval of time answers, participants were asked to write in the number of years their institutions’ plans had been in existence. Answers would then be able to demonstrate a spectrum of years.

14. How often is the crisis management plan reviewed?

*Rationale:* Participants were asked this important question to first learn if their institution reviews their crisis management plan, and then if they do how often. Answer selections included: annually, every 2 years, every 3 years, every 4 years, every 5 years, and an optional write in box was provided.

15. A crisis audit refers to the process of assessing the internal and external environment to identify potential crisis, and determine the impact and probability of various crisis occurring. Has a crisis audit been conducted on your campus?

*Rationale:* To learn, not only how often a plan is reviewed, but to learn if a risk assessment is also performed is important to establish if an institution has a well thought out crisis management plan. Participants were asked to select all answers that were applicable to their institution. Selections included: no, annually, when the plan was originally created, when a crisis occurs, and each time the plan is reviewed.

16. How is the crisis management plan communicated to members of the community?
Rationale: It was important to learn how institutions were communicating their crisis management plans to their campus communities. Answers will be compared to past studies to gauge changes over time, and then the number of delivery methods will be calculated to assess if there is a relationship between number of delivery methods and perceived institutional preparedness. Participants were asked to select all answers that were applicable to their institution. Selections included: Not communicated, copy of the plan available upon request, plan accessible on the web, annual notification, new employee orientation, new student orientation, optional crisis management training session, required crisis management training session, drills and exercises, emergency procedures posted in classrooms and offices on campus, and/or promoted through social media. This version of the Campus Crisis Management survey instrument added in new selections of emergency procedures posted in classrooms and offices on campus, and/or promoted through social media.

17. Does your crisis management plan address the mental/emotional health of the following groups below?

Rationale: Addressing mental health in a crisis management plan is fundamental. Answers to this question can be partially compared to past studies for university caregivers who respond to crisis, as two new answer selections, students and staff, were added into this version of the Campus Crisis Management survey. Participants were asked to select yes or no for
each of those three groups (university caregivers who respond to crisis, faculty/staff, and students).

18. Is there an "On-Call" or "Duty" system in place to respond to campus crisis?

*Rationale*: An "On-Call" or "Duty" system have been utilized as avenue to have a designated individual responsible for kick starting emergency response based off the level of crisis. It is important to learn if these systems are still widely used as a part of institutions’ crisis management plans. Participants were asked to select a simple, yes or no.

19. Is there an established crisis management committee or team identified on your campus?

*Rationale*: Crisis management teams are a key factor in successful crisis management systems, therefore this question aimed to learn which institutions employed the use of a crisis management team. Participants were asked to select a simple, yes or no.

20. The crisis management committee or team is responsible for:

*Rationale*: After establishing which institutions have a crisis management team or committee, next was to learn what the team’s responsibilities. Participants could select all answers that apply to their institution. Selections include: planning and updating the university’s comprehensive campus crisis management plan, training members and stakeholders on crisis management plan, and coordinating campus response along with stakeholders.

21. What type of training is provided to crisis management team members or individuals involved in responding to campus crisis?
Rationale: As it has been established that training the members of the crisis management team is important in the quality of crisis response. It was important to learn the various topics that teams are trained on. Answers could also be compared to past studies. This research study moved beyond topics in general and aims to assess a relationship between the number of topics trained and perceived institutional preparedness to respond to crisis. Participants were asked to select all answers that apply to their institution’s crisis management team trainings provided. Selections include: crisis management (campus procedures), table top exercises, crisis management (general), working with law enforcement and emergency professionals, campus violence issues, media relations, suicide intervention, legal issues/risk management, critical incident stress management, response to a civil disturbance, substance abuse, conflict management, grieving process, and orientation to community and county agency assistance. Conflict management was added as a selection to this modified version of the Campus Crisis Management survey (Zdziarski, 2001).

22. On a scale from 1 to 5, where 1 strongly disagree and 5 strongly agree, please rate the following: the crisis management training is adequate in responding to crisis effectively.

Rationale: After assessing the training topics provided to the crisis management teams, participants were asked to rate their perceived adequacy of the trainings. Answers from this question will be assessed for a relationship with size of institutional enrollment, as Akers (2007) denoted that larger institutions have more staff with varying expertise that can be utilized with
crisis management and response. Participants were asked to rank adequacy on a scale of 1 to 5, selections included: (1) strongly disagree, (2) disagree, (3) neither disagree or agree, (4) agree, or (5) strongly agree.

23. Internal Stakeholders - Please indicate the level of involvement of each internal and external stakeholder listed below.

*Rationale:* To gauge the current state of crisis management, this question sought to learn which internal stakeholders are involved and at what level. Participants could select multiple levels of involvement if applicable, across four levels: Level 1 - represented on the crisis management team or committee, Level 2 – impact of crisis on this stakeholder is routinely considered, Level 3 – involved in planning and response as needed, and Level 4 – not significant to crisis. The internal stakeholders that they were asked to assess involved were: President, Executive Level (Vice President Academic Affairs/Vice President of Student Affairs/General Counsel), University Staff Services (Human Resources/Employee Assistance), University-Wide Services (University Police/Physical Plant/Environmental Health), Academic (Dean of Faculty/Faculty), Student Services (Residence Life/Dean of Students/Counseling Services/Student Health Services/International Student Services), Student Involvement (Student Activities, Athletics/Campus Ministers). To aid against potential survey fatigue, seven categories of stakeholders were created for this modified version of the *Campus Crisis Management* survey, as opposed to 24 separate selections on the original survey (Zdziarski, 2001).
24. Are there competing needs and/or interests amongst the internal stakeholders that could cause conflict? If so, please explain.

*Rationale:* As this study has utilized Maslow’s Hierarchy of Needs theory (1970) in the literature review to connect preparedness to respond to crisis through crisis management systems to meeting the needs and expectations of the institutions community members, this question sought to learn if any competing needs disrupt relationships among internal stakeholders. This was an open-ended question for participants.

25. External Stakeholders - Please indicate the level of involvement of each internal and external stakeholder listed below.

*Rationale:* To gauge the current state of crisis management, this question sought to learn which external stakeholders are involved and at what level. Participants could select multiple levels of involvement if applicable, across four levels: Level 1 - represented on the crisis management team or committee, Level 2 – impact of crisis on this stakeholder is routinely considered, Level 3 – involved in planning and response as needed, and Level 4 – not significant to crisis. The internal stakeholders that they were asked to assess involved were: Federal Bureau of Investigations, state and local police/sheriff, local hospital, state and local fire department, local health department, state and local mental health, victims’ assistance program, parents, Red Cross, local community members, alumni association, local emergency management. To aid against potential survey fatigue, selections of external stakeholders were condensed to ten options for this modified version of the *Campus Crisis*
Management survey, as opposed to 22 separate selections on the original survey (Zdziarski, 2001).

26. Are there competing needs and/or interests amongst the external stakeholders that could cause conflict? If so, please explain.

*Rationale:* As question 24 sought to learn if any competing needs disrupt relationships among internal stakeholders, this question sought the same but for external stakeholders. This was an open-ended question for participants.

27. Natural Crises - Please identify for each type of crisis if individual contingency plans exist for each phase of crisis.

*Rationale:* To gain an understanding of the broad profile of crisis preparedness institutions were asked to select if they had a contingency plan for pre crisis, crisis, post crisis, or they could select comprehensive indicated they have prepared for all three phases. The types of natural crisis scenarios that were presented were: tornado, hurricane, flood, severe weather or earthquake.

28. Facility - Please identify for each type of crisis if individual contingency plans exist for each phase of crisis.

*Rationale:* To establish a profile of crisis preparedness institutions were asked to select if they had a contingency plan for pre crisis, crisis, post crisis, or they could select comprehensive indicated they have prepared for all three phases. The types of facility crisis scenarios that were presented were: evacuation of building/campus, fire, chemical leak, loss of utilities, explosion, and corruption/loss of data.
29. Criminal - Please identify for each type of crisis if individual contingency plans exist for each phase of crisis.

*Rationale:* This question enable a profile of crisis preparedness for institutions to be established. Participants were asked to select if they had a contingency plan for pre crisis, crisis, post crisis, or they could select comprehensive indicated they have prepared for all three phases. The types of criminal crisis scenarios that were presented were: hate crime, terroristic threat, assault, sexual assault/rape, sexual harassment, homicide, burglary, vandalism, domestic abuse, or kidnapping.

30. Human- Please identify for each type of crisis if individual contingency plans exist for each phase of crisis.

*Rationale:* A profile of crisis preparedness for institutions can be determined by assessing contingency plans addressed for various phases of crisis. Participants were asked to select if they had a contingency plan for pre crisis, crisis, post crisis, or they could select comprehensive indicated they have prepared for all three phases. The types of human crisis scenarios that were presented were: student injury/death, infectious disease, suicide, disturb/demonstration, alcohol/drug, emotional/psychological, faculty/staff death, racial incident, missing person, and faculty/staff injury.

31. Regarding a contingency plan, please rate if your institution is prepared to respond to the following crisis - natural, facility, criminal, & human.

*Rationale:* After learning which contingency plans were addressed by crisis, this last question of the survey aimed to learn perceived preparedness to
respond to the four major categories of crisis. Participants were asked to rank if they agreed their institutions were prepared or not with the selections of: (1) strongly disagree, (2) disagree, (3) neither disagree or agree, (4) agree, or (5) strongly agree.

**Research Questions and Hypotheses**

This study sought to answer the following research questions as it examined statistical significance of variables guided by the fundamental hypothesis listed below.

1. Is there a significant correlation between institutional size of enrollment and the perception of institutional preparedness to respond to crisis?

   **Null Hypothesis**
   
   \[ H_0 \]: There is no significant correlation between institutional size and their perception of preparedness to respond to crisis.

   **Alternative Hypothesis**
   
   \[ H_1 \]: There is a significant correlation between institutional size and their perception of preparedness to respond to crisis.

2. Is there a significant correlation between institutional size of enrollment and the perceived general manner of response to campus crisis?

   **Null Hypothesis**
   
   \[ H_0 \]: There is no significant correlation between institutional size of and their perception of general manner of response to crisis.

   **Alternative Hypothesis**
   
   \[ H_1 \]: There is a significant correlation between institutional size of and their perception of general manner of response to crisis.
3. Is there a significant correlation between the number of topics addressed in the crisis management training provided to the crisis management team with perceptions of institutional preparedness to response to crisis?

*Null Hypothesis*

$H_0^3$: There is no significant correlation between the number of crisis management training topics addressed with perceptions of institutional preparedness to response to crisis.

*Alternative Hypothesis*

$H_1^3$: There is a significant correlation between the number of crisis management training topics addressed with perceptions of institutional preparedness to response to crisis.

4. Is there a significant correlation between total delivery methods utilized to communicate the crisis management plan to the campus community and the perception of institution preparedness to respond to crisis?

*Null Hypothesis*

$H_0^4$: There is no significant correlation between total delivery methods utilized to communicate the crisis management plan to the campus community and the perception of institution preparedness to respond to crisis.

*Alternative Hypothesis*

$H_1^4$: There is a significant correlation between total delivery methods utilized to communicate the crisis management plan to the campus community and the perception of institution preparedness to respond to crisis.
5. Does the existence of a Director of Emergency Management position have a significant impact on perception of institutional preparedness to respond to crisis?

*Null Hypothesis*

\[ H_{0} : \text{There is no significant impact from the existence of a Director of Emergency Management on perceptions of institutional preparedness to respond to crisis.} \]

*Alternative Hypothesis*

\[ H_{1} : \text{There is a significant impact from the existence of a Director of Emergency Management on perceptions of institutional preparedness to respond to crisis.} \]

**Variables**

This study contains ordinal, nominal, and interval-ratio variables. The ordinal variables are preparedness to respond to crisis (unprepared, slightly prepared, prepared, moderately prepared, well prepared), general manner of response (reactive, slightly reactive, neither reactive or proactive, slightly proactive, proactive), adequacy of crisis management training (strongly disagree, disagree, neither disagree or agree, agree, strongly agree), preparedness to respond to types of crises (unprepared, slightly prepared, prepared, moderately prepared, well prepared), stakeholder involvement (one, two, three, and four). The interval-ratio variables were time a crisis management plan is reviewed is an interval-ratio variable (annually, two years, three years, and four years), institutional size of enrollment (5,000 – 7,999, 8,000 – 10,000, 10,001 – 20,000, 20,001 – 30,000, and 30,000 or more), number of modes utilized to communicate the crisis management plan (one, two, three, four, five, six, seven, eight, nine or ten), and number of different types
of crisis management trainings offered to the crisis management team (one, two, three, four, five, six, seven, eight, nine, ten, eleven, twelve, thirteen, or fourteen).

