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A Case Study of the Umpqua Community College Shooting

A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Education in Higher Education

by

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Abstract

The purpose of this dissertation was to examine the deadliest shooting that has happened on a community college campus. The following research questions guided this dissertation study: (1) What was the law enforcement response to the deadliest community college campus shooting in history? (2) Did previous mass shootings inform the law enforcement response to the deadliest community college campus shooting? (3) What implications for practice can be derived by studying the deadliest of these shootings? This case study utilized multiple sources of information, from official police reports, official institutional reports, archives of publications, and participant interviews from some of the law enforcement officers directly involved in the case.

Dedication

This paper is dedicated to my loving wife, Johnna, who sacrificed so much over the course of this project. Her unwavering support and sacrifice during this journey cannot be overstated. In addition, to my daughter, Madeline, who always encouraged me to continue even if it meant time away from her life. I am truly blessed to have these two women in my life and they will never know how much they contributed to my success.

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CHAPTER ONE INTRODUCTION

As long as civilization has existed, violence against humans at the hands of humans has existed. Today, on every continent, in every country, humans clash with each other and the result is often death. Some may say violence has become a normal part of the lives of American citizens. Certainly American society as a whole is subject to violence on a daily basis. Violence seems to cross racial and gender boundaries, as these horrific acts affect every racial group, social class, ethnicity, gender, and any other category one can imagine. Yet, when news breaks of another workplace shooting, another elementary school shooting, or another shooting on the campus of a higher education institution, Americans seem surprised it has happened again. Yet, according to Drysdale, Modzeleski, and Simons (2010), there have been more than 270 acts of directed assaults on college and university campuses nationwide since the early 1900s. Inclusion in the category of directed assaults required the attack to be specific to institutions of higher education, must have had specific targets selected prior to the assault or during the assault, and required the perpetrator to have the present ability to employ lethal force.

Context of the Research Problem

In the first four weeks of 2014 alone, the United States saw several acts of violence at colleges and universities. On January 20, a student was shot while sitting in his vehicle in the parking lot of the Schwartz Athletic Center on the campus of Widener University, a private university near Philadelphia. On January 21, a 23-year-old teaching assistant fatally shot another 21-year-old teaching assistant in the Electrical Engineering Building on the campus of Purdue University. On January 24, a 20-year-old engineering technology student and football player was fatally shot outside a dormitory on the campus of South Carolina State University. On January

30, two individuals approached a student on the East Florida State College Palm Bay campus and began beating the student with a pool cue. The victim student pulled a handgun from his car and shot one assailant in the chest. In all, three individuals were dead and one victim survived. Such violent incidents continued throughout the spring semester. On March 24, a student at University of North Carolina at Greensboro was shot during an altercation with another student. On April 2, a 41-year-old male who had no apparent ties to the university fatally shot a 26-year-old female program coordinator in the University of Washington's College of Architecture. Police officials declared the incident a murder-suicide.

I developed Table 1 to help identify the deadliest campus shootings that have occurred in higher education in an attempt to identify which incident to study. In the table, I listed: the number killed at each institution, excluding the shooter; the type of institution, public or private; and the class status of the shooter, if applicable. I included those campus shootings where four or more individuals were killed and noted three cases that stood out with respect to the number killed in the incident. I identified the following three cases as the deadliest campus shootings in higher education history: The University of Texas, Austin had a campus shooting with 14 killed, Virginia Polytechnic Institute and State University had a campus shooting with 32 killed and Umpqua Community College had a campus shooting with nine killed.

Table 1

Campus Shooter Characteristics

Year	Location	Type of Institution	Number Killed	Class Status
1961	University Of Texas	Public	13	Undergraduate
1976	California State University	Public	7	Custodian
1991	University of Iowa	Public	5	Graduate

Table 1 (Cont.)

Campus Shooter Characteristics

Year	Location	Type of Institution	Number Killed	Class Status
2007	Virginia Polytechnic Institute	Public	32	Undergraduate
2008	Northern Illinois University	Public	5	Graduate
2010	Oikos University	Private	7	Undergraduate
2015	Umpqua Community College	Public	9	Undergraduate

Although each incident listed in the table is tragic in its own way, these stories pale in comparison to one horrific day in 2007. A lone gunman descended on the seemingly unaware campus of the Virginia Polytechnic Institute and State University (Virginia Tech) in Blacksburg, Virginia. As students and faculty were thinking about the end of spring semester and the freedom of summer, this violent and unstable individual had been preparing to commit what would be the deadliest shooting rampage in the history of American higher education on their unfortunate campus.

Virginia Tech Shooting

Seung-Hui Cho was born on January 18, 1984 near Seoul, South Korea. Early in childhood, Cho was described by his parents as a well behaved, though very bashful and quiet. One of Cho's aunts remembered how he was not a child who liked to be hugged and would very seldom respond to being spoken to (Cho & Gardner, 2007). Cho's uncle was happy when he found out the family was moving to America because he thought the move would help Cho gain confidence since the United States was such an open society (Kleinfield, 2007). After eight years of attempting to obtain visas for the family, the Cho's made the move to the United States in

1992 and settled in a predominantly Korean neighborhood near Washington, DC where Cho's father took a job as a dry cleaner (Cho & Gardner, 2007).

Although Cho's uncle had hoped the move to the United States would be beneficial to Seung-Hui that was not the case. As early as the sixth grade, Cho's teachers began to be concerned with his behavior; he was very withdrawn and communicated very little in class, which prompted them to recommend therapy for him. Although the family took the advice, doing so created a significant hardship on the family in order to arrange for Cho to attend those sessions (Neuman & Macias, 2007). Cho's teachers were not the only ones who noticed how he failed to respond to teachers' questions, often just staring ahead until they called on someone else. Classmates began to tease him, some going so far as to offer him money if he would say something in class (Cho & Gardner, 2007). Several years later, Cho's therapist began to become concerned with the content of is artwork as he had taken to painting increasingly darker themes (Virginia Tech Review Panel [VTRP], 2007). Around this time, the Columbine High School murders took place, and officials at Cho's school learned of a paper he had written in which he expressed a desire to complete such a massacre (Neuman & Macias, 2007). Cho's family took him to a psychiatrist, who prescribed him medication for depression and anxiety. The medicine appeared help to him, but after just over a year, the doctor discontinued the medication after Cho told them he was fine (Neuman & Macias, 2008).

Once in high school, Cho's teachers began to take note of his lack of communication with the teachers and other students, though his schoolwork was fine. One teacher referred Cho to a counselor who asked him if he had ever been treated for any mental health issues. Cho said that he had not. Ultimately, Cho was given accommodations for class that allowed for modifications to the oral communication requirements for his assignments (VTRP, 2007). With these

accommodations in place, Cho was able to successfully complete high school. Although his counselors would recommend he select a smaller college close to home, Cho enrolled in Virginia Tech in 2003 (VTRP, 2007). For about the next three years, Cho continued to have difficulty adapting to and communicating with others. One female student expressed concern about her interactions with Cho, prompting her to file a complaint about his behavior. She indicated to campus police that Cho had been making unsolicited and unwanted contact with her over the Internet, as well as by phone and in person. This report caused the police to interview Cho and tell him to stop contacting the student and subsequently refer the case to the University's Judicial Affairs department (VTRP, 2007). Another student contacted the campus police and complained that she had received disturbing text messages from Cho. Police again interviewed him and ordered him to have no further contact with her. Shortly after the interview, Cho sent a suicidal text message to his roommate, which was reported to authorities as well. It was that text message that caused Cho to be involuntarily hospitalized overnight, yet he was released the next day, the last day of classes before winter break (VTRP, 2007).

April 16, 2007 began unremarkably for those who were around Cho, as he, unbeknownst to them, set the events of the day in motion without any outward signs the day would be any different. Cho awoke early and was working on the computer when his roommates got up. They remembered seeing him get ready for the day in much the same manner as days before. As usual, Cho left the dorm room without saying a word. Around 6:45 a.m., a student reported seeing him near the West Ambler Johnson residence hall, about a two-minute walk from his room. Although Cho had access to West Ambler Johnson hall by the use of an electronic pass card to check his student mailbox, he was too early to enter the building, as his access began at 7:30 a.m. After gaining access to the building, Cho walked up to the room of Emily Hilscher, a seemingly

random female student on the fourth floor (VTRP, 2007). According to police, no known connection between Hilscher and Cho existed and no one knows for sure how he was able to gain access to the building. When Emily entered her room shortly before 7:15 a.m., Cho was waiting for her. Resident Advisor Ryan Clark lived next door to Hilscher and that morning he heard a commotion in Hilscher's room. Clark responded to Hilscher's room where Cho shot Clark and Hilscher at point blank range. Although they both survived the initial assault, each succumbed to their injuries a short time later. This commotion prompted another student in the residence hall to alert the campus police. However, the student reported the disturbance as being possibly from someone falling out of one of the loft beds in the dorm room, a common call received by emergency personnel on campus (VTRP, 2007). Although he was covered in blood and left bloody footprints at the scene, Cho was able to make it out of West Ambler without anyone having remembered seeing him. The police responded to the scene of the murders. After interviewing several students, they focused their efforts on locating Emily Hilscher's boyfriend, who the police had been told owned a handgun and was known to practice shooting at a target range. Little did the police know the culprit was Cho, who by all accounts had no ties to either victim (VTRP, 2007).

Shortly after killing Emily Hilscher and Ryan Clark, Cho returned to his dorm room where he changed clothes, took the time to log into his email accounts to delete messages and delete the account. Next, he removed the hard drive from his computer and took both the hard drive and his cell phone as he left the dorms (VTRP, 2007). It was shortly after this time that Cho mailed a package to the NBC studios, which contained a CD bearing videos of himself talking about his complaints about society and the wrongs that had been perpetrated against the "mistreated and downtrodden of the world" (VTRP, 2007, p. 99). The package also contained

handwritten letters and pictures of Cho on which he had written captions. These items would soon become America's first glimpse into the mind of a killer.

Just after 9:00 a.m. that day, while police were busy processing the crime scene and interviewing witnesses in the West Ambler Johnson residence hall, Cho traveled back to campus and made his way into Norris Hall. Once inside, Cho chained the double doors shut from the inside at three of the building's entrances and placed a note on one of them warning not to remove the chains or a bomb would go off (VTRP, 2007). Cho went to the second floor and began looking into numerous classrooms, even visiting some of the classrooms more than once, before he began his shooting rampage. Over the next ten minutes or so, Cho would make his way up and down the halls of the Norris building, shooting students and faculty members alike. According to the witnesses interviewed by the panel, Cho would move from classroom to classroom, often firing from the doorway and sometimes from inside the classroom, and then move on to the next room. Cho returned to one classroom several times, ultimately killing all students and the professor in that class (VTRP, 2007). In all, 25 students and 5 faculty members were murdered during the shooting spree, 17 more were shot and survived, and 6 students were injured escaping the building after the shooting began. Cho fired almost 200 rounds from his Walther P22 and Glock 17, with the final shot fired being from the Glock 17 when Cho turned the gun on himself and committed suicide. When police searched his body, they found an additional 203 rounds for the weapons, with some rounds already loaded in magazines and some just loose in his backpack (VTRP, 2007).

Over the next several weeks and months, University officials and Americans nationwide would struggle to comprehend the magnitude of the loss of life at Virginia Tech. Questions would be asked about how such a tragedy could befall victims at a place many would consider a

safe haven. Yet, it should have come as no surprise that there were individuals in the world who were capable of inflicting mass murder on a campus of a higher education institution. On April 16, 2007, Cho became the deadliest gunman on a campus of higher education since his predecessor, a man named Charles Whitman, who some 40 years earlier earned that distinction at the top of the bell tower on the campus of the University of Texas at Austin on April 5, 1966 (Lavergne, 1997).

University of Texas, Austin

Charles J. Whitman was born on June 24, 1941 in West Palm Beach, Florida to Charles A. and Margaret Whitman, their first child (Lavergne, 1997). The elder Whitman was a plumbing contractor by trade and had established a prosperous business prior to his son's birth. Both parents were considered strict. While the younger Charles was provided for very well in material things, he received little emotional support from his parents, either by the nearly impossible standards of his father or the failure of his mother to intervene or temper those unreasonable expectations (Lavergne, 1997).

Charles Whitman left his home at the age of 18 and enlisted in the United States Marine Corps. He was trained in all aspects of military life. Whitman was found early on to be proficient in firing the 30-caliber M-1 Carbine. The M-1 was a "ten-pound, eighty-five-dollar, gasoperated, air-cooled, clip-fed, semi-automatic" weapon with which Whitman used to earn high marksmanship scores in Marine training (Kyle, 2013, p. 192). Having completed basic training as a member of the Marines, Whitman began taking classes at the University of Texas. There, he met his soon-to-be wife, Kathy. Whitman began to resent the Marine Corps and his obligation to it since it kept him away from his wife. Over the next couple of years of his enlistment, Whitman continued to become disillusioned with the Marine Corps, often writing in his journal about how

many days he had left before he would be free (Lavergne, 1997). At one point after returning home, Whitman sought out the help of a mental health professional to whom he disclosed his feelings about climbing the University of Texas Tower with a deer rifle and shooting people (Lavergne, 1997). In the pre-dawn hours of April 6, 1966, Whitman murdered his wife by stabbing her while she slept in bed and went on to murder his mother before traveling to the tower. He assaulted a receptionist, wounded two people and killed two others, climbed the stairs to the top of the University of Texas Tower, a little over 300 feet above the campus, and began shooting at students in the courtyard below. From his position atop the tower, Whitman was able to shoot 45 people, killing 14, before two Austin Police officers were able to ascend the tower, and engage Whitman. Those officers ended the deadliest act of violence ever committed on a campus of higher education until Cho's rampage at Virginia Tech four decades later (Lavergne, 1997).

Prevalence of College Campus Violence

In response to the shooting at Virginia Tech, President George W. Bush tasked members of several public safety organizations such as the Secret Service, FBI, Attorney General, and Department of Health to study the prevalence of violence on college campuses nationwide (Drysdale et al., 2010). Those agencies in cooperation with the Department of Education began a research project in which the authors sought to provide:

An overview of these incidents and the involved subjects, discusses initial observations regarding behaviors of the subjects, and offers preliminary considerations regarding the data that may have relevance to threat assessment. While the participating agencies are aware of the limitations of an open-source descriptive review, this preliminary effort will be complemented by a more in-depth study to be conducted by the Department of Education and the FBI. (Drysdale et al., 2010, p. 2)

The researchers examined all reported incidents of campus violence between 1900 and 2008 in the United States by studying over 4,400 higher education institutions, with more than 60% of

the institutions being four-year colleges and universities and 40% being two-year colleges (Drysdale et al., 2010). According to Drysdale et al. (2010), of the 272 incidents of directed attacks on higher education campuses since the 1900s, perpetrators using a firearm carried out 54% of those attacks.

In the first decade of the 2000s, higher education experienced a rise in directed assaults on campuses nationwide (Drysdale et al., 2010). While it is unknown exactly why those assaults rose, one might look at the increase in student enrollment in higher education and the correlation to the increased number of those attacks as a potential explanation. Other possible reasons for this rise could be the increase in the media coverage of such events, the development of a more zealous gun culture, as well as the many technological innovations in firearms seen during the previous century. In this study, a distinction will be made between all directed assaults as defined by Drysdale et al., (2010) and those involving a firearm as the primary weapon used in the assault. Additionally, this study will develop criteria for inclusion of incidents to be considered the deadliest of the shootings on higher education campuses.

Purpose of Study

Nearly 10 years have passed since the tragedy at Virginia Tech, and yet Americans are still shocked and surprised to hear about shootings occurring on college campuses. In the first four weeks of 2014, the United States saw several acts of violence occur on the campuses of higher education institutions and to this date, none have surpassed Virginia Tech in terms of how many innocent lives taken. On October 1, 2015, a male student entered a writing class on the campus of the Umpqua Community College near Roseburg, Oregon and fatally shot eight students and a professor. In addition, the individual shot eight other students who survived their injuries. When law enforcement officers arrived and engaged the shooter in a gun battle, the

suspect shot himself in the head and ended the deadliest community college campus shooting in United States history. The purpose of this study was to answer questions such as, "How did law enforcement respond to the deadliest campus shooting on a community college campus?"

Further, "What impact, if any, did the lessons learned in the aftermath of previous mass shootings have on law enforcement's response to the shooting?" In addition, ultimately, "What implications for practice can be derived by studying the deadliest community college campus shooting?" One might question what themes exist across higher education that may contribute to the number and severity of these acts of violence. The purpose of this study was to examine the deadliest community college campus shooting in United States history in an effort to develop implications for practice for both law enforcement and higher education constituents.

Significance of Study

Looking at the current body of research into shootings on higher education campuses, there appeared to be a gap in the literature. Many scholars had written about the frequency of mass shootings on higher education campuses, however, most of the studies were quantitative in nature. This qualitative case study examined the deadliest campus shooting on the campus of a community college in the history of the United States from the perspective of the law enforcement officers who responded to the incident in an effort to identify implications for law enforcement and higher education practice.

Research Questions

To fulfill the current study's purpose, the following research questions guided the study.

1. What was the law enforcement response to the deadliest community college campus shooting in history?

- 2. Did previous mass shootings inform the law enforcement response to the deadliest community college campus shooting?
- 3. What implications for practice can be derived by studying the deadliest community college campus shooting?

Definition of Terms

I began by examining the literature about the prevalence of mass murders, mass shootings, and campus shootings. The main obstacle I encountered was the fact much that disagreement existed among scholars about the exact definitions of terms such as mass murder, mass shootings, and campus shootings. For the purposes of this study, I settled on the following definitions when looking at the aforementioned topics:

- Mass murder- while no particular consensus existed about the exact definition of
 mass murder among scholars; it appeared the minimum threshold for an incident to
 meet that definition should be at least three individuals murdered at the same time, or
 at least in relative proximity to each other, by a single individual.
- Mass shootings- after examining the definitions scholars gave, no particular consensus existed about the exact definition of mass shootings. A good working definition for an incident to be classified as a mass shooting would be that the event:

 (1) happened in a public place, such as a business or even a college campus; (2) the event happened during the same day, where at least one gunman uses firearms to cause the death of more than three individuals; and (3) the total number of deaths did not include the perpetrator(s) (Bjelopera, Bagalman, Caldwell, Finklea & McCallion, 2013; Follman, Aronsen, & Pan, 2012; Schildkraut & Elsass, 2016).

Campus shootings- contain all of the criteria for a mass shooting, with the location of
the shooting required to be on, or in close proximity to, an institution of higher
education. For the purposes of this study, primary and secondary education
institutions were excluded.

Delimitations and Limitations

Although shootings on higher education campuses were not found to be a common occurrence, I deliberately imposed some limitations on the scope of this study in order to focus on law enforcement's response to the deadliest shooting on a community college campus. The case studied for this project was unique in that it was the most recent, deadliest shooting in higher education; it was the deadliest campus shooting to ever occur on a community college campus; and it was the deadliest campus shooting to occur on any higher education campus since the Virginia Tech shooting.

Additionally, I decided to study this single case where nine individuals were killed, even though I identified two other campus shootings that had close to the same number of victims as the case chosen. Those two cases were the 1976 California State University shooting and the 2010 Oikos University shooting, both of which had seven individuals killed. I intentionally excluded the California State University shooting from consideration due to it occurring more than 40 years ago, as I wanted to focus on the most recent of the deadliest campus shooting. I excluded the Oikos University shooting, although it was a more recent case, as it occurred on the campus of a private institution and I intentionally decided to limit the potential cases chosen to public higher education institutions.

I chose to employ a single-case study design, which created the following limitations: First, I was unable to ensure the anonymity of the participants who were interviewed and the

identity of the institution I chose to study. Since this case was the deadliest campus shooting since the Virginia Tech incident, it garnered significant media coverage. Many of the participants chosen to be interviewed were identified by name and rank in many of the news stories about the incident. There was no way to keep the identity of the participants anonymous since their stories had, to some degree, already been told in the media.

Next, I had to rely upon participants to help identify other potential interview candidates, as the official report of the investigation from the law enforcement agency who handled the event had not yet been released. Several of the participants interviewed were involved in the immediate shooting incident, yet, had not been interviewed by the media. I did not know their identities until beginning to interview officers whose names I was able to discover while researching the incident through public records. Another limitation of having to rely upon participants to identify other potential participants was the possibility that some willing participants were never actually contacted and were unaware the study was being conducted at all. It is possible that some unique insights or recommendations from those individuals were never discovered. Furthermore, I attempted to obtain interviews from members of the institution where the shooting occurred, but the institution administration declined to participate citing the fact that there were outstanding lawsuits and the campus had not officially debriefed the incident.

Outline of Study

This dissertation is divided into five chapters. Chapter 1 introduced the study by chronicling several campus shootings and discussed the three deadliest campus shootings in history. Chapter 2 provided a review of the pertinent literature surrounding violence in the United States and on campuses of higher education. Chapter 3 discussed the methodology for selecting the deadliest campus shooting to study and the methodology for analyzing that case.

Chapter 4 was the single-case study which included not only a discussion of the publicly available information about the incident, but identified themes from individuals who were directly involved in the shooting response and aftermath. Chapter 5 presented a summary and conclusions from the case and identified implications for practitioners of higher education.

