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Walden University 2021

Abstract

Emergency Managers' Perceptions of Active Threat Preparedness in Higher Education

by

Shannon Daniel

MS, University of St. Francis, 2011 BA, Longwood College, 1994

Dissertation Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Philosophy
Adult Education Leadership

Walden University
February 2021

Abstract

The shooting on Virginia Tech's campus that left 32 dead in 2007 and other incidents since then resulted in active threat preparations at institutions of higher education (IHEs) in the United States. Little is known about how emergency managers understand campus preparedness and what enhanced learning in the implementation, training, and effectiveness of policies. The purpose of this basic qualitative study was to understand how campus emergency managers perceived the effectiveness of the design and implementation of their standard operating procedures to protect against an active threat and what the emergency managers perceived enhanced their learning in the design and implementation of procedures. The conceptual frameworks for the study were Kezar's concept of shared leadership in higher education and Knowles' theory of andragogy. Open-ended interviews were conducted with eight emergency managers from different campuses in a mid-Atlantic eastern state. Interviews were hand coded to extract emergent themes. Three themes emerged in the results. Related to Research Question 1, the two themes that emerged were emergency managers being entrusted to design an effective plan and their working together to create a safer culture. The resulting theme for Research Question 2 concerned lessons learned from their experiences. The results may lead to positive social change by helping emergency managers and other campus leadership gain additional insight into collaboration and coordination on planning and improved communications to develop, implement, and improve plans to protect against an active threat. These improved plans could help students and staff be better prepared for an active threat should one occur on campus, preventing injuries and or death.

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Dedication

I dedicate my dissertation to my family and friends. Overwhelming gratitude to my parents, Addison and Susan Daniel, who instilled in me the confidence, integrity, and perseverance needed to complete this journey. A special thank you to my mother, who chose a life of service to her children. It allowed us all great success along our individual paths. Thank you for your sacrifices.

To my siblings, Dawn, Jennifer, Addison, Cori, and Steve, you have been a constant reminder of great leadership, bravery, service to our country and communities, thank you. You never left my side and continued to provide the words of encouragement and wisdom needed to complete the process. My nieces, Reagan and Payton, and my nephew, Addison, let this be a great lesson that anything is possible with patience and determination. I love you and thank you for being the sunshine during the hardest days. I also would like to dedicate this to my grandparents Esther, Frank, Mary Florence, and Addison, for investing in my education since I was young.

To my friends and West Hanover Volunteer Rescue Squad family who supported me throughout this process by listening to my ideas and understanding when I had to stay home and write, you were steadfast through the entire journey so thank you for your devotion to our friendship. I am lucky to have each of you as part of my life. Ginger and Mike, my sincerest gratitude to you for the treasure of your friendship and kindness when things were challenging. I am grateful to my whole family and all my friends for your love, support, and patience throughout my doctoral program. This would not have been possible without you.

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Chapter 1: Introduction

An upsurge of active shooter events that occur at IHEs in the United States has provoked a new way of thinking among leadership, public safety, emergency managers, and other administrative staff about security, safety, and how to mitigate such an incident if one were to occur on campus (U.S. Department of Justice, 2018a, 2018b). It is not a new phenomenon, but because this type of incident is becoming more frequent on campuses, a more proactive approach in planning seems to be at the forefront of what many colleges and universities are working on to improve prevention, response, and recovery if an event materializes (U.S. Department of Justice, 2018a, 2018b). An active shooter is an individual or group intending to kill and or injure the greatest amount of people in an area with one or more firearms (U.S. Department of Justice, 2018a, 2018b). Between 2000-2017, the FBI confirmed 15 active shooter incidents at institutions of higher learning, which accounts for about 6% of the active shooter incidents occurring throughout the United States during that time span (Roman, 2018; U.S. Department of Justice, 2018a, 2018b). In those 15 shootings that occurred on campuses, there were 143 casualties, in which 70 were killed and 73 were wounded (U.S. Department of Justice, 2018a, 2018b). There were no active shooter incidents documented that occurred at IHEs in 2018 (U.S. Department of Justice, 2018a, 2018b) however, one did occur in 2019 resulting in two students killed and four wounded (U.S. Department of Justice, 2020).

Active shooter events have become more commonplace at IHEs during the last 18 years than in the past years according to the U.S. Department of Justice (2018a, 2018b).

In 1966 the University of Texas at Austin experienced the first active shooting by Charles

Whitman, who climbed the Main Building Tower and for 96 minutes randomly shot and killed 14 individuals and injured 31 more (Wallenfeldt, 2016). In 1976 a custodian at California State University, Fullerton, killed seven and wounded two in the lobby of the library and the basement (Lindsey, 1976). One of many examples of an active shooter event by a graduate student was at the University of Iowa in 1991, a graduate student killed four faculty members and another graduate student (Myers, 1991). On April 16, 2007, the day of the Virginia Tech shooting, the shooter took the lives of 32 individuals and injured as many as 23, before taking his own life (Roman, 2018).

Fox and DeLateur (2014) explored many of the myths associated with mass killings to show that mass murderers do not kill indiscriminately. They pointed to five motives as to why active shooters kill: seeking revenge, seeking power, demonstrating loyalty, inciting terror, and profiting. Fox and DeLateur claimed mass murderers see themselves as victims of some type of injustice and are seeking retribution for the negative experiences and misfortunes they have suffered. Unfortunately, there are too many colleges and universities that still operate under the mindset that this can never happen on their campus (Fox & DeLateur, 2014). Data on campus safety and compliance is readily available, but many IHEs may not take advantage of what is available (DeArmond, 2018).

A positive social change implicated by this study has potential to create change on campuses by this study informing IHEs about preparedness during an active threat situation and how leadership and stakeholders can improve their plans to have a more positive impact on campus and university safety. In this chapter, I provide a background

of active shooter events in IHEs and addressed the problem statement and the purpose of this study. I introduced the research questions that addressed the problem, a framework for the study, and the design of the study. Definitions of key concepts and terms provided assist the reader in understanding the topics being discussed. The scope and limitations help the research focus. In the significance section, I identify the potential contributions and social change implications of the research being conducted.

Background

Because campuses are open and allow for easy access, there are many challenges for an emergency management team when trying to develop and implement plans for communication, security, and safety (Roman, 2018). Because campuses are often large and spread out, with many buildings, it can create challenges for accountability, safety, and security measures to be taken for faculty, students, and staff (Drysdale et al., 2010). When the emergency management teams are developing strategic plans, Drysdale et al. recommended that teams refer to the Department of Education's (DOE) (2013) list of factors when implementing safety and security measures to help prevent active shooter events. Factors listed include ways to deny entry into critical infrastructure; the campus environment; movements of students, staff, and visitors; access control for those intending to harm students, staff, and visitors; resource allocations; and policies (DOE, 2013).

Federal Policies to Support Crisis Management on Campus

Directives and actions based on policies and procedures have been implemented to help guide colleges and universities to develop safety procedures, reporting, and plans.

The Policy Directive 8 (PPD8) and the Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act (Clery Act) were implemented to provide guidance on planning and reporting of crisis events, including human-made disasters. In 2011, the U.S. Department of Homeland Security implemented a national preparedness directive, Policy Directive 8 (PPD8), which identified the five phases of crisis management as prevention, protection, mitigation, response, and recovery. This directive is a systematic approach developed in order to aid in preparation to protect against threats towards security and integrity created by natural and human-made disasters (U.S. Department of Homeland Security [DHS], 2011). The directive was aimed to strengthen the security and resilience across the nation to include IHEs, businesses, and all levels of government (DHS, 2011). The Department of Homeland Security's systematic preparedness approach focused on improved education, planning, and resiliency goals by all stakeholders, private and public, for catastrophic disasters (DHS, 2011). The development of the PPD8 provided a framework for emergency managers at IHEs to write all-inclusive plans to address each phase of a crisis.

The Clery Act was implemented in 1990 to ensure that IHEs receiving federal funding produce an annual report of criminal acts that occurred on campus and the public property on and near the campus (U.S. Department of Education, 2013). The annual report is required to include the updated policy in place that addresses emergency response roles and responsibilities, procedures the students and faculty follow in the event of an evacuation, and operating procedures the institution uses for information sharing and communications during an emergency incident (U.S. Department of

Education, 2013). The Clery Act requires reporting anything to the authorities that can be considered a threat to the campus community. It also addresses that information needs to be communicated out in a timely manner through the campus's emergency notification process.

Continuity of Operations

In many cases colleges and universities take on the characteristics of a small town or city and are able to function as such with staff, residents, living areas, public areas, large buildings, public access, and parking lots (Regehr et al., 2017). Within these communities there are challenges that have to be addressed comparable to those in cities and towns so the environment will be safe for those working there, attending classes, and visiting (Regehr et al., 2017). Much responsibility is placed on the administrators to ensure they are providing security and safety measures developed and implemented to provide the protection and information needed when there is a high-risk situation occurring on the campus (Regehr et al., 2017). Emergency managers have a key role in developing and implementing plans that include the standard operating procedures to address human-made and natural disasters that can occur on any college or university campus (Altizer, 2017).

Active threat incidents are becoming more common both at the local and national levels (Cannon, 2016; Myers, 2017) and IHEs are not immune from these events. This reinforces the need for campus emergency managers to work with internal and external stakeholders to collaborate on plans, communications, and training to educate those who potentially could experience an event of this nature on their campus (Cannon, 2016).

As with any disaster, continuity of operations for the student, staff, and administration is a concern for colleges and universities. Colleges and universities learn valuable lessons from incidents like what occurred at Virginia Tech. Since those incidents, emergency managers and their teams worked to prepare for active shooter incidents by writing, changing, and updating policies, adding locks on the inside of the classrooms to prevent someone from getting in, improving notification systems, and providing training on what to do if faced with an active shooter incident while on campus (Camera, 2017). Roman (2018) identified that some universities are going to even greater lengths to address these challenges by using technology to detect a gunshot and find the exact location by sending an alert to security and law enforcement.

Egnoto et al. (2016) analyzed the motives and manners in which individuals communicated during the University of Texas at Austin active shooter/suicide incident. They explored perceptions of campus leadership at IHEs being tasked with sending out a message if an event like an active shooter took place. They researched what information was provided by individuals on location of the incident, how this assisted responders, and how to remain safe while the incident was occurring. One lesson learned was the impact that social media had on the communications that occurred during the University of Texas at Austin active shooter incident. In this instance, social media was used by many faculty and students to share information about the incident and to confirm they were safe. However, many recipients were unsure if the event was real because messages were not streamed through a main communication source. If messages were streamed through

one source, a better opportunity for one voice messaging and accuracy in the information being shared could have been provided (Egnoto et al., 2016).

In 2005, Hurricane Katrina significantly impacted colleges' and universities' situational awareness of the importance of both mitigation and continuity of operations plans. The hurricane challenged IHEs on how to continue to support students and staff before, during, and after catastrophic events (Farris & McCreight, 2014). Because of the damage to buildings, communications, and other infrastructure caused by the hurricane, many IHEs had to discontinue operations, causing displacement of many national and international students, faculty, and staff. IHEs began writing continuity of operations plans, in case their institutions experienced a catastrophic event that would discontinue operations. The plans typically allowed for communications on next steps for students and staff, how access to records can be preserved, addressed what students need to keep with them in the way of their personal documentation, and how the college community should prepare for such events (Farris & McCreight, 2014). Even though continuity of operations plans were implemented as a result of Hurricane Katrina, plans are now typically utilized for all catastrophic incidents, whether it be a natural or human-made disaster (Farris & McCreight, 2014). Being able to support continuity of operations delineates the level of preparedness of IHEs should any crisis take place on campus.

Problem Statement

Active threat incidents are becoming more frequent both at the local and national levels (Cannon, 2016; Myers, 2017). IHEs are not immune from these events. This reinforces the need to understand how campus emergency managers can better work with

internal and external stakeholders to collaborate on developing and implementing more effective plans, communication systems, and training programs to educate those who could experience an event of this nature on their campus (Cannon, 2016). These processes will be implemented during real-life scenarios and tested through the training and operational exercises conducted by the campus emergency managers.

According to Kezar and Holcombe (2017), during crisis situations different types of leadership is needed as opposed to the traditional leadership model used in most campus settings. There needs to be better understanding of how to involve emergency managers, public safety teams, and public health officials to support the traditional leadership and to provide different perspectives before, during, and after a crisis occurs.

Purpose of the Study

The purpose of this basic qualitative study was to understand how campus emergency managers perceive the effectiveness of the design and implementation of their standard operating procedures to protect against an active threat and to gain a better understanding of what the emergency managers perceive enhanced their learning in the design and implementation of active threat response procedures. I conducted semistructured Zoom interviews with the campus emergency managers to gain a better understanding as to what extent IHEs are prepared for an active threat. The results of this study serve to inform the organizational leadership, students, staff, stakeholders, and communities in which these institutions operate related to what extent their campuses are prepared if an active threat should occur.

Research Questions

The following research questions guided this study:

- 1. How do campus emergency managers perceive the potential effectiveness of the design or implementation of their standard operating procedures to protect against an active threat?
- 2. What do the emergency managers perceive enhanced their learning in the design or revision of the active threat plan used for their campus?

Conceptual Framework

In this study, the conceptual framework included shared leadership in higher education (Kezar & Holcombe, 2017) to address the first research question, and Knowles' (1990) theory of adult learning to address the second research question. Kezar and Holcombe's (2017) theory addresses the value of shared leadership in IHEs as a process. Shared leadership lends itself to contributions from many individuals working to solve difficult issues faced on campuses today (Kezar & Holcombe, 2017). This kind of collaboration among leadership can be applied to emerging real-life issues and prepare them to be proactive on college campuses. Knowles' contributions to understanding adult learning helped me listen for participants' perceptions of learning while doing. Knowles' theory also applied to understanding the importance of what emergency managers learn and the impact their experiences have on the development and implementation of the plans and how it contributes to the potential effectiveness of their plans.

Nature of the Study

I conducted a basic qualitative study, using semistructured interviews with campus emergency managers from IHEs in a Mid-Atlantic state, to understand how they perceived the effectiveness of the design and implementation of their standard operating procedures to protect against an active threat. A basic qualitative study allowed for interpretation of participants' experience, and places emphasis on how individuals explain their personal perspectives (Merriam, 2009). Merriam and Tisdell (2015) described the basic qualitative methodological approach as constructivist or even descriptive, to inform practice. Conducting semistructured interviews allowed for sensitive topics to be discussed in a private setting without any fear of reprisal against the participant for discussing the in-depth information being examined. Data collected from eight interviews, the point of saturation, were analyzed by first organizing and preparing the data transcripts with notes. I created codes, reviewed the codes, and developed themes and subthemes.

Definitions

The following terms and definitions informed this study:

Active shooter – An active shooter is an individual or group intending to kill and or injure the greatest amount of people in an area with one or more firearms (U.S. Department of Justice, 2018a, 2018b).

The Clery Act - The Clery Act was implemented to protect campus consumers by providing awareness of campus crime data and policies developed to help combat campus crime, (U.S. Department of Education, 2013).

Mitigation – addresses taking precautionary measures to prevent or lessen the impact of threats and hazards that can occur, resulting in loss of life, injury or property damage (DHS, 2011).

Presidential Policy Directive 8 (PPD-8) - describes how the nation as a whole can implement a strategic plan for national preparedness during a natural or human-made disaster. This goal addresses five areas of concern during a disaster; prevention, protection, mitigation, response, and recovery, and how to support each area (DHS, 2011).

Prevention – explains the approach, plan, or procedure implemented by a college or university, to avert or impede, a suspected or confirmed threat from occurring on campus (DHS, 2011).