The nominal variables are institutional control/type (public or private), affiliated NASPA region (I, II III, IV-E, IV-W.V, and VI), type of plan (university or student affairs division), existence of a written crisis management plan (yes or no), existence of a Director of Emergency Management position (yes or no), occurrence of crisis audit (no, annually, when the plan was originally created, when a crisis occurs, each time the plan is reviewed), persons’ mental health address in crisis management plan (university caregivers who respond to crisis, faculty/staff, and students), on-call/duty system in place (yes or no), responsibility of crisis management team (planning and updating the university’s comprehensive campus crisis management plan, training members and stakeholders on crisis management plan, coordinating campus response along with stakeholders). Other nominal variables, such as types of crisis, stakeholders, modes of communication, crisis management training topics, and the position that coordinates the crisis management response on campus are listed below.

*Types of crises* - Natural (tornado, hurricane, flood, severe weather or earthquake), facility (evacuation of building/campus, fire, chemical leak, loss of utilities, explosion, and corruption/loss of data), human (student injury/death, infectious disease, suicide, disturb/demonstration, alcohol/drug, emotional/psychological, faculty/staff death, racial incident, missing person, and faculty/staff injury), and criminal (hate crime, terroristic threat, assault, sexual assault/rape, sexual harassment, homicide, burglary, vandalism, domestic abuse,
or kidnapping); along with the types of stakeholders involved internally and externally (Zdziarski, 2001).

Internal stakeholders - President, Executive Level (Vice President Academic Affairs/Vice President of Student Affairs/General Counsel), University Staff Services (Human Resources/Employee Assistance), University-Wide Services (University Police/Physical Plant/Environmental Health), Academic (Dean of Faculty/Faculty), Student Services (Residence Life/Dean of Students/Counseling Services/Student Health Services/ International Student Services), Student Involvement (Student Activities, Athletics/Campus Ministers).

External stakeholder - Federal Bureau of Investigations, state and local police/sheriff, local hospital, state and local fire department, local health department, state and local mental health, victims’ assistance program, parents, Red Cross, local community members, alumni association, local emergency management.

Modes of communication - Not communicated, copy of the plan available upon request, plan accessible on the web, annual notification, new employee orientation, new student orientation, optional crisis management training session, required crisis management training session, drills and exercises, emergency procedures posted in classrooms and offices on campus, and/or promoted through social media.

Crisis management training topics - Crisis management (campus procedures), table top exercises, crisis management (general), working with law enforcement and emergency professionals, and campus violence issues. Other crisis response
training provided was on media relations, suicide intervention, legal issues/risk management, Critical Incident Stress Management/Debriefings, response to a civil disturbance, substance abuse, conflict management, grieving process, and orientation to community and county agency assistance.

*Coordination of crisis management response* - President, VP Academic Affairs, VP Administration/Business Affairs, Chief Student Affairs Officer, Chief/Director of University Police, Director of Public Information/Relations, Director of Emergency Management, Director of Health and Safety, Dean of Students, Director of Student Counseling, Director of Student Health Services, Director of Residence Life, and Director of Student Activities (Zdziarski, 2001).

**Statistical Methods**

Data from the survey results was uploaded into the statistical package of the social sciences (SPSS) to conduct a statistical analysis. Cross-tabulations were created to gain a descriptive analysis of how two variables potentially relate, and to further derive graphs to visually demonstrate the relationship. Each part of the study’s instrument generated data that was statistically analyzed depending on the variables presented the formulation of the research questions to ascertain if there any statistical significance found.

The Spearman’s rho was utilized to discover significant relationships between each of the following variables: institutional size of enrollment and the perception of institution preparedness to respond to crisis, institutional size of enrollment and the perceived general manner of response to campus crisis, the number of topics addressed in the crisis management training provided to the crisis management team with perceptions
of institutional preparedness to response to crisis, and the total delivery methods utilized to communicate the crisis management plan to the campus community and the perception of institution preparedness to respond to crisis. The Spearman’s rho correlation coefficient is a robust analysis of associations and establishes a positive or negative connection between variables. The variables used with this analysis were ordinal and interval-ratio. Lastly, to assess if the existence of a Director of Emergency Management position had a significant impact on perception of institutional preparedness to respond to crisis a two-sample t-test was used. All tests will be analyzed with an alpha level of 0.05 and 95% C.I.

**Ethics**

The electronic correspondence, sent to the qualified institutional Chief Student Affairs Officers to encourage participation in the survey, was only sent to an official university issued email address that were publically available through their individual respective university websites. The survey cover letter/consent form notified participants that participation was not completely anonymous. Personal identity and data collected are to be anonymous, while the name of their institution and an analysis of the data will be used in the researcher’s doctoral dissertation. The participants were also notified in the cover letter that there was no compensation given for survey completion.

**Summary**

The methods chapter provided an outline of the quantitative research study design. First, the population was defined by chief student affairs officers whom previously participated in either the 2001 or 2007 studies or were from NASPA institutional members that were four year public or private, domestically located with a
student enrollment of 5,000 students or more in the spring of 2016. The sampling method was discussed how institutions were identified by who had previously participated in this survey in 2001 or 2007, and how an institutional member list that met population criteria was obtained from NASPA. That process resulted in a sample size of 363 institutions. Next, an overview of the survey instrument and rationale for each question was presented. The variables were listed depending on the type whether time-interval ratio, ordinal, nominal in nature. Appropriate statistical methods were discussed, along with ethical considerations. This quantitative research design aimed to meet the research goals of the study. In the next two chapters, the data and research analysis findings are presented and discussed.
Chapter 4: Results

The goals of this study were to report the status of crisis management, preparedness to respond to crisis, and crisis response in the University setting as perceived by Chief Student Affairs Officers. Of the potential 363 Chief Student Affairs Officers invited to participate, 110 completed the survey for a response rate of 30.3%. Completed results were analyzed using the statistical package of the social sciences (SPSS). Data is presented in this chapter through descriptive and inferential statistics. Descriptive statistics provide an overview of answers and cross tabulations visually represented in tables and graphs. Inferential statistics were used to assess impact and relationships between variables associated with the fundamental research questions of this study. Graphs and tables help to provide visual understanding of the inferential findings.

Descriptive Statistics

Institutional Control

Institutional control can be private or public depending on the history of the institution, its governance, and source of funding. As shown in Table 1, most of the participants of this study were from public institutions (84.5%), though several private institutions also participated (15.5%). Out of the sample size of 110 participants, 93 (84.5%) came from public institutions and 17 (15.5%) came from private institutions. This is representative of the general college institutions.
Table 1

_Institutional Control_

<table>
<thead>
<tr>
<th>Type of Institution</th>
<th>Frequency</th>
<th>Valid Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>17</td>
<td>15.5%</td>
</tr>
<tr>
<td>Public</td>
<td>93</td>
<td>84.5%</td>
</tr>
<tr>
<td>Total</td>
<td>110</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

_Size of Enrollment_

The funding sources, as discussed above, directly affects cost of tuition for institutions which has a direct correlation to affordability and the number of students able to attend each institution. Therefore, public colleges and universities are generally larger in size and have over 5,000 degree-seeking students enrolled. Participants were asked to identify the size of their undergraduate institution (see Table 2). Enrollment between 5,000-7,000 constituted 15.5% of the sample, enrollment of 8,000-10,000 constituted 14.0% of the sample, enrollment of 10,001-20,000 constituted 28.2% of the sample, enrollment of 20,001-30,000 constituted 22.7% of the sample, and enrollment of 30,000 and more constituted 19.1% of the sample.

Results indicated that both medium (3,000 – 9,999) and large sized (10,000 and more) institutions were well represented within this survey. In this study, institutions with more than either 10,000 students enrolled participated at a rate of 70%.
### Table 2

**Institutional Size of Enrollment**

<table>
<thead>
<tr>
<th>Size of Enrollment</th>
<th>Frequency</th>
<th>Valid Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>5,000 – 7,999</td>
<td>17</td>
<td>15.5%</td>
</tr>
<tr>
<td>8,000 – 10,000</td>
<td>16</td>
<td>14.5%</td>
</tr>
<tr>
<td>10,001 – 20,000</td>
<td>31</td>
<td>28.2%</td>
</tr>
<tr>
<td>20,001 – 30,000</td>
<td>25</td>
<td>22.7%</td>
</tr>
<tr>
<td>More than 30,000</td>
<td>21</td>
<td>19.1%</td>
</tr>
<tr>
<td>Total</td>
<td>110</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

### Geographic Location

NASPA is an international organization with over 2,100 institutional members and 15,000 individual members (NASPA website). NASPA has eight distinguished regions across 50 states and over 20 countries internationally grouped by geographic areas. Regions I through VI represent the domestic United States and will be the only regions considered for participation in this study. Region I represents Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont. Region II domestically represents New York, Pennsylvania, West Virginia, Delaware, New Jersey, Washington D.C., and Maryland. Region III domestically represents the southern states with Alabama, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Texas, and Virginia. Region IV is broken into an east and west division. Region IV East is compiled of Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin. Whereas, Region IV West has New Mexico, Colorado, Wyoming, North Dakota, South Dakota, Nebraska, Kansas, Oklahoma, Missouri, and Arkansas. The northwest area of the United States is represented in Region V with Utah, Alaska, Idaho, Oregon, Nevada, Montana, and Washington. Lastly, Region VI contains institutions from California, Arizona, and Hawaii. To gain perspective of geographic distribution of
participation, institutions were asked to identify the NASPA region affiliation based upon their institution’s location.

Region II (20.18%) and Region III (33.03%) had the greatest level of participation as shown in Table 3. Region IV East (15.6%) and Region IV West (10.1%) had the next largest participation. Followed up by Region 1 (8.3%), Region VI (7.3%), and lastly Region V (5.5%). There was participation from 37 states and Washington, D.C..

Table 3

<table>
<thead>
<tr>
<th>NASPA Region Affiliation</th>
<th>Frequency</th>
<th>Valid Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Region I</td>
<td>9</td>
<td>8.3%</td>
</tr>
<tr>
<td>Region II</td>
<td>22</td>
<td>20.2%</td>
</tr>
<tr>
<td>Region III</td>
<td>36</td>
<td>33.0%</td>
</tr>
<tr>
<td>Region IV E</td>
<td>17</td>
<td>15.6%</td>
</tr>
<tr>
<td>Region IV W</td>
<td>11</td>
<td>10.1%</td>
</tr>
<tr>
<td>Region V</td>
<td>6</td>
<td>5.5%</td>
</tr>
<tr>
<td>Region VI</td>
<td>8</td>
<td>7.3%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>109</strong></td>
<td><strong>100.0%</strong></td>
</tr>
</tbody>
</table>

**Crisis Management Plan**

One of the key elements of this survey was to assess institutions crisis management plans, therefore it was key to not only ask who had a written plan but also how long it had been in place. Of the 110 participants 93.6% reported that their institution had a written crisis management plan. Of those institutions, 30.0% have had a written crisis management plans in existence for approximately ten years. One university even reported that their plan was over 30 years old. The next most popular response was twenty years (11.4%). Directly after that five and 15 years were both reported at rate of 10% each, then seven years (5.7%) and three years (4.3%). At a rate of 2.9% two universities both reported that their plans had existed either two years, four years, six
years, nine years, 11 years, 12 years, and 16 years. Lastly, the years zero, one, 13, 24, 27, and 30 were each once by individual colleges. The number of years $M = 10.89$, $SD = 6.22$.

Table 4

*Years University Crisis Management Plan Implemented*

<table>
<thead>
<tr>
<th>Number of Years</th>
<th>Frequency</th>
<th>Valid Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>1.4%</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>1.4%</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>2.9%</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>4.3%</td>
</tr>
<tr>
<td>4</td>
<td>2</td>
<td>2.9%</td>
</tr>
<tr>
<td>5</td>
<td>7</td>
<td>10.0%</td>
</tr>
<tr>
<td>6</td>
<td>2</td>
<td>2.9%</td>
</tr>
<tr>
<td>7</td>
<td>4</td>
<td>5.7%</td>
</tr>
<tr>
<td>8</td>
<td>2</td>
<td>2.9%</td>
</tr>
<tr>
<td>9</td>
<td>2</td>
<td>2.9%</td>
</tr>
<tr>
<td>10</td>
<td>21</td>
<td>30.0%</td>
</tr>
<tr>
<td>11</td>
<td>2</td>
<td>2.9%</td>
</tr>
<tr>
<td>12</td>
<td>2</td>
<td>2.9%</td>
</tr>
<tr>
<td>13</td>
<td>1</td>
<td>1.4%</td>
</tr>
<tr>
<td>15</td>
<td>7</td>
<td>10.0%</td>
</tr>
<tr>
<td>16</td>
<td>2</td>
<td>2.9%</td>
</tr>
<tr>
<td>20</td>
<td>8</td>
<td>11.4%</td>
</tr>
<tr>
<td>24</td>
<td>1</td>
<td>1.4%</td>
</tr>
<tr>
<td>27</td>
<td>1</td>
<td>1.4%</td>
</tr>
<tr>
<td>30</td>
<td>1</td>
<td>1.4%</td>
</tr>
<tr>
<td>Total</td>
<td>70</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

When asked how often their crisis management plans are reviewed, participants could select one or more answers that apply to their institutions frequency of crisis audits. Most participants (37.3%) revealed that they review their plans annually and/or each time their plan is reviewed (37.3%). Other institutions reviewed their crisis management plans less frequent such as only when a crisis occurs (20%) or not at all (18.7%). Lastly, only 14.7% of participants reported that their institution only conducted a crisis audit when the plan was originally created. In terms of span of time that a crisis audit is performed, institutions reported similar findings.
Table 5

Occurrence of Conducting a Crisis Audit

<table>
<thead>
<tr>
<th>Frequency of Crisis Audit</th>
<th>n</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Crisis Audit</td>
<td>14</td>
<td>18.7%</td>
</tr>
<tr>
<td>When the plan was originally created</td>
<td>11</td>
<td>14.7%</td>
</tr>
<tr>
<td>Each time the plan is reviewed</td>
<td>28</td>
<td>37.3%</td>
</tr>
<tr>
<td>Annually</td>
<td>28</td>
<td>37.3%</td>
</tr>
<tr>
<td>Whenever a crisis occurs</td>
<td>15</td>
<td>20.0%</td>
</tr>
<tr>
<td>Total</td>
<td>96</td>
<td>128.0%</td>
</tr>
</tbody>
</table>

Again, most institutions (82.6%) reported conducting a crisis audit each year (see Figure 1). Following with every two years at 15.1%, every three years at 1.2%, and every four years at 1.2%.