Chapter Summary

Violence on college campuses in the United States is a relatively common occurrence, with more than 270 acts of directed assaults on college and university campuses nationwide since the early 1900s (Drysdale et al., 2010). In the 1960s, higher education experienced the deadliest campus shooting in history when a shooter climbed the tower at the University of Texas, Austin and shot 45 people, killing 14. Nearly 40 years later, a student at Virginia Tech shot 47 people, killing more than 30 of them. Most recently, a gunman entered a classroom on the Umpqua Community College campus and shot 17, killing eight students and a professor. If history is any indicator, higher education is likely to experience more campus shootings in the future. The purpose of this study was to examine the deadliest community college campus shooting in United States history in an effort to develop implications for practice for both law enforcement and higher education constituents.

CHAPTER TWO REVIEW OF LITERATURE

The purpose of this study was to examine the deadliest community college campus shooting in United States history in an effort to develop implications for practice for both law enforcement and higher education constituents. Presented in this chapter are the following topics: history and prevalence of mass murder in the United States from the 1900s to the present, what researchers have said about mass shootings in general, and the occasions of mass shootings on campuses of higher education. The development and evolution of firearms in the United States along with the attitudes of higher education constituents toward weapons on campus were also addressed.

History of Mass Murder

Defining Mass Murder

Scholars disagreed about the frequency and trends of mass murder in the United States, and not all researchers defined mass murder in the same way, so it became important for this study to decide what criteria must be met in order to classify an event as a mass murder. For the purposes of this study, serial murders and spree murders were excluded. Serial, or spree murders differ from mass murders in that serial, or spree murders "involve multiple victims killed by the same offender or offenders in separate events over a period of days, months, or years," while mass murders "involve four or more people killed---not including the shooter(s)—in less than one day by the same offender or offenders" (Bjelopera et al., 2013, p. 7). The first known use of the term "mass murder" came after a shooting on the campus of an institution of higher education. According to Auxemery (2015), Hilde Bruch, Professor of Psychiatry, Baylor University College of Medicine, used the term "mass murder" in 1967. Bruch (1967) referred to the incident of Charles Whitman, who had murdered his wife and mother and subsequently

climbed the bell tower on the campus of the University of Texas, Austin shooting and killing 14 more people, as an act of mass murder.

Most researchers agreed that in order to be classified as a mass murder, specific criteria must be met, including the total time over which the killings took place as well as the total number of victims. Holmes and Holmes (1992) stated, "Mass murder is the killing of a number of persons at one time and in one place" (p. 53). Duwe (2004) used four victims killed as the criteria for inclusion into the category of mass murder. Duwe's (2004) rational as to choosing the threshold of four killed as opposed to three appeared to be two-fold. First, Duwe (2004) primarily used newspaper coverage of killings in *The New York Times*, as the source of data for the period from 1900 to 1976, while he relied upon the FBI's Supplementary Homicide Report, which did not become a valid source of data until around 1976, for his study of the period of 1976-1999. According to Duwe (2004),

A study based on the three-victim criterion would have over three times as many cases as would one that used the four-victim threshold. Thus, even though a triple homicide tends to be a newsworthy event, there is still a greater likelihood that a study using a three-victim criterion would miss media reports on a larger proportion of cases than would one that employed a four-victim threshold." (p. 734-735)

Secondly, Duwe (2004) chose the FBI's Supplemental Homicide Reports (SHR) and according to Auxemery (2015) the "FBI distinguishes single, double, and triple homicides from mass murders, which are four or more simultaneous homicides" (p. 150).

Additional factors should be considered when defining mass murder, such as the location and distance traveled during the incident (Holmes & Holmes, 1992), or even the number of offenders and the number of victims who were wounded but not killed (Dietz, 1986). Holmes and Holmes (1992) stated, "Surely a murderer who kills half the requisite number of victims at one site and then travels directly to another site where the other half are killed ought to qualify as

a mass murderer" (p. 479). Holmes and Holmes (1992) believed that not only should the location of the event be taken into consideration, but also "the possibility of distance between murder sites" as "a mass murder may go into a business establishment and kill several customers and then go across town and kill another person. This must be considered a single act of mass murder despite the slightly varying times and locations" (p. 54). According to Dietz (1986), "mass murder should be defined as offenses in which multiple victims are intentionally killed by a single offender in a single incident" regardless of the location of the event or the distance traveled (p. 479). While no particular consensus existed about the exact definition of mass murder among scholars, it appeared the minimum threshold for an incident to meet that definition should be at least four individuals murdered at the same time, or at least in relative proximity to each other, by a single individual.

Timeframes of Mass Murder

Once the definition of mass murder was decided upon, the next task was to examine the timeframe of when mass murder began to take place in the United States. Most research about mass murder in the United States focused on either the timeframe beginning in the 1900s and continuing to the 1960s (Duwe, 2004; Schildkraut & Elsass, 2016) or beginning in the 1960s and continuing to present day. While research seemed to center on these two timeframes, mass murders did occur in the United Stated prior to the 1900s. Schildkraut and Elsass (2016) listed the following acts of mass murder that occurred prior to 1900:

 July 26, 1764—Four Native Americans from the Lenape tribe entered the local schoolhouse as part of Pontiac's Rebellion and murdered a schoolteacher and 11 students by clubbing and scalping them.

- July 25, 1880—Charles Berhues entered a Louisiana Sunday School where his
 cousin, with whom he was upset with for marrying a girl he liked, was teaching,
 killed him, and wounded four others.
- February 14, 1883—Lem Harbaugh killed three schoolchildren attending the Ponca
 Creek School in Nebraska with a needle gun.
- March 26, 1893—At a school dance in Louisiana, a gunman opened fire, killed two
 people, and wounded three.
- December 12, 1898—Five people were shot and killed along with two others wounded at a school exhibition in West Virginia.

These examples seemed to indicate that incidents of mass murder did not begin in the 1960s but had been occurring in the United States for over two hundred years.

Some scholars asserted mass murder became more prevalent beginning in the 1960s and continued to increase in the subsequent decades. However, according to Schildkraut and Elsass (2016) "the first [mass murders] occurred in the 1920's and 1930's, and mainly included acts of familicide. The second wave began in the 1960's, and was on a considerably larger scale than the first" (p. 34). Duwe (2004) agreed, "Although the mid-1960's marked the beginning of a mass murder wave, it was not unprecedented, because mass killings were nearly as common in the 1920's and 1930's" (p.729). Schildkraut and Elsass (2016) went on to state:

Due to the increasing media coverage of the second wave of mass killings, people often associate this period with the beginning of the mass shooting 'epidemic.' Yet in reality, public mass shootings as we know them had been occurring for nearly 150 years prior. (p. 34)

Duwe (2004) argued that not only did the mass murder rate not increase after 1960, little research into the rate of mass murder between 1900 and 1965 had ever been done. Duwe (2004) sought to find out if scholars who believed that the 1960s marked the onset of a mass murder

wave in the United States were correct in their assertion. In order to accomplish this task, Duwe (2004) studied news accounts from the *New York Times* for the timeframe of 1900-1975 and the FBI's *Supplementary Homicide Report* (SHR) and newspaper articles for the years 1976-1999. For the years from 1900-1975, Duwe (2004) identified 403 cases that were potential mass murders by running a search in the *Times* newspaper article database using the categories of murders and attempted murders, shootings, arson, fires, bomb explosions and mass murder. After reading the accounts listed for these 403 identified cases, Duwe (2004) was able to eliminate 144 of the cases, which were either spree or serial murders, lacked the requisite number of victims killed, or the incidents did not happen in the United States even though the *New York Times* still reported on them.

Additionally, Duwe (2004) added one case to the total number of cases after reading an article about another mass murder and identified a New Jersey case from 1996 that met his criteria. This brought the total number of mass murders from 1900-1975 to 260 (Duwe, 2004.) One limitation to the method employed by Duwe (2004) is that he did not actually read every single page of the *New York Times* between 1900-1975, so he was unable to say with certainty the 260 cases were exhaustive of the possible instances of mass murder during that timeframe.

For the timeframe of 1976-1999, Duwe (2004) relied upon two separate searches of the FBI's *SHR*, the first was 1976-1996 and the second was 1997-1999. The first search of 1976-1996, resulted in 692 incidents reported to have involved at least four victims and after reading the newspaper accounts of those incidents, Duwe (2004) eliminated 55 cases found not to be mass murders, but located 37 others not reported to the SHR. These additional cases brought the final number of cases to 568 mass murders between 1976 and 1997. The second search for mass murders occurring between 1997 and 1999 indicated there were 83 incidents, which involved

four or more victims. Similar to the first search, this search revealed an additional 18 cases of which Duwe (2004) found 16 of those cases were not accurately reported as mass murders. Overall, 81 cases of mass murder occurred between 1997 and 1999, bringing the total number of cases to 649 between 1976-1999 as compared to 1900-1975 which had 260. Duwe (2004) concluded that although some argued there were very few mass murders before 1966, in reality the *New York Times* had reported on 173 mass murders between 1900 and 1965. Duwe (2004) asserted that "although claimsmakers [sic] correctly noted that a mass murder wave began in the mid-1960's, it was neither unprecedented nor did it continue to escalate with each passing year. Rather, the first mass murder wave in the 20th century was in the 1920's and 1930's, followed by the one that began in the mid-1960's" (p. 745). Duwe (2004) cautioned, however, "These waves were qualitatively different. This finding, together with the tranquility of the 1940's and 1950's, may help explain why claimsmakers [sic] thought the latter mass murder wave was unprecedented" (p. 745).

While some researchers believed that the 1960s began a new wave of mass murders in the United States, others pointed to the number of cases of mass murder that occurred prior to 1960 as evidence that mass murder has a much longer history. Thus far, this literature review has only defined what constituted mass murder and has examined the prevalence of it without taking into consideration the preferred method of killing utilized by mass murderers. Therefore, it was also important to look at what method of killing was most commonly used by those committing mass murders in the United States.

Mass Shootings

Defining Mass Shootings

The previous section explored the history of mass murder in the United States. Just as it is important to discuss how scholars defined mass murders, it is also important to explore how scholars identified what constituted a mass shooting. Similar to the disagreement about the exact definition of mass murders that existed in the literature, scholars also disagreed to some extent on what exactly constituted a mass shooting. This section will examine the definitions of those mass murders classified as mass shootings, public mass shootings, and active shooters. It concludes by discussing the prevalence of those types of mass murders in the United States.

A bit of overlap in terminology existed when examining the different definitions of what incidents actually qualified as a mass shooting. Some terms such "mass shooting," "public mass shooting," and "active shooter" were sometimes used interchangeably. Schildkraut and Elsass (2016) examined what criteria different governmental agencies, such as the Centers for Disease Control (CDC), the U. S. Department of Education, as well as scholars such as Newman, Fox, Harding, Mehta and Roth (2004) used to classify incidents as mass shootings. For example, the CDC relied upon their School-Associated Violent Death study, which required the incident to take place on school property, but only considered those events that were associated with a school function and not those shootings that occurred elsewhere. The U.S. Department of Education as well as the Secret Service also classified a mass shooting as an incident where a current or former student attacked someone on school grounds and the shooter specifically chose a school as the location for the attack. Similarly, Newman et al. (2004) required the incident to take place at a school where multiple victims were shot and the shooter was a current or former

student (Schildkraut & Elsass, 2016). After considering the previously mentioned definitions as well as other publications, Schildkraut and Elsass (2016) identified a mass shooting as:

[a]n incident of targeted violence carried out by one or more shooters at one or more public or populated locations. Multiple victims (both injuries and fatalities) are associated with the attack, and both the victims and location(s) are chosen either at random or for their symbolic value. The event occurs within a single 24-hour period, though most attacks typically last only a few minutes. The motivation of the shooting must not correlate with gang violence or targeted militant or terroristic activity. (p. 32)

This definition seemed to take into consideration a variety of factors, many of which had some commonality within the sources studied but where no exact agreement in definition existed.

Bjelpoera et al. (2013) also sought out a clear definition of a mass shooting in a report prepared for Congress. Bjelopera et al. (2013) looked for some commonality of definitions among scholarly journal articles, monographs, and government reports. After studying these sources, the researchers noted the definitions and requirements for mass shootings, public mass shootings and active shooters varied concerning "the number of victims or fatalities involved, the weapons used, the motives of the perpetrator, and the timeframes within which the casualties or injuries occurred" (Bjelopera et al., 2013, p. 4). Bjelopera et al. (2013) noted a distinction between a general definition of mass shootings and what they termed "public mass shootings". Bjelopera et al. (2013) defined public mass shootings as "incidents occurring in relatively public places, involving four or more deaths—not including the shooter(s)—and gunmen who select victims somewhat indiscriminately" (p. 4). Bjelopera et al. (2013) indicated that a public space included parking lots, restaurants, workplaces, as well as school campuses, both at the primary and secondary level as well as the post-secondary level.

The FBI categorized public mass shootings as those incidents that involved an active shooter where at least four people were killed by one or more individuals (Blair & Schweit, 2014). The Department of Education and the Department of Homeland Security defined an

active shooter as "an individual actively engaged in killing or attempting to kill people in a confined and populated area." They further noted, "Implicit in this definition is that the subject's criminal actions involve the use of firearms" (Blair & Schweit, 2014, p. 5). Additionally, the Department of Homeland Security indicated that "in most cases, active shooters use firearm(s) and there is no pattern or method to their selection of victims" (DHS, 2008, p. 3).

After examining the definitions scholars gave, no particular consensus existed about the exact definition of mass shootings. One could argue that a good working definition for an incident to be classified as a mass shooting would be that the event: (1) happened in a public place, such as a business or even a college campus; (2) the event happened during the same day, where at least one gunman uses firearms to cause the death of more than three individuals; and (3) the total number of deaths does not include the perpetrator(s) (Bjelopera et al., 2013; Follman et al. 2012; Schildkraut & Elsass, 2016). This is not to say there are no other possible criteria that could be included, just that for the purposes of identifying mass shootings in the present study, the aforementioned definition will be utilized when selecting cases to examine and stay within the scope of the study.

Prevalence of Mass Shootings

While much of the current research into mass shootings studied the 1960s to present day, a number of mass shootings occurred in the United States between the 1900s and 1960s.

Schildkraut and Elsass (2016) identified mass shootings that took place in the United States as early 1898 when five people were shot and killed along with two others wounded at a disturbance in Charleston, West Virginia. Schildkraut and Elsass (2016) claimed in the early 1900s Americans saw a number of incidents of mass public shootings. In 1912, for example, family members of Floyd Allen, who was on trial for and recently convicted of interfering with

another investigation, opened fire at a courthouse in Hillsville, Virginia, killing 5, including the judge, prosecutor, and sheriff, and wounding 7 others. In 1915, a small business owner named Monroe Phillips, who had recently suffered real estate losses in Bibb County, Georgia, opened fire on nearby citizens, killing five and wounding 20 others (Schildkraut & Elsass, 2016). According to Duwe (2004), Phillips started his public mass shooting by killing a prominent local attorney whom he blamed for financial losses and then opened fire on the crowd of people who responded to the initial shooting. Schildkraut and Elsass (2016) indicated that while "the 1920's and 1930's were a quieter and more peaceful era in the United States, there were still several incidents of public mass shootings, albeit fewer than in later decades" (p.36).

Duwe (2004) studied the prevalence of mass murder in the United States in an effort to determine whether the 1960s began a new wave of mass murder, as some scholars claimed. In his study, Duwe (2004) studied news articles from the *New York Times* as well as the FBI's *Supplementary Homicide Reports* to identify which mass murders were considered mass shootings. In examining incidents of mass murder between 1900 and 1999, Duwe (2004) argued that "even though we see relatively high percentages of mass public shootings during the 1930's (17%) and 1940's (23%), there were only 21 incidents that took place between 1900 and 1965" (p. 755). Fox and DeLateur (2013) studied myths and misconceptions about mass shootings and claimed, "The moral panic and sense of urgency surrounding mass murder have been fueled by various claims that mass murders, and mass shootings in particular, are reaching epidemic proportions" (p. 4). Lemieux (2014) conducted a study of the effect of firearm laws on the number of mass shootings in the United States and concluded, "The frequency of public mass shootings has continually increased since 1910" (p. 87). However, Schildkraut and Elsass (2016) disagreed, and argued that "despite the clear findings that mass shootings are not on the rise, but

in fact have remained relatively stable over time, the general public still has a tendency to believe that these types of events are becoming more commonplace" (p. 32). Duwe (2004) claimed, "Although the mid-1960's did mark the onset of a genuine increase in mass murder, it was not unprecedented. What was unprecedented in the years following 1966 was the frequency with which mass public shootings occurred" (p. 755).

Interestingly, and pertinent to the current study, was the fact that the apparent increase in the frequency of mass shootings began with a shooting that occurred on a campus of higher education. Duwe (2004) asserted that the mid-1960s began with a number of mass shootings such as the 1966 mass public shooting at the University of Texas, where Charles Whitman, who had just killed his wife and mother, opened fire on students walking across the campus. Whitman climbed a tower on the institution's grounds and from his elevated vantage point, shot and killed 14 people and wounded an additional 32 people before being killed by a police officer. It was this campus shooting that was considered the worst campus shooting in the history of higher education, and held that distinction for over 40 years. Only a few weeks after the University of Texas shooting, Arthur Davis opened fire at an apartment complex in Connecticut, killing five and wounding two others. Later that year, Robert Smith entered an Arizona beauty school, opened fire, and killed five people and injured two others (Schildkraut & Elsass, 2016). Other mass shootings occurred in the 1970s that met the criteria for mass murder, and it could be argued foreshadowed future mass shootings at institutions of education. In 1974, a 17-year old killed three, wounded nine more at a New York high school; in 1976, a janitor at California State University-Fullerton shot, killed five, and wounded two others; and in January of 1979, a 16-year old opened fire at an elementary school and killed two while wounding nine others (Schildkraut & Elsass, 2016).

Mass shootings continued in the United States in the 1980s and 1990s. In August of 1982, a gunman entered a business that had just serviced his lawnmower, opened fire, killed eight, and wounded three others. In June of 1984, Abdelkrim Belachheb entered a Texas nightclub, shot, killed six, and wounded one other person. That same year, James Huberty opened fire at a McDonald's in California, killed 21, and wounded 19 others before being shot by a police sniper (Schildkraut & Elsass, 2016). In 1991, a gunman entered a cafeteria in Texas, opened fire and killed 23 people; and later that year higher education experienced more student deaths by a campus shooter when a graduate student shot and killed five at the University of Iowa (Schildkraut & Elsass, 2016).

In their study of the prevalence of mass shootings, Follman, et al. (2012) created an open source database of mass shootings in the United States. Much like Duwe (2004) who studied mass murders using the criteria of at least four victims killed in a single event, Follman et al. (2012) studied those public shootings between 1982 and 2012 in which at least four victims were killed in the incident. This database was generated using the FBI's SHR four victim criteria, which was the accepted criteria to define a mass shooting prior to 2013. To complete the database, Follman et al., (2012) used the following criteria to identify cases of mass shootings:

- The perpetrator took the lives of at least four people.
- A lone shooter carried out the killings.
- The shootings occurred in a public place. (Crimes primarily related to gang activity, armed robbery, or domestic violence in homes were not included.)
- Perpetrators who died or were wounded during the attack are not included in the victim counts.

Also included a handful of cases also known as "spree killings"—cases in which the
killings occurred in more than one location over a short period, the otherwise fit the
criteria above.

The results of Follman et al. (2012) indicated there were 62 mass shootings between 1982 and 2012, and while Follman et al. (2012) did look at many mass shootings to compile the database, it is important to note that they excluded those shootings carried out by multiple shooters, those shootings that only met the three-victim criterion used by Dietz (1986), and those incidents that took place in more than one location during the same 24-hour period. In 2013, President Barrack Obama lowered the FBI's SHR threshold from four or more victims to three or more victims, so Follman et al. (2016) created an additional database to cover the years of 2013 to 2016. The researchers found 21 additional cases that qualified as mass shootings using the reduced victim criteria. According to Follman et al. (2016), those 21 cases reaffirmed their original findings noted in the original database. Fox and DeLateur (2013) argued that studies such as Follman et al. (2012) actually underestimated the prevalence of mass shooting to some degree because they "did not include all mass shootings in their analysis" (p. 4).

Previous scholars such as Follman et al. (2012) created databases that enabled the isolation of mass shootings. Blair and Schweit (2014) studied a database with 160 cases of active shooters that occurred in the United States between 2000 and 2013 and found that active shooters killed 486 individuals and injured an additional 557 individuals in that timeframe. Of the 160 cases of active shooters, 70% of the incidents occurred either at a business/place of commerce or in an educational environment and 40 percent of the incidents were classified as a mass killing under the federal Investigative Assistance for Violent Crimes Act of 2012, 28 USC 530C (b)(1)(M)(i) with three or more individuals killed in a single incident (Blair & Schweit, 2014).

Of the 160 incidents occurring within the studied timeframe, Blair and Schweit (2014) identified the four deadliest of these public mass shootings as:

- The Cinemark Century 16 Theatre attack in Aurora, Colorado on July 20, 2012, in which 12 individuals were killed and 58 wounded;
- The Virginia Polytechnic Institute and State University in Blacksburg, Virginia on April 16, 2007, in which 32 individuals were killed and 17 were wounded;
- The Ft. Hood Soldier Readiness Processing Center in Ft. Hood, Texas on November
 5, 2009, in which 13 individuals were killed and 32 wounded;
- The Sandy Hook Elementary School and a residence in Newtown, Connecticut on December 14, 2012, in which 27 individuals were killed (20 of them children) and two wounded (p. 7).

While only the Virginia Tech incident actually occurred on the campus of an institution of higher education, it is important to note that one of the other shooters was a current student of higher education. James Holmes, the accused shooter at the theatre in Aurora, Colorado attended nearby University of Colorado's Anschutz Medical Campus. He was under the care of a psychiatrist on campus at the time of his mass shooting and actually sent detailed plans to that faculty member prior to the shooting. Those plans were not delivered to the professor until after the massacre. Adam Lanza, the accused shooter in the Sandy Hook Elementary School incident was a former student at Western Connecticut State University (Blair & Schweit, 2014).