Protection – addresses the constant measures a college or university takes to secure a campus and protect against natural and human-made disasters that can cause loss of life, limb, and property damage (DHS, 2011).

Recovery – addresses the measures and plan for a college or university to allow for continuity of operations to be uninterrupted despite an incident, emergency, or crisis. Recovery also addresses the ability for the campus to be restored to its full operational setting once the situation has resolved itself (DHS, 2011).

Response – addresses the activity surrounding the ability to relieve the impact an emergency or crisis can create to be able to institute a protected setting to focus on saving lives and property (DHS, 2011).

Assumptions

In qualitative research many aspects of the design can influence the results of the study. When conducting interviews, I considered my own perceptions with the intent of not biasing the results. I assumed that participants would honestly share their reflections and share accurate memories of processes and collaborations. I assumed that in analyzing the data, I could verify the findings by ensuring several participants were interviewed, and by reviewing field notes collected during my interviews.

Scope and Delimitations

Emergency managers who work with 4-year colleges and universities were the participants for this study. Two-year IHEs can also be susceptible to active shooter events and should have separate research to better understand what their emergency managers should develop and implement for their campuses. I chose to interview emergency managers on campuses because part of their responsibility is to be the subject matter expert on how to develop and implement plans to better understand prevention, protection, mitigation, response, and recovery to the active shooter events based on the training and education received in their positions (Regehr et al., 2017). Help may be elicited from internal and external stakeholders, but it is the emergency manager who is responsible to analyze, train, and exercise the plan in order for implementation to occur once the plan is developed.

Limitations

One limitation of this study is self-selection by the participants. Those who elected not to respond to my invitation may have different perceptions from those who

decided to take advantage of the opportunity. Subjectivity is another limitation. One of the benefits for conducting one-on-one interviews is the data collected was explicit regarding the thoughts and perceptions of the emergency managers. I took caution to not let my personal experiences and observations influence any outcomes of the study. I kept a journal during the interview process and recorded my personal thoughts and observations during the process to limit my subjectivity. Qualitative data typically reflects the perceptions and thoughts of the individual being interviewed, which makes the data more subjective versus objective. Transferability of the information provided in my research could occur as I wrote a thick description of my work that included the setting, location, methods of study, role in the study, and as many other details as possible that described the study so that the reader of my study could take into consideration if the results and methods apply to their situation.

Significance

Little was known about how emergency managers understand their campuses' preparedness and what enhances their learning in the implementation, training, and effectiveness of policies. Results of this study could impact how emergency managers of 4-year IHEs develop and implement plans in order to help with prevention, protection, mitigation, response, and recovery during an active threat event should one occur on their college or university campus. The findings have the potential to help improve the ability to provide safety and security on campuses that possibly need help with development and implementation of plans in order to address an active threat event. The study results may inform positive social change in institutions that have not developed and implemented

plans to address an active threat. The findings can be shared with other emergency managers and higher education leaders to help with the broader challenges of organizational planning and decision-making regarding threats that require the cooperation of many stakeholders. Other examples of disasters where the findings could be instrumental include highly contagious diseases on campus, campus electrical outages, hurricanes, tornadoes, flooding, and severe winter weather.

Summary

In Chapter 1, I addressed the background of why this study is relevant, the problem statement and purpose of the study, and research questions. I also described the conceptual framework as shared leadership and the design as a basic qualitative study with semistructured interviews. I provided definitions to help the reader understand the professional support literature and information on assumptions, the scope and delimitations of the study, limitations, and the possible significance of this study to help support 4-year IHEs in developing and implementing their plans for active threat events. In Chapter 2, I describe the strategy I used to search for the literature that supports the research topic and a comprehensive literature review related to key concepts as well as the conceptual framework.

Chapter 2: Literature Review

The purpose of this basic qualitative study was to understand how campus emergency managers perceive the potential effectiveness of the design and implementation of their standard operating procedures to protect against an active threat and to gain a better understanding of what the emergency managers perceive enhanced their learning in the design and implementation of active threat response procedures.

According to Kezar and Holcombe (2017), during crisis situations different types of leadership is needed as opposed to the traditional leadership model used in most campus settings. There needs to be better understanding of how to involve emergency managers, public safety teams, and public health officials to support the traditional leadership and to provide different perspectives before, during, and after a crisis occurs.

In Chapter 2, I provide the library databases and search engines used to gather information, the search terms, and processes used. Also, I describe the conceptual framework and the empirical literature that supports the research problem.

Literature Search Strategy

The following databases were used in search of literature that supported the research ERIC: Educational Resource Information Center, SAGE Journals, Education Source, ProQuest Central, United Nations Educational, and the Scientific and Cultural Organization (UNESCO) database. Keywords and phrases I used to find research articles included, but were not limited to: crisis management, active shooter on college campuses, campus violence, campus emergency planning, active shooters, campus emergency management, emergency management, higher education, critical incidents,

preparedness, culture of preparedness, emergency management planning, crisis leadership, higher education leadership, student safety on college campuses, active threat training, response to a crisis event, violence on college campuses, and survivability during an active shooter on campus.

Some challenges experienced during my information gathering included finding empirical articles less than five years old and some not being empirical, but which were of value for understanding the research problem and were from peer-reviewed journals. I have used these resources because of the paucity of empirical studies related to the research problem.

Conceptual Framework

In this study, the conceptual framework includes the model of shared leadership in higher education addressing the first research question, as put forth by Kezar and Holcombe (2017). Addressing the second research question is Knowles' (1990) theory of adult learning as presented by Knowles and other scholars who have applied the theory, including Palis and Quiros (2014).

Shared Leadership

Kezar and Holcombe's (2017) model addresses the value of shared leadership in IHEs as a process, assuming shared leadership lends itself to contributions from many individuals working to solve difficult issues faced on campuses today. Kezar and Holcombe claimed this kind of collaboration among leadership can be applied to emerging real-life issues and help to be proactive on the college campuses. In order for change to take place in IHL, Kezar (2011, 2014) attributed the success of change to

communication and collaboration among all leadership throughout an institution as opposed to the conservative chain-of command approach often adhered to in IHL. Kezar and Lester (2011) proposed when leadership is able to correlate the mission and values with the change being implemented, all those affected have greater understanding and support for the necessary transition. Kezar (2014) addressed the importance of all leadership levels being involved in implementing change because each level has a certain rapport and influence on their peers, staff, and even students.

Kezar (2005) placed importance on involvement from the leadership, faculty, students, and staff in order to solicit a whole community approach to build success for the students and the institution. Student involvement on committees, in policymaking, and on task forces bring a needed perspective that is crucial in an institution's success (Kezar, 2005). Collaboration among the whole campus allows trust and rapport to be built among the leadership, faculty, students, and staff when change is implemented for curriculum changes, service learning, and effective policies and procedures (Kezar, 2005). Buy-in from all levels of the team, to include students, fosters a positive and cohesive environment for learning, but allows for success if traumatic events occur on campus (Kezar, 2005).

Adult Learning Theory

Adults are prepared and willing to learn when what they are learning impacts their real-world situations (Palis & Quiros, 2014). Palis and Quiros (2014) agreed with Knowles (1990) regarding the importance for adult learners to be able to qualify, guide, and oversee their own learning and understand how it is applicable to what they are

experiencing. Palis and Quiros also relayed the need for adults to take an active role in what they are learning so they can be more independent in their learning. They addressed the relevance that the topic being taught and learned by the adult learner is based on the developmental stage they are experiencing at the time. If the topic is not applicable at the time of it being learned, the learner may feel it is not applicable and not assimilate the new knowledge. Palis and Quiros, like Knowles (1990), found adult learners had success comprehending new skills and information when using scenarios related to everyday situations, thus making the knowledge applicable to their current situation. By understanding the relevance of knowledge being transferred, adult learners are motivated to assimilate the knowledge to the best of their ability in order to be able to recall the information efficiently and effectively as needed. Knowles' and Palis and Quiros' contributions to understanding adult learning will help me listen for participants' learning while doing.

Empirical Literature Review of Key Factors

The key factors I addressed and analyzed in the literature review include the culture of preparedness in institutions of higher learning, active shooter preparedness on campuses of IHEs, roles of campus leadership during crisis (crisis management), and *Run, Hide, Fight* and other responses to active shooter events. Other key factors addressed include what emergency managers have learned or experienced by developing or revising plans.

Culture of Preparedness in Institutions of Higher Learning

Management of crisis on college and university campuses is a relatively new function for colleges and universities and the active shooter incident that occurred at Virginia Tech brought emergency management to the forefront in creating strategic plans to help aid in the prevention and lessen the impact if an active shooter or threat occurred (Farris & McCreight, 2014; Wang & Hutchins, 2010). Before the 9/11 attacks in 2001, emergency managers on campuses were rare, but today on campuses their duties include but are not limited to the hazard mitigation expert; exercise coordinator to help with tabletop, full-scale, and functional exercises; emergency planner; and grant administrator (Farris & McCreight, 2014).

Through a single case study, Wang and Hutchins (2010) showed that training, conducting threat assessments, and actively engaging leadership when changes are implemented, will enable the campus to be better prepared for any crisis event to include an active shooter incident. The findings are helpful for other campuses preparing and planning for an active threat should one occur on their campus. A key factor that Wang and Hutchins referenced was that the developed crisis plan had to address the everchanging needs of the institution while meeting all the intricacies campuses face in order to ensure effectiveness.

Key elements Kapucu and Khosa (2013) found in their data addressed that providing a more secure and resilient campus before, during, and after an active shooter event relies on partnerships with internal and external stakeholders, developing an all-hazards comprehensive emergency management plan; a foolproof communications

system; and providing the correct training to administration, leadership, and students. Kapucu and Khosa surveyed emergency management professionals affiliated with colleges and universities about the development of their plans, processes, and procedures, and how they assess for threats and hazards. They also inquired about how prepared the emergency management teams felt if they were to experience an active shooter or threat incident on campus. Kapucu and Khosa reported that most college and universities emergency management teams were confident in the ability to deal with disaster management if they experienced an event. Also, they found the teams perceived they had worked well with their external stakeholders on planning and preparation. One of the largest reported barriers for colleges and universities was lack of funding in order to support the development plans, and the training and exercising needed to support the evolution of the plans in order to support emergency preparedness on campuses (Kapucu & Khosa, 2013).

Another approach considered in developing a culture of preparedness was researched by Hollister and Scalora (2015). Their focus on campus threat assessment research brought to light what effect reporting of pre-incident behavior and having a team of campus safety professionals investigating and acting upon the threatening behaviors could have on the prevention of campus violence, if it were a possibility. According to Hollister and Scalora, this is a prevention practice that is being widely implemented in colleges and universities. The Virginia Tech and the Northern Illinois university active shooter incidents both contributed to gaining governmental support in the campus threat assessment approach of prevention (Hollister & Scalora, 2015). Hollister and Scalora

researched campus threat assessment, programs implemented after both incidents, and new knowledge gained by students, friends, and families. Students, friends, and families were the majority of individuals providing awareness to unusual behavior witnessed. Of the plots planned to cause an act of violence on campus, 57% were stopped before any harm or injury could be completed by the individual or group thought to be a threat. Preincident reporting and information sharing from students, family, and friends are found to be key factors in campus violence prevention.

Another approach taken by campuses to provide safety and security to the students, faculty, and staff is how neighboring campuses can work together to leverage resources during a time of crisis. Green (2014) studied how three institutions in the western United States worked together to form an alliance to be better prepared for campus emergencies to help each other despite knowing each campus had limited resources. But the ability for the three campuses to collaborate and coordinate allowed the teams to work together to create a culture of preparedness on all the campuses, share planning templates, and develop plans that enhanced each other (Green, 2014). The three campuses worked together with their local first responders and other important stakeholders to exercise the plans that were implemented and were able to cross-train their staff to help respond and support the additional campuses when a crisis occurred. This opportunity allowed for full advantage from the campuses' resources, support, and the development of relationships to provide support (Green, 2014).

Active Shooter Preparedness on Campuses of Institutions of Higher Education

Preparedness may begin with awareness of the campus's plan. Through a case study, Williams (2017) conducted qualitative research on awareness and understanding of a college active shooter crisis plan. Williams interviewed 16 participants to gain a better understanding of their individual situational awareness of the crisis plan the college had implemented for an active shooter. Through the interviews, Williams learned the faculty and staff had little awareness about the policies and the guidance the policies provided. Williams also felt the findings could help advocate for better awareness and planning on campuses should an active shooter event occur.

Faculty active shooter preparedness and the importance of preparedness were the focus of Pitts's (2018) research, which involved an online survey to better understand what factors influence preparedness for faculty during an active shooter event. Of the faculty surveyed, 57% received training at their institution of higher education and reported being prepared for an active shooter incident (Pitts, 2018). In conclusion, Pitts found discussion-based type training and exercises were conducted as opposed to a full-functioning operational exercise, which Pitts felt left much room for improvement in the training program. This refers to Knowles' (1990) theory on knowing why training is relevant and can influence an outcome in a student's situation (Palis & Quiros, 2014).

Data collected via sampling, analysis, and demonstration methods in a descriptive evaluation design were used by Ellies (2015) to research active shooter events and review curriculums on active shooter training providing insight on the importance of partnerships between institutions of higher learning and law enforcement communities.

Ellies explored curriculum to help institutions of higher learning better understand methods used to implement preparedness, mitigation, and response if an active shooter event were to take place on campus. Ellies, through review of case studies of active shooter events, found that institutions of higher learning could be better prepared for an active shooter event on campus by collaborating with law enforcement to create a strategic plan to support preparation, mitigation, and response. To provide better protection to the staff and students, Ellies addressed the need for training to help staff, students, and responders better understand the need to work as a cohesive team when an incident occurs on campus.

Emergency preparedness on campuses by evaluating security plan preparation end exercises to identify barriers and best practices for active threats on campus were explored by Gunter (2016) in his collective case study. Gunter's research showed that if the emergency managers conduct exercises on active shooter incidents, they can take away lessons learned and best practices. The exercise data collected, Gunter suggested, is instrumental in emergency preparedness planning and updates. Gunter identified the need for more federal funding for emergency preparedness on campuses and an accreditation that supports campus security and senior leadership making a more robust change to safety and security on campuses.

A national survey conducted by Fifolt et al. (2016) showed how a hazard vulnerability analysis (HVA) conducted by the onsite emergency managers could improve the situational awareness for leadership and staff on what type of threats and hazards exist on the college and universities' campuses. Fifolt et al. found this allows the

emergency managers to write plans to prepare, mitigate, respond, and recover from both human-made and natural disasters. Due to the complexities and challenges universities and colleges face with multiple audiences and infrastructures, it can be difficult to plan for and respond to the ever-changing emergency situations that could occur on campuses (Fifolt et al., 2016). Catastrophes do not discriminate against where, when, or how they might happen, meaning these types of incidents potentially could strike at a large or small campus affecting the health and well-being of leadership, staff, student, or visitor equally (Fifolt et al., 2016). Fifolt et al. found that many institutions of higher learning, particularly smaller ones, do not perform hazard assessments of any kind, and do not take advantage of the resources that are available to help plan for and mitigate known risks to campuses. Fifolt et al. collected data that addressed knowledge of potential threats to a particular campus, allows for better preparation and response plans to be developed and implemented, and allows for best practices in prevention and mitigation to occur should there be a future crisis at an institution. Fifolt et al. conducted this research in order to help campus leaders gain a better working knowledge of how developing a systematic approach on evaluating and understanding potential threats to their campuses could improve the survivability when, not if, the crisis occurred on their campus.