![Frequency of Crisis Management Plan Review](image)

*Figure 1.* Frequency participants report their institution reviews their crisis management plans.

**Communicating crisis management plan to community members.** Institutional participants were asked how their crisis management plans were communicated to members of their community. This question was presented in a multiple-response format. There were eleven choices provided: not communicated, copy of the plan available upon
request, plan accessible on the web, annual notification, new employee orientation, new student orientation, optional crisis management training session, required crisis management training session, drills and exercises, emergency procedures posted in classrooms and offices on campus, and/or promoted through social media. As shown in Figure 2, top modes of communication included drills and exercises at 71.6%, plan accessible on the web at 63.6%, emergency procedures posted in classroom and offices on campus at 50%, copy of plan available upon request at 46.6%, and optional crisis management training at 43.2%. Modes reported between the most and least popular rated were: annual notification (33%), new employee orientation (29.5%), promoted through social media (25%), required crisis management training (19.3%), and new student orientation (12.5%), respectively.

![Modes of Communicating Crisis Plans](image)

*Figure 2.* Frequency of the various modes of communicating the crisis management plan.
Mental health addressed in the crisis management plan. Participants were asked if their crisis management plans address the mental/emotional health, and this question was a multiple response format. Institutions were asked if their written crisis management plans addressed the mental health of students, staff, and university caregivers that respond to crisis. Results indicate that an overwhelming number of institutions do address the mental health of students (97.6%) in their crisis management plans. However, that rate dropped for addressing the mental health of their staff in their crisis management plans (80.7%). An important group that appears to not have a place in several participants’ crisis management plans was those university caregivers responding to crisis (63.9%).

Contingency plans within a crisis management plan. A well-written crisis management plan should have contingency plans that address the varying types of crisis situations in a comprehensive manner addressing each of the phases of crisis. University participants were asked to mark if a contingency plan was in place for listed crisis within pre-crisis, crisis, post-crisis, or if they had a comprehensive plan. The addition of comprehensive plan was added to the survey for this research, but was not an option in prior studies. The inclusion may have skewed answers and took away from the richness of data gathered. Therefore, this study will focus on institutions reporting comprehensive contingency plans in place for the varying crisis situations. Each of the four major crisis types was assessed with various crisis situations: natural, facility, criminal, and human.

Overall the various crisis situations that had the greatest frequencies for universities having a comprehensive contingency plan in place were severe weather (86.42%), evacuation of buildings (85.0%), sexual assault/rape (83.33%), and suicide
The various crisis situations with the lowest frequency for universities having a comprehensive contingency plan in place were hurricane (43.20%), evacuation of campus (70.88%), kidnapping/abduction (56.41%), and missing person (62.92%).

**Contingency plans for natural crisis situations.** There are several types of natural crisis situations that an institution of higher education may face that can be affected seasonal timing or geographic location. The five-major potential natural crisis situations included tornado, hurricane, earthquake, flood, and severe weather. Participants were asked about whether a contingency plan was in place at their institution for varying natural crisis situations. They had to select for each phase of crisis individually or in a comprehensive plan. Institutions reported severe weather as the highest for having a comprehensive plan in place, after that was flood (68.35%), tornado (65.43%), hurricane (43.2%), and earthquake (48.75%).

Table 6

<table>
<thead>
<tr>
<th>Types of Natural Crisis</th>
<th>Pre-Crisis</th>
<th>Crisis</th>
<th>Post-Crisis</th>
<th>Comprehensive Plan</th>
<th>N/A</th>
<th>Response Count</th>
<th>Percentage of Comprehensive Plans</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tornado</td>
<td>3</td>
<td>5</td>
<td>3</td>
<td>53</td>
<td>17</td>
<td>81</td>
<td>65.43%</td>
</tr>
<tr>
<td>Hurricane</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>35</td>
<td>40</td>
<td>81</td>
<td>43.20%</td>
</tr>
<tr>
<td>Earthquake</td>
<td>2</td>
<td>6</td>
<td>3</td>
<td>39</td>
<td>30</td>
<td>80</td>
<td>48.75%</td>
</tr>
<tr>
<td>Flood</td>
<td>1</td>
<td>6</td>
<td>3</td>
<td>54</td>
<td>15</td>
<td>79</td>
<td>68.35%</td>
</tr>
<tr>
<td>Severe Weather</td>
<td>3</td>
<td>5</td>
<td>0</td>
<td>70</td>
<td>3</td>
<td>81</td>
<td>86.42%</td>
</tr>
</tbody>
</table>

**Contingency plans for facility crisis situations.** This survey presented seven potential facility crisis situations for the participants to assess: fire, explosion, chemical leak, evacuation of building, evacuation of campus, corruption/loss of computer data, and loss of utilities. Participants were then asked about whether a contingency plan was in
place at their institution for each phase of crisis individually or was there a comprehensive plan. Participants selected evacuation of a building (85%), fire (83.75%), corruption/loss of computer data was rated at 79.48%, both chemical leak and loss of utilities reported around 78%, and explosion garnered 72.5%.

Table 7

*Comprehensive Crisis Management Plans for Varying Types of Facility Crisis*

<table>
<thead>
<tr>
<th>Types of Facility Crisis</th>
<th>Pre-Crisis</th>
<th>Crisis</th>
<th>Post-Crisis</th>
<th>Comprehensive Plan</th>
<th>N/A</th>
<th>Response Count</th>
<th>Percentage of Comprehensive Plans</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fire</td>
<td>3</td>
<td>7</td>
<td>1</td>
<td>67</td>
<td>2</td>
<td>80</td>
<td>83.75%</td>
</tr>
<tr>
<td>Explosion</td>
<td>4</td>
<td>9</td>
<td>4</td>
<td>58</td>
<td>5</td>
<td>80</td>
<td>72.5%</td>
</tr>
<tr>
<td>Chemical Leak</td>
<td>2</td>
<td>10</td>
<td>2</td>
<td>62</td>
<td>3</td>
<td>79</td>
<td>78.48%</td>
</tr>
<tr>
<td>Evacuation of Buildings</td>
<td>4</td>
<td>12</td>
<td>0</td>
<td>56</td>
<td>7</td>
<td>79</td>
<td>70.88%</td>
</tr>
<tr>
<td>Corruption/Loss of Data</td>
<td>3</td>
<td>4</td>
<td>6</td>
<td>62</td>
<td>3</td>
<td>78</td>
<td>79.48%</td>
</tr>
<tr>
<td>Loss of Utilities</td>
<td>3</td>
<td>10</td>
<td>2</td>
<td>61</td>
<td>2</td>
<td>78</td>
<td>78.20%</td>
</tr>
</tbody>
</table>

**Contingency plans for criminal crisis situations.** There were ten crisis scenarios presented in this survey for participants to assess their contingency plans, and these included homicide, assault, sexual assault/rape, sexual harassment, domestic abuse, burglary/robbery, abduction, hate crime, terroristic threat, and vandalism Sexual assault (83.33%) was the highest reported comprehensive contingency plans, followed by sexual harassment (82.05%), domestic abuse (80.76%), assault (77.9%), homicide (74%), hate crimes (71.79%), vandalism (69.23%), terroristic threat (67.94%), burglary/robbery (62.5%), and abduction (56.41%).
### Comprehensive Crisis Management Plans for Varying Types of Criminal Crisis

<table>
<thead>
<tr>
<th>Types of Criminal Crisis</th>
<th>Pre-Crisis</th>
<th>Crisis</th>
<th>Post-Crisis</th>
<th>Comprehensive Plan</th>
<th>N/A</th>
<th>Response Count</th>
<th>Percentage of Comprehensive Plans</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homicide</td>
<td>1</td>
<td>10</td>
<td>6</td>
<td>57</td>
<td>3</td>
<td>77</td>
<td>74.0%</td>
</tr>
<tr>
<td>Assault</td>
<td>3</td>
<td>8</td>
<td>3</td>
<td>60</td>
<td>3</td>
<td>77</td>
<td>77.9%</td>
</tr>
<tr>
<td>Sexual Assault/Rape</td>
<td>5</td>
<td>4</td>
<td>1</td>
<td>65</td>
<td>3</td>
<td>78</td>
<td>83.33%</td>
</tr>
<tr>
<td>Sexual Harassment</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>64</td>
<td>2</td>
<td>78</td>
<td>82.05%</td>
</tr>
<tr>
<td>Domestic Abuse</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>63</td>
<td>4</td>
<td>78</td>
<td>80.76%</td>
</tr>
<tr>
<td>Burglary/Robbery</td>
<td>3</td>
<td>12</td>
<td>5</td>
<td>55</td>
<td>3</td>
<td>78</td>
<td>62.5%</td>
</tr>
<tr>
<td>Abduction</td>
<td>2</td>
<td>15</td>
<td>7</td>
<td>44</td>
<td>10</td>
<td>78</td>
<td>56.41%</td>
</tr>
<tr>
<td>Hate Crime</td>
<td>5</td>
<td>10</td>
<td>3</td>
<td>56</td>
<td>4</td>
<td>78</td>
<td>71.79%</td>
</tr>
<tr>
<td>Terroristic Threat</td>
<td>2</td>
<td>13</td>
<td>5</td>
<td>53</td>
<td>5</td>
<td>78</td>
<td>67.94%</td>
</tr>
<tr>
<td>Vandalism</td>
<td>3</td>
<td>9</td>
<td>7</td>
<td>54</td>
<td>5</td>
<td>78</td>
<td>69.23%</td>
</tr>
</tbody>
</table>

**Contingency plans for human crisis situations.** Universities and colleges serve students, but the overall campus community is comprised of a variety of individuals or groups of people that can vary per the time of year or events taking place on campus.

Some of those groups are faculty, staff, administrators, community members, alumni, families, visitors, and prospective students. Therefore, the potential for a crisis to occur involving one of previously mentioned types of individuals is present and inevitable with a critical mass. Whether it is injury or death of a student, suicide, an emotional/psychological episode, alcohol/drug overdose, infection disease, racial incident, campus disturbance/demonstration, most institutions rated (70%) reported having comprehensive contingency plans in place. Comprehensive contingency plans related to injury or death of a faculty member/staff, and missing person (62.92%) had the
lowest frequencies. The crisis scenario with the highest reported comprehensive contingency plan was suicide (83.54%), immediately followed by student death (81.01%).