With three of those four deadliest mass shootings either occurring on campuses of higher education, near those campuses, or carried out by individuals who were associated with higher education, it became apparent that mass shootings did in fact affect higher education. Therefore, it seemed important for practitioners to examine what impact mass shootings had on all

stakeholders in higher education. The present study attempted to identify implications for higher education practice by studying the deadliest campus shooting on a community college campus.

The next section will identify the prevalence of mass shootings that have occurred on campuses of higher education since the 1900s.

Campus Shootings

This section examined mass shootings that have occurred on campuses of higher education since the 1900s. Examining the history of mass shootings that have occurred on college campuses lead the present study in order to help identify the deadliest community college campus shooting to be studied. There appeared to be a gap in the literature on school shootings because few studies centered exclusively on institutions of higher education. Most studies of school shootings fell into one of three categories: studies centered on primary and secondary schools only, studies centered on both primary/secondary schools as well as post-secondary schools, and studies that made no distinction between primary/secondary or post-secondary schools. A thorough review of the literature revealed one study that exclusively covered institutions of higher education and that particular study will be useful for the present study.

Primary and Secondary Schools Only

Some studies of school shootings only examined primary and secondary schools and not post-secondary schools. Anderson et al. (2001) studied school-associated violent deaths in the United States between 1994 and 1999 in an effort to "describe recent trends and features of school-associate violent deaths in the United States" (p. 2695). Anderson et al. (2001) reviewed media reports of school violence, including school shootings, and interviewed at least one school official or law enforcement official involved in each incident to verify data in the media reports. For inclusion in their study, the incident had to meet the following criteria: must have been a

fatal injury because of homicide, suicide, legal intervention (police action) or an unintentional firearm-related death; must have been on the campus of a public or private elementary or secondary school or on the way to or from such school. (Anderson et al., 2001). Anderson et al. (2001) noted 220 events resulting in 253 deaths in the period studied with 172 homicides, 30 suicides, 11 homicide-suicides, 5 deaths from legal intervention and 2 unintentional firearm-related deaths.

In 2008, the Centers for Disease Control in collaboration the U.S. Department of Education and the U.S. Department of Justice created the School-Associated Violent Death (SAVD) study that was a study of the characteristics of school-related student homicides between July 1992 and June 2006. For the study, cases identified met the following criteria: must have involved a homicide of a student; must have been on the campus of a public or private elementary or secondary school in the United States; and the victim must have been on the way to or from school or a school-related function (SAVD, 2008). The researchers conducted a computer search of two newspaper and broadcast media databases, Lexis-Nexis and Dialog and conducted an interview of an involved official to verify data in the computer search. The results of the study found 116 homicides in 109 school-associated events with 65% of those deaths as a result of gunshot wounds (SAVD, 2008). It is important to note that with both Anderson et al. (2001) and the 2008 CDC report, data were collected from media reports, which did not take into account those events, not reported to the media that could cause both studies to have underreported the actual number of school-associated deaths during their respective periods studied.

Flannery, Modzeleski and Kretschmar (2013) examined incidents of multiple-homicide shootings at schools. The researchers also studied the CDC's SAVD for the period from 2000 to 2010 and focused their study on the mental-health issues of multiple-homicide perpetrators of

school shootings but excluded shootings in higher education. Flannery et al. (2013) stated, "While some characteristics of the incidents and shooters invariably overlap, the focus of this review is primarily on shootings that have occurred in K-12 schools" (p. 2). The results of their study found:

- Mental health problems of perpetrators are a risk factor for school shootings, but mostly in combination with other significant psychopathology such as antisocial personality or extreme social rejection.
- A significant limitation to risk assessment [of potential school shooters] is the restriction on access to information about an individual's mental health status, diagnoses, medication utilization or treatment history.
- In most multiple-victim incidents, more than one person was provided information
 about the attack before it occurred, but the information that was known to peers was
 almost never communicated to an adult.
- We know more about the very limited sample of school shooters who kill multiple
 victims than we do about incidents of school shootings or potential school shootings
 where lethal outcomes were successfully averted.

Primary/Secondary and Post-Secondary Schools

Some studies of school shootings examined primary and secondary schools as well as post-secondary schools. Wike and Fraser (2009) utilized both case comparisons and anecdotal reports to identify characteristics of school shooters as well as characteristics of where those shootings occurred but placed "the emphasis on public secondary education but, where possible, we draw inferences to shootings in higher education" (p. 163). Based upon their examination, the researchers noted that student shooters appeared to share two characteristics. The first was the

shooters often were known to have had a fascination with weapons and the second was they often told someone of their plans in what Wike and Fraser (2009) termed as "leakage" (p. 164). As a result of their study, Wike and Fraser (2009) developed six prevention strategies, which included the need for increased security, and communication within the school, the need to establish resources for troubled students, and the need to break down codes of silence that often prevent students from voicing their concerns about other students' behavior. Although a stated outcome from the study was to draw inferences about higher education shootings from the characteristics of primary/secondary school shooters, the researchers failed to address any inferences they may have noted.

Another study conducted by the U.S. Department of Justice and the Federal Bureau of Investigation identified 160 case of active shooters in the United States between 2000 and 2013. Blair and Schweit (2014) looked at all incidents of active shooters during that time-frame and noted that 39 of the 160 cases identified happened in an educational setting where 27 incidents occurred in primary/secondary schools and 12 incidents occurred at institutions of higher education.

Newman and Fox (2009) examined shootings in American high schools for the period of 2002-2008 and attempted to compare and contrast shootings on college campuses with shootings at high schools. For cases to be included in their study, Newman and Fox (2009) developed the following criteria:

- The location of the incident is a "public stage" either on school property or at a school-related function.
- The shooters must be current or former students of the school.

- There must be multiple victims (although the injuries do not have to be fatal) or, at the very least, multiple targets.
- Although some victims may be targets specifically because they have wronged the shooter, there are typically others who are chosen only for their symbolic significance (the principal, the preps, the prayer circle, the jocks) or are shot at random (p. 1288).

Newman and Fox (2009) relied upon the Virginia Tech Review Panel's list of fatal shootings between 1966 and 2007, along with media-generated lists of school shootings found on the Internet to identify their cases. Based on their search, the researchers found four shootings that met the criteria, one middle school and three high schools. Unlike Wike and Fraser (2009), who found shooters in their study had a fascination with weapons, Newman and Fox (2009) noted that only two of the four (50%) of middle school or high school shooters had such an interest in weapons. Newman and Fox (2009) further identified five college shootings that met their criteria and similar to middle school or high school shooters, just two of the five (40%) identified college shooters displayed a known interest in weapons. It should be noted that both studies had a small sample size and the results of those studies may not be generalized for all school shootings.

No Distinction Between Primary/Secondary and Post-Secondary

At least one study of school shootings conducted by the U.S. Secret Service and the U.S. Department of Education made no distinction between primary/secondary or post-secondary locations but referred to their cases as targeted school attacks. The primary stated purpose of the study was to "develop information that could be useful to schools in better understanding and preventing targeted violence in school settings. The emphasis of the study was on examining the attackers' pre-incident thinking and behavior, to explore information that could aid in preventing future attacks" (Vossekuil, Fein, Reddy, Borum, & Modzeleski, 2004, p. 7).

The researchers identified targeted school attacks by working backward beginning in 2000 and going back to 1974. They interviewed school violence experts to help identify some cases that met their requirements; they consulted with law enforcement officials for information about potential cases; and they searched both publicly available databases, subscription databases, and professional publications. For the purposes of the study, Vossekuil et al. (2004) utilized the following criteria for inclusion:

- A current or recent former student attacked someone at his or her school with lethal means (e.g., a gun or a knife).
- The student attacker purposefully chose his or her school as the location of the attack. Consistent with this definition, incidents where the school was chosen simply as a site of opportunity... were not included (p.7).

Researchers identified "37 incidents of targeted school violence involving 41 attackers that occurred in the United States from 1974, the year in which the earlies incident identified took place, through June 2000, when data collection for the study was completed" (Vossekuil et al., 2004, p. 8). Among the implications noted by the study are important issues that are pertinent to the present study. Those findings included:

- Incidents of targeted violence at school rarely are sudden, impulsive acts.
- There is no accurate or useful profile of students who engaged in targeted school violence.
- Most attackers engaged in some behavior prior to the incident that caused others concern or indicated a need for help.
- Most attackers had access to and had used weapons prior to the attack.

• Despite prompt law enforcement responses, most shooting incidents were stopped by means other than law enforcement intervention (Vossekuil et al., 2004, p 31).

Higher Education Institutions Only

Significant for the present study of the deadliest community college campus shooting was Drysdale et al., (2010) who identified more than 270 acts of violence that have occurred on college and university campuses nationwide since the early 1900s. After the 2007 campus shooting at Virginia Tech, President George W. Bush directed his Attorney General and Department of Education Secretary to help identify ways the federal government could help prevent such an attack from occurring.

After a series of meetings with stakeholders in higher education, Drysdale et al., (2012) set out to answer three questions: (1) How prevalent are incidents of campus violence?; (2) Who is responsible for the attacks?; and (3) Are the perpetrators affiliated with higher education? The researchers utilized a three-tier approach to data collection, first searching the Internet for lists of school-related acts of violence, then they conducted a search string of Nexis utilizing phrases from the first search, followed by a phrase-based search of online newspaper articles (Drysdale, et al., 2010). In the study, Drysdale et al., (2010) included several attributes, including but not limited to shootings, stabbings strangulation, or any combination of those methods, having happened on a college campus. Cases that qualified for their study required the attack to be specific to institutions of higher education, must have had specific targets selected prior to the assault or during the assault, required the perpetrator to have the present ability to employ lethal force, and the assault must have taken place either on campus or in close proximity to the campus. Of the more than 270 incidents of campus violence, 54% of the cases involved a shooting (Drysdale et al., 2010). Since a majority of the incidents of campus violence studied

were identified as a shooting, it was apparent there was a need to further study campus shootings and the present study attempted to fill a part of that need.

One of the deficiencies noted in the literature about campus shootings was that studies of school shootings often included not just institutions of higher education, but primary and secondary schools as well. With most of the literature surrounding school shootings being focused primarily, if not exclusively, on primary and secondary school shootings, a gap in the literature existed. This study attempted to fill part of that gap by examining the deadliest campus shooting on a community college campus. Since more than 50% of the incidents of campus violence involved the use of at least one firearm, it was important to examine the history and development of the weapons used by campus shooters. The next section will explore the history, lethality, and availability of weapons used by perpetrators of violence on college campuses.

History of Firearms in the United States

With the current study focusing on the deadliest campus shooting at a community college, it is important to understand the history of firearms and how they have developed over time to their current lethality, ease of use, and availability to someone inclined to attack students and faculty at an institution of higher education. Barrett (2012) asserted, "In the United States, guns are much more than a tool of law enforcement or an article of commerce. They are embedded in the country's history" (p. 20). "By the time the Constitution was framed, a tradition of private firearm ownership was an aspect of daily life and American identity. To many Americans, over many generations, guns have represented freedom, individualism, and self-reliance" (Barrett, 2012, p. 20). Over the course of American history, different guns have been utilized for all sorts of purposes, from weapons of war, to personal protection, to securing food, and even for the purposes of inflicting death. This section looked at the history of the different

types of firearms used since the beginning of the country and may help shed light upon how guns, from their prevalence to their lethality, have contributed to the prevalence of mass shootings in general and on higher education campuses in particular.

Understanding the evolution of the types of firearms used in campus shootings requires a brief discussion of the types of guns used in American throughout history. The evolution of those guns provided a backdrop for the types of weapons used in mass shootings as early as the 1900s. They represent how American firearms evolved from slow-reloading and primitive firing mechanisms to more precise weapons, able to fire multiple rounds more accurately, all of which are characteristics of many of the guns used in mass murders and campus shootings.

First Generation

Three main guns were prevalent in the United States prior to the 1900s, the American Long Rifle (Kentucky Rifle), the Spencer Repeater, and the Colt Single Action Army (Colt .45). These weapons utilized firing systems such as percussion-fired and flint-fired rounds, which were notably slow to reload and represented a sort of "first generation" of firearms. Around the turn of the century, a "second generation" of firearms allowed military personnel and criminals to achieve a higher numbers of rounds fired due to an increased capacity of bullets, however, they lacked the accuracy and reliability of weapons later favored by mass shooters on campuses of higher education.

The American Long Rifle (Kentucky Rifle)

The American Long Rifle (Kentucky Rifle) dates back to the late 1700s. According to Kyle (2013), European-born gunsmiths from the 1620s patterned the New World American long rifles off designs. These rifles used black-powder flintlock and weighed less than 10 pounds. Thus, they were "surprisingly lightweight... more like a precision combat surgical instrument

than a battlefield weapon" (Kyle, 2013, p. 5). Kyle (2013) explained that while the weapon was accurate, the time required to fire each shot from the weapon was quite long. Once the trigger was pulled, the flint traveled to contact the frizzen pan, which ignited gunpowder, and the small flash of flame then ignited the powder behind the projectile. The result was a large cloud of gray smoke exiting the barrel just after the projectile leave. The Kentucky Rifle was used in battle from the late 1700s until the mid-1800s when the Spencer Repeater began to gain popularity (Kyle, 2013).

The Spencer Repeater

In the spring of 1861, President Abraham Lincoln arrived at a firing range to test out two new rifles, the Spencer Repeater and the Henry Repeater (Kyle, 2013). The Henry Repeater, unlike the Kentucky Rifle, was a lever action rifle that utilized a long tube magazine running the length of the barrel of the gun (Kyle, 2103). The Henry could fire 16 shots without having to reload and "took about half a minute to reload; a soldier could then squeeze off another sixteen shots as fast as he could jerk the lever back and forth" (Kyle, 2013, p. 35). Next up was the Spencer Repeater. Unlike the Henry, the Spencer had:

Seven cartridges fit into the weapon's stock. Using an innovative dropping-block design and lever action, all seven rounds could be quickly and accurately fired. When you pulled down on the trigger guard, the breech opened and the spent cartridge was ejected. Push the guard back on up and the new cartridge slipped into place, ready to fire. Spare magazines could be kept ready for speedy loading in combat. (Kyle, 2013, p. 40)

Of the two guns, the Spencer Repeater found greater favor in Lincoln's eyes. Later in 1861, the Union contracted with the gun manufacturer to provide 10,000 Spencer Repeaters for the army. The Spencer repeater helped the North secure victory at the Battle of Gettysburg. Kyle (2013) noted that "those Spencer Repeaters proved that volume of fire was one important key to winning a battle that's been called a turning point of the Civil War" (p. 50). As the Civil War

ended and America began its next chapter, the Spencer Repeater would fade and the Colt Single-Action Army Revolver (Colt .45) would rise to the challenges in the wild American West (Kyle, 2013).

The Colt Single-Action Army Revolver (Colt .45)

Gun maker Samuel Colt developed the Colt Single-Action Army Revolver (Colt .45), and it was his first pistol that fired center-fire cartridges (Kyle, 2103). Prior to the Colt .45, most of Colt's revolvers used a method of loading which required the powder and ball [bullet] to be loaded down the front of the cylinder and fired by striking a percussion cap. Colt copied the Smith & Wesson Model 3 Revolver's use of a metal center-fire cartridge containing the powder, primer, and bullet all in one (Kyle, 2013). The Colt .45 proved to be the preferred weapon of both outlaws, like Butch Cassidy and the Sundance Kid, Billy the Kid, and the Dalton Boys as well as lawmen, such as Virgil, Wyatt, and Morgan Earp (Kyle, 2013). The Colt .45 would be used in the famous 1881 Gunfight at the O. K. Corral in Tombstone, Arizona after two cowboys; Billy Clanton and Frank McLaury, appeared in Tombstone wearing Colt .44 pistols on their hips in violation of a law requiring weapons to be checked (Kyle, 2013). The Earp brothers, all armed with Colt .45's, along with Doc Holliday, confronted Clanton and McLaury at the O.K. Corral where they had gathered with their brothers and other cowboys. Some confusion about the exact chain of events still exists, but when the shootout was over, three cowboys had been killed and three lawmen were wounded (Kyle, 2103). While the "Colt revolvers had been instrumental in opening up the American West," in order "to finally 'win' the West, the United States needed an even bigger gun" which happened to be the Winchester 1873 Rifle (Kyle, 2013, p. 83).

Second Generation

From around the turn of the century until the 1960s, a "second generation" of weapons developed in the United States. The Winchester 1873 Rifle, the M1903 Springfield, and the M1911 Army Pistol, incorporated technology that changed from slow reloaded flint-fired and percussion cap-fired weapons to lever action rifles and magazine-fed handguns that allowed quicker reload times and fired multiple rounds before the operator reloaded. It is important to examine the "second generation" of advancement in weapon technology, as the ability to fire multiple rounds without the need to reload was an important characteristic in weapon selection for campus shooters and other active mass shooters.

The Winchester 1873 Rifle

In October of 1892, the infamous Dalton Gang arrived in Coffeyville, Kansas and began robbing the two banks in town. When the citizens heard about the robberies, many responded to the Isham Brothers hardware stores where they armed themselves with Winchester 1873 rifles and began shooting at the bank robbers (Kyle, 2013). After the gunfire subsided, four members of the Dalton Gang were dead, along with four civilians but the town's money had been saved from the robbers. Kyle (2013) noted the Winchester 1873 rifles the citizens armed themselves with:

Fed as many as fifteen bullets through a round tube magazine into the breech. Pull down on the trigger guard, come back up with it, fire---even if most of these folks hadn't grown up around guns all their lives, they still would have had no trouble learning how to fire the rifle in the heat of the battle. The front sight was fixed, and while the rear could be adjusted, my suspicion is that at close range the good citizens of Coffeyville didn't have to do much messing around with the sight. (p. 91)

While the Winchester 1873 was utilized by Dalton Gang as well as others in the West, Kyle (2013) asserted, "Winchesters were never commonly used as combat weapons by American military forces" due to the "difficulty of cycling rounds while lying flat behind thin cover" so it

"became the all-purpose working rifle for countless thousands of cowboys, ranchers, lawmen, and homesteaders in the last quarter of the nineteenth century" (pp. 93-94). Even President Theodore Roosevelt, who became a cowboy and rancher after his wife and daughter died in 1884, used a Winchester rifle as he tracked three fugitives from justice and marched them back forty miles to face charges (Kyle, 2013). As Roosevelt found out nearly 15 years later at the battles of Kettle Hill and San Juan Heights, there was another weapon superior to the Winchester, the Spanish Model 1893 Mauser.

The M1903 Springfield

When Roosevelt lead American troops to the eastern side of Santiago, Cuba he found the Americans outgunned in both artillery and small arms fire. The Spanish had the Spanish Model 1893 Mauser, "a fast-firing, speed-loading, repeating firearm of excellent reliability and smooth, safe, and effective performance" (Kyle, 2013, p. 115). The Americans had a bolt-action rifle, the U.S. magazine Rifle, a .30 caliber, Model 1896, which was modeled off a Norwegian gun as well as the 1873 Trapdoor Springfield that fired black powder cartridges (Kyle, 2013). Roosevelt carried a Winchester rifle to battle and even opted to purchase Winchesters for some of his troops to use, however, the Mauser was the superior weapon in the battle (Kyle, 2103). Despite the troops being outnumbered and utilizing inferior weapons, Roosevelt led the Americans to victory at the battles of Kettle Hill and San Juan Heights. Although these battles did not win the Spanish-American war, they set the stage for the signing of the Treaty of Paris and marked a "turning point in American guns; the shift from antiquated military rifles to cutting-edge, modern weapons that could dominate the battlefield" (Kyle, 2013, p. 121).

Four years after San Juan Hill, Springfield Armory introduced its M1903 Springfield rifle, a bolt-action, .30 caliber, five-round magazine, stripper-clip-fed rifle called the U.S. Rifle,

Caliber .30, Model of 1903 (Kyle, 2013). Other than the firing pin, the M1903 was a Spanish Mauser and it so closely resembled the Mauser that the owners of Mauser sued the American government for copying its rifle. The disposition of the lawsuit required the United States to pay hundreds of thousands of dollars in royalties (Kyle, 2013). Theodore Roosevelt loved the new M1903 so much that he ordered his own custom hunting model of the rifle and used it on numerous hunting trips across three continents over the next 12 years (Kyle, 2013).

The M1911 Army Pistol

While the Springfield 1903 was an effective weapon for the battlefield and was a great hunting rifle, there was another firearm that was also standard issue for the American military from 1911 to 1985, the Automatic Pistol, Caliber .45, Model M1911, popularly known as the 1911. After the Spanish-American war, the U.S. Army found itself fighting in the Philippine Islands against radical Islamist Moro tribesmen, and realized their issued .38 Long Colt revolvers were ineffective at stopping the Moro (Kyle, 2013). This led the Army to seek out a better option for a handgun and tested handguns from five companies, the Army decided on the 1911:

A semi-automatic, locked-breech, single-action Cold Pistol. The handgun chambered .45 caliber, 230-grain, full metal jacket, smokeless rounds fed from a single stack, seven-shot magazine. The winning prototype had fired no less than six thousand rounds. It had been dunked in acid and salt water, and forced to handle deformed and misloaded [sic] rounds. It became the official sidearm of the U.S. Army on March 29, 1911. (Kyle, 2013, pp. 150-51)

The Marine Corps and the Navy followed suit in adopting the weapon a couple of years later. The 1911 was considered semi-automatic handgun, which differed from the Colt .45 in that instead of a cylinder to hold the rounds, the 1911 had "a spring-loaded magazine easily filled with bullets. The mag [sic] slips vertically inside the pistol grip. Rack the pistol—pull back the slide (the top of the gun, sitting over the barrel). This chambers a round. Aim. Fire" (Kyle, 2013, pp.155-56).