Roles of Campus Leadership During Crisis

Brennan and Stern (2017) defined campus leadership's roles at IHEs during a crisis situation as being prepared; able to make critical decisions before, during, and after a crisis has occurred; able to have and understand the facts of the event in order to provide accurate communications to all stakeholders about the incident; and having the

ability and means to end the event, but also the ability to take lessons learned by leadership and staff and apply those lessons to prevent and mitigate future events.

Jackson (2016) researched the dean of students' roles and responsibilities in the crisis management process on one campus. Jackson identified the dean is a member of the crisis management team, but no clear guidelines or responsibilities were developed to allow for a careful response to an active shooter incident on campus. Defining roles for the dean and other leadership may allow the team to manage during an active shooter more effectively, which may lead to efficient protection for life and safety of all stakeholders both on and off campus (Jackson, 2016).

Kelly (2015) conducted a case study and reviewed documents and conducted interviews on one campus to gain insight on what readiness on college campuses should look like during an active shooter incident. The campus Kelly worked with was mandated to have a strategic plan that met both the federal and state guidelines and Kelly noted this particular campus had never experienced an active shooter event. On a consecutive basis Kelly deduced that campuses need to provide support to include financial and human resources, and planning, training, and exercises to the staff and students located on campus of colleges and universities. Kelly found updating the active shooter plan should take place on a regular basis as information and knowledge sharing occurs from other active shooter events.

Kelly (2015) created a conceptual model addressing proposals for colleges and universities to consider when making a commitment for preparedness during an active shooter event. Kelly noted extensive time and effort should be given to review incidents

that have occurred at other IHEs. Drills should be conducted regularly with all campus staff and community to include tabletops with senior leadership, and internal and external stakeholders. Campus classrooms, offices, and buildings should have proper ability to lockdown during an active shooter event. Kelly also addressed the importance of a fluid plan that should be updated frequently and aligned to the best practices learned from other institutions and emergency management plans.

Run, Hide, Fight, and Other Responses to Active Shooter Events

Surveys were conducted by Kellom and Nubani (2018) with law enforcement officers and campus faculty to better understand the perceptions of preparedness from these individuals. Campuses across the nation adopted a Department of Homeland Security response sequence that many communities known as "run if you can, hide if you must, fight if you have to" (Kellom & Nubani, 2018, p.1) into their response programs for active shooter. Kellom and Nubani wanted to gain a better understanding as to whether Run, Hide, Fight was an appropriate response for campuses to adopt in their strategic plan and if first responders having access to campus maps prior to an event would aid in quicker access. Kellom and Nubani concluded that because active threat events end quickly, responders will not have time to access the floorplans and maps at the time of the event but could study them during training and exercise to help support situational awareness of the campus layout. Kellom and Nubani addressed the need for emergency plans to update building codes to aid in the deterrence and prevention of active shooters gaining access and to increase visibility access for students and faculty on egresses for evacuation. Kellom and Nubani explained the importance of leadership

involvement when implementing structural changes on college and university campuses to consider the access an active shooter could have to the open spaces.

The focus of Skurka et al. (2018) research was on emergency response training should a crisis occur on campus. Skurka et al., like Kellom and Nubani (2018) and Ford and Frei (2016), placed emphasis on an emergency preparedness video using the Run-Hide-Fight sequence to help aid staff and students' response should an active shooting occur on their campus. Data collected from Skurka et al. showed that the information from the video improved situational awareness, approach, and ability to respond in an appropriate manner to active threat situation. The research also showed planning and preparedness for emergencies are prevention measures to decrease injury and death during a campus attack.

Peterson et al. (2015) gave surveys to public safety departments on college and universities across the nation that demonstrated a paucity of information on training being provided on campuses for active shooter preparedness. Peterson et al. wanted to understand if students felt better prepared after they watched videos that were implemented into the college and university's curriculum meant for that purpose.

Peterson et al. found students did feel more prepared after watching preparedness and response videos about active shooters on the campus setting. However, by watching videos increased fear was invoked that an active shooting would occur. Peterson et al. found the training and approach was reactive and not focused on prevention and mitigation, which is a way to be more proactive and support preparedness. Peterson et al.

addressed one approach would be providing mental health services for students and stakeholders, with a need to develop programs with individualized mental health plans.

The survey data collected by Anklam et al. (2014) included questions that addressed carrying concealed firearms on college and university campuses by faculty and staff, more direct response from first responders, and how policy change could better protect students. Anklam et al. determined that if faculty and staff were to conceal carry firearms on campus, training and examinations would have to be conducted to confirm they are legally able and capable to do so, and school administrators would have to implement liability and legality restrictions. Additional training for response with the law enforcement would also be necessary for the staff choosing to carry concealed firearms. Anklam et al. determined this type of response would lessen the number of casualties during an active shooter incident. Anklam et al. addressed the importance of a policy being written to include protecting and safeguarding the students, staff, and faculty from violence while on campus. The longer an active shooting incident is allowed to occur without interruption from someone with a firearm, the more injuries and deaths that may be incurred, which is why an institution of higher learning is an easy target for this type of violence (Anklam et al., 2014). Campuses are classified as soft targets because there are no deterrents to individuals wanting to create violent acts, creating opportunity for an increase of active shooter events at institutions of higher learning across the nation (Anklam et al., 2014).

A less traditional way for students and staff to be educated on response to an active shooter event was explored by Shaw (2018) through a case scenario study where

participants actively engaged in what they would do should a shooter present on campus. Shaw presented a real-time, sequential scenario, where the individuals participating had to simulate what they would do during this incident. Shaw demonstrated that an interactive exercise allowed for the participants to gain skills and a better understanding of what is needed to manage a crisis incident, rather than the typical lecture or video type education typically provided. Shaw developed the curriculum in order for participants to be able to identify a crisis, and recognize the challenges presented during different crises. Shaw also studied how leadership styles contribute to success or failure during crisis and how certain styles improve performance when presented with such challenge.

The importance of communication during an active shooter event and the crucial role it plays in how much harm is sustained if not done rapidly and appropriately was the focus of Lachlan et al. (2016) survey study. Lachlan et al. addressed relevance of timely information sharing and credible sources with key stakeholders and how it could negatively impact the reputation of an institution's leadership, the campus' safety, and demonstrated competence during a crisis event if not implemented appropriately. Lachlan et al. provided data supporting the importance of disseminating information effectively and quickly concerning the incident, which allows for leadership, faculty, and students on campus to make life-saving decisions in order to avoid harm's way during the violent incident. Planning for active shooter and other crisis events should include a credible and reliable means of communication to all stakeholders that could be affected by such an event (Lachlan et al., 2016). Leadership should continue to work and improve upon the capabilities and availabilities of technology by exploring what is accessible to be

implemented and utilized on campuses by responders and stakeholders (Lachlan et al., 2016).

All public venues need to consider planning for, responding to, and mitigating the aftermath an active shooter event can cause according to survey data collected by Egnoto et al. (2016). Egnoto et al.'s survey results suggested there was a breakdown in communications during crisis events at universities and colleges, which led to misinformation being shared among staff, students, and stakeholders. There are public guidelines available to communities for information and training about preparation and readiness for different crisis events, but information on how to better use new technologies, such as texting, social media, and email, during something as significant as an active shooter is minimal (Egnoto et al., 2016). Egnoto et al.'s study showed institutions should have several means of communications during a crisis to include social media platforms, texting, alerting through sirens, emailing, and broadcasting. These real-time forms of communication during a crisis provide credible information that will debunk rumors. Egnoto et al. found communication can be proactively promoted by ensuring students, staff, and stakeholders know how to procure institutional approved information during a life-threatening incident.

Virginia Tech shootings of 2006 and 2007 largely impacted on how college and universities respond to crisis incidents on campuses and the emergency preparedness procedures implemented since 2007 (Seo et al., 2012). One finding confirmed by Seo et al. is there have been many emergency procedures implemented across the nation on college campuses, but data collected in the surveys the team conducted found that the

students and staff would not know how to respond during an active shooter event. See et al. also found it would take at least 5 minutes for notifications to be sent and received to staff, faculty, and students. The majority of college campuses surveyed did not participate in any exercise or drills to practice the procedures in place.

Student preparedness is key to survival for students that might experience a critical incident on a college or university campus, which is why Tanner and Doberstein (2015) conducted a survey to inquire about preparedness of students that were actively enrolled in a university. Participants in the survey were asked about their personal emergency preparedness and if they had kits or certain equipment in their own homes. Data showed that the majority of participants had emergency preparedness kits and equipment in their domicile (Tanner & Doberstein, 2015). The data showed an overwhelming number of students did not feel prepared for emergency situations and that the colleges and universities did not adequately prepare them with information or training for an emergency incident required (Tanner & Doberstein, 2015). The results did show emergency preparedness training and education should be provided by universities and colleges in order to better prepare students, staff, and stakeholders on what would better prepare them for when a disaster strikes (Tanner & Doberstein, 2015).

Ford and Frei (2016) studied what means of communication provided the most effectiveness in motivating the administration team and students to complete the active threat awareness training provided and what impact the active shooter awareness training had on those that completed it. In particular, Ford and Frei examined the characteristics of the messaging sent to students and staff and found the messages and information

shared did not affect the urgency or desire for students and staff to take the training being offered. The researchers did find that students who placed value in their safety felt they were better prepared to handle an active shooter event if one was to occur on their campus.

Thompson et al. (2009) researched how to reduce firearm-related violence on college campuses and what processes and policies can be implemented to support the efforts. As a result of their research, Thompson et al. suggested that college campuses should have policies in place that prevent firearms on campus but that training and education should be provided about the policies to stakeholders, so they are aware of the information provided and consequences if the policies are not followed. Thompson et al. also addressed the importance of providing students with options regarding mental health services and the need to educate faculty regarding recognizing students who could be experiencing mental health crises to include the suicide education programs available. Mental health services are an important part of emergency preparedness planning for the recovery mission. Incorporating the long-term care into the standard operating procedures is another important aspect to the overall plan (Thompson et al., 2009).

Preparedness and prevention are two areas that emergency managers address in standard operating procedures to help victims survive when faced with an active threat event. Jacobs (2014) studied maximizing survivability in active shooter and intentional mass casualty events by addressing the immediate needs of victims of active shooter events. Jacobs researched how the response and management of active shooter events needed to change in order for survivability of those who experienced injury. He and a

team of medical professionals examined critical actions that need to be taken in order to eliminate the immediate threat, stop any bleeding that victims are experiencing, move the injured to safety as quickly as possible, and for the injured to receive the appropriate care by trained public safety providers as soon as they are able. Jacobs addressed if plans and training were provided for those who could experience an active shooter event there could be improved survivor outcomes.

Emergency Managers and Their Learning

Andragogy (Knowles, 1984) is used as a model in the development of organizational training and learning, on which there has been research regarding administrators' learning. While there is no research regarding emergency managers' learning, Weinstein (2004) conducted research on CEOs and their learning experiences in order to improve the trainings available for leadership development. Weinstein found that the CEOs understand the importance of being lifelong learners and taking on challenges in their fields and focusing on ways of thinking that foster learning. Emergency managers, like the CEOs in Weinstein's study, understand the lifelong learning influences and how they help them address the ongoing changes and challenges in their field (Fifolt et al., 2016). In particular, Weinstein found CEOs understood how power dynamics influence and shape the way learning occurs and being lifelong learners allows for adaptation to changes and challenges and finding solutions to difficult problems. Emergency managers, like CEOs and other leadership, want to understand how the impact of their learning affects their careers and lives they are living (Knowles, 1984).

Kapucu and Khosa (2013) addressed the importance of testing plans through training and exercises in support of the implementation of plans and improving their plans and procedures. Also, they found the teams perceived they had worked well with their external stakeholders on planning and preparation. In particular, Kapucu and Khosa found through conducting exercises to test the plans implemented, the emergency managers learned the gaps in their plans and how to improve upon what is already in place on campus. Information known before the exercise and that which is collected after, allows for comparison and update of the plans and procedures. According to Green (2014), emergency managers had learned through conducting exercises that prior to the exercises, there was a lack of communication with their external stakeholders. The emergency managers also learned that sometimes suggestions made were costly and could not be implemented solely on their budget. Fifolt et al. (2016) also found the emergency managers and leadership learned the value of communication with other IHEs about the similar threats, hazards, and mitigation plans. Two key principles of adult learning theory are solving problems and being part of the planning and evaluation process of the learning taking place (Knowles, 1984). Emergency managers should be involved in the planning and evaluation of the planning of training and exercises and participate in the evaluation process of the training and exercises conducted (Kapucu and Khosa, 2013).

Summary

In Chapter 2, I addressed the culture of preparedness and active shooter preparedness on campuses of IHEs. I also analyzed research on the roles of campus

leadership during a crisis event and the various responses to manage active shooting events to include *Run*, *Hide*, *Fight*. Research shows that planning, and training exercises help with preparedness, mitigation, response, and recovery when dealing with disaster or crisis event, but there is a lack of research that focuses on whether IHEs are prepared for such events. Much of the research in Chapter 2 showed emergency managers saw room for improvement in their plans and procedures, and learned about gaps in communications, alerting systems, response, collaboration with stakeholders, among other areas for improvements in their campus plans through surveys and exercising. In Chapter 3, I discussed the research design and rationale for the design I chose, identified my role as the researcher, and provided an explanation of the methodology I chose to use for collecting my data, including the interview process.

Chapter 3: Research Method

The purpose of this basic qualitative study was to understand how campus emergency managers perceived the effectiveness of the design and implementation of their standard operating procedures to protect against an active threat and to gain a better understanding of what the emergency managers perceived enhanced their learning in the design and implementation of active threat response procedures. In this chapter, I discuss the methods used for collecting data from the participants, define my role as the researcher, discuss how I planned to analyze the data collected, and address how I plan to formulate the findings. I also include a description of how I address the issues of credibility, trustworthiness, and what I did to maintain ethical standards.

Research Design and Rationale

As the sole researcher in this basic qualitative study I examined the perceptions of campus emergency managers regarding the effectiveness of their standard operating procedures to protect against an active threat should such an event occur on their own campus. The first research question that helped shaped the design of this study was: How do campus emergency managers perceive the effectiveness of the design and implementation of their standard operating procedures to protect against an active threat? The second research question was: What do the emergency managers perceive enhanced their learning in the design and implementation of active threat response procedures? Interview questions based on these two research questions helped increase understanding of the central phenomenon of interest: how emergency managers perceive the

effectiveness of the design and implementation of their standard operating procedures to protect against an active threat.

The study was a basic qualitative inquiry in nature. Merriam and Tisdell (2015) described the basic qualitative methodological approach as constructivist or even descriptive to inform practice. According to Patton (2015), using qualitative inquiry allows the participants to share their experiences and perceptions to reveal the significance of their experiences. A qualitative inquiry allows for people who have real-world experience to share their perceptions within their own context and framework. Patterns and trends are discovered in the qualitative data that impact experiences created from real world situations. For my study, the qualitative approach was the most appropriate because it addressed the ability to collect data through interviewing individuals and answer my pragmatic research questions.

One design option for the research I considered was the case study, which focuses on a particular circumstance, operation, or interaction that occurs over a period of time with multiple sources of information (Patton, 2015). According to Patton, a case study may look at different parts of a program, projects, or be the study of an individual in a particular setting. Creswell (2013) described a case study as an inquiry and depiction of a specific bounded system. It would be difficult to find a campus in crisis related to an active shooter or to sustain research over the course of a long design and implementation period, hence a case study was not practical.

Another design considered was the phenomenological approach. This approach centers around very specific experiences or a very intense incident that elicits intense

feelings or reactions (Patton, 2015). Again, waiting until a campus is in crisis to study people's lived experiences would be challenging. And there could be ethical risks with doing phenomenological research shortly after an active shooter event on campus, risking some reactivation of traumatic stress.