Table 9

*Comprehensive Crisis Management Plans for Varying Types of Human Crisis*

<table>
<thead>
<tr>
<th>Types of Human Crisis</th>
<th>Pre-Crisis</th>
<th>Crisis</th>
<th>Post-Crisis</th>
<th>Comprehensive</th>
<th>N/A</th>
<th>Response Count</th>
<th>Percentage of Comprehensive Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Death</td>
<td>2</td>
<td>3</td>
<td>10</td>
<td>64</td>
<td>0</td>
<td>79</td>
<td>81.01%</td>
</tr>
<tr>
<td>Faculty/Staff Death</td>
<td>1</td>
<td>7</td>
<td>11</td>
<td>51</td>
<td>7</td>
<td>77</td>
<td>66.23%</td>
</tr>
<tr>
<td>Student Injury</td>
<td>2</td>
<td>9</td>
<td>8</td>
<td>58</td>
<td>2</td>
<td>79</td>
<td>73.41%</td>
</tr>
<tr>
<td>Staff Injury</td>
<td>1</td>
<td>13</td>
<td>9</td>
<td>49</td>
<td>5</td>
<td>77</td>
<td>63.63%</td>
</tr>
<tr>
<td>Suicide</td>
<td>5</td>
<td>4</td>
<td>2</td>
<td>66</td>
<td>2</td>
<td>79</td>
<td>83.54%</td>
</tr>
<tr>
<td>Emotional/psychological</td>
<td>5</td>
<td>8</td>
<td>6</td>
<td>59</td>
<td>1</td>
<td>79</td>
<td>74.68%</td>
</tr>
<tr>
<td>Missing Person</td>
<td>3</td>
<td>12</td>
<td>6</td>
<td>56</td>
<td>2</td>
<td>79</td>
<td>62.92%</td>
</tr>
<tr>
<td>Alcohol/Drug Overdose</td>
<td>2</td>
<td>10</td>
<td>6</td>
<td>58</td>
<td>3</td>
<td>79</td>
<td>73.41%</td>
</tr>
<tr>
<td>Infectious Disease</td>
<td>2</td>
<td>10</td>
<td>4</td>
<td>62</td>
<td>1</td>
<td>79</td>
<td>78.48%</td>
</tr>
<tr>
<td>Racial Incident</td>
<td>3</td>
<td>9</td>
<td>6</td>
<td>55</td>
<td>5</td>
<td>78</td>
<td>70.51%</td>
</tr>
<tr>
<td>Campus Disturbance/Demonstration</td>
<td>6</td>
<td>10</td>
<td>3</td>
<td>59</td>
<td>2</td>
<td>80</td>
<td>73.75%</td>
</tr>
</tbody>
</table>

**Campus Crisis/Emergency Response Team**

Institutional participants were asked questions relating to their crisis response teams on campus. When asked who coordinates crisis response on campus, most responses fell between the Director of Emergency Management (28.2%) and the Chief/Director of University Police (27.3%) as shown in Table 10. Next, the most frequently selected positions selected were Vice President Administration/Business Affairs (18.2%), the President (11.8%), Chief Student Affairs Officer (9.1%), Dean of Students (1.8%), and Director of Health Services (1.8%). Drabek & Evans (2007) note the emergency of the field of emergency management since the terror attack in 2001.
This is reflected at institutions of higher education with a new position of Director of Emergency Management gaining popularity, as supported by the data reported 60.9% of participating institutions have a Director of Emergency Management position.

Table 10

*Position that Coordinates Crisis Response on Campus*

<table>
<thead>
<tr>
<th>Position</th>
<th>Frequency</th>
<th>Valid Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>President</td>
<td>13</td>
<td>11.8%</td>
</tr>
<tr>
<td>VP Academic Affairs</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>VP Administration/ Business Affairs</td>
<td>20</td>
<td>18.2%</td>
</tr>
<tr>
<td>Chief Student Affairs Officer</td>
<td>10</td>
<td>9.1%</td>
</tr>
<tr>
<td>Chief/Director of University Police</td>
<td>30</td>
<td>27.3%</td>
</tr>
<tr>
<td>Director of Public Information/Relations</td>
<td>1</td>
<td>0.9%</td>
</tr>
<tr>
<td>Director of Emergency Management</td>
<td>31</td>
<td>28.2%</td>
</tr>
<tr>
<td>Director of Health and Safety</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Dean of Students</td>
<td>2</td>
<td>1.8%</td>
</tr>
<tr>
<td>Director of Student Counseling</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Director of Student Health Services</td>
<td>1</td>
<td>0.9%</td>
</tr>
<tr>
<td>Director of Residence Life</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Director of Student Activities</td>
<td>0</td>
<td>0.0%</td>
</tr>
</tbody>
</table>

Even though crisis response may be coordinated mainly by an individual position on campuses, most participants (97.83%) reported that their university has an established crisis management committee or team. Those who identified that there was an emergency management committee or teams on their campus were then asked to select what the committee or team was responsible for performing. Participants answered that coordinating campus response along with stakeholders at a rate 91.1%, followed by planning and updating the university’s comprehensive crisis management plan at 75.6%, and lastly training members and stakeholders on crisis management plan was selected 65.6%.
Table 11

Responsibilities of Crisis Management Committee or Team

<table>
<thead>
<tr>
<th>Responsibilities</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning and updating the university’s comprehensive crisis management plan</td>
<td>68</td>
<td>75.6%</td>
</tr>
<tr>
<td>Training members and stakeholders on crisis management plan</td>
<td>59</td>
<td>65.6%</td>
</tr>
<tr>
<td>Coordinating campus response along with stakeholders</td>
<td>82</td>
<td>91.1%</td>
</tr>
<tr>
<td>Total</td>
<td>209</td>
<td>232.2%</td>
</tr>
</tbody>
</table>

Crisis response training. Participants were asked about what types of training were provided to the crisis management team members or individuals involved in responding to campus. The answers ranged from no training provided, to general training, and to more specified response. The survey listed fifteen different types of training options and participants could select all that apply to their institutions crisis management training. The top five rated types of training provided were crisis management (campus procedures) (93.1%), table top exercises (81.6%), crisis management (general) (67.8%), working with law enforcement and emergency professionals (67.8%), and campus violence issues (51.7%). Other crisis response training provided was on media relations (48.3%), suicide intervention (46%), legal issues/risk management (44.8%), critical incident stress management (44.8%), response to a civil disturbance (37.9%), substance abuse (28.7%), conflict management (27.6%), grieving process (26.4%), and orientation to community and county agency assistance (25.3%). Only two institutions reported that they provided no crisis response training to their team at all.
Next participants were asked to rate the adequacy of their institution’s crisis management training. The question was designed for participants to select the level of adequacy on a 5-Point Likert scale where one is strongly disagree, two is disagree, three is neither disagree or agree, four is agree, and five is strongly agree. Most selected agree at a rate of 42.7% that their crisis management training is adequate, 30.3% said neither agree or disagree, 19.1% said strongly agree 19.1%, 5.6% said disagree, and 2.2% said strongly disagree 2.2% (shown in Figure 4). The $M = 3.71$, $SD = 0.92$. 

*Figure 3.* Relative frequency percentages for various types of crisis management training topics.
Figure 4. Adequacy of crisis management training.

**Size of enrollment by perception of crisis management training adequacy.** To begin to assess size of enrollment with the perception of crisis management training adequacy to respond to crisis effectively a cross tabulated table was created. Institutions across all size categories ranked themselves the most as slightly proactive in their general manner of crisis response (43.11%). The next highest rankings of general manner of crisis response were proactive (27.52%) and neither reactive or proactive (23.85%). Only one institution ranked themselves as reactive and they were from the 20,001 – 30,000 enrollment size category.
Table 12

Cross Tabulation – Size of Enrollment and General Manner of Crisis Response

<table>
<thead>
<tr>
<th>Institutional Size of Enrollment</th>
<th>Reactive</th>
<th>Slightly Reactive or Proactive</th>
<th>Neither Reactive or Proactive</th>
<th>Slightly Proactive</th>
<th>Proactive</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>5,000 – 7,999</td>
<td>0</td>
<td>1</td>
<td>9</td>
<td>4</td>
<td>3</td>
<td>17</td>
</tr>
<tr>
<td>8,000 – 10,000</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>6</td>
<td>5</td>
<td>16</td>
</tr>
<tr>
<td>10,001 – 20,000</td>
<td>0</td>
<td>1</td>
<td>9</td>
<td>14</td>
<td>7</td>
<td>31</td>
</tr>
<tr>
<td>20,001 – 30,000</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>11</td>
<td>10</td>
<td>25</td>
</tr>
<tr>
<td>More than 30,000</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>12</td>
<td>5</td>
<td>20</td>
</tr>
<tr>
<td>Total</td>
<td>1</td>
<td>5</td>
<td>26</td>
<td>47</td>
<td>30</td>
<td>109</td>
</tr>
</tbody>
</table>

Internal and External Stakeholders

The crisis management committee or team can be comprised of both internal and external stakeholders. Some reside on the core crisis management team while other stakeholders only participate when necessary for planning, response, and/or debriefing crisis. This involvement can further be dependent on which type of crisis. The survey posed a series of four questions to assess their involvement in crisis planning and response and to assess if there are any competing needs and/or interests that could cause conflict between stakeholder groups. Participants were asked to rate the level of involvement per each group of internal and external stakeholders. The levels ranged from one through four with Level 1 being “represented on the crisis management committee or team”, Level 2 being “impact of crisis on this stakeholder is routinely considered”, Level 3 being “involved in planning and response as needed”, and Level 4 being “not significant to crisis.” As Figure 5 and Figure 6 demonstrated, internal stakeholders were more involved on a Level 1 and Level 2 whereas external stakeholders were involved more in Level 2 and Level 3.
**Internal stakeholders.** As can be seen in Figure 5, those who reported Level 1 included Student Services (89.8%), University-Wide Services (86.5%), and the Executive Level (80.9%). The report of involvement on Level 1 dropped to just under 50% with the President (49.4%) and University Staff Services (47.2%). Involvement on Level 2 included Student Involvement (50.6%) and the President (44.9%). Rates for involvement on Level 3 were in a consistent range across the internal stakeholder categories, President (28.01%), Executive Level (22.50%), University Staff Services (43.8%), University-Wide Services (22.05%), Academic (41.60%), Student Services (23.6%), and Student Involvement (32.06%). Level 4 had the lowest ratings for level of involvement with Student Involvement (12.4%), Academics (5.6%), and both University Staff Services and the President at (3.4%). Lastly, the Executive Level, University-Wide Services and Student Services were at 1.1% respectively.

![Level of Involvement by Internal Stakeholders](image)

*Figure 5.* Internal stakeholders’ level of participation in crisis management, planning and response.
One way that internal stakeholders, along with the respective departments, participate in crisis response is through a system where an individual is identified as the initial or primary contact to be notified in a crisis commonly referred to as a duty or on-call system. This structured system generally has a rotation of responsibility based on weekly or monthly time intervals. An “on-call” or “duty” system was as a form of streamlining crisis response that enabled the staff to share the responsibility. The participants reported that 72.2% currently operate this system as a part of their crisis management plan, and 27.8% reported that they do not have an on-call system.

**External stakeholders.** External stakeholders are comprised of entities that are governed separate from the institution of higher education, and their operations are generally located off-campus. There were eleven external stakeholders that the survey listed and asked participants to rate their levels of involvement with crisis planning and response. The external stakeholders listed were the Federal Bureau of Investigations (FBI), state and local police/sheriff departments, local fire department and state fire marshall, local and state mental health, local emergency management, Red Cross, local hospitals, parents, local community members, alumni associations, and victims’ assistance programs. As can be seen in Figure 6, Level 4 was the next highest rated level of involvement from external stakeholders with alumni association at 30.9%, both the Red Cross and local community members at a rate of 18.5%. The highest levels of participation for external stakeholders on Level 3 included local hospitals and the FBI with a rate of 43.2% followed by local, state mental health, and the Red Cross had the next highest rating at 38.3%.
Next, at Level 2 where the impact of crisis response was routinely considered, these stakeholders fall within the range of 30-37% respectively: state and local police/sheriff departments (37%), local fire department and state fire marshal (37%), local emergency management (33%), and parents (32.1%). Level 1 had the lowest rated level of involvement. Local emergency management was rated at 13.6%, followed state and local police/sheriff departments at 9.9%, and finally local and mental health at 7.4%. The remaining stakeholders were under 5%.

**Level of Involvement by External Stakeholders**

*Figure 6. External stakeholders’ level of participation in crisis management, planning, and response.*
**Competing needs and/or interests among stakeholders.** There were two open-ended questions that asked participants if there were any competing needs and/or interests amongst internal and external stakeholders. These questions were designed to further connect crisis management to the area of conflict as one the goals of the study. In terms of working with internal stakeholders, four themes emerged from the open-ended questionnaires. Of the 43 participants who answered the question about internal stakeholders reported that 30.23% that there were no competing needs/interests. The other themes with the most frequently described were concerns about public relations (9.3%), availability/use of resources (6.97%), and lastly differences in preferred strategy to respond to crisis (6.97%). Nineteen participants answered the open-ended questionnaire for the competing needs and interests for external stakeholders, and 42.10% reported that there were no competing needs/interests. The only other two answers provided that were repeated by multiple participants were potential competing needs of the community versus the university in time of crisis (6.79%) and the need for clarification between university police and local police (6.79%).

**Perceptions of Preparedness to Respond to Crisis**

Participants were engaged in a series of questions that assessed their perceptions of overall university preparedness and Student Affairs Division preparedness. Participants rated the Division of Student Affairs (89.0%) as more prepared to respond to crisis than the overall university (85.3%) when looking at ratings of moderately prepared and well prepared. First, participants were asked to rate their university’s preparedness to respond to crisis utilizing a five-point Likert scale where the one was unprepared, two was slightly prepared, three was prepared, four was moderately prepared, and five was
well prepared. The participants rated their universities as unprepared .9%, slightly prepared .9%, prepared 12.8%, moderately prepared 55%, and well prepared 30.3% as shown in Figure 7. The $M = 4.13$, $SD = 0.734$.