The 1911 proved to be an effective handgun used in World War I against the Germans, in Latin America and the Caribbean during the Banana Wars, as well as in Haiti in 1919 when a Marine sergeant snuck into Charlemagne Peralte's camp and executed him in front of many of Peralte's followers (Kyle, 2013). After being successfully used in both World War I and World War II as well as the Vietnam War, the M1911 was adopted back at home in the United States by numerous law-enforcement agencies including the FBI, Secret Service, and even the Texas Rangers. Yet, as great of a weapon the M1911 was, it was no match for the next-generation of firearms that developed, most notably the Thompson Submachine Gun which in 1939 *Time* magazine called the deadliest weapon ever devised by man (*Time*, 1939). This "third generation" of firearms became much more accurate and much more reliable than previous generations of firearms and those new firearms were often employed by mass shooters both in the public and on campuses of higher education.

Third Generation

The Thompson Submachine Gun

During the late 1920s and the early 1930s, the Thompson enjoyed an infamous, although relatively short-lived popularity. It was commonly adopted by the gangsters of the era. Al Capone was eating in his favorite restaurant in late 1926, when nine limousines pulled in front of the restaurant and fired more than a thousand rounds of ammunition from Thompson Submachine guns into the business. This shooting would come to be known as the Siege of Cicero (Kyle, 2013).

The Thompson differed from previously examined rifles in that a semi-automatic rifle required the operator to pull the trigger of the firearm each time he or she wished to fire a round. The Thompson was an automatic rifle that required the operator to simply press and hold the

trigger and rounds were fired, automatically one after another, until either the operator released the trigger or the magazine ran out of bullets. Other notorious gangsters, such as John Dillinger and Baby Face Nelson also favored the Thompson, nicknamed the "Tommy Gun." Baby Face Nelson used the weapon to kill more FBI agents than any other criminal in history (Kyle, 2013).

Although the Thompson was originally invented to be used in World War I as a way of clearing enemy trenches, it was not finished in time to be utilized by soldiers in the war. Unfortunately, gangsters of the time adopted and used the weapon so often that the Thompson Submachine Gun became synonymous with organized crime (Kyle, 2013). By the time World War II started, nearly a million and a half Thompsons were in service and used by GI's. Those Thompson Submachine Guns were not only utilized in WW II, but in Korea and Vietnam as well. The weapon remained in the United States military inventory long after WW II came to an end, with some of them still being used as late as the 1960s (Kyle, 2013). By the mid-1960's, another battle rifle, The M16, emerged and was tested in the jungles of Vietnam.

The M16 Rifle

In November of 1965, the United States found itself engaged in a fight with the People's Army of Vietnam, and for the first time, American soldiers were deployed into battle with a fully automatic assault rifle (Kyle, 2013). The weapon soldiers carried was officially called the XM16E1, a name later shortened to M16 (Kyle, 2013). As the battle continued, reports of problems with the M16 surfaced and as Kyle (2103) stated, "the gun had a fatal weakness as a combat rifle: It was not very forgiving if you fouled it or got it full of dirt" and as such "the damn thing had the tendency to jam at the worst possible time (p.245). This problem, however, did not render the entire weapon system useless; it just required some major revisions to the weapon. By the 1980s revisions such as an added forward assist (allowed operator to make sure

the bolt was closed), a change in the powder charges in the cartridge, and revised instructions about the importance of keeping the weapon clean had been made (Kyle, 2013).

Unfortunately, much like the Thompson Submachine Gun, the M16 and its subsequent improved versions not only caught the eye of those in combat but appealed to the criminal element as well. In 1997 in North Hollywood, California, two heavily armed men entered a Bank of America and were confronted by the police before they could escape the bank. Although they were not carrying M16's exactly as previously described, they were armed with fully automatic rifles with drum-style magazines [large, round magazines capable of holding hundreds of rounds] and were wearing body armor (Kyle, 2013). The police at the time were armed with semiautomatic pistols and shotguns and for the next forty-five minutes, the pair outgunned the police, wounding 18 of the nearly 300 officers who responded (Kyle, 2013).

Officers were finally able to kill the pair with automatic assault rifles located at a nearby gun shop but the need for the police to be better armed became apparent. The Bank of America incident in 1997 was not the first time in history law enforcement found itself facing criminals who were better armed than they were. Almost 11 years earlier, Special Agents with the FBI in Miami, Florida spotted two bank robbery suspects who were wanted in connection with two murders and a missing woman (Barrett, 2012). As the FBI agents converged upon the men, armed with a rifle and a shotgun, the men shot at the agents. Agents returned fire with their FBI issued five and six shot revolvers and by the time the shooting stopped, two agents had been killed and five others injured (Barrett, 2012). After the Miami shootout, Lieutenant John Rutherford of the Jacksonville Sheriff's Office set out to find a better handgun to replace the revolvers issued to Sheriff's Deputies (Barrett, 2012) Little did he know, a new handgun was about to be discovered that changed the face of law enforcement. Those handguns, created by an

Austrian railroad worker named Gaston Glock, quickly became the most widely used handgun in law enforcement history.

The Glock

Gaston Glock developed the first model of Glock pistol in the early 1980s, which contained just thirty-four components and was nearly ten ounces lighter than other comparable pistols at the time (Barrett, 2012). Glock, a railroad worker turned government contractor, was known to produce good quality knives and ammunition belts for the Army in Austria. Because of his reputation, Glock was selected to have his Glock pistol prototype tested against four other pistols for consideration of adoption by the Austrian Army. Gaston Glock's new pistol tested the best and in 1983, the Ministry of Defense ordered twenty thousand Glock 17's (Barrett, 2012). Glock, with the help of Karl Walter, a gun salesman, introduced the Glock to the United States in the early 1980s. Their timing was unfortunate as the Glock brand of pistols gained both notoriety and criticism with its introduction. Barrett (2012) spoke about the turmoil in the United States over hijackings of commercial airlines that coincided with the introduction of Glock pistols. The Glock handgun had a trigger and lower receiver assembly made almost entirely of a kind of polymer plastic instead of metal like the current models of handguns available. Many opponents of this new weapon technology (partially plastic handguns) feared these handguns could escape detection with currently employed methods of x-ray detection in airports (Barrett, 2012). In fact, during a 1986 hearing of the US House of Representatives Subcommittee on Crime, Representative Biaggi, a former New York City police officer who had been a member of Congress for 20 years, called the firearm the "latest tool of terrorist technology...because it is mostly plastic. I say that the Glock 17 is far more difficult to detect than any conventional weapon" (Barrett, 2012, p.45-6).

Despite this early controversy, the Glock pistol quickly became one of the most popular handguns in the United States. Many gun-control advocates continued to claim the weapon was the preferred choice of those who chose to commit gun violence but Barrett (2012) disagreed. Those claims appeared to be unsubstantiated, at least according to a 2002 Bureau of Alcohol, Tobacco and Firearms study of 88,570 guns recovered from crime scenes in 46 cities during 2000 (Barrett, 2012). The study ranked the top 10 weapons recovered from those scenes studied, and interestingly, the Glock was not even listed in the top 10. Yet, according to Barrett (2012) "Some of our most prolific psychopaths have favored the Glock, presumably because of its large ammunition capacity and lightning speed" (p. 22). Mass public shooters such as Seung-Hui Cho at Virginia Tech, Steven Kazmierczak from Northern Illinois University, and Jared Loughner in Tuscon, Arizona, all used the Glock as at least one of their weapons of choice (Barrett, 2012).

From flints, to percussion caps, to lever action to automatic shooting, firearms in the United States evolved over several hundred years to what they are today. With the most recent iterations of these weapons capable of inflicting great numbers of deaths, the argument could be made that this evolution in lethality has some correlation to the prevalence of mass shootings in the United States. Early firearms in the United States were somewhat primitive and not conducive to firing multiple rounds in short periods. The latest types of firearms allow the operator to fire dozens, if not hundreds of rounds, in the time it would take earlier weapons such as the Kentucky rifle to fire a single round, reload, and fire a second round. Even weapons such as the Spencer Repeater or the Winchester 1873, which were capable of firing 7 to 15 rounds before needing to be reloaded, were far less reliable and accurate than weapons developed in the past couple of decades. The increased accuracy and reliability of firearms gave modern mass shooters greater potential to inflict large numbers of injuries and casualties. The present study

examined the deadliest community college campus shooting in American history and included a discussion of the type of weapon system the shooter used. The next section examined student, faculty, staff, administration, and campus police officials' perceptions and attitudes about the idea of weapons being carried on their campuses, whether concealed or otherwise.

Attitudes Toward Weapons on Campus

In 2004, Utah became the first state to pass a law that allowed concealed carry of firearms on the state's public college campuses. Surprisingly, in the wake of the massacre at Virginia Tech in 2007, states increasingly allowed students to carry concealed firearms on campus. By 2008, 17 states had attempted to pass laws similar to Utah allowing handguns on campus (Bartula & Bowen, 2015). As of 2009, 24 states had weapon-bans in place for colleges and another 23 states left the decision up to individual institutions (Bartula & Bowen, 2015). Proponents of this type of legislation often made the argument that in order to make a college or university a less desirable target of mass shooters, institutions should allow students, faculty, and staff to carry concealed firearms. Having this knowledge, individuals who were prone to violence against the members of the campus would be less likely to choose that particular institution. The National Rifle Association along with other pro-concealed carry advocates, such as the group Students for Concealed Carry on Campus, argued that the campus community would be safer and more secure with the knowledge that some legally authorized individuals on campus were armed and willing to react to threats such as an active shooter on campus. Not everyone felt the same about concealed carrying of weapons on campus. Smith (2012) wrote, "Opponents of such legislation argue that allowing guns on campuses would be a mistake. The American Association of University Professors is one such opponent" (p. 240). Quizon (2011) quoted AAUP spokeswoman Nse Ufot as saying "campuses would be better served by a morebalanced approach—for example, looking for ways to improve counseling services that would help identify unstable and potentially dangerous people, or adjusting emergency-response plans to deal with violent situations" (p. 2).

While there was a great deal of research into guns and gun control generally, very little research into college students' view of gun control existed. A few studies measured college students' attitudes toward campuses allowing concealed carry. One study conducted by Cavanaugh, Bouffard, Wells, and Nobles (2012) found students did not seem particularly comfortable with the concept of weapons on campus. Cavanaugh et al. (2012) conducted a study of two universities in states that had recently considered introducing legislation that would allow for concealed carry on campus. The researchers administered an in-person survey in classes at both universities and after controlling for blank surveys and those filled out by non-students present in the course, had a response rate of 78.4% at one university and 72.1% at the other (Cavanaugh et al., 2012). The results of this study revealed one institution reported a nearly 3:1 ratio of being not comfortable at all with concealed handguns on campus to being very comfortable while the other institution had a very similar result with greater than a 2:1 ratio (Cavanaugh et al., 2012).

Another study conducted by Miller, Hemenway, and Wechsler (1999) did not specifically explore students' comfort with concealed weapons on campus but more generally sought to determine the rate of firearm possession on campus and to explore potential differences between those students who carried firearms versus those who did not. Miller et al. (1999) surveyed 130 4-year colleges and utilized a random sample size of 26,920 students returning 15,685 surveys that equated to a 58% response rate. This study indicated that of those who completed the survey, 6% of men and 1.5% of women reported they had a working firearm at college (Miller et al.,

1999). Miller et al. (2002) conducted a follow-up survey to Miller et al. (1999) in which the researchers claimed in "the only previous survey of firearm possession at college, 6.4% of male students and 1.5% of female students had a working firearm at school" (Miller et al., p. 57, 2002). This follow-up study (Miller et al., 2002) examined the relationship between the general public's firearm ownership and overall firearm ownership of college students. Miller et al. (2002) surveyed 119 4-year colleges and utilized a random sample size of 21,055 students returning 10,904 surveys that equated to a 52% response rate. Those responses came from students who were enrolled in public colleges (69%) and private colleges (31%) which, according to the researchers is approximately the national distribution of four-year students (Miller et al., 2002). During the course of the research, they revealed that of those who responded to the survey, 4.3% indicated they had a working firearm at college, and interestingly of those 4.3%, 1.6% of them had actually been threatened with a gun a school (Miller et al., 2002). Miller et al. (2002) found:

That gun owning college students are more likely than their unarmed counterparts to drink frequently and excessively and, when inebriated, to engage in activities that put themselves and others at risk for life-threatening injury, such as driving when under the influence of alcohol, vandalizing property, and having unprotected intercourse. In this respect, college students who carry weapons generally...are more likely than non-weapon-carrying students to consume excessive amounts of alcohol, to fight, and to have multiple sexual partners. (p. 63)

While these two studies did not seek to examine students comfort with concealed weapons on campus, both studies indicated that only a small percentage of respondents, 7.9% and 4.3% respectively, admitted having a working firearm at college. Given the fact that a very small percent of those college students admitted to having had possession of a working firearm while on campus, it would seem to indicate the majority of the students would not be comfortable with additional weapons on campus. Otherwise, one would expect to see a higher

incidence of weapon possession among those students surveyed. The obvious limitation to that claim is these two studies only examined a portion of all colleges in the United States.

Both Cavanaugh et al. (2012) and to some degree Miller et al. (2002) found in their research that only a small percentage of college students are comfortable with the idea of allowing weapons to be carried on campus. Similarly, faculty members and school administrators tended to be against the idea of allowing concealed weapons on campus according to studies conducted by several researchers. Bennett, Kraft and Grubb (2012) surveyed one university in southeastern Georgia in an effort to gauge faculty attitudes toward concealed carry on their campus. In their study, the researchers contacted 287 faculty/administration members via campus mail to request their participation of which 158 completed and returned the survey that represented a 55% response rate (Bennett et al., 2012). Of the 158 responses, researchers found that 13 of those respondents identified as administrators, and subsequently omitted those 13 responses due to the fact that "While administrators at the university hold faculty status, they typically teach no more than one course per year and are in much less contact with large numbers of students" (Bennett et al., p. 339, 2012). According to Bennett et al. (2012), 70% of those surveyed either opposed or strongly opposed Georgia's new gun legislation, HB 89, which expanded the places concealed carry permit-holders were allowed to carry a concealed weapon. Although HB 89 did not allow concealed carry as it was passed, 72% of those surveyed were strongly opposed to allowing concealed carry on college campuses and 70% were strongly opposed to allowing weapons in churches or synagogues (Bennett et al., 2012). Bennett et al. (2012) found while "the present study showed that political party affiliation and gun ownership were the most significant predictors of opposition to the HB 89, ... the current study lacked variables measuring political ideology, only capturing self-identified political party" (p. 349).

Bennett et al. (2012) went on to say that, "While the current study represents attitudes from over half of the faculty at only one state university in Georgia, it appears clear that, by and large, college faculty are generally opposed to allowing concealed handguns on campuses or in places of worship" (p. 350). Although not a part of their particular study, Bennett et al. (2012) noted that administrators also indicated a strong opposition not only to HB 89 but to other proposed amendments that allowed weapons on campus and in religious buildings. Bennett et al. (2012) found that 11 of the 13 respondents were strongly opposed to all three measures.

Thompson, Price, Drake and Teeple (2013) also researched faculty perceptions of carrying concealed weapons on campus. In their study, the researchers sent a questionnaire to 1,125 faculty members at 15 randomly selected state universities in five Great Lake states to assess their attitudes about concealed weapons on campus. Faculty members were asked about being a victim of crime on campus, their feelings about their safety on campus, confidence in campus police to prevent crime, and whether or not they carried weapons on campus (Thompson et al., 2013). Nearly 800 questionnaires were returned (70% response rate) with a majority of the respondents being male, white, Democrat, and who did not hold a concealed carry weapons permit. Thompson et al. (2013) found that 97% of the responding faculty said they felt safe while on campus, 82% indicated they were not worried about being a victim of violence, and only 9% of those faculty members had actually been a victim of a crime on campus. In addition, the researchers found the vast majority of the faculty who responded (94%) did not support concealed carry on campus, with 92% of those respondents indicating they would not seek to become concealed-carry licensed if it became legal, and in fact, 93% of them believed if concealed-carry were allowed on campus, other faculty would not feel safe (Thompson et al., 2013). While a majority of the respondents in this study were male, white, Democrat, and did not

hold a concealed carry weapons permit, those respondents who were male, Republican, and owned two or more firearms were more likely to support concealed-carry on campus than the majority of the respondents (Thompson et al., 2013) Faculty members who were against concealed-carry on campus cited a number of reasons for why they were uncomfortable with the idea. Those reasons included "they might miss and another person might mistakenly be shot," the fact that "researchers and practitioners alike report hit ratios by trained police officers that vary from 17 to 34%," and "concern that they might be mistaken for a 'campus shooter' if they had their own guns drawn" (Thompson et al., 2013, p. 371). Thompson et al. (2013) concluded:

Based on the majority of the findings of the current study it is clear that the vast majority of university faculty were not supportive of having concealed handguns on campus. Most faculty already feel extremely safe on their campuses and clearly do not support the introduction of concealed handguns. If faculty feel so strongly about not having concealed handguns on college campuses it is imperative that they become informed regarding legislation that is being introduced in their states that may impact their workplaces. (p.371)

Not surprisingly, those surveyed who identified as leaning more toward Democratic ideology tended not to support concealed carry on campus while those who identified as leaning more toward Republican ideology tended to not only support concealed carry on campus but were more likely to be firearm owners as well.

While Thompson et al. (2013) surveyed only faculty members at university campuses, Patten, Thomas and Wada (2013) examined not only faculty perceptions about concealed carry on campus but also perceptions of students, faculty, staff, and administrators. Patten et al. (2013) surveyed students, faculty, staff, and administrators at two state colleges, Chico State University in California and Chadron State College in Nebraska, with a total number of responses from both colleges being 1,484 and 580 responses respectively. The researchers found the respondents at Chico State tended to be predominately white, female, politically middle of the road but tended

to lean more liberal while at Chadron State, the respondents tended to be white, female, politically middle of the road but tended to lean more conservative (Patten et al., 2013). Patten et al. (2013) found that a "majority of faculty, students, and staff (73%) did not want qualified individuals to be able to carry a gun on campus, 70% did not feel safer with more concealed guns on campus, and 72% did not think armed faculty, students and staff would promote a greater sense of campus safety" (p. 559-560). This would seem to indicate that many individuals affiliated with an institution of higher education would not support concealed carry on campus. Although Patten et al. (2013) did not address the issue of open carrying of weapons on campus in their study, Bartula and Bowen (2015) did.

Bartula and Bowen (2015) were the first to conduct a study of Texas university police officials and their perceptions regarding the possibility of open carrying of firearms being allowed on college campuses. Just prior to the study, Texas passed legislation allowing for concealed carry on Texas campuses. Bartula and Bowen (2015) sent surveys to 115 top police officials of Texas universities to determine if those officials would be supportive of open carry on campus and if those officials felt that open carry would make individuals on campus feel safer. Bartula and Bowen (2015) chose top police officials "because they would be directly responsible for enforcing the new Texas policies [Texas legislation allowing concealed carry on campus] and responding to any potential incidents on campus" (p. 7). In their study, Bartula and Bowen (2015) sent 115 electronic surveys and the researchers received 47 responses (41%). 43 of the 47 respondents (91.4%) were not in favor of the possibility of open carry being allowed on their campuses (Bartula & Bowen, 2015). Additionally, those respondents indicated "they believe that such a law would increase fear of crime and victimization among students, faculty and staff." (Bartula & Bowen, p. 12, 2015)

While there is a growing body of research about weapons on campus, additional research in this area should be conducted. Whether studying the opinions of students, faculty, staff, administrators as well as university police officials, current research indicates that a majority of constituents in higher education oppose the concept of additional weapons on their campuses regardless of the reason those weapons are there.

Chapter Summary

The purpose of this study was to identify the deadliest community college campus shooting in United States history. Presented in this chapter was a discussion of the prevalence of mass murder in the United States from the 1900s to the present. This chapter addressed what scholars considered the requirements for a mass murder incident to qualify as a mass shooting. Additionally, this chapter reviewed what researchers said about mass shootings, including what criteria were required for an incident to be a mass shooting, and explored the prevalence of mass shootings on campuses of higher education. Along with the prevalence of mass shootings at higher education institutions, this chapter discussed the evolution of firearms and the development of a more zealous gun culture in the United States. Finally, this chapter discussed the attitudes toward concealed weapons on campus by many of the constituents in higher education

CHAPTER III METHODOLOGY

As previously noted in the literature review, mass murders have occurred in the United States for more than 200 years, and while mass shootings have been a part of the total number of mass murders, not every mass murder is a mass shooting. Of all of the mass murders that did qualify as mass shootings, an even fewer number of those mass shootings occurred on a campus of higher education. Although not every mass shooting occurred on a college or university campus, any shooting on a higher education campus is problematic, whether it qualifies as a mass shooting or not. My study focused on a mass shooting at a campus of higher education. I chose a qualitative, single-case study approach to answer three main research questions:

- 1. What was the law enforcement response to the deadliest community college campus shooting in history?
- 2. Did previous mass shootings inform the law enforcement response to the deadliest community college campus shooting?
- 3. What implications for practice can be derived by studying the deadliest community college campus shooting?