With the objective of my research being focused on emergency managers' perceptions, knowledge, and enhanced learning about real-world issues, a pragmatic approach (see Patton, 2015) helped define solutions for detailed problems and a basic qualitative study was conducted. The reason interviewing was the best option for my data collection was it allowed participants being interviewed the ability to share their own perspectives in their own words. This allowed for me to learn how the emergency managers viewed their world and provided me data in the participants' own words.

Role of the Researcher

I was the only researcher and the sole recruiter of participants. I developed the interview questions, and I was the only observer, interviewer, recorder of data from the interviews, and the only one that transcribed the interviews. I was the only researcher that performed the data analysis. I have extensive experience in response to emergency events and that could have presented potential bias. None of the emergency managers interviewed worked with me or reported to me in any way. I had an indirect work relationship with each of the emergency managers I interviewed. As indirect colleagues, we have worked on projects together, however I had no supervisory power over them and participation in the interviews did not negatively impact any aspect of our working

relationships. I emphasized that the purpose of the interview was to gather data only, and I was cautious not to change, endorse, or discredit any person's views (Patton, 2002).

In order to avoid bias, I attempted to remain objective and did not interject my own opinion during the data collection process, contribute any information, or sway the interviewee. I was also cautious to not ask leading questions, which could have prompted the interviewee to answer in a certain way or in a particular manner. I completed the transcriptions myself and worked to minimize my own subjectivity by keeping a researcher's journal where I documented any risks as I moved through the data collection process. I sought to be impartial when interpreting data and did not reinforce my own assumptions.

To minimize such bias, I asked probing questions to clarify incomplete responses to produce richer and informative data. During the interviews, I was careful to maintain a neutral, nonjudgmental stance; interacted with the participants with honesty and respect; and, prior to the start of each interview, explained that there are no right or wrong answers to questions and that each person's perspectives are highly regarded and respected. Participants were advised they would not have to answer any questions they were uncomfortable addressing, and that they could ask for clarification for any questions I asked. No one requested clarification on the questions. The participants were advised they had the option to withdraw from the study at any point without fear of reprisal if they no longer wanted to participate. I informed each participant that all their shared data will be kept confidential with my doctoral team and we are the only ones with access to the transcripts.

During the data collection and analysis, I used a journal to reflect on observations and participants' responses to promote a neutral stance and enhance accuracy during the analysis and interpretation of the data. I ensured that confidentiality was maintained for all data I collected and used for this research to meet dissertation and doctoral requirements.

Methodology

In the methodology section, I describe the recruitment plan, setting and participation selection, instrumentation, data collection, and the data analysis plan. I address strategies I used to decrease bias and preserve ethical standards, and methods to ensure validity, credibility, transferability, and other issues associated with trustworthiness in research.

Recruitment

Each college and university in the state has an individual or team in the role of emergency manager(s). To recruit participants, I emailed campus emergency managers to invite them to participate in interviews (see Appendix for interview questions). Initially, I communicated by campus email using email addresses I found via each campus website. The invitation included a letter of consent that clarified what was involved in agreeing to participate in the interviews and explained my research and the purpose of my data collection. I confirmed their role and duties at the university via email with each emergency manager I invited to an interview and who expressed interest in participating and cooperated in setting up a time for the interview.

Setting and Participation Selection

Because of the COVID-19 pandemic, I did not seek a face-to-face interview on participants' campuses. Instead I used Zoom to conduct three oral interviews and five video interviews with the participants. Participants chose a location and time that met their needs.

From the approximately two dozen or more private or public institutions in a Mid-Atlantic state to which I emailed invitations to emergency managers I selected the first eight people who responded. I continued recruiting and conducting interviews until I reached data saturation. The focus of the basic research design was to understand the perceptions and actions behind a process or topic, and this allowed for flexibility in the sample size.

Selection criteria for participants included:

- must have participated in the development or revision of an active threat plan for their institution of higher education.
- must be full-time employees with their respective university or college for at least 2 years.
- must hold the position of emergency manager or assistant to the emergency manager.
- must have appropriate knowledge to answer the questions about the campus's standard operating procedures on an active threat incident.

Instrumentation

The primary purpose of this research was to explore how campus emergency managers perceived the effectiveness of the design and implementation of their standard operating procedures to protect against an active threat, as well as to understand what the emergency managers perceived enhanced their learning in the design and implementation of active threat response procedures. Conducting interviews with the selected participants allowed for me to ask open ended questions so the individuals could share their personal experiences and perceptions regarding their own learning and share their own knowledge and perceptions about the design and implementation of their standard operating procedures.

The interview questions (Appendix) were guided by the literature review, were reviewed and approved by my doctoral committee to ensure the interview questions answered my research questions and aligned with the purpose before conducting interviews with the emergency managers. I conducted one practice interview with a doctoral colleague to ensure the questions were relevant to the research questions and make revisions if needed. The additional questions I asked were probing questions used with all the participants to gain clarity from the participant in the interview. These additional questions served to ensure I fully understood what the participant shared and helped shape the future interviews. I avoided asking leading questions that could influence the participants' answers.

Data Collection

I collected data using semistructured interviews with emergency managers from eight colleges or universities on Zoom. Participants had the option to decide if they preferred video participation or just phone interviews. Three participants chose to speak on Zoom without video and five chose to use Zoom's video feature. I allowed at least 90 minutes for completion of each interview. I recorded each interview with a recording device and took notes during the interview process. I encouraged participants to find a comfortable, quiet spot so there was privacy for an online interview. I ensured they had consented by email to participate prior to the interviews. I conducted interviews at the availability of the participants. After each interview, I continuously compared data, which helped with progression and gaining more information. I thanked each emergency manager for their participation by providing them a small token of appreciation in the form of a \$25 gift card to Amazon for personal use.

Data Analysis Plan

I transcribed each interview, which increased my familiarity with the data. I read and re-read the interviews to become more familiar with the transcripts, using the constant comparison method (see Patton, 2015). I wrote reflections in my journal to help improve and guide the next interview. Then, I began with breaking down the information into smaller pieces of information to provide manageable chunks of data. Once the pieces of information were in more manageable units, I assigned codes to the data. I identified like information making it easier to develop codes, followed by categories, then I surmised a smaller number of themes using a whiteboard with color schemes to aid in my

coding. The whiteboard with color schemes allowed me to set up the text in a way I could visually identify key points from the text. The codes and categories were less specific but captured the content of the data appropriately.

Issues of Trustworthiness

Credibility and Validity

Credibility is a measure of the quality of the work and data the researcher collected and what it presents, making sense of participants' world and real-world concepts (Patton, 2015). The author puts forth the information, puts biases aside, and supports the findings through the words of the participants (Creswell, 2013). To support the trustworthiness of this project and gain credibility of the participants, once I transcribed the data collected from each interview, I sent the transcript back to each participant. I ensured correct interpretation of the data by having them review what was transcribed and provide feedback on the interview.

To be a competent inquirer, Patton (2015) suggested the evaluator of the research must be professional, able to analyze situations, reflect, and be able to manage projects. One way to enhance credibility for myself as the inquirer was to briefly disclose my relevant experiences and my purpose in the introduction to the interview. I acknowledged possible bias and kept a journal to write about the biases I may have experienced during data collection. Other ways to support my competence was keeping accurate and concise field notes about how I was affected by my research and any emotional responses it elicited

Transferability

Transferability is the author's ability to recognize the impact their work can have on similar situations and events (Patton, 2015). The author is able to demonstrate the impact by depicting how the research is applicable during those events (Patton, 2015). I recognized how my research and the sharing of information could influence and impact other IHEs and their ability to develop and implement a plan.

Dependability

Dependability is the ability to repeat a similar study and reproduce the comparable results in the research (Patton, 2015). This allows for another researcher to review the procedures and processes I outlined to replicate my study.

Confirmability

Confirmability is being as neutral as possible when the author interprets data (Patton, 2015). The author does not inject their own opinions or thoughts on the topic. In order to maintain confirmability, the author can document every interaction, research junction, and action associated with the research conducted. I maintained a journal in order to document about the interactions, research junctions, and actions that were associated with the research I conducted.

Ethical Procedures

An interviewer's purpose is to gather data and not to create a change in the participant being interviewed, but it is possible that someone being interviewed can experience a change during or after the reflective process (Patton, 2015). As the researcher, I provided the participants honesty and transparency about the purpose of my research. Ethical

standards were maintained during participant selection and I maintained participant privacy and confidentiality. I was clear on the law and what is required in my jurisdiction and I would not speculate or create responses based on subjectivity. I educated myself on the expectations of Walden University and addressed data ownership issues as well, which I addressed in my Institutional Review Board (IRB) approval. The approval number provided was # 06-23-20-0249646. I sought clarification from my dissertation committee when needed.

Ethical issues were minimal, but it should be noted that the emergency managers answered questions about their work environments. The participants were not briefed on the questions prior to the interviews and were advised that at any point if they felt uncomfortable with any part of the interview or questions, they could stop the interview. I began with basic questions like name, job title, and roles and responsibilities to make the participant more at ease to help create a more relaxed atmosphere. This allowed for a more honest and open dialogue during the interview. The emergency managers should have had no conflict of interest with their places of work because all information, unless they shared with me a reportable action or offense, was kept confidential and masked, including the identity of the participants and the IHEs where they are employed.

I followed all requirements and processes expected of the Walden University IRB.

Contact was not made with any of the participants prior to IRB approval. I used several coding measures to ensure protection and privacy of the participants and the data I collected. I secured data on electronic files that are password protected and I am the only

one with access. Per the university's requirements, I will keep the data collected for a minimum of 5 years and then destroy the data.

Summary

In this chapter, I described my research design and rationale of the qualitative descriptive study. I discussed how I collected data by conducting semistructured interviews and the journal I kept as the researcher. I outlined my method for recruitment, participation selection, and setting for interviews. I provided my instrumentation, data collection and analysis plan. I addressed the issues of trustworthiness in qualitative studies to include credibility, validity, transferability, dependability, confirmability and ethical procedures. In Chapter 4, I discussed the setting of the interviews, the demographics of the participants, the data collection process and the data analysis I conducted. I described the issues of trustworthiness and how I ensured credibility, transferability, dependability, and confirmability in my study. In the results section I addressed the data findings that supported each research question, and included a table discussing the themes and subthemes.

Chapter 4: Results

The purpose of this basic qualitative study was to understand how campus emergency managers perceived the effectiveness of the design and implementation of their standard operating procedures to protect against an active threat and to gain a better understanding of what the emergency managers perceived enhanced their learning in the design and implementation of active threat response procedures.

Research Questions

The research questions developed to explore the research topic are:

- 1. How do campus emergency managers perceive the potential effectiveness of the design or implementation of their standard operating procedures to protect against an active threat?
- 2. What do the emergency managers perceive enhanced their learning in the design or revision of the active threat plan used for their campus?

Setting

After receiving Walden IRB permission, I began collecting data (approval number # 06-23-20-0249646) from eight emergency managers who worked for seven IHEs in a mid-Atlantic state. Six of the IHEs were public and one was private. The smallest IHE had approximately 2,000 students and the largest had as many as 40,000 students enrolled at any given time. During their interviews, all emergency managers explained that they were currently writing plans for the return of students to their respective campuses for the fall 2020 term due to the COVID-19 pandemic.

I conducted eight Zoom interviews from my private home office where there were no distractions or interruptions. Each participant chose the place that was the easiest and most comfortable for them to be able to hear and answer the interview questions I asked. When scheduling the interviews, I took into consideration the participants' schedules and scheduled interviews around their work times.

Demographics

The eight interviews I conducted allowed me to reach saturation of the research topic. Each participant worked at their IHE for a minimum of 2 years as an emergency manager or coordinator and developed or revised their active shooter/active threat plan, thus meeting the requirement to participate in this study. I interviewed three female emergency managers and five males. Three of the emergency managers had 5 to 10 years' experience and five of them had between 15 and 30 years of experience. Seven out of eight IHEs had over 5,000 students, and one smaller private institution was a liberal arts college. I identified the participants by gender-free pseudonyms and in all cases did not mention the name of their institution. The pseudonyms used to identify the participants were taken from the Greek alphabet to maintain gender-free identities:

Alpha, Beta, Gamma, Delta, Epsilon, Zeta, Eta and Kappa. I used the pronouns "they" and "their" to help maintain the gender-free pseudonyms as neutral.

Data Collection

Data collection began in July of 2020 and was completed in August of 2020. I was the sole researcher and I recruited and interviewed my participants. Interview questions were developed by me and with the help of my doctoral committee. I gained

the contact information of emergency managers from the public listing on each institution's website. Five participants responded the first day after receiving their email invitation to participate. Three of the five participants recommended additional emergency managers, all of whom responded positively. I had two negative responses from the initial emails stating they were too busy with the COVID-19 pandemic and the return of students to be able to participate.

I gained consent from each participant. The interviews lasted 50-75 minutes. I utilized my personal computer and conducted each interview using Zoom software, as all participants opted to use Zoom, which allowed for a virtual face-to-face and audio meeting. The audio and visual meetings were recorded with the permission of each participant. I recorded notes during each interview as well. Each interview concluded with me asking if there was any additional information that they would like to share and seven of the emergency managers had additional information they wanted to share about their programs. All eight participants said thank you for allowing them to be part of the study and appreciated the opportunity to share what their IHEs are doing in response to the growing number of active threats occurring across the nation. I thanked each emergency manager for their participation and provided each of them a small token of appreciation in the form of a \$25 gift card to Amazon. After each interview, I utilized amberscript.com software to transcribe the eight interviews.

Data Analysis

In order to familiarize myself with the information participants shared and to better understand the interview data collected, I initially read each interview two times

and then I went through and highlighted the information with different colors provided by each participant that I felt addressed the research questions that were asked. I also wrote notes in the margin areas about the data collected. After that, I began assigning each participant a color code and listed the data by each participant's answers to the interview questions. I broke the data into smaller aspects of similar perceptions to come up with the codes I assigned to the data. Word software was used to type up the categorized codes, which allowed me to create themes and the categories I listed as subthemes. Listed below in Table 1 are the themes, subthemes, and codes used to help sort the relevant data into the thematic structure. Two themes and six subthemes addressed the first RQ1. One theme with two subthemes addressed RQ2.