**Ranked Institutional Preparedness to Respond to Crisis**

![Histogram](image)

*Figure 7. Chief student affairs officer’s perception of university’s preparedness to respond to crisis.*

Next, participants were asked to rate their Student Affairs Division’s preparedness to respond to crisis utilizing a 5-Point Likert scale where the one was unprepared, two was slightly prepared, three was prepared, four was moderately prepared, and five was well prepared. As shown in Figure 8, participants rated their student affairs division as unprepared .9%, slightly prepared 1.8%, prepared 8.3%, moderately prepared 46.8%, and well-prepared 42.2%. The $M = 4.28$, $SD = 0.768$. 
Perceptions of Preparedness to Respond to Different Types of Crisis

Participants were then questioned about their perception of preparedness to respond to crisis for the four types of crisis: natural, facility, criminal, and human. This was assessed on a five-point Likert scale where one was strongly disagree, two was disagree, three was neither disagree or agree, four was agree, and five was strongly agree. As shown in Table 12, a majority reported as being prepared to respond to crisis with those who reported agree to strongly agree for natural (87.8%), facility (85.3%), criminal (85.3%), and human (86.4%) crises. Interestingly, some reported as neither agreeing nor disagreeing in being prepared to respond to natural (12.2%), facility (13.4%), criminal (13.4%), and human (11.1%) crisis. Human crisis and criminal crisis were the only two crises where participants reported strong disagree at 1.2% and 2.5%, respectively.
Table 13

Perception of University Preparedness to Respond to Various Types of Crisis

<table>
<thead>
<tr>
<th>Type of Crisis</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither Disagree or Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural</td>
<td>0.00%</td>
<td>0.00%</td>
<td>12.2%</td>
<td>52.4%</td>
<td>35.4%</td>
</tr>
<tr>
<td>Facility</td>
<td>0.00%</td>
<td>1.22%</td>
<td>13.4%</td>
<td>45.1%</td>
<td>40.2%</td>
</tr>
<tr>
<td>Criminal</td>
<td>1.2%</td>
<td>0.00%</td>
<td>13.4%</td>
<td>40.2%</td>
<td>45.1%</td>
</tr>
<tr>
<td>Human</td>
<td>2.5%</td>
<td>0.00%</td>
<td>11.1%</td>
<td>43.2%</td>
<td>43.2%</td>
</tr>
</tbody>
</table>

Enrollment size by perception of university preparedness to respond to crisis.

To first assess enrollment size by perception of university preparedness to respond crisis a cross tabulation of data was created, as shown in table 15. It can be seen across all institutional enrollment sizes both reactive and slightly reactive scored the lowest with only one institution in reporting unprepared in both the 8,000 – 10,000 and 20,001 – 30,000 size categories. Most institutions rated themselves moderately prepared (61.46%).

Table 14

Cross Tabulation for Size of Enrollment by Preparedness to Respond to Crisis

<table>
<thead>
<tr>
<th>Institutional Size of Enrollment</th>
<th>Unprepared</th>
<th>Prepared</th>
<th>Modest Prepared</th>
<th>Well Prepared</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>5,000 – 7,999</td>
<td>0</td>
<td>4</td>
<td>12</td>
<td>1</td>
<td>17</td>
</tr>
<tr>
<td>8,000 – 10,000</td>
<td>0</td>
<td>3</td>
<td>7</td>
<td>5</td>
<td>16</td>
</tr>
<tr>
<td>10,001 – 20,000</td>
<td>0</td>
<td>5</td>
<td>19</td>
<td>6</td>
<td>30</td>
</tr>
<tr>
<td>20,001 – 30,000</td>
<td>1</td>
<td>0</td>
<td>12</td>
<td>12</td>
<td>25</td>
</tr>
<tr>
<td>More than 30,000</td>
<td>0</td>
<td>2</td>
<td>10</td>
<td>9</td>
<td>21</td>
</tr>
<tr>
<td>Total</td>
<td>1</td>
<td>14</td>
<td>60</td>
<td>33</td>
<td>109</td>
</tr>
</tbody>
</table>

Trainings provided to crisis management team by perceptions of institutional preparedness. One of the survey questions asked participants to select all training topics their college or university trained their crisis management team with to effectively
respond to crisis from a select of 15 topics. The topic selections were no training provided, crisis management (campus procedures), crisis management (general), legal issues/risk management, working with law enforcement and emergency professionals, responding to civil disturbances or demonstrations, suicide prevention, media relations, campus violence issues, substance abuse, grieving process, orientation to community and county agency assistance, critical incident stress management/debriefing, table-top exercises, and/or conflict management. The findings were then quantified from the number of trainings each institutional participant selected from the fifteen types of training presented, only 10 different types of trainings were selected and therefore used for tabulation. Participants were also asked to use a 5-Point Likert scale to rate their university’s preparedness as 1 - unprepared, 2 - slightly prepared, 3 - prepared, 4 - moderately prepared, or 5 - well prepared. Then a table was created with data from those two prior questions and cross-tabulated.

Table 15

Cross Tabulation for Total Delivery Methods and Institutional Preparedness

<table>
<thead>
<tr>
<th>Perceptions of Institutional Preparedness to Respond</th>
<th>Total Delivery Methods</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1.00</td>
</tr>
<tr>
<td>Slightly Prepared</td>
<td>1</td>
</tr>
<tr>
<td>Prepared</td>
<td>3</td>
</tr>
<tr>
<td>Moderately Prepared</td>
<td>9</td>
</tr>
<tr>
<td>Well Prepared</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>15</td>
</tr>
</tbody>
</table>

Perceptions of General Manner of Institutional Crisis Response

Participants were engaged in a series of questions that assessed their perceptions of their institution’s general manner of crisis response. General manner of response was
defined on the survey as being proactive or reactive. Proactive was defined as acting before a situation becomes a source of confrontation or crisis, and reactive was defined as reacting to the past rather than anticipating the future. To assess whether institutions of higher education were perceived to either respond to crisis in a more proactive or reactive manner, the institutional participants were asked to rate their university’s general manner of response to crisis on a 5-Point Likert scale where one was reactive, two was slightly reactive, three was neither reactive or proactive, four was slightly proactive, and five was proactive.

As shown in Figure 9, participants rated their university’s general manner of response as reactive at 0.9%, slightly reactive at 4.6%, neither reactive nor proactive at 23.9%, slightly proactive at 43.1%, and proactive at 27.5%. The $M = 3.92$, $SD = 0.883$.

**Ranked Institutional General Manner of Response to Crisis**

![Histogram](image)

*Figure 9. Chief student affairs officers’ perception of their university’s general manner of response to crisis.*
Organizational factors related to proactive and reactive crisis response. To provide further insight of their university’s general manner of response to crisis as proactive or reactive, participants were asked to describe any organizational factors that they may perceive as variables characteristic of either being proactive or reactive. To be transparent, researcher bias perceived proactive manner of response as positive and reactive as negative, though participants answered varied in the viewpoint. Participants described that their university responded to crisis as a proactive manner because they had strong stakeholder relationships (12.3%), conducted ongoing training (10%), had a crisis management team (9.23%), had a comprehensive crisis management plan that was reviewed often (9.23%), and had an Office of Emergency Management (6.15%). The top themes that emerged when the participants described why their university responded to crisis in a reactive manner included a lack of lack of staffing and/or financial resources (12%), university-wide coordination (6.67%), and “too many cooks in the kitchen” (6.67%). Several participants went further to explain that having “too many cooks in the kitchen” referred to either not sticking to the plan in the moment of crisis, frequent leadership changes, or lack of a plan to identify the person in charge.

Size of enrollment by perception of university’s general manner of crisis response. Size of enrollment data was cross-tabulated with institutional reported rankings of perceived general manner of crisis response. As shown in Table 16, institutions across all enrollment size categories ranked themselves as slightly proactive at a rate of 43.12%, followed by rankings of proactive (27.5%) and neither reactive or proactive (23.85%). Again, the two lowest ranked manners of response across all enrollment size categories were reactive (0.01%) and slightly reactive (4.58%).
Table 16

Cross Tabulation of Size of Enrollment and General Manner of Response

<table>
<thead>
<tr>
<th>Count</th>
<th>Perception of University's General Manner of Crisis Response</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Reactive</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Institutional Size of Enrollment</td>
<td></td>
</tr>
<tr>
<td>5,000 – 7,999</td>
<td>0</td>
</tr>
<tr>
<td>8,000 – 10,000</td>
<td>0</td>
</tr>
<tr>
<td>10,001 – 20,000</td>
<td>0</td>
</tr>
<tr>
<td>20,001 – 30,000</td>
<td>1</td>
</tr>
<tr>
<td>More than 30,000</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>1</td>
</tr>
</tbody>
</table>

Inferential Statistics

To assess if institutional characteristics or components of crisis management systems were related to institutional preparedness in responding to crisis, several variable combinations were calculated for significance. This next section will provide the statistical analysis related to the study’s first five research questions. The institutional characteristic of size of enrollment was assessed with institutional preparedness, adequacy of crisis management training, and general manner of crisis response. The components of crisis management systems that were assessed through inferential statistics included crisis management training, communication of crisis management plan, and reports of a Director of Emergency Management. The components were individually assessed for significant correlations or impact with institutional preparedness and general manner of crisis response.

Enrollment Size by Perception of University Preparedness to Respond to Crisis

A Spearman’s rho analysis was conducted to determine the correlation between enrollment size and the perception of university preparedness in responding to campus
crisis. Participants were asked using a 5-point scale to rate their university’s preparedness as unprepared, slightly prepared, prepared, moderately prepared, or well prepared. Results indicated a significant but weak correlation between enrollment size and perception of university preparedness to respond to campus crisis, \( r_s (109) = 0.293, p < .01 \). The null hypothesis was rejected.

Table 17

*Spearman’s rho Correlation Output – Size of Enrollment and Perceived Institutional Preparedness to Respond to Crisis*

<table>
<thead>
<tr>
<th>Correlations</th>
<th>University Preparedness to Respond to Crisis</th>
<th>Institutional Size of Enrollment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spearman’s rho</td>
<td>Correlation Coefficient</td>
<td>1.000</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>109</td>
</tr>
<tr>
<td>Institutional Size of Enrollment</td>
<td>Correlation Coefficient</td>
<td>.293*</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.002</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>109</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).

A post-hoc analysis was conducted to further analyze the correlation between institutional size, based off student enrollment, and the perceptions of university preparedness to respond to crisis as either moderately prepared or well prepared. Results indicated that the top three institutional size categories that CSAOs who perceived themselves are well prepared were 20,001 – 30,000 (11.01%), more than 30,000 (8.26%), and 10,001 – 20,000 (5.5%). The top three size categories that perceived themselves as moderately prepared were 10,001 – 20,000 (17.43%), next a tie between 5,000 – 8,000 (11.01%) and 20,001 – 30,000 (11.01%), and more than 30,000 (9.17%). Even though the correlation between institutional size and preparedness to respond to crisis was
determined to be moderately weak at $r_s (109) = 0.293$, it was statistically significant at the $p < .01$ level (2-tailed). This is visually evident in the graph (Figure 10), as there are two bell curves one for moderately prepared and well prepared. Moderately prepared peaks at institutions of 10,001 – 20,000, and well prepared peaks at institutions with 20,001 – 30,000. Therefore, the size institution, as evident from this survey, that perceives themselves to be most prepared would be a mid-sized institution enrolling 10,001 – 20,000 students. Therefore, further confirming the weak correlation at $r_s (109) = 0.293$, as being not monotonic. A monotonic correlation would visually demonstrate as one variable goes up, the other goes down. As these variables demonstrate a bell curve on the graph they are not monotonic in nature.

![Figure 10. Size of enrollment by perceived institutional preparedness to respond to crisis.](image)
**Size of Enrollment by Perception of General Manner of Crisis Response**

Spearman’s rho analysis was conducted to determine the correlation between enrollment size and the perception of an institution’s general manner in responding to crisis. Participants were asked using a 5-point scale to rate whether their perception of their university’s general response to crisis was reactive, slightly reactive, neither reactive nor proactive, slightly proactive, or proactive. Results indicated a significant but weak correlation between size of enrollment and a university’s general manner of crisis response, \( r_s(109) = 0.196, p < .05 \). The null hypothesis was rejected.