According to Yin (2009), case study research requires one to "explain and show how you are devoting yourself to following a rigorous methodological path" (p. 3). This chapter outlines the method and rationale for selecting a qualitative, single-case study research design and explains the specific procedure for collecting data. Additionally, this chapter addresses the type of data collected, how this data was analyzed, and issues such as ensuring the integrity of the data. The chapter also includes a discussion of the limitations of the design selected.

Research Design

I chose a qualitative, single-case study approach to examine the deadliest campus shooting at a community college, in part to determine if changes made as a result previous mass shootings were helpful to that institution. Creswell (2008) asserted qualitative research:

is a type of educational research in which the researcher relies on the views of participants; asks broad, general questions; collects data consisting largely of words (or texts) from participants; describes and analyzes these words for themes; and conducts the inquiry in a subjective, biased manner. (p. 46)

According to Creswell (2014), qualitative research differs from quantitative research in that qualitative research methods "rely on text and image data, have unique steps in data analysis, and draw on diverse designs" (p. 183). Additionally, Creswell (2008) described qualitative research as research that "relies on the views of participants" and "collects data consisting largely of words (or text) from participants" (p.46). In this study, I relied heavily on interviews with police officers who responded to the shooting or who were involved directly with the response to the shooting.

There are several important aspects of qualitative research that must be considered when conducting a study. For example, methods for collecting qualitative data do not generally rely upon instruments developed by the researcher to collect data; they more often examine documents, observe behavior, and interview participants face-to-face (Creswell, 2014). In this study, I chose not to design an instrument to collect data about the deadliest campus shootings since the information from this case was readily available to be studied.

Qualitative research also uses multiple sources of data, such as interviews, documents, observations, and audio-visual information as opposed to using a single source. The researcher then organizes those multiple data sources to identify themes (Creswell, 2014). I used data from multiple sources through the Internet, such as newspaper articles written about the incident,

along with reports generated by police agencies involved with the shooting. In addition to newspaper articles and reports, I conducted interviews with law enforcement officers who were personally involved in the response to the shooting.

Finally, qualitative research planning can be difficult, as the initial plan for the phases of the research may change as the researcher begins collecting the data and may even change the initial research questions to some degree (Creswell, 2014). I did experience this during my study. I had originally planned to interview individuals associated with the community college studied. However, after reviewing my request for interviews, the administration at the college declined to participate in the study. For all of the aforementioned considerations, I chose a qualitative research method for this study.

Case Study Research

Since the purpose of this study was to examine the deadliest campus shooting at a community college, it was not appropriate to use quantitative methods due to the small sample size. Since the topic of higher education shootings in this study was so incredibly specific, that is, not just a study of campus shootings but a study of the deadliest campus shooting at a community college, I sought to find a method best situated for studying the event. Yin (2009) asserted that "a case study is used in many situations, to contribute to our knowledge of individual, organizational, social, political, and related phenomena" (p. 4). Creswell (2013) and Merriam (2009) both noted the case study method of research is a valid form of qualitative research, which is commonly used in the field of education. Merriam (2009) considered case studies a type of qualitative research that differed from other types of research, such as surveys, experiments, or statistical methods of research. Hancock and Algozzine (2003) asserted that "although case study research sometimes focuses on an individual representative of a group (e.g.,

a female principal), more often it addresses a phenomenon (e.g., a particular event, situation, program or activity)" (p. 15). This study focused upon a particular event—a campus shooting—and examined the deadliest campus shooting at a community college in an effort to identify implications for law enforcement and higher education stakeholders.

The case study method in this study followed Hancock and Algozzine (2003), who asserted that "doing case study research means identifying a topic that lends itself to in-depth analysis in a natural context using multiple sources of information" (p. 16). Although I did not physically travel to the location of the shooting, I was able to appreciate the natural context by examining the perspectives and narratives of those individuals who were physically present for the events. It is critical for educators and administrators to recognize the long history of campus shootings and seek to identify ways to anticipate and mitigate the impact of campus shootings.

This study utilized multiple sources of information, from official police reports, archives of publications, and statements from and interviews with those directly involved in the case. "Case study research is generally more exploratory than confirmatory; that is the case study researcher normally seeks to identify themes or categories of behavior and events rather than prove relationships or test hypothesis" (Hancock & Algozzine, 2003, p. 16). Case study research was the most appropriate method for this particular study in that I sought to examine the deadliest community college campus shooting as a way to identify themes across higher education and identify what implications those themes had on higher education constituents.

Similarly, Creswell (1998) noted that qualitative case studies are an "exploration of a 'bounded system' or a case (or multiple cases) over time through a detailed, in-depth data collection involving multiple sources of information rich in context" (p. 61). The bounded system means the case is bound by time and place (e.g., the United States and institutions of

higher education since 1900). Multiple sources of information can include interviews, documents, audio-visual material, as well as reports and observations; and context of the case is focused on the physical, social, or historical setting (in this case the deadliest community college campus shooting). I followed Creswell (1998), as well as Hancock and Algozzine (2003), and utilized different types of information that included interviews, documents, reports and observations (by others), archives, and databases.

I chose a single-case study design that followed Hancock and Algozzine's (2003) assertion that "case study research produces more than a chronological listing of events; it results in a researchers descriptive interpretation of factors that both cause and result from events" (p. 31). In this study, I chose to examine the topic of the deadliest campus shooting at a community college, and a single-case study design was the most appropriate.

Case Study Designs

Hancock and Algozinne (2003) asserted, "Doing case study research means selecting a design that matches the disciplinary perspective of the investigation" (p. 33). Further, the researchers argued case studies could be broken down into three groups—exploratory, explanatory, and descriptive—and argued that exploratory designs "seek to define research questions of a subsequent study;" explanatory designs "seek to establish cause-and-effect relationships;" and descriptive designs "attempt to present a complete description of a phenomenon within its context" (p. 33).

Additionally, Hancock and Algozinne (2003) argued that case studies were also classified as intrinsic, instrumental, or collective. Intrinsic case studies primarily used to "study a particular individual;" instrumental case studies used to develop "enhanced understanding of the particular issue being examined;" and collective case studies "attempt to address an issue in question while

adding to the literature base that helps up better conceptualize a theory" (p. 33). This study could be considered an instrumental case study in that I attempted to create a better understanding of the phenomenon of campus shootings by examining the deadliest campus shooting that occurred on a community college campus.

After deciding upon a single-case study design, I relied upon the literature to provide a framework for identifying the deadliest campus shootings. I utilized the following criteria for a case to be considered. First, the incident had to have occurred on the campus of an institution of higher education. Second, the incident had to have involved the use of at least one firearm. Third, the incident had to have involved four or more victims killed, not including the shooter.

Mass Murder Criteria

When I examined the prevalence of mass murder, it became apparent that two schools of thought existed when defining a mass murder. The disagreement primarily revolved around the exact number of victims necessary in order to be considered mass murder. For example, in one study, Dietz (1986) used three victims as the minimum number of victims killed for inclusion into classification of mass murder in his research. Dietz (1986) cited the rationale of a three-victim threshold in order to "maximize the number of cases defined as mass murder (so that there will be enough to study) while minimizing the odds that the cases so defined will be murders occurring as a byproduct of other crimes" (p. 480). In other words, using three victims as opposed to four, five, or even more, increased the sample size of the cases studied. I attempted to identify the deadliest community college campus shooting, therefore, I chose not to follow Dietz's (1986) three-victim criteria to increase that sample size, but to follow Duwe's (2004) four-victim criteria.

Duwe (2004) used four victims killed as the criteria to be included into the category of mass murder. Duwe's (2004) rational as to choosing the threshold of four victims killed as opposed to three, appears to be two-fold. First, Duwe (2004) studied the period from 1900 to 1976 and primarily used newspaper coverage in *The New York Times* as the source of data for the period. Additionally, Duwe (2004) relied upon the FBI's Supplementary Homicide Report, which did not become a valid source of data until around 1976, for his study of the period of 1976-1999. Another scholar agreed with Duwe's (2004) use of the four-victim criteria for studying mass murder. Auxemery (2015) noted the "FBI distinguishes single, double, and triple homicides from mass murders, which are four or more simultaneous homicides" (p. 150).

While one could argue that the number of victims necessary for a murder to be considered a mass murder could either be three or four victims, I chose to use a four-victim criteria as the minimum number of victims for a case to qualify as one of the deadliest campus shootings for two main reasons. First, the FBI compiles reports of all major crimes committed in the United States each year, which include major crimes such as shootings. The FBI makes a distinction between normal murders and mass murders in that it does not classify an incident a mass murder until four or more murders are committed in the same incident (Auxemery, 2015). It made sense to use the same number used by the entity that kept track of the numbers of crimes committed in the United States, as campus shootings would certainly be included in those numbers. Second, when researching campus shootings, I first set out to identify the worst shootings on higher education campuses. I considered choosing from cases that met the three-victim criteria suggested by Dietz (1986), however, many more campus shootings met the four-victim criteria than the three-victim criteria and a higher number of victims killed seemed more appropriate to classify as the worst of the shootings than a fewer number of victims. I am not

suggesting that a shooting involving three victims or less was not worth studying, only that the specific focus of this study was the worst campus shootings and using a four-victim criteria maintained that specificity.

Mass Shooting Criteria

Next, I examined the literature to determine which shooting incidents were considered mass shootings. Similar to the disagreement about the exact definition of mass murders that existed in the literature, scholars also disagreed to some extent on what exactly constituted a mass shooting. Blair and Schweit (2014) noted that the FBI categorized mass shootings as an incident that involved an active shooter where one or more individuals killed at least four people. The Department of Education and the U.S. Department of Homeland Security defined an active shooter as "an individual actively engaged in killing or attempting to kill people in a confined and populated area." They further noted, "implicit in this definition is that the subject's criminal actions involve the use of firearms" (Blair & Schweit, 2014, p. 5). Bjelopera et al. (2013) defined public mass shootings as "incidents occurring in relatively public places, involving four or more deaths—not including the shooter(s)—and gunmen who select victims somewhat indiscriminately" (p. 4). Schildkraut and Elsass (2016) identified a mass shooting as:

[A]n incident of targeted violence carried out by one or more shooters at one or more public or populated locations. Multiple victims (both injuries and fatalities) are associated with the attack, and both the victims and location(s) are chosen either at random or for their symbolic value. The event occurs within a single 24-hour period, though most attacks typically last only a few minutes. The motivation of the shooting must not correlate with gang violence or targeted militant or terroristic activity. (p. 32)

I used the aforementioned criteria when I selected which cases to consider. Those cases not meeting these criteria were excluded as potential cases to be studied.

Sampling

According to Creswell (2008), the purpose of qualitative research is not to make general statements about any particular population but to explore a central phenomenon, in this case the deadliest campus shooting on a community college campus. Creswell (2008) claimed that "to best understand this phenomenon, the qualitative researcher purposefully or intentionally selects individuals and sites" (p. 212). In this study, I employed purposeful sampling where I chose a specific case to study, the deadliest community college campus shooting, and I intentionally chose the individuals to be interviewed about their experience with that shooting.

First, in order to determine which campus shootings were the deadliest, I developed a table of the deadliest campus shootings by utilizing the previously mentioned criteria of:

- 1. The incident had to have occurred on the campus of an institution of higher education.
- 2. The incident had to have involved the use of at least one firearm.
- 3. The incident had to have involved four or more victims killed, not including the shooter.

This table included which type of institution the shooting took place at, the shooter's affiliation with the institution, as well as the number of people killed that were not the shooter.

Table 1

Campus Shooter Characteristics

Year	Location	Type of Institution	Number Killed	Class Status
1961	University Of Texas	Public	13	Undergraduate
1976	California State University	Public	7	Custodian
1991	University of Iowa	Public	5	Graduate

Table 1 (Cont.)

Campus Shooter Characteristics

Year	Location	Type of Institution	Number Killed	Class Status
1991	University of Iowa	Public	5	Graduate
2007	Virginia Polytechnic Institute	Public	32	Undergraduate
2008	Northern Illinois University	Public	5	Graduate
2010	Oikos University	Private	7	Undergraduate
2015	Umpqua Community College	Public	9	Undergraduate

After examining the table, I was able to identify the deadliest campus shooting that had occurred on a community college campus, the Umpqua Community College shooting in 2015.

Second, once I was able to identify the deadliest campus shooting on a community college, I set out to identify which individuals I wanted to interview for the study. I originally wanted to speak to individuals who were affiliated with the community college, such as faculty and members of the institution, as well as law enforcement officers who responded to the shooting or were very closely involved in the incident. I contacted representatives of the college and presented my case study protocol along with a request for permission to contact faculty members, administrators, or other institutional representatives who may be familiar with the case. After deliberation at the institutional administrative level, Umpqua Community College declined to participate in the study.

I then moved on to the second group of individuals I wanted to interview, those law enforcement officers who responded to the shooting or who were closely involved with the investigation of the incident. I employed what Creswell (2008) described as snowball sampling,

where "snowball sampling is a form of purposeful sampling that typically proceeds after a study begins and occurs when the researcher asks participants to recommend other individuals to study" (p. 217). In this case, the participants I was looking for were those individuals who were most closely involved with the incident, but not the entire sample of law enforcement officers who responded that day. In particular, I wanted to identify the very first officers who engaged the shooter in gunfire, those officers who arrived during that exchange of gunfire, those officers who arrived very shortly after the shooting stopped, and the officers who were in charge of the investigation in the aftermath of the shooting.

I started this process by contacting the public information officer of the municipality where the shooting took place. This officer was the first person I interviewed and he was instrumental in identifying the two officers on scene who engaged the shooter in a gun battle. After interviewing those officers, they were able to identify some of the officers who arrived during the shooting as well as those who arrived immediately after the shooting stopped. Finally, I contacted the public information officer of the Sheriff's Office who handled the investigation and he was able to identify the detective who ran the investigation in the aftermath of the shooting.

In all, seven participants took part in the current study, which included five officers from the municipality where the shooting occurred, one officer from a municipality close by, and the detective from the Sheriff's Office who conducted the investigation in the aftermath of the shooting. Since this shooting was so specific, that is, the deadliest campus shooting at a community college, it was unlikely I would have been able to keep the participants' identities confidential since many of the participants were written about in newspaper articles and television stories that were widely publicized in the days and weeks following the shooting.

Data Collection

This study utilized multiple sources of information, from official police reports, archives of publications, and statements from those directly involved in those cases. "Case study research is generally more exploratory than confirmatory; that is the case study researcher normally seeks to identify themes or categories of behavior and events rather than prove relationships or test hypothesis" (Hancock & Algozzine, 2003, p. 16). Case study research was the most appropriate method for this particular study in that I sought to examine the deadliest community college campus shooting as a way to identify themes across higher education and identify what implications those themes had on higher education constituents.

Hancock and Algozzine (2003) suggested case studies should utilize the study of "four categories of documents: the Internet, private and public records, physical evidence, and instruments created by the researcher" (p. 52). Given the scope of the study, I utilized three of these categories, private and public records and the Internet. I was unable to collect any actual physical evidence. However, I discussed what physical evidence was noted in those documents, such as what type of weapon the shooter utilized. It did not seem appropriate to attempt to create any type of instrument to administer, as the shooter in the case examined was deceased. Much of the information surrounding the shooting, including witness statements, were available using the aforementioned categories. In much the same manner as Hancock and Algozzine (2003), Baxter and Jack (2008) asserted that a qualitative case study:

is an approach to research that facilitates exploration of a phenomenon within its context using a variety of data sources. This ensures that the issue is not explored through one lens, but rather a variety of lenses which allows for multiple facets of the phenomenon to be revealed and understood. (p. 544)

In other words, the phenomenon of mass shootings in higher education could be more richly explored by looking at the cases from different viewpoints, such as from the perspective of students, faculty, staff, and administrators.

In much the same manner as Hancock and Algozzine (2003), Creswell (2014) discussed the four basic types of qualitative data collection procedures as being: observation, interviews, documents and audio and visual materials. Given the fact that this study examined the deadliest campus shooting to have occurred on the campus of a community college, I was not able to utilize all four of the data collection procedures as suggested by Creswell (2014). Creswell (2014) explained qualitative observation involved the researcher taking field notes of activities at the research site where the researcher would typically ask participants questions and record their views. Qualitative observation was not appropriate in this particular study as the incident had already happened.

Second, Creswell (2014) asserted that qualitative interviews involved a face-to-face meeting with the participants, telephone interviews, or a focus group of participants. In the current study, I was able to conduct telephone interviews with seven law enforcement officers who were directly involved in the incident. As previously mentioned, I attempted to gain permission from the administration of Umpqua Community College to speak to representatives of the college who were present at the time of the shooting, but the administration denied my request.

Third, Creswell (2014) noted another valid data collection procedure included the examination of qualitative documents, whether they were publicly available or private documents available to the researcher. This study utilized different sources of public documents, such as publications publically accessible from governmental agencies, newspapers, institutions,

and scholars in the field. Additionally, I collected official police reports from agencies who responded to the incident, along with lab reports, audio recordings of victim and witness interviews, and surveillance video from the college and the pawnshop where the shooter purchased weapons used in the incident. I was careful when I collected these documents since many of the sources were free and available. Yin (2009) warned that a researcher utilizing these types of sources should be cautious and verify the accuracy, scope, purpose and context before utilizing them in the study. Creswell (2014) also cautioned that documents may be produced by individuals who may differ in their level of articulation or perception of an event and the documents may not be accurate or even authentic.

Finally, Creswell (2014) noted the last category of qualitative data included qualitative audio and visual materials, such as photographs, e-mails, videotapes, and social media text and digital archives. I was able to collect over 600 photographs taken by law enforcement at the scene of the shooting. In addition, I collected several audio interviews of victims who were present in the classroom at the time of the shooting along with surveillance video from both the college and the pawnshop where the shooter purchased at least one of the weapons used in the incident. Lastly, I was able to access many photographs and articles in both newspapers and magazines available publically from reputable sources such as national magazines and government entities.

One weakness I identified in these categories of data collection was that it did not require me to travel to the particular institution in person; therefore, I could have missed some of the context and unique atmosphere of the individual campus. Although I could have missed some of that context and atmosphere, since much time had elapsed since the incident actually occurred, I

felt it was unlikely I would have been able to get a better sense of the community of the campus than I could derive from the materials I accessed remotely.

Participant Interviews

Creswell (2008) suggested that when conducting interviews for qualitative research, the researcher could use one-on-one interviews with participants as part of the data collection process. Yin (2009) agreed and considered interview data collection to be one of the most important types of data collection for case studies because it allows the researcher the opportunity to gather information they might otherwise not be able to collect from other types of data collection. Creswell (2008) indicated that the researcher should take care to ask the right kinds of questions while attempting to allow the participants to freely share their experiences. Patton (2002) noted the need for the researcher to use a semi-structured approach in an effort to balance the need to follow approved research protocol with the need to ensure questions are open-ended that allows the participant to feel free to provide their own perspective.

Utilizing the IRB-approved case study protocol and interview questions found in Appendix A, the current study used 14 semi-structured questions about the participants' law enforcement background, previous training in the area of active shooters, and level of participation in response to the Umpqua Community College campus shooting on October 1, 2015. The types of questions centered on the participant's memory of their involvement in the incident. I began with the least intrusive questions, such as their background in law enforcement and transitioned to questions more specifically regarding the event. As recommended by Patton (2002), I concluded with an open-ended question intended to capture any particular memories or comments not yet covered during the interview.

Although I followed the approved case study protocol and asked all of the interview questions, I allowed for some deviation to the order of the questions asked, based upon the participant's answers to other questions. I found that some of the participants began speaking about questions I had planned to ask later in the interview, and I would ask those questions when the interviewee brought the issue up.

Participant interviews all took place over the phone and began with confirmation the participant had read the approved case study protocol that outlined their participation in the study and had been provided the proposed interview questions. (Appendix B). In addition, I ensured each participant had properly filled out the informed consent form and that I had a copy of it available in hard copy prior to commencing the interview. Following Yin (2009), this informed consent form outlined the protection afforded to the participant, including a statement advising they could refuse to participate or withdraw their participation at any time. The form also explained that the participant's identity would not be keep confidential, but the use of the information gathered during the interview would be subject to applicable law and University of Arkansas policy. (Appendix C)

I recorded each interview digitally in addition taking comprehensive notes during the interview. The interviews were immediately transcribed and the audio recordings of the interviews were downloaded and stored on a password-protected laptop of which I had the only access to the information.

Document Analysis

In the current study, I followed Yin's (2009) suggestion of collecting and analyzing documents in addition to other data collections procedures such as the aforementioned participant interviews. Creswell (2008) suggested qualitative researchers collect documents such

as newspapers, written reports of events, mass media products, and official publications. In the current study, document analysis was an ongoing procedure that occurred over the course of approximately 8 months. Document analysis began with collecting publicly available stories from local and national news sources, such as the *New York Times* and the *Los Angeles Times*, as well as major television news media outlets, such as Fox News, NBC News and Oregon Public Broadcasting. Additionally, I was able to collect official police reports from agencies who responded to the incident, along with lab reports, audio recordings of victim and witness interviews, and surveillance video from the college and the pawnshop where the shooter purchased weapons used in the incident. Table 2 specifies the documents analyzed and notes the sources of those documents.

Table 2

Public Documents Analyzed, Listed by Agency/Author

Type of Document	Agency/Author of Document		
Newspaper Articles	Los Angeles Times		
	New York Times		
Table 2, cont.	New York Daily News The News-Review		
Internet Articles	Oregon Public Broadcasting Newsweek		
	Reuters		
	Fox News		
	NBC News		

 Table 2 (Cont.)