Table 1

Overview of Thematic Structure

Question Number	Theme	Subtheme	Codes
RQ1	Entrusted to produce an effect	Objectives and Goals	Flexible plan, scalable plan, adaptable plan, Plan covers mutual aid and command and control, plan should cover preparedness, prevention, mitigation, response and recovery, meet accreditation criteria, provide guidance, protection of life, protect critical infrastructure, revise the plan as techniques evolve, All-Hazards plan, annex of the crisis and emergency management plan, practice the plan, continuity of operations plan (COOP), framework for preparedness, response, planning drills
		Roles and Responsibilities	Making sure roles and responsibilities are clear,

Question Number	Theme	Subtheme	Codes
			leadership needs to know what to do, communicate the plan and what to do, roles for leadership
		Training and Exercises	Tabletop exercise, training not mandatory has to be requested, cautious on how we train, advertise training, training not mandatory but well attended, exercises done on campus to test the plan and training, Run, Hide, Fight, Training is mandatory, videos created, new employees and students receive training during orientation, training can be used for other events off campus, Homeland Security Exercise Evaluation Program, after action reviews
RQ1	Working together to create a safe culture	Collaboration and coordination with stakeholders to create a safer culture	Team collaboration, accreditation, information sharing, team open minded for change, pushback, disagreements, sensitive information, IHE Caucus, Communications is key, everyone on the same page
		Working within and outside the campus	Number of folks on the team, leadership involvement, Higher education is a different world for Emergency Management, spirited conversations among team, Incident Coordination Team, Board of Visitors, Public Safety Teams to include police, fire, and EMS, subcommittee workgroups, faculty, staff, parents, students, citizens, Department of Emergency Management, Department of Health, executive

Question Number	Theme	Subtheme	Codes
			leadership, State Police, Public Information Office, policy groups
RQ2	Lessons Learned from Their Experiences		Campuses are like growing cities, universities are like cities within a city, you can't change things easily in IHEs, it can be a confusing place to work, everyday there is something new, people are very open minded to making changes, learning technology, the emotion that comes with that, we need to work on different aspects of the plan, leaders need to be trained in making decisions, we have to continually practice and exercise, who the players are, people do not understand if they do not work in higher education, it can happen here, prepare for everythingthe worst-case scenario, making people see it can happen here and in an instant, safety and security scares students, receptive to change and received support from stakeholders, we can't save the world by ourselves, a huge learning curve for me, the importance of building relationships

Evidence of Trustworthiness

Qualitative researchers use four criteria to ensure trustworthiness and validity of their work. Those criteria include credibility, transferability, dependability, and confirmability. In this section I described each criterion and how they were used to support the evidence of trustworthiness and validity of my research.

Credibility

Credibility is a measure to ensure the study accurately reflects the information collected and is presented precisely to represent what is being investigated. To establish credibility during the study development, I sought feedback from my dissertation committee on the interview questions and the process for data collection. I conducted three practice interviews with subject matter experts who were not part of my interview participant selection to ascertain the interview questions were clear, concise, and were applicable to the research questions for my study. I used transcript software to ensure timely and accurate transcripts. Member checking was done by providing an electronic copy to each participant's school email. I asked each participant to provide any changes they desired and for the changes to be returned in five business days. I received no responses for changes being needed, so I assumed there were no errors noted.

Transferability

Providing thorough descriptions of the setting, data collection methods, and data analysis process utilized during the study helps to ensure transferability in a study. By providing enough information about my study, it allows for other researchers to understand if the process is applicable to his/her framework (Patton, 2015). Caution was used to conceal the identity of the participants and their respective IHEs. All participants had years of emergency manager experience. With the information provided, future researchers should be able to glean relevant knowledge from my study.

Dependability

By providing a thorough account of the processes used in a study, dependability is created. This allows other researchers to reproduce a comparable study gaining analogous results (Patton, 2015). In my study, the participants provided rich detail and descriptions of their plans and processes. Included in the method of the study were the processes utilized to perform data analysis and cultivate and complete the study.

Confirmability

Confirmability is when the researcher disregards her personal views and bias, and ensures the data collected for the study is accurately reported. Providing a documented strategic plan on how the interviews were conducted, the data collected to the readers, and how the study was implemented increases the confirmability of the study (Patton, 2015). During the process, I used a reflective journal to record my personal account of this educational journey. I recorded my new thoughts, the feelings I was experiencing, and any other ideas that came to me. I documented my reactions, feelings, and thoughts before, during, or after the interviews. I referenced my notes to ensure I stayed on task and attempted to not inject my personal feelings or biases on any conclusions drawn from the data collected.

Results

Two themes emerged related to RQ1, How do campus emergency managers perceive the potential effectiveness of the design or implementation of their standard operating procedures to protect against an active threat? The two themes are *entrusted to design an effective plan* and *working together to create a safe culture*. There was one

theme related to RQ2, What do the emergency managers perceive their learning in their decision and revision of the active threat plan used for their campus? The theme associated with the second research question is *lessons learned from their experiences*.

Theme 1: Entrusted to Design an Effective Plan

The first theme related to RQ1 addresses what criteria emergency managers perceived made their standard operating procedures on active shooter effective. The criteria set by state lawmakers means an effective plan addresses preparedness, mitigation, prevention, response, and recovery that can occur before, during, and after a natural or human-made disaster on campus (DOE, 2013). Three subthemes reflected how the emergency managers felt their work contributed to the overall effectiveness of the plans: the goals and objectives of the plans; roles and responsibilities of campus leadership, faculty, staff, and students; and the training and exercises conducted in order to educate on the plan and validate and improve the plan. The participants stated that each of their crisis emergency operating plans had been designed and implemented by an emergency management team. The plan referenced includes the active shooter/active threat plan. This included both public and private IHEs. Kappa shared the difference in the law as a private institution, "By law as a private institution, we don't have to have an emergency management plan... we are private; we don't have to have a Continuity of Operations plan. We don't have the mandate that public IHEs have." Zeta discussed their team and how they consider the new mandates when revising their plan, "We'll look at new mandates that have come out. We will look at our new laws that have come out and

then we'll come together, revise [the plan]." Theta felt their plan is standardized and robust "We have we have a robust system. We have standardized protocols."

Because Kappa has experience in emergency management, they were able to convince the leadership at the private institution of the importance of developing and implementing a plan. Epsilon shared what they felt was a responsibility as the emergency manager of the IHE, "...that it's my job to write good, actionable plans and pray we never use them." Like Epsilon, Gamma shared their main focus when they were hired into their position was to ensure their plan was updated appropriately: "When I took over this position, I was to ensure that I got our crisis and emergency management plan where it needed to be." Delta felt the plan should be able to meet the needs of the campus environment and "is supposed to be flexible, scalable, adaptable and nimble to meet the needs of any kind of event that we're having." Alpha pointed out the importance of being aware of changes in techniques and how changes were a driving point of plan changes, "as techniques change, we have to change the way that we combat those [changes], the way we address those issues. When those types of things change, we have to change or revise the plan to fit [the changes]." Beta shared that a large change with their plan occurred when they changed the title of their plan, "We changed [the name] basically from active shooter to active threat; I've worked with the police department making some of those changes. Then we made changes to the program that we give across campus."

Goals and Objectives

Subtheme 1 reflects the participants' views of the level of the empowerment emergency managers possessed to create plans that they felt were effective in

preparedness, mitigation, prevention, response, and recovery that can occur before, during, and after a natural or human-made disaster on campus. Zeta shared the details for their particular campus plans:

Our planning specifically is all hazards based...So we don't write the separate annexes or different plans for the different hazards. ... And our overall plan is called our CEMP, the acronym. It's Crisis and Emergency Management Plan; that's our overarching plan. And then there are some annexes off of that for, you know, procedures for recovery plan, etc. And there are several attachments, but they're all written in an all hazards format. We don't have a specific active shooter plan, but we have other aspects of that, as you know, in emergency management. You have to prepare, mitigate, you know, respond, et cetera.

Each emergency manager interviewed provided information on the goals and objectives of their institution's plan. Each participant felt the goals and objectives were instrumental components to their plan's effectiveness during an active shooter situation should one occur on their campus. Alpha and Kappa both addressed the importance of the helping support in saving lives. Alpha elaborated about the plan and described the specifics of its purpose. "[The plan] explains how and what we do to get assistance, where we get assistance, and what resources we have for those types of things..." Alpha also addressed the importance of the collaboration and training to save lives:

Hopefully, with our collaboration and the training we conduct, we're going to save lives. I mean, that's obviously the bottom line is if you have this type of

event, whether it's in a municipality or on a university campus, that is our priority... take the threat out and we can save as many civilians as possible.

Kappa stated their plan addresses that with proper infrastructure there is survivability and better protection of life and property: "We can increase survivability and protect because of infrastructure and minimize the vulnerability of our critical buildings on our campus...the protection of life and property."

Theta, Zeta, Beta, and Gamma discussed the awareness and guidance provided in their plans on what to do during an active shooter event on their campuses. Theta stated, "the plan provides competence and confidence in your organization's ability to react and recover, a sense of resilience, if you will." Zeta stated their plan, "It's making sure people know what to do... the most important part of this plan, besides implementing it, is making sure our population understands what they should do" Beta stated their plan provides information on how to protect the campus and what to during an active shooter event.

It is important to make people understand that [an active threat] can happen here.

It can happen here, and it can happen in an instant. We're protecting our campus.

We're teaching our students, faculty and staff what to do in these situations.

Gamma stated the objective of their plan is to create situational awareness,

...creating awareness for the Cabinet, faculty, staff and students...the checklists of things that need to be done...getting people to take notice of the issue and the lack of awareness that we had and then kind of thinking through here's all the things that could possibly happen, creating situational awareness.

Delta addressed the effectiveness of their at his/her campus because it provides details on the communications and coordination that will occur during an active shooter event

...[making] sure that we have everybody on the same page... communications and coordination are probably the key things; we want to make sure that those are right and tight prior to have any kind of an incident. This plan helps to frame all of that out.

Epsilon stated, the active shooter plan provides detail to the campus community and provides an opportunity for the community to be prepared.

[The plan] gives the opportunity for our campus community to be prepared. They know they have the opportunity to learn. They have the opportunity to grow in their own personal preparedness. I think the important piece of my plan is the preparedness piece... these are skills I want you to take with you, not just here on campus, I want you to take them to church and to the mall and to the movie theater and to the concert venue and anywhere you go.

The goals and objectives of the campus active shooter plans, as stated by the emergency managers, were perceived as allowing for the preparedness, direction, coordination, communication, and recovery of the IHE if they should experience an active shooter event.

Roles and Responsibilities of the Emergency Managers

Subtheme 2 addresses the roles and responsibilities discussed by each emergency manager and how those are defined in reference to the effectiveness of plans being

developed and implemented. They all discussed the impact the expectations their leadership has of their roles and responsibilities on creating an effective plan for their IHEs. Gamma confirmed, "My main job or my main task when I took over this position was to ensure that I get our crisis and emergency management plan where it needs to be." Theta described their role and responsibility as conducting exercises that test the plan and providing active shooter training.

...[but] my main specialty is exercises. I am familiar with exercises and trainings and stuff like that. What I found interesting here was many departments always wanted to do an active shooter scenario. Well, you know, I want to do active shooter training, I'm going to do an exercise and active shooter training.

Zeta brought to light roles and responsibilities of their emergency management position is to focus

...[specifically] training and accreditation, where the two areas I was going to be focused on... even though that's the focus, I'm involved in all the other planning heavily, I get involved with the planning, especially during those codes [exercises]... the focus is because I was hired to do exercises here, my goal is to be the subject matter expert in exercises for the university.

Epsilon stated there was no plan in place when they arrived on campus and the objective was to develop and implement the plan. Beta stated their responsibility in the emergency manager position at the campus is to help support police in writing their plan.

...I work with them [the police] on it so that the response plan is done by the police department. Now, I've come in and ask questions about it, and since we

changed basically from active shooter to active threat, I've worked with the police department making, you know, some of those changes. And then that makes the changes to the program that we give across campus, our code red program.

Delta addressed the requirement to have a crisis management plan at their IHE.

We're required by [the state] to have a crisis management plan written. That is why some manual basis is readily available to our staff and visitors and rewritten as part of our annual review process. We will take a look at what we have as a virtual support function-based plan. And as part of that, we will give each of the ESFs (Emergency Support Functions) an opportunity to look at their respective plans, as well as the broader plan to make sure that everything works as it needs to for ESF the safety and security. We generally give them the opportunity to look at their roles and responsibilities as well as their internal procedures and protocols.

Alpha discussed the revisions made during their time with the IHE and the collaboration with local city officials.

We took what they had already done... it was a revision of what they did... it became broader than what was originally here...we work very close with the city and county's local sheriff's office, expressly in the area for resources in case we do have an active shooter...a more formal plan of how we would operate is in place. So that is what we have evolved to.

Kappa stated their roles and responsibilities are two-fold.

I am the chief of police of the police department in the safety division [and I] also work as the emergency manager on campus, as well as the party in charge of the mission management plan and hopefully soon the plan for the continuity operations plan, they call it the continuity operations plan (COOP).

All the emergency managers had roles and responsibilities that either involved writing or developing their campuses active shooter plans or revising a plan that was already in place.

Education on and Testing of the Plans

Training and exercises and the importance of the effectiveness of the plans developed on campus were discussed by each participant. The training informs about the plan and the exercises allow the effectiveness of the plan to be tested during "real-world" like scenarios. All eight emergency managers spoke of the importance of the training provided on the active shooter plans. They also addressed exercises which could be a drill, a tabletop, full-scale scenarios, or a functioning exercise where people role play. All are ways in which the plans are tested. Three of the emergency managers stated that there is mandatory active shooter awareness training for both staff and students that takes place during the orientations. One institution stated it is mandatory for their students during orientation but not staff, two institutions have mandatory training for staff not students, and two institutions have no mandatory training for the staff or students but provide the training when it is requested.

Kappa discussed the interest of the training provided on their campus and how often it is offered.

...[since] we have an interest in it, we never offer it less than twice a month, in the afternoon, and in the evening time for students who attend these trainings.

Those are not mandatory. But when we hire our professional staff and coordinators, we do training in active shooter for them and student workers as well. We also had to deal with the training of officers.

Kappa discussed, "We were able to do a tabletop exercise and our plan would be to do a full-scale exercise in the spring of 2021 so that we are back on track with our planning after COVID." Gamma discussed the drills held twice a year and the additional training videos that the students watch for the active shooter awareness training provided on their campus.

Currently we use a variety of them [videos] on YouTube, but it's not our school. We hold two drills every single year with just the police. We use our buildings on campus to do our active shooter drills and we simulate an actual active shooter within the scenarios, and we are evaluated during the process.

Alpha addressed how their training and exercises are conducted off campus and with full collaboration of the localities in the area.

When we do an exercise or training, we actually do it off campus.... they do an annual training...we have seven towns incorporated within the county, and we all participate. One joint training or it's a training exercise, it's usually several weeks long...And then they actually do a full-scale exercise at some locations within the city...it's in a public school or even we have several private schools in the city that allow us to do the training, it's a very cooperative training...We would hope

that through training and exercise, that would help to save people's lives. That is where you actually run through the plan and you test the plan.

Delta shared that the people on campus are receptive to training and the purpose is to test the plan in place.

People are generally pretty receptive to any kind of planning, training or preparedness. We also do degrees of training whether or not they include tabletop exercises. We have the capacity now with the training, the buying and the planning support to be able to expand our ability to test what [the plan] we have in place. And that allows us the ability to kind of work through the problem(s) that are presented.

Beta addressed the caution practiced on their campus when training takes place to prevent traumatizing anyone when it does take place. They also discussed the accreditation criteria that are required by the state law and localities.

When we train, we have to be very cautious. We don't want to upset people or traumatize people in our training. We offer code red training...When I first came the first year, I had 24 classes. It's all an open forum kind of talking to PowerPoint...We have to practice and exercise the continuity plan and the crisis emergency management plan. I have to have this documentation that we've done it because a lot of people don't realize that we need it for accreditation. I also have to present to the city as well, that we're following all of our plans and that we are documenting what we do, and we have exercised our plans.

Epsilon said their training does provide information on what to do during an active shooter event should one occur on campus.

I need the students, faculty and staff to know what to do to protect themselves, to be able to respond quickly, to be able to run, hide, fight. And then the university went to ... the civilian response to active shooter threats or events [training]. So now we started doing some training on that ... We've done a lot of training on our plan. I spent the fall semester last school year ... twice a week the entire semester. ... And I did the training for 100% of the faculty. I had three hours with them. I did the training and then I did a little tabletop with them where they actually had to walk and talk me through some classroom stuff. It gave me the opportunity to not only do the training with them, but to also do some piece of an exercise with them ... this campus administration has always been supportive of exercises. And, you know, we do full scale exercises, like I said, every other year.