Table 18

*Spearman’s rho Correlation Output - Correlation between Institutional Size and Perceived General Manner of the Crisis Response*

In a post analysis, the correlation between institutional size of enrollment and the perceived general manner of crisis response found that institutions with more than 10,000 students perceived themselves to respond to crisis more proactive or slightly proactive. Institutions that perceived themselves to be proactive were with more than 30,000 (4.59%), 20,001 – 30,000 (9.17%), and 10,001 – 20,000 (6.42%). Perceiving themselves to be slightly prepared were than 30,000 (11.01%), 20,001 – 30,000 (10.09%), and
10,001 – 20,000 (28.4%). There were some institutions that rated themselves as being neither reactive or proactive, and this could have affected the strength of the correlation. 5,000 – 8,000 (8.26%), 8,001 – 10,000 (4.59%), and 10,001 – 20,000 (8.26%). It was hypothesized that there is a significant correlation between institutional size of and their perception of general manner of response to crisis, as can be visually understood in the graph (figure 11). There is a significant bump in perceived slightly proactive response once you get to the size of 10,001 – 20,000, but then rate of perception slightly tapers off. As for institutions who perceived as themselves as proactive institutional size peaks at 20,001 – 30,000 in a bell curve. Therefore, further confirming the weak correlation at $r_s (109) = 0.196$, as being not monotonic.
Figure 11. Size of enrollment by institutional participants perceived general manner of their university to respond to crisis.

Size of Enrollment by Perception of Crisis Management Training Adequacy

A Spearman’s rho analysis was conducted to determine the correlation between size of enrollment and perception of crisis management training adequacy. Participants were asked using a 5-point scale whether they considered their university’s crisis management training was adequate in responding to crisis as strongly disagree, disagree, neutral, agree, or strongly agree. Results indicated a significant but moderate correlation between enrollment size and perception of crisis management training adequacy in responding to crisis effectively, $r_s (89) = 0.343, p < .01$. The null hypothesis was rejected.
A post analysis was conducted to further analyze the correlation between institutional size and the perceptions of adequacy of the crisis management training response rated agree. The institutional size categories that ranked that they agree that their crisis management training: 10,001 – 20,000 (14.61%), 20,001 – 30,000 (8.99%), 8,000 – 10,000 (6.74%); ranked strongly agree 20,001 – 30,000 (7.74%), more than 30,000 (5.62%), and all other size categories 20,000 and under (2.25% each). The graph (figure 12) below visually demonstrates a bell curve that peaks with institutions of 10,001 – 20,000 who agree their training is adequate, and peaks in a bell curve at 20,001 – 30,000 who strongly agree their training is adequate. Therefore, further confirming the moderate correlation at \( r_s(89) = 0.343 \), as being not monotonic.
A Spearman’s rho analysis was then conducted to determine the correlation between the number of trainings provided and the perceptions of an institution’s preparedness to respond to crisis. Results indicated a significant but moderate correlation between the number of training provided to crisis management team members with perceptions of institutional preparedness to respond to crisis, $r_s (108) = 0.366$, $p < .01$. The null hypothesis was rejected.
A post analysis was conducted on the correlation between the number of topics the crisis management training and the perceptions of institutional preparedness in responding to crisis, looking further at trends between each ranking of prepared, moderately prepared, and then well prepared. It can be visually noted in the graph (figure 13), a non-monotonic pattern emerge as there is a bell curve with moderately prepared, and then the number of train taper off with on both sides with prepared and then well prepared. Upon closer assessment, this is also noted within moderately prepared at 12.64% and well prepared at 6.90% peaked in a bell curve, which is not monotonic in nature, with the four trainings as an optimum trend.
Preparedness to Respond to Crisis by Number of Crisis Management Trainings Provided

Figure 13. Spectrum of the preparedness to respond to crisis by the number of types of crisis management training provided on college campuses.

Delivery Methods Utilized by Perception of Preparedness to Respond to Campus Crisis

A Spearman’s rho analysis was conducted to determine the correlation between the quantity of delivery methods that institutions utilized to communicate their crisis management plan and the perception of university’s preparedness in responding to campus crisis. Participants were asked to select from eleven different common delivery methods of how institutions communicate their crisis management plans to their campus community. The choices included: not communicated, copy of plan available upon request, plan accessible on the web, annual notification, new employee orientation, new student orientation, optional crisis management training, required crisis management training, drills/exercises, emergency procedures posted in classrooms and offices on
campus, and/or promoted on social media. Participants were also asked to rank their institutional preparedness to respond on a 5-Point Likert scale with 1 being unprepared, 2 being slightly prepared, 3 being prepared, 4 being moderately prepared, or 5 being well prepared. Results indicated a significant but weak correlation between the number of delivery methods institutions utilize to communicate their crisis management plan and the perception of institutional preparedness in responding to crisis, $r_s (87) = 0.260, p < .01$. The null hypothesis was rejected.

Table 21

Spearman’s rho Correlation Output – Total Delivery Methods and Perceived Institutional Preparedness

<table>
<thead>
<tr>
<th>Correlations</th>
<th>Total Delivery Methods</th>
<th>Total Delivery Methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived Institutional Preparedness to Respond to Crisis</td>
<td>Spearman’s rho</td>
<td>Correlation Coefficient</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.015</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>87</td>
</tr>
<tr>
<td>Total Delivery Methods</td>
<td>Correlation Coefficient</td>
<td>1.000</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.015</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>87</td>
</tr>
</tbody>
</table>

* Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).

In a post analysis, the relationship between perceived preparedness to respond to crisis and the total number of delivery methods used to communicate the crisis management plan to the campus community, the ranking of moderately prepared will be further examined. It is visually represented in the graph (figure 14) that moderately prepared peaks in a bell curve with four (12.64%), five (11.49%), and then with three and six both ranking at moderately prepared at 6.90%. Therefore, the optimum trend is
between three and six modes of delivery, though the curve down representing less delivery modes rises back up with one delivery mode at 10.34%. This not monotonic scattering of results confirms the weak correlation.

**Figure 14.** Institutional preparedness to respond to crisis relationship to the number of modes utilized to communicate the crisis management plan to the campus community.

**Director of Emergency Management and Perception of University Preparedness to Respond to Crisis**

It is hypothesized that institutions that employ a Director of Emergency Management perceive themselves to be more prepared to respond to crisis. A two-sample t-test was used to examine the relationship between a Director of Emergency Manager
and perceived institutional preparedness in responding to crisis. There was a statistical significance in scores for those who has a Director of Emergency Management ($M = 4.283$, $SD = .598$) when compared to those with no Director of Emergency Management ($M = 3.90$, $SD = .871$; $t (2.69) = 105, p = 0.008$). The null hypothesis was rejected.

Table 22

Two-Sample t-Test Assessing Significance of Director of Emergency Management Position and Perceived Institutional Preparedness to Respond to Crisis

<table>
<thead>
<tr>
<th>Independent Samples Test</th>
<th>Levene's Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig.</td>
</tr>
<tr>
<td>Perceived Institutional Preparedness to Respond to Crisis</td>
<td>Equal variances assumed</td>
<td>.935</td>
</tr>
<tr>
<td></td>
<td>Equal variances not assumed</td>
<td></td>
</tr>
</tbody>
</table>

Table 23

Two-Sample Group Statistics of Director of Emergency Management Position and Perceived Institutional Preparedness to Respond to Crisis

<table>
<thead>
<tr>
<th>Group Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>University has a Director of Emergency Management position?</td>
</tr>
<tr>
<td>How prepared your university is to respond to campus crisis?</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>
To further look at what factors make a significant impact on the perceptions of institutional preparedness to respond to crisis, reports of whether campuses employ a Director of Emergency Management position or not were analyzed alongside the preparedness rankings of each participant. As shown in Table 18, the mean for having a Director of Emergency Management \( (M = 4.28, SD = .07307) \) was higher than the Mean for not having a Director of Emergency Management \( (M = 3.90, SD = .13775) \).

Therefore, as visually represented in the graph (Figure 15), institutions reporting having a Director of Emergency Management perceived themselves as being more prepared to respond to institutional crisis than those who reported this position not existing on their campus.

![Bar Chart](chart.png)

*Figure 15. Existence of a Director of Emergency Manager position on campus by institutional preparedness to respond to crisis.*
Summary

In this chapter, the findings from the crisis management survey were presented through descriptive and inferential statistics with visual reference tables and graphs. The descriptive statistics captured the state of crisis management on college and university campus as perceived by Chief Student Affairs Officers at 110 institutions across the United States. This section provided a snapshot of participant demographics, indicators of crisis preparedness, components of crisis management systems, and perceptions of preparedness and manner of crisis response. Cross tabulations were presented for variables that would later have inferential statistics performed to assess impact and look for relationship. These variables were: institutional size of enrollment by adequacy of crisis management team training, institutional size of enrollment by perceptions of preparedness to respond to crisis, institutional size of enrollment by general manner of response to crisis, institutional preparedness to respond to crisis by number of training topics delivered, institutional preparedness to respond to crisis by number of delivery methods used to communicate the crisis management plan to the community, and institutional preparedness to respond to crisis by whether a university has a Director of Emergency Management.

Lastly, this chapter analyzed sets of variables looking for statistical significance in relation to the study’s research questions utilizing data from the previously mentioned cross tabulations and statistical analysis performed using two-sample t-tests and Spearman’s rho correlation coefficient. Next, in the final chapter the results from this chapter will be discussed as per the research questions. Implications for practice and
fields of study will be discussed, as will study limitations and recommendations for future research based off this research experience.
Chapter 5: Discussion, Conclusions, and Recommendations

As the research study concludes in this final chapter, a reflection of the purpose of the study will be presented. Followed by the key statistical findings as they relate to the perceived status of crisis management, institutional preparedness to respond to crisis, and the impact of institutional size. Major implications from the study are then shared, along with expected contributions to the fields of higher education administration/student affairs, crisis management, and conflict resolution studies. Lastly, the limitations of the study and recommendations for future studies are discussed.

Purpose

The overall purpose of this study was to establish a view into the current state of crisis management, institutional preparedness, and crisis response as perceived by Chief Student Affairs Officers (CSAOs). This research provided an update on crisis management at mid to large sized on college and university campuses for crisis leaders and student affairs professionals, as the last study conducted with this population was in 2007 (Catullo, 2008). To assess the status of crisis management, the research re-examined the four indicators of preparedness: type of crisis prepared for, phases of the crisis that are prepared for, systems in place to respond to crisis, internal and external stakeholders involved in planning to respond and responding to crisis (Mitroff, Pearson, & Harrington, 1996). This was accomplished in two ways. First, participants were asked to report the existence of a written crisis management plan on their campus, identify the coordinator for the crisis planning and response, and categorize the components of their crisis management systems and plan. Next, various components of crisis management systems were assessed: various types of crises addressed, the phases of crisis addressed,
involvement level of internal and external stakeholders, types of training provided to the crisis management team and their responsibilities, and how crises management plans are communicated to the campus community. Then participants were asked to rank their institutions’ preparedness in responding to crisis and the general manner of crisis response. The purpose of this study was to ascertain the following research questions:

1. Is there a significant correlation between institutional size of enrollment and the perception of institutional preparedness to respond to crisis?

2. Is there a significant correlation between institutional size of enrollment and the perceived general manner of response to campus crisis?

3. Is there a significant correlation between the number of topics addressed in the crisis management training provided to the crisis management team with perceptions of institutional preparedness to response to crisis?

4. Is there a significant correlation between total delivery methods utilized to communicate the crisis management plan to the campus community and the perception of institution preparedness to respond to crisis?

5. Does the existence of a Director of Emergency Management position have a significant impact on perception of institutional preparedness to respond to crisis?

The objectives were to assess the potential relationships between institutional characteristics and components of crisis management systems with perceptions of institutional preparedness in responding to crisis and the general manner of crisis response. As an assumption, Chief Student Affairs Officers should continually pursue intentional ways to mitigate crisis on campus for the safety and care of their students and
staff. This study postulated as to why some colleges and universities were perceived as more prepared and proactive in nature while others less prepared and reactive in times of crisis. It also provided insight to organizational factors that may impede a proactive crisis response.

**Key Statistical Findings**

The CSAOs who participated in the survey were mostly from publically controlled (84.5%) and from large sized institutions (70%) with 10,000 or more degree-seeking students. Participants were geographically diverse with each of the six domestic NASPA affiliated regions represented. Descriptive statistical findings have established data that can be used for future research studies.

**Status of crisis management.** Most respondents reported having a crisis management plan (93.6%), which was consistent with previous findings (Catullo, 2008). A large portion of participants noted that their institution’s plan had existed for at least 10 years (30%). Institutional participants shared that they perform crisis audit either annually (37.3%) or each time the crisis management plan was reviewed (37.3%). Results showed that the most common delivery methods for communicating the crisis management plan were drills and exercises (71.6%), plan accessible online (63.6%), and emergency procedures in classroom and offices (50%). Many of the participants reported the use of an “on-call” system (72.2%) as a part of their crisis management plan as tool to streamline their process and manage staff responsibilities. Institutions reported addressing student mental health in their crisis management plans at a higher rate (97.6%) than their staff (80.7%) and university caregivers (63.9%) who respond to crisis.
This study examined the types of contingency plans universities were most prepared to address. Results show similar ratings of agree to strongly agree for responding to natural (87.8%), facility (85.3%), criminal (85.3%), and human (86.4%) crises. Of the 33 various crises presented, those with the highest reported comprehensive contingency plans were natural such as severe weather (86.42%), facility such as evacuation of buildings (85.0%), criminal such as sexual assault/rape (83.33%), and human such as suicide (83.54%).