 Public Documents Analyzed, Listed by Agency/Author

Type of Document	Agency/Author of Document Oregon State Police	
Law Enforcement Reports		
	Douglas County Sheriff	
	Roseburg Police Department	
	Douglas County D. A.	
Other		
Surveillance Video	Umpqua Community College	
	Associated Buyer Pawn Shop	
Audio Recordings	Roseburg Police Department	
	Oregon State Police	
	Douglas County Sheriff	
Manifesto of shooter	Perpetrator	

In all, I collected approximately 265 pages of incident reports from the Oregon State Police, and approximately 1,377 pages of incident reports from the Douglas County Sheriff's Office. In addition to the Douglas County Sheriff's Office incident reports, I also collected more than 600 crime scene and incident photographs and more than five hours of audio recordings of interviews with victims and witnesses. I also obtained nearly two hours of surveillance footage from both the College and the pawnshop where the shooter purchased at least one of the weapons used in the incident. Finally, I obtained a copy of the contents of the manifesto written by the shooter and given to the police by one survivor. These documents included a six-page manifesto,

articles about previous mass shooting events, as well as articles about police response to active shooter incidents.

Role of Researcher

Qualitative research requires the author to recognize how their own experiences, background, and culture can shape their interpretation of the data being collected and can have an impact on the direction the study takes (Creswell, 2014). I was careful to take into consideration my personal background and experiences when examining this incident. I made sure those individuals I interviewed were aware of the scope of my experience and background in an effort to be completely transparent about the potential bias I might have based on my background. The benefit of my particular background and experience was it assisted me in the path the study took, specifically in regards to the access provided to potential participants based on my law enforcement status as a currently commissioned police officer.

I have been involved in law enforcement for almost 20 years, and the knowledge I possess in the area of law enforcement response to shooting incidents allowed me to examine the response to the case studied and compare the response to what I have experienced. That particular aspect of the study assisted me in identifying themes and implications for practitioners in higher education that I noted in the conclusion. The drawback to my particular area of expertise and experience was a potential bias toward those ideas that tended to support firearm ownership, increased access to firearms, as well as any positive suggestions related to the handling of the incidents by the police. Additionally, I was cognizant of the fact that since the interviewees were all police officers with similar amounts of training and experience, there was the potential that the information participants shared with me was information another researcher

without that experience may not have collected. I was aware of my potential bias in those areas when I discussed implications and recommendations for higher education constituents.

Profile of Case Institution

Umpqua Community College (UCC) is a public community college located in southwest Oregon and was originally founded in 1964. The Northwest Commission on Colleges and Universities (NWCCU) first accredited Umpqua Community College in 1970. The institution has a seven-member Board of Trustees who are elected based upon their service districts for four-year terms. Umpqua Community College offers Career and Technical Education, Community and Adult Basic Education, and Workforce Development, in addition to offering transfer programs and serving as a cultural center for the Douglas County area (Nolte & Kelly, 2016).

The college is located six miles north of Roseburg, Oregon, resides on 100 acres of land overlooking the North Umpqua River, and is composed of 17 buildings on campus, with satellite locations in Roseburg, Mrytle Creek, and Winston, Oregon. The campus is located in Douglas County, Oregon, a more than 5,000-square-mile jurisdiction with just over 100,000 residents. According to the Medicare/Medicaid rules for categorization of counties, Douglas County is considered "super rural, isolated, and economically distressed" (Nolte & Kelly, 2016, p. 3).

The mission statement of UCC reads, "Umpqua Community College provides accessible and affordable quality college education, lifelong learning opportunities, workforce training, and cultural programs for its communities" (Nolte & Kelly, 2016, p. 17). UCC offers nine Associate of Science (AS) direct transfer degrees, 49 Associate of Arts Oregon Transfer (AAOT) degrees, and 26 Associate of Applied Science (AAS) degrees. Additionally, UCC offers 56 one-year or less certificates and an Associate of General Science (AGS) degree. Subjects and majors for those degrees include nursing, dental assisting, emergency medical service, fire science, and

automotive. UCC also offers both cultural and recreational activities at its facilities, including the Swanson Amphitheatre, Whipple Fine Arts Center, and the UCC gymnasium and pool.

At the time of the shooting in 2015, the UCC campus employed security officers who were not law enforcement officers. Former UCC president, Joel Olson, told the *New York Times* that in the months before the shooting occurred, the campus had engaged in discussions about having armed security officers on campus, but according to Olson, ""The campus was split 50-50. We thought we were a very safe campus, and having armed security officers on campus might change the culture" (Vanderhart, D., Johnson, K., & Turkewitz, J., 2015, p.3). In November of 2015, UCC contracted with the Douglas County Sheriff's Office to have a full-time, commissioned deputy on campus five days a week (Oregon Public Broadcasting, 2015). According to their website, UCC now employs three full-time and two part-time security officers certified by the Oregon Department of Public Safety Standards and Training.

Profile of Participants

I initially planned to interview both law enforcement officers as well as individuals from the institution who were present when the incident occurred, however, the UCC administration declined to allow their employees to participate in the study. For the current study, I interviewed seven law enforcement officers from three different agencies that responded to the shooting at Umpqua Community College. Those participants included the two officers who were the first on scene and engaged the shooter, three officers who arrived as shots were being fired, a Public Information Officer (PIO), and the detective who ran the entire investigation. The participants included:

Sgt. Dennis Chrisenbery-Roseburg Police Department. Sgt. Chrisenbery is a
patrol supervisor who joined the United States Navy just after high school. Sgt.

- Chrisenbery attended the Reserve Police Academy at Umpqua Community College and was hired by the Roseburg Police Department in 2001.
- Sgt. Jeff Eichenbusch-Public Information Officer for the Roseburg Police
 Department. Sgt. Eichenbusch has worked in law enforcement for over 20 years
 and has worked as a patrol officer, field-training officer, hostage negotiator,
 SWAT team member, and school resource officer.
- Detective Sergeant Joe Kaney-Roseburg Police Department. Detective Sergeant
 Kaney commands the investigation division and was hired by the Roseburg Police
 Department in 1992 after he served in the United States Marine Corps. Sgt. Kaney
 has served as a patrol officer, member of the SWAT team, and a detective.
- Lt. Chris Merrifield-Douglas County Sheriff's Office. Lt. Merrifield holds a
 Bachelor's degree in Criminology and has been in law enforcement for 24 years.
 He has served as a patrol officer, field-training officer, SWAT team member,
 Street Crimes unit member, Narcotics Team member and investigator. He is
 currently the supervisor for the Douglas County Sheriff's Office investigations
 division.
- Master Officer Tony Powers-Roseburg Police Department. Master Officer
 Powers retired from the United States Air Force where he worked criminal
 investigations, worked on a tactical team that protected nuclear weapons, and
 worked as an Air Force recruiter prior to being hired by the Roseburg Police
 Department.
- Master Officer Vaughn Rains-Sutherlin Police Department. Master Officer
 Rains served in the United States Air Force in a law enforcement specialist role

and has been in law enforcement for 20 years. Master Officer Rains has worked for the Sutherlin Police Department since 2004 and is an active shooter response instructor.

Detective Todd Spingath-Roseburg Police Department. Detective Spingath has
been employed by the Roseburg Police Department for 18 years. He served in the
United States Air Force security police force and has been a patrol officer, a
SWAT sniper team leader, and a detective.

Data Analysis and Interpretation

According to Creswell (2008), data analysis and interpretation can be problematic as there is no one agreed upon method for data analysis in qualitative research. Yin (2009) agreed and argued that data analysis in qualitative research relies upon the individual researcher to utilize his or her own style and method of thinking. Additionally, Creswell (2014) asserted that "because text and image data are so dense and rich, not all of the information can be used in a qualitative study. Thus, in the analysis of the data, researchers need to 'winnow' the data" (p. 195). That is to say, unlike quantitative research where the researcher ensures all of the data is accounted for, qualitative researchers should "aggregate data into a small number of themes" (Creswell, 2014, p. 195). I was able to aggregate the data into several themes, which were discussed in the final chapter of the study.

Although no specific method for qualitative data analysis exists, several researchers have written about methods for organizing the data collected and made suggestions of ways to analyze the data. I chose to follow both Yin (2009) and Creswell (2008) who suggested the researcher begin with a large amount of information and work that information down to several specific themes. I began this task by transcribing the participant interviews and spending a great deal of

time reading and re-reading these transcripts to become intimately familiar with the content of the interviews. In addition to reading the transcripts, I also listened to the audio recordings of the interviews prior to actually beginning the coding process. As suggested by Creswell (2008), I kept copies of original recordings and transcripts, as well as all other data collected. I kept duplicate copies of the information on a password-protected computer in a locked office.

Next, I began the data coding process by working with the electronic versions of transcripts from the participant interviews. Merriam (2009) recommended that "assigning some sort of shorthand" to the various pieces of data would make it easier to retrieve the data (p. 164). According to Merriam (2009), the researcher should assign codes based upon both the participants' and the researchers' own input but should closely follow the intended purpose of the study. I utilized the paper copies of the transcripts and as Creswell (2008) suggested, I placed the particular codes I assigned to the pieces of data in the left margin of the document and left the right margin for later theme development. Once I completed the coding process in the left margin of all the participant interviews, I began to cluster the codes that showed up most often together into groups of codes (Creswell, 2008). I utilized those groups of codes for the development of the major themes that emerged in the data analysis and interpretation process. While coding the participant interviews, I was able to identify themes about their law enforcement experience, prior training in active shooter response, participation in the active shooter incident, as well as lessons learned and suggestions for the application of these lessons to both law enforcement and higher education. This similarity informed some of the implications discussed in the final chapter of the study.

Research Trustworthiness

In an effort to ensure I conducted the current study in an ethical manner with the proper emphasis placed on the trustworthiness of the study's results, I followed several suggestions by Patton (2002), Creswell (2008), and Yin (2009). Those suggestions included topics such as the confirmability of the findings, the validity and reliability of the data, and the credibility of the findings. It was this attention to detail which I hoped would indicate to other scholars that I was diligent and meticulous during this process.

Confirmability

Creswell (2008) suggested researchers need reflexivity while conducting their research projects, stating that "reflexivity means that the researchers reflect their own biases, values, and assumptions and actively write them into their research." (p. 58). I have extensive background in law enforcement, and throughout the process of interviewing law enforcement officers who responded to this shooting, I was able to follow Creswell's (2008) suggestion that reflexive research may "involve discussing personal experiences and identifying how you collaborated with participants during phases of the project" (p.58). For many of the interviews I conducted, I found a common theme or experience the participant had mentioned and related how my experience was similar to theirs.

Validity and Reliability

In order to ensure validity and reliability of the data collected during this study, I followed Creswell (2014), who noted "qualitative validity means the researcher checks for the accuracy of the findings by employing certain procedures" and "qualitative reliability indicates the researcher's approach is consistent across different researchers" (p. 201). Creswell (2014) suggested eight primary strategies for ensuring validity and reliability in qualitative research:

- Triangulate
- Use member checking
- Use rich, thick description
- Clarify bias brought to the study
- Present negative or discrepant information
- Spend prolonged time in the field
- Use peer debriefing to enhance accuracy
- Use an external auditor to review the entire project (p. 201-202)

In this study, I followed several of these suggestions to include triangulation, rich and thick description, clarifying bias I brought to the study, and peer debriefing. For the process of triangulation, I examined data from multiple sources, both public and private, both from the living survivors and the deceased individuals, as well as information from those who were near the incidents when they occurred. For rich and thick description, I examined many sources of information such as photographs, newspaper articles, interviews with witnesses and those involved in the actual incident, stories told by individuals who were familiar with the shooters prior to the incident, as well as governmental and institutional reports generated in the aftermath of the shootings. I also identified the bias I brought to the study based upon my extensive law enforcement experience and utilized peer debriefing by meeting with a colleague who is a qualitative researcher to ensure my study would be beneficial to others in the field.

Credibility

In the current study, the credibility test followed Creswell's (2008) suggestion that "validating findings means that the researcher determines the accuracy or credibility of the

findings through strategies such as member checking or triangulation" (p. 265). I employed both member checking and triangulation in the current study.

Member Checking. The first aspect of the credibility test included was member checking. According to Creswell (2008), member checking "is a process in which the researcher asks one or more participants in the study to check the accuracy of the account" (p. 267). I was able to ensure accurate interpretation of the data collected during the interviews by transcribing each interview and sending a copy of the competed interview transcript to each participant.

Participants were asked to verify the transcription as accurate before the coding process began. I requested participants to review the transcript and provide feedback within 14 days and advised them that if they did not provide feedback within that timeframe, I would consider the transcript to be a final version for data analysis. Additionally, once I selected the quotes from participants I wanted to incorporate in the study, I provided participants a copy of the quotes and an opportunity to verify the accuracy of the quotes I planned to use before I included them in the final product.

Triangulation. A second aspect to the credibility test for the current study involved the concept of triangulation, which Creswell (2008) defined as, "the process of corroborating evidence from different individuals, types of data, or methods of data collection in descriptions and themes in qualitative research" (p. 266). In this study, I was able to corroborate evidence that I learned from document analysis, such as newspaper articles written in the aftermath of the incident, with statements made by the participants during their interviews. In addition, I was able to verify information from different participants accounts of their experiences that in many instances validated the information located in the document analysis.

External Audit. Finally, I was able to utilize the method of external audit in which I utilized a colleague with a Ph.D. in Criminal Justice and Criminology to review the project. (Creswell 2008). I asked my colleague to review my project several times throughout the process and requested he provide me with both the strengths of the study, along with the weaknesses of the study.

Chapter Summary

In this study, I chose to examine the shooting at the Umpqua Community College for two main reasons. The first reason was due to the fact this campus shooting was the deadliest campus shooting to occur on the campus of a community college ever. Secondly, this campus shooting was the deadliest shooting to occur on a campus of higher education post the Virginia Tech shooting.

After I decided which institution to study, I followed Creswell's (2014) suggestion for the process of data collection that included the examination of qualitative documents, whether they were publicly available or private documents I had access to. I utilized different sources of public documents, such as publications publically accessible from sources such as newspapers and the Internet as well as investigative reports and documents proved by governmental agencies involved in the incident. Additionally, I followed Creswell's (2014) suggestion for ensuring validity and reliability, which included triangulation, rich and thick description, clarifying bias I brought to the study, as well as peer debriefing.

CHAPTER IV FINDINGS

The purpose of this study was to examine the law enforcement response to the deadliest mass shooting at a community college. In an effort to accomplish this purpose, I chose a qualitative, single-case study approach to answer three main research questions:

- 1. What was the law enforcement response to the deadliest community college campus shooting in history?
- 2. Did previous mass shootings inform the law enforcement response to the deadliest community college campus shooting?
- 3. What implications for practice can be derived by studying the deadliest community college campus shooting?

Summary of Study

This study used multiple sources of information, from official police reports, archives of publications, and interviews of law enforcement officers who responded to the incident. "Case study research is generally more exploratory than confirmatory; that is the case study researcher normally seeks to identify themes or categories of behavior and events rather than prove relationships or test hypothesis" (Hancock & Algozzine, 2003, p. 16). Case study research was the most appropriate method for this particular study in that I sought to study the deadliest community college campus shooting as a way to identify themes emerging from the event and identify what implications those themes had on higher education constituents.

I interviewed seven police officers who responded to or were very closely involved with the incident at varying levels, including the investigator in charge of the entire investigation and the two officers who actually engaged the shooter. I had originally intended to include interviews from Umpqua Community College, but when presented with my research protocol and request to

interview individuals from the institution who were present when the incident occurred, the administration declined to allow their employees to participate.

For each of the participants interviewed, I asked each 14 open-ended, IRB-approved interview questions (Appendix B). I also followed up some of the responses with additional probative questions in an effort to ensure I understood the responses correctly. I recorded these interviews digitally, and once I had the interviews transcribed, I sent an electronic copy of the transcript to the participant to ensure the accuracy of the transcription. I requested each participant to review the document and respond with any corrections or clarifications and one participant responded back within the requested period of two weeks. One of the participants made minor corrections to phrases in the transcript, but none of the other participants made any changes.

As previously mentioned, in addition to collecting participant interviews, I also collected numerous documents. I began by collecting publicly available stories from local and national news sources such as the *New York Times*, the *L.A. Times*, as well as major television news media outlets such as Fox News, NBC News and Oregon Public Broadcasting. In addition, I collected official police reports from agencies who responded to the incident, lab reports, more than five hours of audio recordings of victim and witness interviews, and nearly two hours of surveillance video from the college and the pawnshop where the shooter purchased weapons used in the incident. I collected more than 1,600 pages of incident reports from both the Oregon State Police and the Douglas County Sheriff's Office. I also collected more than 600 crime scene and incident photographs. Lastly, I obtained a copy of the contents of the manifesto written by the shooter and given to the police by a survivor. The computer thumb drive included a six-page

manifesto, articles about previous mass shooting events, as well as articles about police response to active shooter incidents

Overview of Incident

Initial Call

On October 1, 2015, a 27-year-old male student who attended Umpqua Community

College near Roseburg, Oregon, entered a classroom and opened fire on a classroom full of
students. At 10:37 a.m., numerous 911 calls started coming in to emergency dispatching centers
in Douglas County, Oregon. Callers advised that a gunman had entered a classroom in Snyder

Hall on the campus of Umpqua Community College near Roseburg, Oregon and had opened fire.

Caller 1: "There's an active shooter at UCC right now!"

911 Dispatch: "Ok, UCC. Where at? UCC, what building, do you know?"

Caller 1: "He's in the science building!"

911 Dispatcher: "1174, Medical Aid, this is for an active shooter at UCC. 1174, Medical Aid, we have a report of one person shot. UCC, 1140 Umpqua College Road, an active shooter." (Douglas County 911 dispatch audio)

Over the course of the next approximately nine minutes, the shooter killed nine people in the classroom, including the professor, before law enforcement arrived and engaged the shooter in a gun battle. According to surviving students in the classroom, the shooter ultimately turned his weapon on himself and committed suicide in what became the deadliest community college campus shooting in United States history.

Response

Multiple police officers received the dispatch of the active shooter on the campus of UCC and began responding to the area. Two Roseburg Police Department detectives, Detective Sgt.

Joe Kaney and Detective Todd Spingath, had just left the Roseburg Police Station and were headed to get a cup of coffee when the call came out. The detectives immediately headed toward the campus of UCC. Sgt. Dennis Chrisenbery and Master Officer Tony Powers of the Roseburg

Police Department were also on duty when the call came in and responded to the scene. About eight miles north of Roseburg in the town of Sutherlin, Oregon, Master Officer Vaughn Rains of the Sutherlin Police Department and a police trainee had just finished a traffic stop and immediately responded as well. Douglas County Sheriff's Office Lt. Chris Merrifield heard the dispatch over the radio, observed other deputies running out of the Sheriff's Office, and also responded to the scene. By 11:00 a.m., law enforcement officers from 13 different agencies heard the call and responded to the campus, along with several fire and EMS agencies.

Arrival

Detective Sergeant Kaney and Detective Spingath were the first officers to arrive at the campus of UCC and parked near Snyder Hall. Kaney and Spingath were about to get out of their vehicle when they heard shots being fired at them. The detectives quickly exited their vehicle and took a position of cover behind other vehicles in the parking lot near the classroom. The shooter continued to fire at them but the detectives initially had difficulty locating the shooter's position because of the design of the building. Meanwhile, other officers arrived at the scene and made their way toward Snyder Hall. Some of the responding officers were unfamiliar with the location of Synder Hall, which delayed their arrival to the classroom where the shooter was located. As the shooter continued to fire at the officers, Detective Sergeant Kaney and Detective Spingath were able visually locate the suspect and returned fire, striking the suspect one time.

For the next few moments, no further shots came from the classroom and several students began to exit the building and run toward Kaney and Spingath. One of the students told officers that the shooter had taken his own life and was lying on the ground near the front of the classroom. The detectives rushed into the classroom, secured the shooter in handcuffs, and called for EMS to be sent to their location. By that time, many other officers had arrived on scene,

including Master Officer Powers, Master Officer Rains, and Sgt. Chrisenbery. Powers and Rains entered the classroom just after Kaney and Spingath and began triaging the wounded.

Several of the participants interviewed described the scene inside the classroom. Many of those details were very specific and quite disturbing. Most of the participants described seeing a mass casualty event, with several deceased individuals, several wounded individuals, and some individuals who did not appear to be injured. Officers triaged the wounded as they awaited the arrival of emergency medical personnel. Out of respect for the victims and their families, I chose not to include those quotes from participants describing the scene details in this case.

In all, nine individuals, including the professor, were shot and killed, eight individuals were shot but survived, and four individuals present in the classroom were uninjured. According to participants, the shooter died of a self-inflicted gunshot wound to the head. Response to the incident included 13 law enforcement agencies, as well as numerous fire departments and emergency medical service units.

Aftermath

In the hours and days that followed the shooting, law enforcement officers from those 13 agencies continued to investigate this incident. One of the tasks given to officers with the Oregon State Police was to interview individuals who were present in the classroom during the incident. OSP officers audio recorded the interviews of three of the students who were in the classroom but were not injured during the incident. The details these students described helped inform the present study as I developed implications for practitioners in higher education. Out of respect for these students, at least one of which has never spoken publically about the case, I chose to refer to them simply as a student and not by their real names.