Epsilon also discussed the importance of not only being able to react should an incident like this occur on campus but being able to react anywhere at any time because active shooter events are happening more and more in today's world.

Zeta discussed orientation is the time the students receive mandatory training on the active shooter plans and how the training has changed from in-person to a virtual platform.

We get about an hour and a half with them, so a pretty good chunk of time. It is part of their orientation for staff or faculty. We also get that time with the students. It's a part of their onboarding orientation. And previously, it was an in

face to face presentation in front of the group. Now it is about 30 minutes, it used to be about an hour previously. We now have to do it virtual, so we actually just last week finished recording videos, so we had to do short videos of those procedures. There are three separate videos or actually four. There is a separate video for Secure in place and then there's a separate one for the run hide fight ... It'll be a part of their orientation requirement.

Theta shared the importance of not just checking the box for training but said it should provide meaning.

It's not just checked the box for training. Let's do an exercise that your department, your unit can benefit from ... in one of our recent trainings the tactical commander actually made it a point during this training to incorporate all the different agencies ... we do these drills, we do these trainings, we talk about the right way of sheltering in place and ... but nothing is mandatory, nothing in the way of training or exercises is mandatory on campus.

Theme 2: Working Together to Create a Safe Culture

The second theme addresses the second research question and focuses on how working with stakeholders at the IHEs was perceived to create a safer culture for those on campus. As two avenues of creating a safer culture, the first subtheme addresses coordination and collaboration, and the second addresses internal and external stakeholders.

Collaboration and Coordination with Stakeholders to Create a Safer Culture

Aspects of coordination and collaboration are factors that all participants claimed need to be considered when developing an effective active shooter plan for IHEs. Some of the aspects of coordination and collaboration that were most frequently mentioned by the emergency managers interviewed included being involved in the IHE caucus, accreditation, information sharing, and for everyone being on the same page and understanding the plans in place. Alpha shared the importance of collaboration, "...when you're developing that plan, there is a whole lot that has to be a group effort. And there has to be a huge collaboration." Zeta discussed the dynamic of the campus team and how they collaborate and coordinate about his/her plans.

Everybody brings their knowledge to the table and we hash it out and come out with the best plan we can ... I think we have a great team ... We do have spirited conversation. I wouldn't even call it arguments. You know, there are people that will get passionate about their view. But at the end of the discussion, you know, when we come to a consensus, we back that consensus. We know we will go with whatever is decided.

Information sharing was discussed by seven out of the eight of the emergency managers interviewed and why it is so important. Alpha explained how information shared with them in meetings is imperative in the writing of plans for their university, "Every time you sit in one of those briefings with the police department ... I glean a lot of information from those, and when you're sitting around a table, you hear experience and expertise from lots of other people." Epsilon shared that they view part of the job as the one to share pertinent information based on what is written in the plan, saying, "It's my

[Emergency Policy Group] together." Delta pointed out the plan is what provides the guidance and information for the communications and actions that take place on the campus. During a high threat event, "...the emergency management plan does most of the talking when it comes to mutual aid, communications, information sharing, command and control, how the CEOs organize, the way that we run things, the roles and responsibilities of emergency functions." Kappa explained that their plan is what provides the information on how to navigate in order to provide safety for the students during an active shooter event, saying, "...things to communicate, to control, to command and the communication piece is trying to provide our partners and stakeholders in the college enough information of what this [an active shooter event] will look like.

Information sharing is important so the emergency managers can ensure they understand the perspective of their leadership and write the plan effectively to answer to the organization's needs. Zeta explained how they are able to gain clarification from leadership in order to be proactive in the writing of their plan.

...[a] portion of that safety security policy committee was meeting, and we were able to push information up and get clarification on the policy ... That is very important because they [leadership] give us the information we see as very valuable ... So, it is important to use the resources.

Theta confirmed that the leadership will confirm what is written in the plan or share additional information to enhance the writing of the plan before the information is shared, "They come back either with changes, or leadership signs off of them, and from there we

start disseminating that information [in the plan]." Beta conferred that sometimes the localities they work with are not sure where the information is coming from "...And sometimes when we're talking, maybe the locality doesn't get that. Hey, you guys, we have the information that comes out in our plan ... we follow certain plans that, you know, that our president says are our guidelines."

The importance of accreditation was discussed by five of the emergency interviews and how accreditation impacts the development and implementation of the plan. Kappa addressed all the orders and mandates that IHEs have to answer to when preparing and implementing plans for their universities, "you have a lot to answer to with the directives, direct orders and executive orders and all the accreditation pieces." Delta shared the ultimate goal of the institutions is to get accredited.

And we always have things that we can do to shore up and improve the plans that we have in place, whether it's new criteria from EMAP [Emergency Management Accreditation Process] that we're trying to meet, because, I mean, ultimately, we want to try to get our program accredited.

Gamma shared they have to provide two drills a year to meet their accreditation criteria. "We know, we've drilled to our active shooter response. We hold two drills every single year with just the police ... We have to do it for accreditation." Beta said, "we have internal auditors and plus we have the external auditors from the state that come, and they audit our plans ... they also evaluate for university accreditation." Zeta mentioned accreditation as one of their two areas of focus and what that entails, "...specifically training and accreditation, were the two areas I was [going] to be focused on. And we

even though that's the focus, I'm involved in all the other planning heavily, I get involved with the planning."

Communications and having the team understand how to work from the plan that is implemented was discussed by four of the emergency managers. Delta made clear how important communication is during any event on campus, saying, "Communication is probably one of the key things, making sure that we have everybody on the same page ... But I think just understanding the different perspectives of the different sectors involved is something that's key." Beta shared how their leadership and staff have a better understanding of what to do because of the plan, saying "... they are getting on board that we have to have it [the active shooter plan], but it is getting on the same page as to what goes in that plan, how we implement those things." Kappa addressed when leadership tries to observe and not participate in the exercises so they can ensure they understand their responsibilities, saying, "We need to put them back into play so they can understand what their role is, so they don't look like a dog looking at the headlights [when an event occurs]." Epsilon advised on their campus it was hard to get the leadership and staff to understand the importance of the plan and "getting them to understand the preparedness value is the hard part ... We've done a lot of trainings to help people understand what the expectation is of our faculty, students and visitors."

Three of the interview participants discussed the importance of being involved in the IHE Caucus (IHEC) and how the information gleaned from their data collection is helpful. The IHEC serves as a consortium that collaborates on the emergency preparedness needed for campuses and to discuss goals and issues faced by individual

institutions. Kappa stated, "Being involved in the institution caucus...is very important because they give us the information, we see them [IHEC] as very valuable." Beta discussed the benefits of being involved in the IHEC, saying, "... I have learned so much since being on the IHEC, that has been instrumental for me ... I will call them in a second or send an email. Hey, can you guys help me with this?" Delta shared their view on the caucus and how this one is modeled after an international consortium, "I don't know how many others have a statewide caucus. We have one of the few. But I'm not aware of all the other ones around. And we're a mini version of Universities and Colleges Caucus, which is a larger consortium that's really international."

Working Within and Outside the Campus

All eight emergency managers discussed the importance of working with leadership at their respective universities and colleges related to developing and implementing active shooter/threat plans for their campuses as well as outside stakeholders such as the community, local businesses, state agencies, and federal agencies. Emergency managers discussed that every 4 years each university and college must have the Board of Visitors' approval of the plan that was developed. Once approved by the Board of Visitors, the plan is then implemented. As Epsilon said, "The president and the chief of staff also reviewed it with our board of visitors."

Theta explained the importance of having the leadership participation and why that is necessary sometimes to help convince other departments it is imperative they support the plan.

We have our associate vice president can go toe to toe with a college team and say, we need you to do this, this and this. And then we have the layers in between internally. I think internally we work really well with other departments; it depends on what the department does, a lot of departments don't understand what emergency management is or does.

Each emergency manager had other stakeholders who would provide input on their plans.

Gamma said the stakeholders they worked with included "student affairs, academic affairs, university relations, [the campus] police, and Human Resources...and specifically I report to the chief of police and the associate vice president for public safety."

Alpha, Epsilon, and Kappa discussed the relationships with their local public safety teams and about collaboration with local fire and EMS teams and the university's police department, Alpha elaborated about the importance of working closely with these teams, "...we work with Fire and EMS. We obviously worked closely with both the [city's] and county's fire department, rescue squad ... all of those agencies collaborate in part [with the university] police department..." Epsilon shared that they first met with the university's police department then includes other public safety agencies: "...we first brought in our own police department and the city police department...then fire, and EMS ... I think my public safety partners are my most important partners in writing the plan." Kappa elaborated on the involvement of the outside agency heads with the plan. "I'll give [the plan] to our [police and fire] department chiefs and the E.M.S. as well. Have them look at the plan and provide input..."

Delta, Beta, Zeta, Kappa, and Epsilon discussed how the community outreach and surrounding businesses were integral in their planning for their campus. Delta discussed the community involvement at their university: "the outreach and the engagement with the community is probably one of the most important things ... that they have knowledge of what is in this plan, [and] what is implemented by the police department."

Beta pointed out:

We collaborate with our parents, the teachers, the staff, the administrative staff, and even [the community that surrounds the university] local and state stakeholders, like your businesses, that contribute to the operations of the college and [support] what we the universities are about.

Zeta shared that they collaborate with "the town, county and a lot of the other entities that are in play here because we all benefit from the university." Kappa added that one of the most important part of their plan is the community, "the strong part of my plan is our community, our relationship with our local law enforcement, fire and the EMS." Epsilon shared the importance of not only involving the students faculty and staff but how important the community's input is for their university, "I do involve students, faculty and staff; the other stakeholders that I keep very close to me are my community stakeholders because we've got to neighborhood organizations that surround our campus..."

Theme 3: Lessons Learned from Their Experiences

Theme 3 is related to RQ2, and how the experiential learning of each of the emergency managers influenced the development of their active threat plans. All eight

emergency managers shared their experiences and perceptions of what enhanced their learning during writing or improvising their active threat plans for their college or university campus. One factor that impacted developing and implementing the active threat plans was a new understanding of the university as a "city." Alpha, Delta, and Zeta described when they came to work on their own campus Alpha described the campus as, "...a small city, really, if you will, [thousands of] students, faculty, and staff." Delta said of the university, "We are like cities within a city ... we have a population of [thousands of] people on campus all together." This point made them realize it is challenging to make changes in their institution of higher education. Zeta elaborated:

We are our own little city. We have a quarry, a butcher, a hospital, an airport, so change is difficult in this culture as well. [Making a decision] really doesn't work that way in higher ed. It's a lot different, a lot slower process. Things just move slower, a lot slower.

Alpha shared about how previous experience working in a hospital setting taught them how vulnerable large institutions can be during an active shooter event.

I didn't realize in a health care setting or institution of higher learning how vulnerable that facility could be to an active shooter. So when I was working at the hospital, I had the opportunity to help with their plan, which gave me kind of some insight in how [the plan] should be done ... How we notify people to either shelter in place [or] evacuate, what actions they need to take, what messages we send out ... which is more what my responsibilities are, to assist in getting that information out here on campus.

Zeta and Gamma described how different it was for them when they first came to their individual campuses to work in the emergency management fields. Zeta shared how different the environment is at an institution of higher education, "...you just don't understand how different it is. It's very different in structure, in operations, and the functions are just unique. These [structures, operations, and functions] don't exist in a in a regular city or county government." Gamma addressed, "I learned intricacies and complexities of higher education. I really didn't know anything about the different departments and their operations. I learned a lot about [the university], the structure of higher education and how unique it is to everything else." Gamma elaborated that having in-person meetings helped his/her ability to better understand the structures and departments that make up the complex university system:

When I started to do the in-person meetings with departments, ... I really got to sit with people one on one in each department. Fortunately, all those individuals have been at [the institution] for many years, there was a lot of institutional knowledge and people were very happy to talk about what they do.

Zeta agreed with Gamma on the importance of understanding the structure of the university and how it works. This impacts the writing of their plans, "You've got to understand how things how things work and who the players are and who's responsible for what...You have to understand the structure and how things work."

Delta and Kappa felt their learning was enhanced by their experiences and events from their past. Delta shared being able to study the information provided from the afteraction reports of past events was invaluable.

We were able to kind of expand on that a little bit based on the lessons learned that we had in [that] event. And that helped us to work on some other areas. That really helped us with our family assistance planning. That really helped us out with disaster and mental health planning. Regardless if it's at the Navy Yard or if it's at San Bernardino or wherever it may be, we take a look to see, we look over people's shoulders at their plans, their after-action reports.

Kappa addressed the ability to be able to share information and collaborate on what has already been implemented is also invaluable.

Seminars continue to be about lessons learned from other events. That is very important because they give us information that is very valuable. We all borrow from one another, plans, forms ... it is important to use the resources out there.

Another key point Kappa felt influenced plan writing was an appreciation of unpredictable human behavior. "Regardless of how often you train [on the plan], whether you have felt you have the best plan, one thing you cannot plan for is human behavior, it's just something you can't plan for."

Epsilon shared an invaluable lesson learned from their personal involvement during an active shooter exercise. The experience they had impacted the writing of plans as did the mental and emotional toll that can develop when training and exercising of the plan.

Now, when I was in an active shooter exercise at another college, I got shot in the back running. Emotionally that changed how I teach active shooter, because I now know what that feels like in a pretend environment. Not the gunshot but

somebody pushing me to the floor because I had been shot. The other part of that was the evening news played the clip of me getting shot. I saw that over and over that I got shot. It brought on a whole new emotional element for me in teaching people that you have to open up to. You have to physically put yourself in that place and you have to think about everything that comes with that in order to be able to clearly make good decisions.

Epsilon also felt his/her learning was enhanced when working with individuals who felt the university needed no outside help if one of these active threat events occurred on their campus.

The hardest part for me in every plan that I write for the university, is dealing with the person at the table that says, "Oh, we can handle that. We've got that resource. We can do that. We don't need anything. We're OK where we are." I'm sorry, we're human. We only have a limited amount of resources, and we are going to need help from other people. We are going to have to ask for help ...

There was the technical piece of getting people to understand; we can't save the world by ourselves. And then the emotional piece of if this happens to me, can I pull everything I've got within me to respond and not panic?

Theta shared what they learned is:

People need to trust the plan. You need to trust what was already written. What I found, especially during this pandemic, was that if something was even a little bit uncomfortable, we would reinvent the wheel ... plans are designed so that when something happens, we open the plan, we do it and it's over.

Theta helped in the revising of the institution's plan and ensured the plan included valuable information backed by data, and that the plan was clear and concise so there was no confusion on what steps to follow and when. Another learning aspect that benefitted Theta in their plan revision was the technology experience. "My biggest learning curve was technological advances, like boom mikes, zoom capabilities, multi-screens, whiteboards, smart boards, all those technologies ... if I'm going to stay in this business, I have to stay on the cutting edge of technology."

Beta learned,

... that there were no plans other than those that were based on law enforcement response. But there wasn't an active threat or active shooter plan that incorporated beyond that response. We have what the police officers are going to do, but what happens after that? ... Some of our officers or lieutenants were asking about what happens with reunification, what happens with family assistance centers, all of these things. ... I think part of it was that sometimes people think the plan only includes response. Nobody thinks that is the shortest amount of time [during an active shooter], they forget typically that we have a whole other part of this that was not has not been done yet.

Learning the plan needed to cover prevention, mitigation, preparedness and recovery, this impacted how Beta updated the plan for the institution by making sure the plan included additional information to address reunification, family assistance centers, and other efforts that have an impact before, during, and after the actual event. Another valuable

lesson earned for Beta is, "...getting everybody on the same page so that, when something happens, that this plays out as smooth as we can make it."