Next, crisis management coordinator and teams were examined. Since 2007, the responsibility for the coordinating campus crisis response had shifted away from the Vice President of Administration, Vice President of Student Affairs, Dean of Students and Director of Student Health to the Director of Emergency Management (28.2%) and/or the Chief/Director of University Police (27.3%) (Catullo, 2008). The data collected showed 60.9% institutions reported a Director of Emergency Management position to oversee crisis response related incidents on their campus. Crisis management teams were reported to mostly oversee coordination of campus response along with other stakeholders (91.1%). A lower percentage of their responsibility was related to training other members to respond to crisis (65.5%). Most institutions provided general crisis management training on campus procedures to their crisis management team (93.1%) and performed tabletop exercises (81.6%). Training for the crisis management team was rated mostly adequate (30.3%) or as neither disagree or agree (19.1%).

The study also analyzed internal and external stakeholders by their levels of involvement, Level 1 – represented on the crisis management team or committee, Level 2 – impact of crisis on this stakeholder is routinely considered, Level 3 – involved in
planning and response as needed, and Level 4 – not significant to crisis (Zdziarski, 2001).

Overall internal stakeholders were more involved on Levels 1 and 2, whereas external stakeholders were mostly involved in Level 2 and 3. Internal stakeholders most involved in Level 1 were related to Student Services (89.8%), University-Wide Services (86.5%), and the Executive Level (80.9%). Internal stakeholders most involved Level 2 were Student Involvement (50.6%) and the President (44.9%). As for external stakeholders, the highest level of participation was reported on Level 3 at a rate of 43.2% for both local hospitals and the FBI. External stakeholders involved at a Level 2 were state and local police/sheriff departments (37%), local fire department and state fire marshal (37%), local emergency management (33%), and parents (32.1%).

**Perceptions of preparedness to respond to crisis.** Overall institutions reported the university as moderately prepared (46.8%) to well-prepared (42.2%) in responding to crisis, though the participants ranked the Student Affairs Division to be slightly more prepared (89%). This research was interesting in the relationships between size of enrollment and the preparedness in responding to crisis about crisis management plan delivery methods, training topics addressed, and the existence of a Director of Emergency Manager on campus. Inferential statistical analysis employed the Spearman’s rho correlation coefficient to determine the significance of a relationship between ordinal variable while a a two-sample t-test was used to assess significant impact of a Director of Emergency Management position with perceptions of preparedness. The results are as followed:

- **Size of enrollment and Perception of Preparedness** - The correlation was determined weak at $r_s(109) = 0.293$, though it was statistically significant at the $p$
< 0.01 level (2-tailed). It was hypothesized that there is a significant correlation between institutional size and their perception of preparedness to respond to crisis, though the data shows a bell curve in the data with optimal peaks of moderately prepared to respond to crisis at institutions with an enrollment of 10,001 – 20,000 indicating the correlation as not monotonic. Not monotonic means there is no associations between variables.

- **Number of Delivery Methods and Perception of Preparedness** – The correlation was determined weak at \( r_s (87) = 0.260 \), though it was statistically significant at the \( p < 0.01 \) level (2-tailed). It was hypothesized institutions that there is a significant correlation between total delivery methods utilized to communicate the crisis management plan to the campus community and the perception of institution preparedness to respond to crisis, though the data represented a bell curve pattern, not monotonic. Moderately prepared peaks in a bell curve with four (12.64%), then sloping down with five modes (11.49%) and then with three and six both ranking at moderately prepared at 6.90%. Therefore, the optimum trend is between three and six modes of delivery, though the curve down representing less delivery modes rises back up with one delivery mode at 10.34%.

- **Number of Trainings Address and Perception of Preparedness** - The correlation was determined to be moderately at \( r_s (108) = 0.366 \), but statistically significant at the \( p < 0.01 \) level (2-tailed). It is hypothesized that there is a significant correlation between the number of crisis management training topics addressed with perceptions of institutional preparedness to response to crisis. The highest rank of preparedness as moderately prepared, and within that ranking four
trainings (12.64%), five trainings (11.49%), and one training (10.34%) had the
greatest frequency reported. When further assessing the relationship between
number of trainings and perceived preparedness, a bell curve pattern appears and
peaks within moderately prepared at 12.64%, therefore not monotonic, and the
four trainings emerging as the optimum trend.

- **Director of Emergency Management and Perception of Preparedness** - The
  impact was statistically significant at a level of 0.008 (2-Tailed). This value is
  less than .05, therefore the null hypothesis is rejected. It is hypothesized that
  there is a significant impact from the existence of a Director of Emergency
  Management on perceptions of institutional preparedness to respond to crisis.
  The results showed that the Mean for having a Director of Emergency
  Management ($M = 4.28, SD = .07307$) was higher than the Mean for not having a
  Director of Emergency Management ($M = 3.90, SD = .13775$). Therefore,
  institutions reporting having a Director of Emergency Management did perceive
  themselves as being more prepared to respond to institutional crisis than those
  who reported this position not existing on their campus.

- **Institutional Size.** Another focus of the research was analyzing the institutional
  size and its potential relationships with training adequacy and general manner of crisis
  response. This was accomplished through a Spearman’s rho correlation coefficient.

- **Perceived Training Adequacy and Institutional Size** - The correlation was
  statistically significant at the $p < 0.01$ level (2-tailed), even though it was
determined moderate at $r_s(89) = 0.343$. When assessing the relationship between
  training adequacy there is a bell curve that peaks with institutions of 10,001 –
20,000 who agree their training is adequate, and peaks in a bell curve at 20,001 – 30,000 who strongly agree their training is adequate.

- **Perceived General manner of response to crisis and Institutional Size** - The correlation was determined weak at \( r_s (109) = 0.196 \), yet statistically significant at a rate of \( p < 0.05 \) level (2-tailed). It is hypothesized that there is a significant correlation between institutional size of and their perception of general manner of response to crisis. The data showed a peak of institutions perceiving themselves to be slightly proactive in their approach to crisis response at the size of enrollment of 10,001 – 20,000. Since the data has a bell curve, it is not monotonic.

### Major Implications from This Study

This research study promoted best practices for crisis management and the importance of proactive crisis management. With past studies presented in the literature review, and now through this study, institutions of higher education can learn about the indicators of preparedness and how to conduct a crisis audit to measure their own preparedness (Akers, 2007; Burrell, 2009; Catullo, 2008; Covington, 2013; Grimsley, 2015; Mitroff, et al., 2006; Zdziarski, 2001). According to the results, an enrollment size of 10,001 – 20,000 degree-seeking students is the optimum size institution that makes a significant impact on the perceptions of institutional preparedness to respond, general manner of crisis response, and adequacy of training provided to the crisis management team.

The rise of the field of emergency management has evolved within the last 16 years since the terror attack of September 11, 2001 (Drabek & Evans, 2007). With the creation of the National Incident Command System in 2004, Bosselait (2009) found that
institutions had adopted this on form of emergency management on their campus. This aligns with the study as most institutions (60.9%) reporting a Director of Emergency Management position on campus. As well as, the Director of Emergency Management and the Chief of University Police were considered the chief administrators responsible for coordinating campus crisis. Therefore, from past studies there has been a movement away crisis leaders being higher education administrators to a position leading this role with direct emergency management expertise. Plus, there is a positive impact on perceived preparedness to respond to crisis from the CSAOs at institutions that have the position of a Director of Emergency Management.

Findings show an optimum frequency for both communication delivery modes to communicate a crisis management plan and for the number of trainings to be provided to the crisis management team. Institutions that feel most prepared to respond to crisis when the crisis management plan is delivered between three and six different methods. This number has also been supported in the research that, about the use of an emergency notification system, that students’ attention is captured after a third notifications is delivered (Stephens et al., 2013). The optimum number of topics to address crisis management team training in relation to perceived preparedness to respond to crisis, was four to five topics. This can be utilized by crisis management teams when coordinating their plans as to be thorough but not to be redundant or overwhelming with information.

**Expected Contribution**

The research study discussed crisis management in the post-secondary educational setting. Data generated was from the perspectives of Chief Student Affairs Officers, who are for the most part in direct connection with the field of higher education
administration and student affairs. The setting for crisis management studied in this research was also in postsecondary education further connecting this research to those higher education administrators. The study’s focus on crisis management systems, planning, and response creates a natural connection to the field of crisis/emergency management.

**Higher Education Administration/Student Affairs**

There are several elements of this study that can benefit the profession of higher education administration and/or student affairs. As concluded, this student promoted crisis management best practices on college campuses. Regardless of varying institutional types, the literature presented and study findings can serve as a barometer. Institutions as they establish a crisis management plan or review their current plan, can use indicators of preparedness and other institutional norms presented here to measure the state of their plan. An important this study for higher education professions was the importance of being proactive with crisis management planning. Most importantly for the quality of care to meet base level needs of their students and staff, but also that responding to crisis in a reactive manner could lead to negligence, which can personally be devastating to lives and the reputation of the institution (Molina, 2010). This study also provided a frequency for the optimum number of crisis management trainings topics to cover and the number communication modes to use when communicating the crisis management plan.

Most student affairs administrators have various campus responsibilities and served multiple roles. The findings stated that 60.9% of institutions reported a Director of Emergency Management position, and that there is a positive impact on perceived
preparedness to respond to crisis for those whom have this position on campus. This position is already emerging as a main crisis leader on campus, along with the Chief of University police. This trend was a shift from earlier studies, where it was reported that administrators such as Vice President of Administration, Vice President for Student Affairs, or the Dean of Students lead the coordination of crisis response on campus (Catullo, 2008; Zdziarski, 2001). Therefore, it would be recommended, if funding resources were available, for institutions to examine the benefits of employing this type of position on campus.

**Crisis/Emergency Management**

This study can contribute to the field of emergency management within the post-secondary educational settings. In past studies Zdziarski (2001), Catullo (2008), and Covington (2013) noted that the phase of crisis least prepared for with a contingency plan was the pre crisis phase, therefore claiming institutions were more reactive in crisis response. Whereas, this study found that institutions reported having comprehensive contingency plans at greater frequency, which could be viewed as progress towards institutions becoming more prepared for crisis.

The trend of institutions adopting the NIMS protocol, and moving towards crisis leadership represented by emergency management professional has emerged (Bosselait, 2009). This was evident in this study with over half of the participating institutions having a Director of Emergency Management position, and because of it perceiving themselves as more prepared to respond to crisis. Therefore, with formal education in the field of emergency or disaster management also on the rise, a Director of Emergency
Management within universities presents a career track that was not present in prior studies.

Limitations of the Study

A potential limitation of this study is that the participant framed their university from a positive perspective, and therefore it may have skewed the answers. This can be described with the theory of social desirability of self-report where respondents were likely to answer questions in more socially suitable way (Phillips & Clancy, 1972). Participants were made aware that identifiable data by college would be publically unavailable to avoid this limitation. Another limitation is that correlation does not equal causation. This study is based on perceptions of crisis management and preparedness to respond to crisis. Therefore, it cannot be stated with full certainty that the results of the study are indicative of the current state of institutions preparedness.

Recommendations for Future Research

This study continued the research on medium to large sized, public or private institutions’ crisis preparedness. It would be recommended for future research to expand the participant criteria to include other institutional types and factors such as two-year colleges, technical institutions, institutions with branch campuses, and institutions with affiliated hospitals on campus. Akers (2007) performed a robust study of varying institutional types, but it has been ten years since he research was presented. Therefore, a new study could provide a richer context of university preparedness.

This study found significant correlations between the institutional size of 10,001 – 20,000 students enrolled and institutional preparedness to respond to crisis, general manner of crisis response, and adequacy of crisis management team training. Zdziarski
(2001) mentioned in his research that institutional size 10,001 – 20,000 students enrolled ranked themselves as most prepared by the indicators of preparedness. Therefore, it would be recommended for future studies to add questions to the *Campus Crisis Management* survey instrument in relation to factors of funding and staffing resources (Zdziarski, 2001). This would be a means to learn other key elements about this size of institution that aid in the perceptions of being better prepared to respond to crisis.

Findings from this study are from the perspective of Chief Student Affairs Officers, or in other research in the literature review from the provost or president (Burrell, 2009; Catullo, 2008; Covington, 2013; Mitroff, Diamond, Alpaslan, 2006; Zdziarski, 2001). Therefore, it would behoove future research to look at institutional preparedness from the perspective of different stakeholders. As the shift in crisis leadership on campuses from student personnel administrators to emergency management professionals, it would be interesting to assess the perspective of either the chief of university police or the director of emergency management. Several participants within this study described a competing need/interest or reasoning in not responding to crisis in a proactive manner was the balance between crisis response and the institutions reputation in mind due to the scrutiny of actions in the media (Molina, 2010). Therefore, a study on the perceptions of crisis management and preparedness from the director of media relations would be interesting.