The officers began the interviews by asking the students if they were aware their interviews were being recorded and each student acknowledge the understood. A student remembered sitting in class listening to the professor going over the assignment for the day when they noticed a subject wearing a backpack rush in the classroom. The individual yelled, "I want everybody on the ground" and fired two shots into the ceiling. The individual told everyone to get to the center of the room. He pulled off his backpack and said, "It will be a miracle if any of you survive today." That same student remembered hearing two gunshots but was not sure if the shooter was inside or outside the classroom when the shots were fired and also remembered the shooter telling everyone to get to the center of the room. That student told police:

He then stopped and said, "Hey, you in the back", and pointed at one of the students, and said, "You are going to be the survivor today, so come on up here. All of my stuff is in here [in an envelope] there is a flash drive with all of my stuff. Show this to the police after I am done."

Another student told police the shooter looked at him and told him he [shooter] was not going to kill him [student]:

He said he was not going to kill me if I kept the envelope and gave it to the police after and then he told me to sit in the back of the class. Right after that, he shot a couple of students that were on the ground.

Another student remembered being in the front row of the classroom when the shooter entered the room. That student remembered kneeling down on the ground behind his table near the professor who was also kneeling. The student told police that the shooter shot the professor in the head and then shot the student who was directly beside him as well.

The students interviewed by the police that day also talked about how the shooter told one individual to stand up and he [shooter] asked the individual if they were religious. When the individual told the shooter they were Christian, the shooter just said, "Ok," and shot them. The shooter asked another individual to stand up and asked them if they were religious. The

individual told the shooter they were Catholic, to which the shooter replied, "Thank you for standing up for your beliefs" also shot them. Another student told police, "After that, he [shooter] just started indiscriminately shooting at people."

Shortly after that, a male subject, later identified as Chris Mintz, arrived outside of the classroom (I chose to provide his full name here because I felt his heroic attempt to stop the shooter should be recognized). A student told police:

I heard someone come up to the door, that was Chris Mintz and he [the shooter] was still in the classroom. I heard him say, "Dude stop!" Then I heard a gunshot and then he [Mintz] said, 'Please stop, it's my kids birthday!' and then I heard another one [gunshot] and I heard someone fall.

A different student also remembered Chris Mintz coming to the door of the classroom:

Then the man outside [Chris Mintz] was talking to people, he thought that he might be telling people to go away The shooter peeked out the door and said he thought he heard him say something about calling the cops The guy said, 'it's my son's birthday, please don't shoot me'. I don't know how many shots he fired; I think it might have been just one.

Another student told police they remembered thinking that something needed to be done but the student expressed concern about their safety if they attempted it. That student heard another student say, "We need to do something or we are all going to die" and the student recalled,

I remember thinking a couple of different times; we are if we don't do something. But there was no way to—If I got up I would have had to go over a body, I would have had to go through two tables to a guy with a gun. I knew I was going to die if I do that cause no one else was trying to."

Shortly after shooting Chris Mintz several times while standing outside the classroom, the shooter apparently heard law enforcement officers responding to the scene. At that point, he began shooting outside the classroom at responding officers. During the exchange of gunfire, a round from one of the police officers hit the subject. A student said:

Then the cops showed up and he [shooter] heard them and he peeked out the door and shot at them, and he did that a couple of times. I think he got hit and then he laid on the ground for a second and shot himself.

One student who had been lying on the ground looked up and saw the shooter in the front of the classroom with an apparent gunshot wound to his head. Shortly after the shooter committed suicide, law enforcement officers entered the room. Another student remembered seeing Detective Spingath enter the room and told officers that when they saw Detective Spingath, they knew they were safe.

Background of the Shooter

Once the officers on scene located the deceased shooter, the next step in the investigation was to learn as much about the shooter as was possible in an effort to ensure there were no other subjects involved and no further potential victims. Normally the identity of the individual responsible for a shooting of this magnitude would be important, however, many individuals who were closely involved with this incident referred to the perpetrator only as the shooter. One such individual was the Sheriff of Douglas County, John Hanlin. Around 7:15 pm on the day of the shooting, Sheriff Hanlin addressed the media and made this statement:

We have information that leads us to believe we know who the shooter is. The official ID will come from the medical examiner's office. Let me be very clear: I will not name the shooter. I will not give him credit for this horrific act of cowardice. Media will get the name confirmed in time... but you will never hear us use it. We would encourage media and the community to avoid using it, repeating it, or engaging in any glorification and sensationalization of him. He in no way deserves it. Focus your attention on the victims and their families and helping them to recover. (Hanlin press conference, 2017)

Additionally, during the interview portion of the study, it became very clear that no matter which officer I spoke to, no one would mention the shooter by name. Given the obvious fact that none of the interview participants referred to the perpetrator by name, and out of respect for the victims and their families, I felt it was most appropriate to refer to him as the shooter for

the remainder of this study. The name of the shooter in this incident is readily accessible by a quick Internet search if one is so inclined to learn it.

Investigators learned the shooter was a 27-year-old white male born to Laurel Harper and Ian Mercer who lived in the Torrance, California area before divorcing when the shooter was around two years old. Two officers from the Oregon State Police located the shooters' mother and interviewed her to learn about the shooter. The shooter's mother, Laurel Harper, told police that the shooter never really bonded with his father, and Mercer [the shooter's father] never really tried to be a part of the shooter's life. Harper told the officers that from time to time, Mercer would call the shooter, but never really kept in touch after she moved to the area of Roseburg several years earlier. Harper told detectives the shooter "doesn't like him, never liked him ... he was never a good father."

Harper remembered the shooter's early years when he would have such bad tantrums that she would physically restrain him until he ran out of energy. One time when the shooter was about five years old, he attempted to jump out of her vehicle as it was traveling down the freeway.

Harper went on to describe the shooter's teenage years:

When he was ... in his teens, like I said, he had anger issues. He would just, you know, he would get all kind of, you know, kind of up in my face type thing, and try, and be very intimidating, and it's like there's just like out of control. There was this one time when, when he pointed a shotgun at me. This was, I don't know, like five, no, no, six, six years ago, maybe six, seven years ago. (Harper interview, 2017)

Harper continued to describe the shooter: "I just think he was angry at the world, angry, because he couldn't, he couldn't fit in." Harper went on to say, "He was not a spontaneous person.

Change was hard for him. Um, but I know that he, he had to have been lonely. He was alone and he was a loner, and he took, it was difficult for him to commit to people." When detectives asked

if she had reported the shotgun incident, Harper said, "No. I was trying to give him every chance in the book without having a record around his neck. He had enough, you know, obstacles. He didn't need that one."

Harper described another incident when the shooter became very angry with her in the waiting room of a medical facility and was verbally abusive to her. Because of that incident, the shooter was placed in a group home, or halfway house, for a period of time. When he was released, he traveled back to her home and broke into her house through a window. Harper told the shooter if he was going to expect to stay with her, he would need to show he was going to turn his life around. Harper told detectives, "I know you hear this all the time, no, he wasn't bad. Most people, they're not really bad. He was very, he was, he was very troubled."

Finally, Harper described the shooter as someone who did not approve of technology and new things. "He hated all the, new technology, and he didn't approve of people who would go out and buy, you know, buy new things all the time." Harper went on to say, "He hated smartphones. Basically, he hated people who used them. He was kind of disappointed in me because I, you know, I have one."

In addition to interviewing the shooter's mother, police interviewed an acquaintance of the shooter and asked the subject to describe the shooter to them. Cecil Ritchey told police that he had met the shooter on campus in line at the financial aid office in May 2017. Ritchey told the police that he and the shooter had spent time together on approximately 10 occasions and were friends on social media.

Additionally, Ritchey told investigators that the shooter was interested in his [Ritchie's] religion, Luciferianism, and was particularly interested in the part of the religion dealing with sacrifices and black magic. The shooter told Ritchey he had been molested by a preacher at

church when he was young and he [shooter] believed that Christians should have been Hitler's target and preachers deserved to be beheaded. Ritchey advised that the shooter had sent him some videos on social media depicting Christians being beheaded, which included one video of two 12-year old girls beheaded.

Finally, around the middle of August 2017, the shooter showed him a gun, which he described as a rifle with a brown bottom with the rest of the gun being black, and told Ritchey it was his [shooter's] insurance when the nation became divided. Ritchey told the police the shooter believed Christianity should be illegal and thought someone should stop it.

The two previously identified individuals, Harper and Ritchey, were the only two individuals contacted by law enforcement who knew the shooter in any significant way. The only other person who was interviewed who knew the shooter was his father, Ian Mercer who, according to Newsweek, told CNN "The only thing I would like to say, the only question I would like to ask, is how on earth could he compile 13 guns?" (Ziv, 2015, p. 2). The shooter's father, Ian Mercer, also said:

We talk about gun laws. We talk about gun control. Every time something like this happens, they talk about it and nothing gets done. I'm not trying to say that that's to blame for what happened, but if [the shooter] had not been able to get hold [sic] of 13 guns, this wouldn't have happened. (Newsweek, 10/5/15, p.3)

When asked about his relationship with the shooter, Mercer stated, "He's my son. He was my son, you know? There isn't any kind of disharmony or bitterness or anything like that between him and I" but Mercer went on to say it had been about two years since he had seen his son last when they had dinner together.

Preparation for Shooting

Prepared Manifesto

Shortly after police secured the scene on the day of the shooting, law enforcement became aware of the existence of a computer thumb drive the shooter had given to one of the surviving students in the classroom. The shooter told the student he would be spared if he provided an envelope that contained the thumb drive to the police. When the student left the classroom after the shooting stopped, he actually just threw the envelope down on the grass outside the classroom and did not give it directly to the police.

Police began searching for the envelope the student threw down as they exited the classroom. During the investigation, officers learned that a male subject was seen picking up the envelope, opening the envelope, putting something in his pocket, and throwing the envelope away. I obtained an audio recording of an interview with the individual who found the envelope that contained the thumb drive in the grass, a student named James Perry. In the audio interview, Mr. Perry told law enforcement officers that he observed an envelope lying on the grass and he picked it up to see what was inside the envelope. He found a computer thumb drive inside the envelope and he put the thumb drive in his pocket and threw the envelope away. He told police he did not know it was involved in the incident but said that, "I thought it was just somebody's flash drive that some student dropped cause [sic] they were in a panic" (Perry audio recording, 2017). Police seized the thumb drive as evidence and I was able to obtain a copy of the contents of the thumb drive.

Once the police had seized the thumb drive, one officer was assigned to examine the contents of the thumb drive. One of the items on the thumb drive was the shooter's six-page manifesto in which he revealed some of his motivation for committing the shooting. In the

manifesto, the shooter detailed his belief that everyone hated him and he felt he was the most hated person in the world. He wrote about how he was a very lonely person and felt that he would return from the dead as a demon to kill again. The shooter called previous mass shooters "the elite, people who stand with the gods" (Shooter Manifesto, p. 1, 2015). The shooter wrote about how he believed society would wonder what they could have done to prevent this incident, but indicated there was nothing anyone could do. He felt that society would never have been able to give him what he wanted and the only place left for him was in hell (Shooter Manifesto, 2015). The shooter also wrote about the mistakes he felt that previous mass shooters had made:

I have been interested in mass shooters for years. I noticed where they always go wrong is they don't work fast enough and their death toll is not anywhere near where it should be. They shoot wildly instead of targeted blasts. They also don't take on the cops. Why kill other people but you won't take out the cops. (Shooter manifesto, 2015)

He finished the manifesto by listing his favorite music artists, favorite movies, favorite colors and explained that he did not feel he was mentally ill by saying, "Just because I'm in communion with the Dark Forces doesn't mean I'm crazy" (Shooter Manifesto, p. 6, 2015).

Researched Other Active Shooter Incidents

In addition to the shooter's manifesto, investigating officers located several other files on the thumb drive. Those files were links to websites about other mass shooters such as the perpetrators of the Sandy Hook shooting, Colorado movie theatre shooting, and the Virginia Tech shooting.

According to the investigator's reports, the shooter had included links to several articles about the perpetrator and the aftermath of the Sandy Hook shooting. One link was to an article about morbid items found in the perpetrator's room, such as photos of dead bodies, videos depicting suicide, as well as information that advocated for the rights of pedophiles (Shooter Manifesto, 2015). The thumb drive contained another link to an article written by the *New York*

Times that outlined other items found in the Sandy Hook perpetrator's apartment, including multiple firearms, ammunition, knives, and a newspaper clipping about the shooting at Northern Illinois University (Shooter Manifesto, 2015). It also contained a link to the final report of the Sandy Hook shooting written by the Office of the State's Attorney Judicial District of Danbury.

In addition to articles about the Sandy Hook shooter, the thumb drive contained several links to articles about the Virginia Tech shooting, including a link to the final report of the Virginia Tech Review Panel from 2007. This report was one of the two reports found on the thumb drive that I had already cited in the current study's literature review. The thumb drive also contained a link to an article about the Colorado movie theatre shooter describing how he was in solitary confinement after his conviction for the murder of 12 people in 2012 (Shooter manifesto, 2015).

Researched Police Response

In addition to research about previous mass shooters, the investigators found the thumb drive contained links to two articles about police response to active shooters. The first article, "A Study of Active Shooter Incidents in the United States Between 2000 and 2013," (Blair & Schweit, 2014) was the second article on the thumb drive that was cited in the current study's literature review. Additionally, the thumb drive contained a link to an article from the Police Executive Research Forum, an independent research organization that focuses on critical issues in policing titled, "The Police Response to Active Shooter Incidents" (2014). Those two articles were very detailed about specific tactics used by both shooters and law enforcement, which may have influenced the shooter's plan of action.

Firearms Purchase

During the initial response to the shooting, officers on scene located several firearms in the classroom as well as a duffel bag which was left it the men's restroom directly across the hall from the classroom. The duffel bag contained a rifle, additional magazines of ammunition, as well as a ballistic vest. After searching the crime scene and serving a search warrant at the shooter's residence, police located six firearms in the campus crime scene and an additional three firearms at the residence. Officers seized all of the weapons, both at the crime scene as well as at the shooter's residence, and began to research where the shooter had obtained the weapons.

According to police reports, officers located copies of the firearms transaction paperwork from when the shooter purchased all of the weapons he carried to the campus. According to the firearms transaction paperwork, the shooter purchased three firearms, a rifle and two handguns, in 2012. The shooter purchased another handgun in 2013, and purchased the final two handguns in 2015. One of the handguns that the shooter had purchased in 2015, a .380 caliber HiPoint semi-automatic handgun, was purchased just two days before the shooting. I obtained surveillance video from the pawnshop where the shooter purchased the firearm and the video showed the shooter entered the pawnshop, handled the firearm, filled out the paperwork, and left the store with the handgun.

Disposition

Law enforcement officers from 13 agencies responded to the deadliest community college campus shooting in United States history, along with multiple fire agencies and EMS workers. Law enforcement officers collected more than 300 pieces of evidence from the scene of the shooting and from the shooter's residence and interviewed over 150 individuals during the

investigation. In addition, law enforcement officers followed up on more than 400 leads and generated more than 100 police reports.

Nine students, including the professor in the classroom, died as a result of gunshot wounds from a handgun. An additional eight students received at least one gunshot wound but survived the incident and four students present in the classroom escaped without physical injury. The shooter turned his handgun on himself and committed suicide just after engaging the first responding officers in a gun battle. Toxicology reports indicated there were no illegal substances or prescription medication in the shooter's blood at the time of the shooting.

As a result of the investigation, law enforcement determined the shooter in this case acted alone and had not made his intentions known to any family or friends, although the shooter did leave behind a written manifesto in which he outlined some of his motivation for committing mass murder.

Themes

Once I completed the data collection and analysis of the participant interviews, several themes emerged with respect to the law enforcement response to the deadliest shooting on a community college campus in United States history. Themes that emerged surrounded such topics as training for active shooter incidents and the changes to that training over time. Other themes centered on participants expressed disbelief and uncertainty about the actual nature of the call, unfamiliarity with campus, challenges in locating the shooter, chaotic nature of the incident, and the complexity of the investigation. The following section outlines those themes using the data collected during participant interviews.

Training for Active Shooters

One of the questions I asked the participants was about the type of training in active shooter response they had been involved in during their career. Most of the participants interviewed had 15-20 years' experience in law enforcement and several participants indicated they had participated in training on how to respond to an active shooter incident during their career. Some of the participants had prior military experience and indicated their training on active shooters came during that service.

Master Officer Rains mentioned he was an instructor in active shooter response and spoke about the early active shooter training. Rains said, "Early attempts on the active shooter response was you set up a perimeter. You try to assess the situation the best you can, and you wait for special units to come in." Sgt. Eichenbusch also remembered participating in active shooter training through his agency on in his career. Eichenbusch said,

I've had some classroom training over the years, where they just talk about active shooter situations and how to respond to them and different things of that nature. As far as, actual hands on active shooter training, we've incorporated a lot of that into our combat simulations that we do as an agency.

Eichenbusch went on to say that after the active shooter training scenario was over, the use of force, defensive tactics, and firearms instructors would give positive feedback to the participants. He remembered how his early training was basically just, "When you respond to a shooting type of situation to contain, group up, and basically get that area secured off and then come up with the plan and go in."

Detective Sergeant Kaney also remembered the training he received early in his career in active shooter response. Kaney described that training as, "Back in the [19]90s, it was all about containment. It was about containing the situation, don't let it grow...almost like an armed and barricaded type scenario or a hostage standoff." This type of philosophy was common for law

enforcement in the late 1990s, and I have participated in that type of training in my career. It was not until the Columbine High School shooting occurred in 1999 that law enforcement began to shift the response to active shooter incidents.

Prior to the Columbine shooting, protocol for an active shooter situation required officers who arrived at the scene to secure a perimeter and wait for additional backup officers to arrive. Once enough officers arrived and had the necessary equipment to safely enter the building, teams of officers would enter the building to locate and stop the shooter. One of the criticisms of the police who responded to the Columbine shooting was that they waited for additional resources to arrive and that delay of the entry into the building likely resulted in additional loss of life.

Over the next several years, law enforcement training evolved to a philosophy that suggested when the first law enforcement officer arrives at the scene of an active shooter incident, the officer or officers should not delay entry into the building but should go directly toward the shooter. Participants in the current study indicated they had experienced that change in philosophy when it came to training for active shooter response and also indicated that a previous mass shooting at a high school in Colorado had precipitated that change in training philosophy

Change in Training

Many of the participants talked about the change in law enforcement training that happened in the aftermath of the Columbine High School shooting in 1999. After the Columbine High School shooting, law enforcement agencies started to change their active shooter training from a more static style of training, where you secure the scene and wait for special response teams, to focus more on quick response and immediate engagement of the shooter. In addition,

agencies began to incorporate more realistic scenario-based training using simulated weapons and role players.

Detective Sergeant Kaney remembered a change in active shooter training that took place at his agency. He noted that immediately after Columbine, his agency began scenario-based training for responding officers, but it was more geared toward holding a perimeter until a special response team could respond. Over time, the training changed when the agency came to realize that the delay in waiting for the special response teams to arrive could cost lives. Kaney said, "I don't remember when it was, but there was a change in philosophy. We don't have time to wait for the tactical team, so the threat has to be ended well before the tactical team can get there."

Additionally, Detective Sergeant Kaney spoke about scenario training that happened where officers were presented with situations with role players and simulated weapons. Kaney mentioned that their agency had even used teachers from the schools as role players on teacher in-service days so the faculty would be familiar with how law enforcement would respond to such a situation.

Master Officer Rains, who was an active shooter instructor, talked about lessons learned from the Columbine shooting and about how he modified his training tactics. Rains said, "Columbine taught numerous lessons, you know, and victims bled out. They could have been saved had they [law enforcement] had a different response tactic." Master Officer Rains went on to talk about the scenario-based training he offers at his agency. Rains said, "We are big in scenario based training...the body's not gonna go where the mind hasn't been. I tell people in training a lot, by making it [training] more realistic, those guys are ready to go in and face that."

When asked how training for active shooters had changed, Master Officer Powers said, "I know way back, when they used to preach if you responded to an active shooter, you would always standby for a second officer. Now they teach if you're the first officer there, you go in towards the gunfire." Powers also talked about how his agency began to do scenario-based training where they used simulated weapons and role players to see how officers responded when someone was shooting at them.

In the aftermath of the Columbine High School shooting in Colorado, law enforcement agencies began to rethink their response to active shooter incidents. Many agencies moved from training their officers to respond to an active shooter incident, secure the scene, and wait for additional officers and special response units, to training their officers that the first officer on scene should immediately enter and engage the shooter.

Disbelief/Uncertainty

After completing the data analysis and coding of the participant interviews, several other themes emerged with respect to the law enforcement response to the deadliest community college campus shooting. Another theme expressed by participants when asked about what went through their mind when the call came in was a certain level of disbelief or uncertainty of the actual nature of the call. As 911 calls flooded into the dispatch center, Detective Sergeant Joe Kaney of the Roseburg Police Department was already at work for the day. Detective Todd Spingath had adjusted his shift to arrive at work just before 10:30 due to a scheduled training class and met Detective Sergeant Kaney in the bottom portion of the building. On that particular morning, the detectives decided to go for a cup of coffee. Detective Sergeant Kaney remembered:

So, we were actually—the news, I know said we were out working an investigation or we were out doing follow up. In reality, we were on our way to Starbucks when the call

came out. I don't know how, I think the news maybe jumped to conclusions but, yeah, so we were on our way for our morning Starbucks run. (Kaney interview, 2017)

Detective Sergeant Kaney pointed out that it was important for law enforcement officers to remember that no matter what activity they were involved in, even if they are doing something such as going to get a cup of coffee that a major incident such as an active shooter could happen at any time and on any day.