Summary

Three themes were identified in this data analysis: entrusted to produce an effect, working together to create a safe culture, and lessons learned from their experiences. By using these themes, an understanding of emergency preparedness at IHEs during an active threat situation is achievable. In Chapter 5, I provide an interpretation of my findings using the contextual framework and empirical literature reviewed in Chapter 2 that guided the study. Also addressed in Chapter 5 are the limitations of the study, recommendations for future research, and implications for social change.

Chapter 5: Discussion, Conclusions, and Recommendations

The purpose of this qualitative study was to understand how campus emergency managers perceived the potential effectiveness of the design and implementation of their standard operating procedures to protect against an active threat and to gain a better understanding of what emergency managers perceived enhanced their learning in the design and implementation of active threat response procedures. In the study I sought to answer two research questions:

RQ1: How do campus emergency managers perceive the potential effectiveness of the design or implementation of their standard operating procedures to protect against an active threat?

RQ2: What do the emergency managers perceive enhanced their learning in the design or revision of the active threat plan used for their campus?

Three themes emerged during the data analysis process, including two themes that addressed RQ1 and one theme that addressed RQ2. The themes addressing RQ1 are entrusted to produce an effect and working together to create a safe culture. The three subthemes for the first theme of RQ1 are objectives and goals, roles and responsibilities, and training and exercises. The two subthemes for the second theme of RQ1 are collaboration and coordination with stakeholders to create a safer culture and working within and outside the campus. The theme addressing RQ2 is lessons learned from their experiences. RQ2 theme had no subthemes.

In this chapter I interpret the findings of the study. Also, I present limitations of the study and recommendations for future research. I conclude the chapter with a discussion of the implications this study may have for positive social change for leadership and emergency managers involved in writing emergency management plans for their IHEs

Interpretation of the Findings

Interpretations of the findings are addressed in the next three sections organized in relationship to the three themes. Provided in the three sections are interpretations of the three themes and subthemes in the context of the empirical studies analyzed in the literature review in Chapter 2 and the conceptual framework.

Theme 1: Entrusted to Design an Effective Plan

The most recurring theme I found in my research was that all the emergency managers felt they were entrusted by their leadership to develop and implement the most effective and efficient active threat preparedness plan. The emergency managers who participated in this study shared about the first subtheme regarding goals and objectives of the active threat plans and the importance of how those influence their planning when constructing an active threat plan or update. The emergency managers expressed their active threat plans had to provide for their everchanging environments and be able to be implemented at any given time. Kelly's (2015) study explored the active threat plans and the author reported the importance of the fluidity of a plan allowed for implementation when needed and that updates should be made frequently to parallel best practices learned from other IHEs.

The second subtheme addressed in all eight interviews for the study regarded the roles and responsibilities that each emergency manager on a campus for an institution of

higher education is tasked to fulfill. Farris and McCreight's (2014) findings were comparable to what I found in my study, regarding the emergency managers' roles and their obligations to the IHEs where they worked. Emergency planning, coordinating exercises, and hazard mitigation expert are a few of the responsibilities that Farris and McCreight felt were important aspects of what emergency managers contributed to their individual campuses. The participants in my study echoed the importance of Farris and McCreight's findings. The eight emergency managers discussed how important the prevention and preparedness, training along with exercises, as well as the response and recovery phases are to this role. Each emergency manager took being entrusted with creating their plan seriously, and by including all these phases in their plans, perceived they contributed to a more effective plan when it came to preparedness during an active threat event should one occur on their respective campus.

Samuel and Siebeneck (2019) conducted a qualitative study interviewing 30 emergency managers to better understand how they defined their roles in planning. Samuel and Siebeneck found the roles of emergency managers were crucial when it came to develop and implementing plans that prevent loss of life and property that are a result of natural and human made disasters. They recognized the importance of the diverse functions of emergency managers within the higher education community and the expertise they provided across all stages of emergency management. The study concluded the roles of emergency managers were pivotal in creating resiliency in their communities.

Training and exercises, the third subtheme, were also discussed by the eight emergency managers as being imperative for the education and testing of the plans being

implemented. The training provided the students, faculty, leadership, and staff on campuses with the information on how they will mitigate and respond to an active threat event should one occur. Exercises, to include tabletop discussions, full-scale, and fully functional exercises, are used to reinforce the education provided and analyze the plan in place. Research concluded by Pitts (2018) and Kapucu and Khosa (2013) supported the importance of training and exercises. These researchers found mitigation and preparedness as key elements and stressed the importance of testing the plans for proper implementation and improvement as needed to support changes on the campuses. Pitts found active shooter training should include exercises, recommended by the Department of Homeland Security and Department of Education, because that ensures more effective active shooter preparation efforts. Kapucu and Khosa showed that three key elements were needed to develop a resilient IHE when facing a disaster. The three elements referenced to withstand such tragedy, were development of an all-hazards plan, consistently training and exercising the plan developed, and building strong relationships with external community partners.

Another element to consider the plan effective is the understanding of why this training is relevant to learn and understand. According to some of the emergency managers, it is important for all students to comprehend the significance of this training because it can ultimately be what saves their lives as well as those of others around them. This aligns with Knowles' (1984) adult learning theory and principle of understanding the relevance of knowing why this learning is important and applicable to the practice of what is being learned (Palis & Quiros, 2014).

Theme 2: Working Together to Create a Safe Culture

The second theme was how working together created a safer culture. Two subthemes emerged from the data, collaboration and coordination with stakeholders to create a safer culture and working within and outside the campus. During the interviews conducted with the emergency managers, each one explained the importance of the involvement of their stakeholders, and the value of working within and outside of the campus with the various partners. In Green's (2014) study, it was reported collaboration and coordination were key to successful disaster planning for the three participating campuses.

All eight emergency managers discussed their stakeholders, and with whom they collaborated in their communities at the local, state, and federal levels. One emergency manager shared the importance of getting the staff and students on the same page with the active threat plan so that if an incident occurred, they are prepared to the best of their ability. Green (2014) conducted research on three campuses that collaborated and coordinated to form a consortium that enabled these campuses to work together to develop and implement active threat plans that allow for support for each respective campus from the others should an active threat event occur on one of the campuses. The small IHEs worked together with their local public safety teams and other community entities to develop a culture of preparedness across the whole locality and each of the universities. The stakeholders also helped in support of the training and exercises conducted to test the plan for effectiveness. The research concluded that collaboration

and coordination can create resilient campuses and more efficient and effective preparedness by leveraging each institution's resources.

Eight emergency managers discussed the importance of internal and external stakeholders and the value they provide in developing and implementing an active threat plan for the campus. Ellies (2015) concluded that the support of internal and external stakeholders is crucial in managing an active threat on campus. Most campuses are not fully equipped to control the crucial components of a large-scale crisis. The engagement with inside and outside stakeholders allows for more thorough strategic planning and preparedness with identification of vulnerabilities and addressing how each can be eliminated.

Kezar and Holcombe's (2017) theory redefined traditional leadership as using your resources at every level of leadership, rather than using the approach of information coming from only the executive tier down to other leadership. When collaboration happens at all levels of leadership, subject matter experts' multiple perspectives are gained on how to be best prepared when an emergency occurs. Collaboration at all levels of leadership promotes the implementation of positive change. It helps in understanding challenges and issues faced by IHEs and how to address them with inside and outside stakeholders. Coordination and collaboration across the organizations is encouraged at all levels and supports the theme of working together to create a safer culture within IHEs.

Theme 3: Lessons Learned From Their Experiences

The third theme, addressing RQ2, captures the lessons learned from the emergency managers' experiences. Experiential learning, as described by Knowles,

influenced each of the emergency managers in the development of their active threat plans. Four of the eight emergency managers attributed their ability to develop and revise the active threat plans for their IHEs, in part, to their experiences prior to their arrival to their campus, regarding how to collaborate and coordinate with their internal and external stakeholders to build or update the plans. Weinstein (2004) found lifelong learners were able to adapt to changes being made in businesses and were able to propose solutions to challenges faced. Weinstein's study showed lifelong learners were able to adapt and evolve making them successful in their business.

Two of the emergency managers felt their lessons learned were from understanding the operations better by getting more involved at their IHEs. Weinstein (2004) found that for success with changes and challenges presented in an organization, demonstrated commitment as a lifelong learner would help overcome those obstacles. Success in business or organizations was obtained by taking advantage of all learning opportunities that were presented. The CEOs in Weinstein's study felt by taking advantage of the learning opportunities, they would continue to be prepared and obtain valuable information for the everchanging environment and remain successful in the process.

Limitations of the Study

There are several limitations associated with this qualitative study. The study participants are from one mid-Atlantic state and seven different IHEs that have active threat plans in place for their campuses. These IHEs may not fully represent all IHEs throughout the nation. The sample criterion, emergency managers with a minimum 2

years of experience in emergency management, may also have served as a transferability. Participants volunteered for the study after receiving an email invitation to participate in the study, and these participants might have similar backgrounds and experiences.

Omitting emergency managers with less experience could have limited the richness of the data or the number of willing participants. Another limitation to consider would be self-reported data from the perspective of one of the many stakeholders that work with the emergency managers were not necessarily the perspective of the participant who was interviewed for the data collection.

The COVID-19 pandemic could have been a limitation to the study. The interviews were conducted virtually because face-to-face was not an option with the restrictions implemented throughout the state in which the interviews were conducted. Access to some emergency managers was not possible, as some responded to the invitation to participate by specifying that they were preoccupied with COVID-19 responsibilities and did not have the time to participate in an interview.

Recommendations for Future Research

My research was conducted in one mid-Atlantic state. One of the first recommendations to build upon the findings is to conduct research in more states, either in a region or maybe across the nation to gain a better understanding of what IHEs are doing to address emergency preparedness. Another recommendation for future research is to conduct a case study at one institution that has implemented their active threat during an incident to explore what the institution did to update the plan based on the lessons learned after the incident.

Another suggestion for future research might include conducting interviews with executive leadership to better understand their knowledge, readiness, and perceptions on emergency preparedness during an active threat incident should one occur on their campus. Also, a survey could be conducted among current IHE students and parents that would allow them to share how prepared they feel their respective campuses are should an active threat occur on their campus. Researching IHEs that host population-specific students that have access and functional needs is a needed perspective.

Implications for Social Change

One implication for social change is using the findings and recommendations from my research to help leadership, staff, and students at IHEs that are developing and implementing or updating and revising their active threat plans. Fifolt et al. (2016) pointed out that there is a broad range of disasters and potential hazards that U.S. IHEs potentially face, which makes managing emergencies complex. Fifolt et al. reported being prepared for both created, and natural disasters can be key to survival for all involved, including students, staff, and faculty. Implementing active threat plans can provide guidance to the leadership, faculty, staff, and students on how to be prepared if an active threat should occur on their campus. Fifolt et al. found working with other institutions and comparing challenges and issues can encourage IHEs to think more deeply about what they face at their own campuses, as well as working with key stakeholders. Mitigation, preparation, response, and recovery actions could improve drastically. Having this information in place provides more assurance to families of students attending an IHE that is prepared for such an event. An active threat plan

implemented on campus could be the reason many lives are saved should an active assailant decide to attack.

Social change is positively impacted by entrusting emergency managers to complete plans in order to mitigate, prevent, prepare, respond, and recover from any human-made disaster that has the potential to prepare itself on campus. The findings led to a recommendation that executive leadership support the roles and responsibilities of the emergency management staff in order to allow for the creation of an appropriate plan. Leadership should support training and exercises to support widespread understanding of the emergency plans and how to implement them should the need arise. An exercise process can also allow emergency managers to test the plan to see if the plan is operational or needs adjustments. Findings from my study led to a recommendation that emergency managers be allowed to build rapport and relationships with all stakeholders, both internal and external stakeholders who have an impact on the campus. Samuel and Sienbeneck (2019) found that stakeholder involvement and support was key to gaining information and leverage in developing and implementing mitigation planning to improve disaster readiness.

The last important recommendation is that leadership facilitate the growth of emergency managers on campus to be lifelong learners. This includes promoting collaboration and coordination with other campuses, attendance at conferences, and travel to other campuses to see operations in action. Green's (2014) study found that collaboration was key when a consortium of IHEs developed and implemented

compatible plans across all IHEs, exercising together the plans, sharing the emergency management staff, and building a culture of safety across the campuses involved.

Conclusion

The introductory statement of this study reported on the upsurge of active shooter events at IHEs in the United States and how this has provoked a new way of thinking among leadership, public safety, emergency managers, and other administrative staff about security, safety, and how to mitigate such an incident if one were to occur on campus (U.S. Department of Justice, 2018a, 2018b). Through this dissertation, I wanted to understand the perceptions of emergency managers working on college and university campuses on how prepared they felt should an active threat incident occur on one of their campuses. My reason for wanting to explore this type of incident is because it is becoming more frequent on campuses and many colleges and universities could use more support as they work to improve prevention, response, and recovery on their campuses (U.S. Department of Justice, 2018a, 2018b).

Based on the results of this study, it appears colleges and universities are working on the prevention, preparedness, response, recovery, and mitigation for active threats on campus. All eight of the emergency managers interviewed for this study stated their plans are reviewed and updated annually as needed. Every 4 years the plans are reviewed and approved by the Board of Visitors for each institution as well. Institutions and their staff need to think about their and understand their roles and responsibilities should an active threat occur on campus. They need to support more active training and exercises and give

more consideration to allow the emergency managers to collaborate and coordinate with other IHEs through whatever means possible to build a stronger support network.

My study is one step in a journey of scholars and practitioners seekeing an understanding of the safety and security measures at IHEs and how prepared they are should an active threat incident occur on their campus. Leadership at colleges and universities across the nation need to recognize that active shootings could happen on their campus, regardless of how prepared they feel. It is my hope that with the information from this study, along with findings of future studies, that IHEs with no plan in place or need support on updating what is in place on their campus, will consider coordinating and collaborating with other campuses.

References

- Altizer, A. (2017, March). Do you have what it takes to be a university emergency manager? *Campus Safety*. Retrieved from https://www.campussafetymagazine.com/
- Anklam, C., Kirby, A., Sharevski, F., & Dietz, J. (2014). Mitigating active shooter impact; analysis for policy options based on agent/computer-based modeling.

 *Journal of Emergency Management, 13(3), 201-216. Retrieved from https://www.wmpllc.org/ojs/index.php/jem/article/view/176
- Brennan, J. A., & Stern, E. A. (2017). Leading a campus through crisis: The role of college and university presidents. *Journal of Education Advancement and Marketing*, 2(2), 120-134. Retrieved from https://www.henrystewartpublications.com/sites/default/files/Brennan%2C%20Joseph%20%26%20Stern%2C%20Eric%20-">https://www.henrystewartpublications.com/sites/default/files/Brennan%2C%20Joseph%20%26%20Stern%2C%20Eric%20-">https://www.henrystewartpublications.com/sites/default/files/Brennan%2C%20Joseph%20%26%20Stern%2C%20Eric%20-">https://www.henrystewartpublications.com/sites/default/files/Brennan%2C%20Joseph%20%20Stern%2C%20Eric%20-">https://www.henrystewartpublications.com/sites/default/files/Brennan%2C%20Joseph%20%20Stern%2C%20Eric%20-">https://www.henrystewartpublications.com/sites/default/files/Brennan%2C%20Joseph%20%20Stern%2C%20Eric%20-">https://www.henrystewartpublications.com/sites/default/files/Brennan%2C%20Joseph%20%20Stern%2C%20Eric%20-">https://www.henrystewartpublications.com/sites/default/files/Brennan%2C%20Joseph%20%20Stern%2C%20Eric%20-">https://www.henrystewartpublications.com/sites/default/files/Brennan%2C%20Joseph%20%20Stern%2C%20Eric%20-">https://www.henrystewartpublications.com/sites/default/files/Brennan%2C%20Joseph%20a%20Crisis.pdf
- Camera, L. (2017, April 17). Virginia Tech 10 years later when campus safety changed forever. *U.S. News and World Report*. Retrieved from https://www.usnews.com/news/national-news/articles/2017-04-14/virginia-tech-10-years-later-whats-changed-on-campuses-since-the-2007-shooting
- Cannon, A. (2016). Aiming at students: The college gun violence epidemic. *Citizens**Crime Commission of New York City, 1-25. Retrieved from

 http://www.nycrimecommission.org/pdfs/CCC-Aiming-At-Students-College-Shootings-Oct2016.pdf

- Creswell, J. W. (2013). Qualitative inquiry and research design: Choosing among five approaches (3rd ed.). Sage.
- DeArmond, M. (2018). That could never happen here: Compliance and safety imperatives for today's college campuses. *Higher Education Workplace*, 10(2).