**Concluding Comments**

This research study met it goals of presenting an updated state of crisis management and institutional preparedness to respond to crisis as perceived by Chief Student Affairs Officers in higher education. The results of this study imply, that not only
do participating institutions perceive themselves as prepared, the data reported on the various components of their crisis management systems affirm their perception. New recommendations for a position of a director of emergency manager, and frequencies for optimal number of topics to train the crisis management team and number of modes to use when communicating the crisis management plan to the campus community. There is still more to learn about what makes an institution with 10,001-20,000 students perceive themselves as most prepared, that respond more proactive, and delivers a more adequate training to its crisis management team. Not to set create an ideal institutional size, but to learn from the factors that contribute to its more positive outlook of crisis management.

It is important for institutions to remember that no plan is perfect, nor is there a one size fits all crisis management plan to adopt. A crisis management plan that works at one institution, may not fit the needs of another university even if they are similar in structure. Therefore, an importance must be placed upon pulling together the correct stakeholders to establish, continually review, and practice a comprehensive written crisis management plan.
References


Altizer, A. (2017, March 6). Do you have what it takes to be a university emergency manager? *Campus Safety Magazine*.
http://www.campussafetymagazine.com/article/do_you_have_what_it_takes_to_be_a_university_emergency_manager


Appendix A: Survey Cover Letter/Consent Form

Consent Form for Participation in the Research Study Entitled:
Evolution of Crisis Preparedness in the 21st Century: A Comparison Study of Institutional Preparedness to Respond to Crisis from the Perspective of Chief Student Affairs Officers at Select NASPA Member Institutions

Principal Investigator
Heather Studenberg, M.Ed.
7841 Rocky Fork Almaville Rd
Smyrna, TN 37167
305-778-5554

Co-Investigator
Robin Cooper, Ph.D.
Chair/Associate Professor, Department of Conflict Studies
College of Arts, Humanities, and Social Sciences
3301 College Ave, Fort Lauderdale, FL 33314
954-262-3048

Institutional Review Board
Nova Southeastern University
Office of Grants and Contracts
(954) 262-5369/Toll Free: 866-499-0790
IRB@nsu.nova.edu

Description of Study: Heather Studenberg is a doctoral student at Nova Southeastern University engaged in research for the purpose of satisfying a requirement for a Doctorate of Philosophy. The purpose of this study will be to examine the evolution of perceived preparedness for institutions of higher education to respond to crisis from 2007 – 2015, and then to further assess the importance of crisis management plans through a conflict management lens.

This questionnaire will build upon the research collected in two previous studies that took place right before terrorist attacks of September 11, 2001, and the Virginia Tech Massacre in 2007. The data from this questionnaire will be used to determine the evolution of higher education institutions’ preparedness to respond to crisis. The questionnaire will take approximately twenty to thirty minutes to complete.

Risks/Benefits to the Participant: There may be minimal risk associated with participation. Please understand that although you may not benefit directly, your participation in this study will help to enhance the knowledge in the fields of conflict resolution, student affairs in higher education and emergency management.

Cost and Payments to the Participant: There is no cost for participation in this study. Participation is completely voluntary and no payment will be provided.

Confidentiality: Information obtained in this study is strictly confidential unless law requires disclosure. All data will be secured in a locked filing cabinet. Your name or your institution’s name will not be used in the reporting of information in publications or conference presentations.

Participant’s Right to Withdraw from the Study: You have the right to refuse to participate in this study and the right to withdraw from the study at any time without penalty.

I have read this letter and I fully understand the contents of this document and voluntarily consent to participate. All of my questions concerning this research have been answered. I understand that the completion of this questionnaire implies my consent to participate in this study.
Appendix B: Survey Instrument

Studenberg - Campus Crisis Management

DEMOGRAPHIC INFORMATION

* 1. Type of institution you currently work at:
   - 4 Year Private
   - 4 Year Public

* 2. What is the size of your institution’s undergraduate enrollment?
   - 5,000 – 7,999
   - 8,000 – 10,000
   - 10,001 – 20,000
   - 20,001 – 30,000
   - More than 30,000

3. Which NASPA Region is your institution at member of?
   - Region 1
   - Region 2
   - Region 3
   - Region 4E
   - Region 4W
   - Region 5
   - Region 6

* 4. Name of your institution (Please note your answers will not be tied to your institution within the body of the paper. This is for the purpose of comparing data from institutions who have completed this survey before.)
PART 1

5. On a scale of 1 to 5, where 1 is unprepared and 5 is well-prepared, please indicate how prepared your university is to respond to campus crisis.

<table>
<thead>
<tr>
<th>Unprepared</th>
<th>Well-Prepared</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6. On a scale of 1 to 5, where 1 is unprepared and 5 is well-prepared, please indicate how prepared your student affairs division is to respond to campus crisis.

<table>
<thead>
<tr>
<th>Unprepared</th>
<th>Well-Prepared</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

7. On a scale of 1 to 5, where 1 is reactive and 5 is proactive, please indicate how you perceive your university's general manner of response to crisis.

The definition of reactive and proactive is as follows:
- reactive: reacting to the past rather than anticipating the future
- proactive: acting before a situation becomes a source of confrontation or crisis

<table>
<thead>
<tr>
<th>Reactive</th>
<th>Proactive</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8. Describe any organizational factors that you may perceive as variables in your university responding to crisis in a proactive manner?

9. Describe any organizational factors that you may perceive as variables in your university responding to crisis in a reactive manner?
10. Who coordinates your university's response to campus crisis? (Check only one.)

- President
- VP Academic Affairs
- VP Administration/Business Affairs
- Chief Student Affairs Officer (VP Student Affairs/Vice Chancellor or Provost)
- Chief/Director University Police
- Director of Public Information/Relations
- Director of Emergency Management
- 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 (please specify)

11. Does your university have a written crisis management plan addressing campus crisis?

- Yes
- No

12. Does your university have a Director of Emergency Management position?

- Yes
- No
- Not sure
Please respond to the remaining questions as they related to your student affairs crisis management plan. If you do not have a student affairs crisis management plan, then respond to the remaining questions as they relate to your university crisis management plan. If you do not have a written plan of any type, please answer as many of the remaining questions as possible.

13. How many years has your university crisis management plan been implemented?

14. How often is the crisis management plan reviewed?
   - Annually
   - Every 2 Years
   - Every 3 Years
   - Every 4 Years
   - Every 5 Years
   - Other (please specify)

15. A crisis audit refers to the process of assessing the internal and external environment to identify potential crisis, and determine the impact and probability of various crisis occurring. Has a crisis audit been conducted on your campus? (Check all that apply.)
   - No
   - When the plan was originally created
   - Each time the plan is reviewed
   - Annually
   - Whenever a crisis occurs
   - Other (please specify)
16. How is the crisis management plan communicated to members of the community? (Check all that apply.)

- Not communicated
- Copy of plan available upon request
- Plan accessible on the web
- Annual notification
- New employee orientation
- New student orientation
- Optional crisis management training session
- Required crisis management training session
- Drills and exercises
- Emergency procedures posted in classrooms and offices on campus
- Promoted through social media

Other (please specify)

17. Does your crisis management plan address the mental/emotional health of the following groups below?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>University caregivers that respond to crisis by providing Critical Incident Stress Debriefings</td>
<td></td>
</tr>
<tr>
<td>Students</td>
<td></td>
</tr>
<tr>
<td>Staff</td>
<td></td>
</tr>
</tbody>
</table>

18. 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 specified time intervals (e.g. weekly, monthly, etc.). Is there an "On-Call" or "Duty" system in place to respond to campus crisis?

- Yes
- No
19. Is there an established crisis management committee or team identified on your campus?
   Yes
   No (Skip to Part 2)

20. The crisis management committee or team is responsible for:
   [ ] Planning and updating the university’s comprehensive campus crisis management plan
   [ ] Training members and stakeholders on crisis management plan
   [ ] Coordinating campus response along with stakeholders

21. What type of training is provided to crisis management team members or individuals involved in responding to campus crisis? (Check all that apply.)
   [ ] No training provided
   [ ] Crisis Management (campus procedures)
   [ ] Crisis Management (general)
   [ ] Legal Issues/Risk Management
   [ ] Working with Law Enforcement & Emergency Professionals
   [ ] Responding to Civil Disturbance or Demonstration
   [ ] Suicide Intervention
   [ ] Media Relations
   [ ] Campus Violence Issues
   [ ] Substance Abuse
   [ ] Grieving Process
   [ ] Orientation to Community & County Agency Assistance
   [ ] Critical Incident Stress Management/Debriefing
   [ ] Table-top exercises
   [ ] Conflict Management (general)
   [ ] Other (please specify)

22. On a scale from 1 to 5, where 1 strongly disagree and 5 strongly agree, please rate the following: the crisis management training is adequate in responding to crisis effectively.
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 internal and external stakeholder listed below. You may check multiple levels of involvement if applicable.
23. Internal Stakeholders

<table>
<thead>
<tr>
<th>Level 1: Represented on the Crisis Management Committee or Team</th>
<th>Level 2: Impact of Crisis on this Stakeholder is Routinely Considered</th>
<th>Level 3: Involved in Planning &amp; Response as Needed</th>
<th>Level 4: Not Significant to Crisis</th>
</tr>
</thead>
<tbody>
<tr>
<td>President</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Executive Level (VP of Academic Affairs, VP of Administrative Affairs, VP of Student Affairs, General Counsel, University Relations)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>University Staff Services (Human Resources, Employee Assistance)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>University-Wide Services (University Police, Physical Plant, Environmental Health)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Academic (Dean of Faculties, Faculty)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student Services (Students, Dean of Students, Student Health Services, Student Counseling Services, Residence Life, International Student Services)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student Involvement (Student Activities, Athletics, Campus Ministers)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other (please specify)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

24. Are there competing needs and/or interests amongst the internal stakeholders that could cause conflict? If so, please explain.

[Box for answer]
25. External Stakeholders

<table>
<thead>
<tr>
<th>Stakeholder</th>
<th>Level 1: Represented on the Crisis Management Committee or Team</th>
<th>Level 2: Impact of Crisis on this Stakeholder is Routinely Considered</th>
<th>Level 3: Involved in Planning &amp; Response as Needed</th>
<th>Level 4: Not Significant to Crisis</th>
</tr>
</thead>
<tbody>
<tr>
<td>FBI</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>State &amp; Local Police/Sheriff Departments</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Local Fire Department &amp; State Fire Marshall</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Local &amp; State Mental Health</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Local Emergency Management</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Red Cross</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Local Hospitals</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Parents</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Local Community Members</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Alumni Associations</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Victims Assistance Programs</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Other (please specify)</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>

26. Are there competing needs and/or interests amongst the external stakeholders that could cause conflict? If so, please explain.
PART 3

A contingency plan is a written procedure or checklist that supplements a basic crisis management plan and addresses unique circumstances or issues for a specific type of crisis.

Please identify for each type of crisis if individual contingency plans exist for each phase of crisis. If all three phases of crisis are addressed with a contingency plan in your university's overall crisis management plan choose "comprehensive" as your answer.

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 preventative 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 passed, follow-up communications with stakeholders, and mechanisms to revise or improve procedures for the next crisis.

27. Natural

<table>
<thead>
<tr>
<th></th>
<th>Pre-Crisis</th>
<th>Crisis</th>
<th>Post Crisis</th>
<th>Comprehensive</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tornado</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hurricane</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Earthquake</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flood</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Severe Weather</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other (please specify)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
28. Facility

<table>
<thead>
<tr>
<th>Event</th>
<th>Pre-Crisis</th>
<th>Crisis</th>
<th>Post Crisis</th>
<th>Comprehensive</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fire</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Explosion</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chemical Leak</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Evacuation of Campus</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Evacuation of Buildings</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corruption/Loss of Computer Data</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loss of Utilities (e.g., electricity, A/C, telephone, etc.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other (please specify)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

29. Criminal

<table>
<thead>
<tr>
<th>Event</th>
<th>Pre-Crisis</th>
<th>Crisis</th>
<th>Post Crisis</th>
<th>Comprehensive</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homicide</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assault</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sexual Assault/Rape</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sexual Harassment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Domestic Abuse</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Burglary/Robbery</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kidnapping/Abduction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hate Crime</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Terroristic Threat</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vandalism</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other (please specify)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
30. Human

<table>
<thead>
<tr>
<th>Event</th>
<th>Pre-Crisis</th>
<th>Crisis</th>
<th>Post Crisis</th>
<th>Comprehensive</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Death</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Faculty/Staff Death</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student Injury</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Faculty/Staff Injury</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Suicide</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emotional/Psychological Crisis</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Missing Person</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alcohol/Drug Overdose</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Infectious Disease</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Racial Incident</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Campus Disturbance/Demonstration</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Other (please specify)  

31. Regarding a contingency plan, where 1 is strongly disagree and 5 strongly agree, please rate the following: my university is prepared to respond to the following crisis:

<table>
<thead>
<tr>
<th>1 - Strongly Disagree</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5 - Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Facility</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Criminal</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Human</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>