 Retrieved from https://www.cupahr.org/issue/feature/compliance-safety-campus/
- Drysdale, D., Modzeleski, W., & Simons, A. (2010). *Campus attacks: Targeted violence affecting institutions of higher education*. U.S. Secret Service, U.S. Department of Education, & Federal Bureau of Investigation. Retrieved from https://www2.ed.gov/admins/lead/safety/campus-attacks.pdf
- Egnoto, M. J., Griffin, D. J., Svetieva, E., & Winslow, L. (2016). Information sharing during the University of Texas at Austin active shooter/suicide event. *Journal of School Violence*, *15*(1), 48-66. Retrieved from https://www.tandfonline.com/doi/full/10.1080/15388220.2014.949376
- Ellies, S. K. (2015). Evaluating an active shooter curriculum for institutions of higher learning (Doctoral dissertation, University of Pittsburgh). Retrieved from http://d-scholarship.pitt.edu/26003/1/sellies_dissertation_8-18-15_ETD-SD_Edits-MND_Edits.pdf
- Farris, D., & McCreight, R. (2014). The professionalization of emergency management in institutions of higher education. *Journal of Homeland Security and Emergency Management*, 11(1), 73-94. Retrieved from https://www.researchgate.net/publication/272263049 The Professionalization of Emergency Management in Institutions of Higher Education

- Fifolt, M., Burrowes, J., McPherson, T., & McCormick, L. C. (2016). Strengthening emergency preparedness in higher education through hazard vulnerability analysis. *College and University*, *91*(4), 61–70. Retrieved from https://eric.ed.gov/?id=EJ1121088
- Ford, J., & Frei, S. (2016). Training for the unthinkable: Examining message characteristics on motivations to engage in an active-shooter response video.

 *Communication Studies, 67(4), 438-454. Retrieved from https://www.tandfonline.com/doi/abs/10.1080/10510974.2016.1196381
- Fox, J. A., & DeLateur, M. J. (2014). Weapons of mass (murder) destruction. *Criminal and Civil Confinement, 40*(313), 313-343. Retrieved from https://www.researchgate.net/publication/287106525_Weapons_of_mass_murder_destruction
- Green, R. (2014). Resilient campuses: Leveraging resources among small- and moderate-sized institutions of higher education. *Journal of Emergency Management*, *12*(1), 21-30. Retrieved from https://pubmed.ncbi.nlm.nih.gov/24691913/
- Gunter, T. A. (2016). *Qualitative collective case study of targeted violence preparedness*at institutions of higher education (Doctoral dissertation, Liberty University).

 Retrieved from https://digitalcommons.liberty.edu/doctoral/1319/
- Hollister, B. A., & Scalora, M. J. (2015). Broadening campus threat assessment beyond mass shootings. *Aggression and Violent Behavior*, *25* (Part A), 43–53. Retrieved from https://www.sciencedirect.com/science/article/abs/pii/S1359178915000907
- Jackson, P. B. (2016). Dean of students' responsibilities in campus crisis management

- (Doctoral dissertation, Georgia Southern University). Retrieved from https://digitalcommons.georgiasouthern.edu/cgi/viewcontent.cgi?article=2632&co ntext=etd
- Jacobs, L. (2014). The Hartford consensus: How to maximize survivability in active shooter and intentional mass casualty events. *World Journal of Surgery, 38*(5), 1007-1008. Retrieved from https://link.springer.com/article/10.1007/s00268-014-2481-7
- Kapucu, N., & Khosa, S. (2013). Disaster resiliency and culture of preparedness for university and college campuses. *Administration & Society*, 45(1), 3–37.
 Retrieved from
 https://www.researchgate.net/publication/254257861 Disaster Resiliency and C
 ulture of Preparedness for University and College Campuses
- Kellom, K., & Nubani, L. (2018). One step ahead of active shooters: Are our university buildings ready? *Buildings*, 8(12), 173. Retrieved from https://www.mdpi.com/2075-5309/8/12/173
- Kelly, K. T. (2015). Campus readiness for dealing with an active shooter (Doctoral dissertation, California State University, Long Beach). Retrieved from https://search.proquest.com/openview/05b741da923362bbd2674f296aa28ab0/1?pgg-origsite=gscholar&cbl=18750&diss=y
- Kezar, A. (2005). Promoting student success: The importance of shared leadership and collaboration (Occasional Paper No. 4). Indiana University Center for Postsecondary Research. Retrieved from

https://scholarworks.iu.edu/dspace/handle/2022/23532

- Kezar, A. (2011). What is the best way to achieve broader reach of improved practices in higher education? *Innovative Higher Education*, 36(4), 235–247. Retrieved from https://www.researchgate.net/publication/225427162 What is the best way to achieve broader reach of improved practices in higher education
- Kezar, A. (2014). *How colleges change: Understanding, leading, and enacting change.*Routledge.
- Kezar, A. J., & Holcombe, E. M. (2017). Shared leadership in higher education:

 Important lessons from research and practice. Washington, DC: American

 Council of Education.
- Kezar, A. J., & Lester, J. (2011). Enhancing campus capacity for leadership: An examination of grassroots leaders in higher education. Stanford University Press.
- Knowles, M. (1984). Andragogy in Action. Jossey-Bass.
- Knowles, M. (1990). The adult learner: A neglected species (3rd ed.). Gulf.
- Lachlan, K. A., Spence, P. R., & McIntyre, J. J. (2016). Responding to a campus emergency: The effect of alert sources on learning, message speed, and perceptions of campus safety. *International Journal of Mass Emergencies & Disasters*, *34*(1), 95–112. Retrieved from http://www.ijmed.org/articles/693/download/
- Lindsey, R. (1976, July 13). Seven killed, two injured a gunman sprays shots at college in California. *The New York Times*. Retrieved from https://www.nytimes.com/1976/07/13/archives/seven-killed-two-injured-as-

gunman-sprays-shots-at-college-in.html

- Merriam, S. B. (2009). *Qualitative research: A guide to design and implementation*. Jossey-Bass.
- Merriam, S. B., & Tisdell, E. J. (2015). *Qualitative research: A guide to design and implementation* (4th ed.). Jossey-Bass.
- Myers, K. (2017). Higher education institutions: Complex and underprepared for active-shooter situations. *Campus Law Enforcement Journal*, 47(1), 34-38. Retrieved from https://www.iaclea.org/assets/uploads/pdfs/CLEJ-2017-01-WMDCPT-UnderpreparedforActiveShoot.pdf
- Myers, S. L. (1991, November 2). Student opens fire at U. of Iowa, killing 4 before shooting himself. *The New York Times*. Retrieved from https://www.nytimes.com/1991/11/02/us/student-opens-fire-at-u-of-iowa-killing-4-before-shooting-himself.html
- Palis, A. G., & Quiros, P. A. (2014). Adult learning principles and presentation pearls. *Middle East African Journal of Ophthalmology, 21*(2), 114–122. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4005174/
- Patton, M. Q. (2015). Qualitative research and evaluation methods (4th ed.). Sage.
- Peterson, J., Sackrison, E., & Polland, A. (2015). Training students to respond to shootings on campus: Is it worth it? *Journal of Threat Assessment and Management, 2*(2), 127-138. Retrieved from https://www.researchgate.net/publication/289365691 Training students to respond to shootings on campus Is it worth it

- Pitts, L. (2018). *Preparation matters: A quantitative examination of faculty active shooter*preparedness (Doctoral dissertation, University of Southern Mississippi).

 Retrieved from https://aquila.usm.edu/dissertations/1555/
- Regehr, C., Glancy, G. D., Carter, A., & Ramshaw, L. (2017). A comprehensive approach to managing threats of violence on a university or college campus. *International Journal of Law and Psychiatry*, 54, 140–147. Retrieved from https://doi:10.1016/j.ijlp.2017.06.009
- Roman, J. (2018, September/October). The new normal: With active shooters incidents on the rise across the country, colleges and universities employ new strategies to help campuses prepare. NFPA Journal, Retrieved from https://www.nfpa.org/News-and-Research/Publications-and-media/NFPA-Journal/2018/September-October-2018/Features/Campus-Active-Shooter
- Rosenwald, M. S. (2018, April 29). 159 years before Columbine, the nation's first school shooting happened at UVa. *The Washington Post*. Retrieved from https://www.washingtonpost.com/news/retropolis/wp/2018/04/20/a-masked-shooter-a-campus-killing-and-a-manhunt-159-years-before-columbine/
- Samuel, C., & Siebeneck, L. K. (2019). Roles revealed: An examination of the adopted roles of emergency managers in hazard mitigation planning and strategy implementation. *International Journal of Disaster Risk Reduction, 39*. Retrieved from

https://www.sciencedirect.com/science/article/pii/S2212420918313979?via%3Di

- Seo, D.-C., Torabi, M. R., Sa, J., & Blair, E. H. (2012). Campus violence preparedness of US college campuses. *Security Journal*, 25(3), 199–211. Retrieved from https://link.springer.com/article/10.1057/sj.2011.18
- Shaw, M. (2018). Teaching campus crisis management through case studies: Moving between theory and practice. *Journal of Student Affairs Research and Practice,* 55(3), 308-320. Retrieved from https://www.tandfonline.com/doi/abs/10.1080/19496591.2018.1399894?journalCode=uarp20
- Skurka, C., Quick, B. L., Reynolds-Tylus, T., Short, T., & Bryan, A. L. (2018). An evaluation of a college campus emergency preparedness intervention. *Journal of Safety Research*, 65, 67–72. Retrieved from https://www.sciencedirect.com/science/article/abs/pii/S0022437517305571
- Tanner, A., & Doberstein, B. (2015). Emergency preparedness amongst university students. *International Journal of Disaster Risk Reduction*, 13, 409–413.

 Retrieved from

 https://www.sciencedirect.com/science/article/abs/pii/S2212420915300510
- Thompson, A., Price, J. H., Mrdjenovich, A. J., & Khubchandani, J. (2009). Reducing firearm-related violence on college campuses- police chiefs' perceptions and practices. *Journal of American College Health*, *58*(3), 247-254. Retrieved from https://pubmed.ncbi.nlm.nih.gov/19959439/
- U.S. Department of Education. (2013). *Guide* for *developing high-quality emergency* operations plans for institutions of higher education. Retrieved from

https://rems.ed.gov/docs/REMS_IHE_Guide_508.pdf.

- U.S. Department of Homeland Security. (2011). *Presidential policy directive/PPD-8:*national preparedness. Washington, DC.
- U.S. Department of Justice, Advanced Law Enforcement Rapid Response Training
 (ALERRT) Center Texas State University, & Federal Bureau of Investigation.
 (2018a). Active shooter incidents in the United States in 2016 and 2017.
 Washington, DC.
- U.S. Department of Justice, Advanced Law Enforcement Rapid Response Training
 (ALERRT) Center Texas State University, & Federal Bureau of Investigation.
 (2018b). Active Shooter Incidents in the United States in 2018. Washington, DC.
- U.S. Department of Justice, Advanced Law Enforcement Rapid Response Training(ALERRT) Center Texas State University, & Federal Bureau of Investigation.(2020). Active Shooter Incidents in the United States in 2019. Washington, DC.
- Wallenfeldt, J. (2016). Texas tower shooting of 1966. *Encyclopedia Britannica*.

 Retrieved from https://www.britannica.com/event/Texas-Tower-shooting-of-1966
- Wang, J., & Hutchins, H. (2010). Crisis management in higher education: What have we learned from Virginia Tech? *Advances in Developing Human Resources, 12*(5), 552-572. Retrieved from https://journals.sagepub.com/doi/10.1177/1523422310394433?icid=int.sj-abstract.similar-articles.2&
- Weinstein, M.B. (2004). An Investigation of CEOs and Learning Experiences:

 Implications for Leadership Training. Paper presented at the Academy of Human

Resource Development International Conference, Austin, TX. Retrieved from https://files.eric.ed.gov/fulltext/ED492286.pdf

Williams, C. B. (2017). Awareness and understanding of a college active shooter crisis plan (Doctoral dissertation, Walden University). Retrieved from https://scholarworks.waldenu.edu/dissertations/4027/

Appendix: Interview Questions

- 1. Tell me about who you are, and how you became an emergency manager with your institution of higher education. (use institution name)
- 2. Describe to me your roles and responsibilities in writing or revising the Active Threat preparedness plan for your campus.

Probe: Designing, implementing, revising or updating?

Probe for detail and examples of the roles and responsibilities.

- 3. Tell me about your experiences you had in **designing** your plan?
 - a. Probe: What has been the most difficult part about writing the Active
 Threat Preparedness plan if any?
 - b. Probe: Do you feel there were parts easier to develop than others?
 - c. Probe: Tell me about any collaboration or coordination across other departments.
- 4. Tell me about your experiences have you had in **implementing** your plan? (for clarification, not during an event for emergency preparedness)
 - a. Probe: Tell me about your relationship with your emergency manager team?
- 5. Tell me about your experiences have you had in **revising** your plan?
 - a. Probe: Working with team?
- 6. How effective do you feel your current active shooter/threat design and implementation of the plan are for your campus?

- a. Probe: How comfortable do you feel about the current active shooter/threat standard operating plan?
- b. Probe: Describe to me the areas that concern you. Strongest?
- 7. As you look back on designing, implementing, and revising the plan, what steps or aspects of the plan did you collaborate on the most?
- 8. Which stakeholders did you collaborate with on this plan?
 - a. Probe: who were the most key stakeholders? (no need to name names ... perhaps just share roles or the contribution to collaboration)
- 9. What resistance, if any, did you meet from leadership and staff during the development and implementation of active shooter/threat preparedness plan? (Moved to question 1)
 - a. Probe: How did you address the resistance received?
- 10. What do you feel to you is the most important thing to come from implementing this procedure for an active threat on campus?
- 11. What factors enhanced your own learning experience during designing, implementation or revision?
 - a. Probe: Are there strategies you have learned that help you to be a better leader? If so, can you tell me about them?
- 12. Did anything interfere with your learning experience? Could you share that with me?

Probe? How did you come about that insight? Did you learn from others?

- 13. What lessons learned have you taken away from developing and implementing the active shooter/threat standard operating procedures?
 - a. Probe: How have those lessons impacted developing and implementing other standard operating procedures that you might be involved with?
- 14. Is there additional training or education you would like to participate in after having this experience designing and implementing these policies? Has this prompted you to want to learn more? What about?
- 15. Are you aware of what enhanced other's learning experiences as you implemented and trained? (both key stakeholders and campus members)
- 16. Is there anything else you would like to share with me?