Normally, when police officers leave the office, they each take their own police vehicles, but on that morning, the detectives left the police department in one vehicle. Detective Spingath remembered how the detectives ended up riding together that morning:

My CID [Criminal Investigation Division] car, we have take-home cars, so I keep my armory in my trunk. I've got my sniper system; I've got my AR back there. All my SWAT gear is back there in the trunk. So we ended up taking Joe's [Detective Sergeant Kaney] rig and we are heading to our coffee place. (Spingath interview, 2017)

The initial dispatch notification about the active shooter came over the radio on the Douglas County Sheriff's Office frequency. Detective Sergeant Kaney explained, "We heard a County unit [Douglas County Sheriff], and we are on a shared dispatch system. So we heard a County unit get a call of an active shooter at Umpqua Community College." (Kaney interview, 2017) When asked what went through his mind when he heard the call, Detective Sergeant Kaney said,

I don't know if Todd [Detective Spingath] and I verbalized it to each other, but at first, I remember thinking, this is probably some guy that's killing his girlfriend or significant other. I thought, this is probably some kind of a domestic dispute or something that is going on. That's kinda what's running through my head. That somebody is there shooting somebody over some kind of dispute. (Kaney interview, 2017)

Detective Spingath remembered what was going on in his mind when the call came over the radio:

We were running lights and sirens, but its [the vehicle] is unmarked, and I remember thinking at this point, shit, man. I am not in my car. I've got all my stuff in my car and now I am starting to do a round count in my head. Well, I have my pistol and I've got this

single magazine and cuff pouch. I am doing a little ammo count in my head and I don't have a vest with me. (Spingath interview, 2017)

As the detectives got closer to the college, dispatch continued to provide information about the shooting. Dispatch advised there were at least two victims down and continual shots were being heard. Detective Sergeant Kaney remembered, "It slowly starts to sink in that, oh, this is actually an active shooter. This is the real deal. This probably isn't just one person there to kill another person" (Kaney interview, 2017).

Other law enforcement officers interviewed also remembered what went through their minds when the call of the active shooter came out. Sergeant Dennis Chrisenbery of the Roseburg Police Department was the corporal in charge of the other Roseburg officers that day. Sgt. Chrisenbery was in the parking lot of the police department:

I remember being at the parking lot and hearing the radio call come out and I kind of look at another officer like, 'If this is real. Why are they only dispatching one officer? Did we miss something? Is there training going on this morning?' Because if that was a real dispatch, I would, with other major calls, we usually hear dispatch dispatch any and all available officers or they'll dispatch several different radio units. This one came out and it sticks in my mind that they only dispatched one unit. So I just remember that being something bizarre and unusual given the circumstances. (Chrisenbery interview, 2017)

Master Officer Vaughn Rains of the Sutherlin Police Department was field training a new officer that day and had just finished with a traffic stop. When they got back in their vehicle, they noticed the MDC, or mobile data computer, in the car was showing an alert of active shooter at UCC. Master Officer Rains remembered:

We kinda looked at each other, there was nothing on the radio yet and it was —I can't remember if it was the first day of duck hunting season, and along the river was the school [UCC] and it was not uncommon for duck hunters to be around there. So, I am thinking maybe it's a duck hunter. We always train for this, you know, and the mentality is, around here, for a lot of people, 'Oh, it will never happen here.' And then, now that it's happened, 'Oh, it won't happen again.' (Rains interview, 2017)

Master Office Rains also remembered something specific about the dispatcher who was giving out the call on the radio. Normally, this dispatcher would talk very rapidly:

I knew something was wrong because this particular dispatcher, I know her, and she talks a hundred miles an hour. It's like she drank twenty Red Bulls before work and she's just on fire all the time. But this time she was dead calm. Talked very softly and so in the back of my mind I know something is up. (Rains interview, 2017)

Master Officer Powers of the Roseburg Police Department was on duty that day and remembered what went through his mind when the call of the active shooter came over the radio:

I remember that we only had two officers and a watch commander, so it was only three of us working for the whole city, which is typical. It was like 10:15 and I had walked into a Little Caesar's, because you know, you grab something when you can because it gets so busy. I had ordered a couple of pizzas for myself and a couple of other guys I was working with. And then, while in there, all I heard was, 'Active shooter,' and I thought it was odd because the dispatch said active shooter and then there was—I mean a pause seemed like it was forever. And I'm just like, I didn't know if it was a training. I didn't know what it was. He just said, active shooter. So I stepped out of the Little Caesar's and that's when they said there was an active shooter in a classroom at UCC. (Powers interview, 2017)

Master Officer Powers also remembered thinking for a moment about whether or not he should respond since it would leave the city unprotected if all of the officers left the city. UCC is located about five miles outside of Roseburg, which meant the college was actually just outside of his jurisdiction. That thought was fleeting, however, because shortly after he considered that, "I will never forget. Deputy Zambrano, who was a forest timber deputy, was driving a truck and I remember him passing me. He was just hauling so I just tucked in behind him in my patrol car and we went." (Powers interview, 2017)

Lieutenant Chris Merrifield of the Douglas County Sheriff's Office was at work that morning when he noticed a couple of officers running by his desk, which was not an uncommon occurrence at the Sheriff's Office. Many times when high priority calls come into a law

enforcement agency, available officers move rapidly to their vehicles to respond to the call. In this instance, Lieutenant Merrifield remembered not knowing exactly what was going on:

We don't know necessarily what they're responding to, but I do remember somebody yell out something like there's a shooting at UCC. We just—all detectives just started responding and as we're responding, we're finding out that it's a- that there's an active shooter. The first thought of this is this is going to be a one on one thing that happened at the college. A lot of times it was a domestic type of thing that turns into a shooing. Typically, that's kind of our mindset of what it's going to be. (Merrifield interview, 2017)

However, in this case, as Lt. Merrifield and other officers were responding to the scene, they found out through dispatch that there actually was an active shooter, that they were shooting victims, and ultimately dispatch informed them that the shooter was down [neutralized].

Sgt. Jeff Eichenbusch was the Public Information Officer for the Roseburg Police

Department on the day of the shooting, however, he was actually off-duty and at home when the call came in. Sgt. Eichenbusch remembered a relative sent him a text message and asked him if he had heard about the shooting at UCC. Sgt. Eichenbusch remembered thinking:

'What? What are you talking about?' I started making some phone calls and found out it was legitimate. Then I was just kind of like, 'Wow', I mean this is, this is real. I thought they had some bad information but then, when I get ahold of my contacts, they're like, 'No, it's really happened.' I called my captain and said, 'Hey, I'm coming in', even though it was not in the city limits of Roseburg, it's within a couple of miles and if you knew our area, we work really closely with all of our outlying jurisdictions. I knew this was going to be a group effort for all local law enforcement, plus I know federal agencies and state agencies were on their way. (Eichenbusch interview, 2017)

Although law enforcement officers are trained to expect the unexpected, participants in the current study indicated they experienced some level of disbelief or uncertainty whether there was actually an active shooter at the UCC campus and not some other explanation for the call. It is important for officers to expect the unexpected and not delay the response to a possible active shooter incident as that delay in response could result in further loss of life.

Unfamiliarity With Campus

Another theme expressed by the participants was an unfamiliarity with the campus and uncertainty of exactly where to go on campus. Some of the participants did not actually know the names of the buildings or the exact layout of the campus, which caused some participants a degree of anxiety not knowing the quickest and safest way to respond to the active shooter incident.

Given the fact that the Umpqua Community College campus is not located within any local city's boundaries, the Douglas County Sheriff's Office had law enforcement jurisdiction over the campus. Not surprisingly, several of the participants who responded to the college were unfamiliar with the campus since it was located outside their area of responsibility. Law enforcement officers tend to be familiar with those schools and other buildings within their city limits but are seldom called to respond to locations outside their jurisdiction.

Sgt. Chrisenbery from the Roseburg Police Department followed several officers on the way to the campus but was unsure exactly where the buildings on campus were:

I remember thinking, I really don't know the names of those buildings up in the college, and I didn't like that situation because I really didn't know what the best approach would be in terms of getting there quickly and getting close but not getting too close so that we could deploy properly and safely. Thankfully, Officer Dahl was asking the same questions and he was more familiar with the campus than I was because I think he had some family members that recently attended out there. (Chrisenbery interview, 2017)

Once on scene, Sgt. Chrisenbery and other officers moved toward Snyder Hall, but his lack of knowledge of the layout of the campus that continued to concern him. Sgt. Chrisenbery said, "Not knowing what building we were going to was unnerving because it really felt like it was a disadvantage."

Neither Master Officer Rains nor his police trainee were familiar with the layout of the campus, even though Master Officer Rains had participated in training at the Reserve Police

Academy on the campus. Master Officer Rains stated, "I taught active shooter at that college but I've never ventured past their gym area.... I didn't know the lay of the land. They kept saying Snyder Hall and the science building, I had no idea." Master Officer Rains knew his trainee grew up in the Roseburg area, but when he asked the trainee where Snyder Hall or the science building was, the trainee had no idea. Rains and the trainee exited their vehicle and could hear gunshots but did not know where they were. Master Officer Rains said, "We jumped out and we're all kind of lost, and finally I see someone from Roseburg [Police Department] running towards a corner, so we followed him." Master Officer Tony Powers was also unfamiliar with the campus even though he had been a student at one time:

I went to UCC myself. I got a scholarship at my senior high school and I went up to UCC but I couldn't tell you where Snyder Hall was. But we ended up parking a distance from it. I grabbed my AR and me and Zebrano ran toward where people were pointing. I remember getting to the classroom and the way the classroom is set up, there were like three or four classrooms joined and then if you walk out the main doors, it was like a breezeway that's covered. (Powers interview, 2017)

As Detective Sergeant Kaney and Detective Spingath got closer to the campus of UCC, the detectives concluded that they would be the first officers on the scene of this incident.

Detective Spingath talked about how even though he had taught part-time at the Reserve Officer academy on campus, he also was unsure of the location of Snyder Hall, Detective Spingath remembered:

We got a little bit more information that there was—they'd mentioned Snyder Hall specifically, which I wasn't really sure where it was at. I think Joe [Detective Sergeant Kaney] had a fairly good knowledge of where it was. We both teach out there. (Spingath interview, 2017)

In fact, only one of the participants in the current study mentioned they were familiar with the location of the building where the shooter was reported to be. Detective Sergeant Kaney was an adjunct instructor in the Criminal Justice program at the college

I've been teaching there for about 10 years, and so, I remember being really worried because this could be going on anywhere. And fortunately, as we start getting closer, that's when dispatch put out that it's happening at Snyder Hall and I knew where that was. (Kaney interview, 2017)

Given the fact that the campus of UCC was located outside the jurisdiction of many of the officers who responded to the shooting, it was not surprising to learn that officers were unfamiliar with the campus layout and the names of the individual buildings. Fortunately, one of the first officers who arrived on scene was an adjunct faculty member who taught class on campus and knew where to go.

Building Design

Another theme that emerged from participants was the difficulty in actually seeing the shooter once they arrived on scene and began taking fire from the suspect. The main reason participants had difficulty seeing the shooter was because of the layout of the building.

As other officers converged on the campus, Detective Sergeant Kaney and Detective Spingath arrived near Snyder Hall and immediately began to take fire from the shooter, who was able to take advantage of the layout of the building and the officers' unfamiliarity with the building.

Detective Sergeant Kaney stated:

So I pull up and I put the car in park and right as I am putting the car in park, Detective Spingath says, 'Shit, gunshot!' I heard something but I was too busy ratcheting the shift lever into park and so—I guess we took a round or there was a gunshot at the moment we pulled up. So he and I kind of rolled out of our car. So we didn't take time to vest up. I remember at that time, this is going to sound silly, but I threw my car keys—I think into like a flowerbed adjacent to me. I had this strange weird thought in my mind that if I get killed, I don't want the guy to be able to get my car. (Kaney interview, 2017)

Detective Spingath also remembered arriving on scene to the sounds of gunfire: "So we pull into the parking lot from the main road, and no sooner than the Explorer goes into park, through the closed windows, I hear probably five gunshots." The detectives then headed toward Snyder Hall where they could see debris from the windows where the shooter was firing at them. Neither

officer was able to see the shooter at that point. As the officers approached Snyder Hall,

Detective Spingath remembered taking cover behind a vehicle in the parking lot and Detective

Sergeant Kaney took a position to Detective Spingath's left.

The main reason the officers had trouble seeing the shooter was because of the design of the building where the shooter was located. Detective Sergeant Kaney described the building and the doorway where the shooter was standing:

He was shooting from a doorway and adjacent to this doorway, there's like a breezeway, a covered breezeway. Then there's the corner of another structure that is attached to the that breezeway, which was actually the restrooms. And so, basically, what he was able to do was pop out the door, look out into the parking lot, see us approach but he is almost—the edge of the structure that is the restrooms is almost completely blocking our view of him. (Kaney interview, 2017)

Detective Spingath also described the difficulty of locating the shooter because of the layout of the building:

We probably got about halfway through the parking lot where he [shooter] was at the front entrance of Snyder Hall. The shooting starts toward us. I hear at least two rounds whiz past us and then there was debris which ended up being the blinds from inside the classroom. So we split and Joe [Detective Sergeant Kaney] went to my left. The architecture of the building—you know what a Pizza Hut looks like, kind of that 70's style architecture? So that's basically what this building looks like, just on a larger scale. (Spingath interview, 2017)

Detective Sergeant Kaney remembered how he finally saw the shooter the next time he [shooter] fired a shot: "Then he shot and I saw a little bit of movement around where that smoke was...I'm seeing that gun, I'm seeing a bit of his shoulder." Kaney went on to say, "And it was at that point where I was kind of like, 'Ah, there you are.' And so then I fired two shots, in pretty rapid succession." Detective Spingath also fired at the shooter but there was a bit of a delay because, "I knew this guy could see me so I relocated to where this van was." Spingath saw the shooter through the partially open door and it appeared the shooter was firing at Detective Sergeant Kaney. He [Spingath] heard two shots from his left, which he assumed, came from Kaney.

Detective Spingath said, "I could hear debris hit the cars where I was again. So basically I squeezed off one round while I was on the move" to get out of the way of the shooter.

Since the detectives had to split up in order to keep from being shot and to gain a better view of the location of the shooter, Detective Spingath was not sure where Detective Sergeant Kaney was or if he had been hit. Detective Spingath remembered holding his position and trying to see if Detective Sergeant Kaney was okay. He yelled to Kaney but was not able to see or hear him. While he was holding his position, Spingath remembered:

I remember a really small-statured Asian girl came out. She was holding the side of her face, and I see blood on her face and on her hand, and she just came out in a daze. I called her to me, told her to run, she ran over to where I was, and I couldn't tell how bad her injury was by just seeing the blood on it. I asked her where he [shooter] was and she said she thinks he shot himself, and that he was at the front of the class. (Spingath interview, 2017)

Detective Sergeant Kaney also recalled seeing a female, with an apparent wound to her hand exit the classroom along with another male subject. The male subject did have blood on him but Kaney did not think he was injured. They [Kaney and Spingath] gave the subjects commands to hold their hands where they could be seen, but they [students] ran toward Detective Spingath and one of them yelled that the shooter was down.

The first responding officers who engaged the shooter indicated they had difficulty locating the shooter when they arrived on scene because of the building the shooter was in.

Participants described the building as having a breezeway between classrooms that allowed the shooter to easily lean out of the classroom to shoot at them, but made it difficult to see the shooter when he did. It was only after seeing the smoke from the muzzle of the shooter's firearm that the detectives were able to locate the subject and return fire.

Chaos on the Scene

Another theme expressed by participants was the chaotic nature of the scene when they arrived. Officers converged on the scene, but as previously mentioned, some of the participants were not familiar with the layout of the campus, providing a slight delay in the response to the building where the shooter was located. Upon determining the location of the shooter and making their way to the building, several participants remembered the chaotic nature of the scene.

Sgt. Chrisenbery recalled, "Once we approached Snyder [Hall], we started seeing just absolute chaos with students kind of all over the place." At this point, Sgt. Chrisenbery and about six to eight other officers were moving as a group toward the classroom. Since he was in the second wave of responding officers, he could hear other law enforcement officers yelling and someone yelled the shooter was down. Sgt. Chrisenbery recalled:

But really, there was so much chaos and students screaming and running all over the place and people bleeding. So we were just kind of moving forward, trying to move forward safely, as best as we could, but move quickly because we didn't hear any shooting. I remember because I've been to a scene before where the shooting was still going on and I just remember I'm not hearing shooting so that was probably a little bit of a good sign. (Chrisenbery interview, 2017)

Master Officer Powers also recalled the scene when he got close to Snyder Hall. As he approached Snyder Hall, Powers could see there were already some other law enforcement officers outside the classroom tending to victims in the breezeway. Master Officer Powers saw a man lying on his side with his hands up and screaming for help. He could also see officers administering CPR to an individual in the doorway of the classroom. Sgt. Chrisenbery also recalled seeing the man lying in the breezeway outside the classroom. Chrisenbery said, "I remember feeling bad because I had to just walk, I had to keep moving past him because it [scene] wasn't secure yet and I found out later that was Chris Mintz." Sgt. Chrisenbery went on

to say, "He was one of the students there that sort of distracted the shooter and took a whole bunch of rounds [was shot several times] right there in between the classrooms."

The initial chaos some participants described on the campus of UCC was not limited to the campus itself. Sgt. Eichenbusch, the public information officer (PIO) for the Roseburg Police Department, responded to the reunification center set up at the local fairgrounds, several miles away from the campus. The reunification center was the location designated for relatives and others to meet with law enforcement and receive information about their family members who were on campus at the time of the shooting. The fairgrounds were also the location where students from campus were transported once being released from the scene. Sgt. Eichenbusch remembered how when he arrived on scene:

I hate to say this but initially it was chaotic, it was a mess. We, at the time I got there, there were Douglas County Sheriff's Office deputies, supervisors, people like that. There were some people from other outlying, smaller agencies. There were federal investigators that were showing up from the DEA and FBI, and I mean there were a lot of people there initially. It was kind of chaotic and it wasn't real clear on who was in charge and what we were going to do next. (Eichenbusch interview, 2017)

When asked why he felt the scene at the reunification center was as chaotic as he described, Sgt. Eichenbusch said:

It [the shooting] wasn't expected. It [the shooting] was one of those things where obviously we knew we weren't immune to it and that it could happen. Of course, we do a lot of training with active shooters and guys on the ground, but as far as the aftermath, the stuff you do afterwards, it was all new territory. That was kind of learning on the fly. (Eichenbusch interview 2017).

Since the campus of Umpqua Community College is located just outside of Roseburg, Oregon, the Douglas County Sheriff's Office had jurisdiction over the investigation. Lt. Merrifield of the Douglas County Sheriff's office described what he remembered about the scene when he arrived:

Probably within about a mile or so of getting to the campus, I heard on the radio that they were Code 4 [secure], the suspect was down. I arrived and the chaos, there were already a lot of people there. You got students moving around, we got a college campus, and it's

chaos. I think there were a lot of—my impression was, there were a lot of people in shock, almost kinda just standing around, not even really sure of what to do or what happened. (Merrifield interview, 2017)

Detective Sergeant Kaney approached Lt. Merrifield and told him he [Kaney] was sorry he was not going to be able to help him in the investigation because he was one of the officers involved in the shooting. Normally, Detective Sergeant Kaney would work closely with Lt. Merrifield on major cases, but in this incident, since he was one of the officers who shot at the suspect, he was not able to participate in the investigation.

Although law enforcement officers routinely respond to major incidents and are accustomed to some degree of chaos at those events, participants in the current study expressed a degree of surprise as to the amount of chaos they observed when they arrived on scene. Some participants described seeing students running around, with some of them screaming and some of them bleeding, as well as other students lying on the ground near the classroom. In addition to chaos at the scene of the shooting, participants described the chaotic nature at the local fairgrounds where numerous law enforcement agencies had gathered along with students and family members of students.

Enormity of the Investigation

Once he arrived, Lt. Merrifield took control of the scene and began to organize the medical response, began to secure the scene, and started to coordinate with tactical teams in order to sweep the campus for additional suspects. Additionally, Lt. Merrifield organized the evacuation of victims and witnesses, identified personnel to work the crime scene, and began preparing for the next phase of the investigation, setting up an investigation command post. Lt. Merrifield described the challenges with actually organizing an incident of that magnitude and in addition knew "all of the people [media, family, other agencies] were going to start arriving; they

are showing up to do their job or help you with yours." Lt. Merrifield described how in his previous experience with large-scale incidents, when those individuals started to show up "they are doing their job, but doing their job requires them to interact with you, which pulls you away from what you need to do, so they are an additional drain on your resources."

Lt. Merrifield set up the investigative command post at the Oregon State Police Office that was located about a mile away from campus. Lt. Merrifield remembered, "We were able to set up a command post there, start our investigative command post, started to get people organized, start working on assignments, and start working on identifying victims." Merrifield stated, "In retrospect, we could have made the process easier for ourselves if we had set up a formal Emergency Operations Center (EOC) early on, but we ended up doing many of the EOC duties within the Investigative Command Post." According to Merrifield, other EOC duties were informally handled at the Sheriff's Office. He also said that because the Douglas County Sheriff's Office is a small agency with limited resources, they had to rely on local responders to fulfill multiple roles. For example, a local officer who responded to the initial incident might have later been assigned to handle other duties to assist in the investigation. Merrifield stated, "Our local responders did an amazing job of fulfilling multiple roles, even in the face of something so devastating." Additionally, Lt. Merrifield remembered that even when additional officers arrived to assist, many of the first responding officers who could have been relieved or reassigned actually refused to be relieved and continued to work on other tasks that needed to be accomplished.

Although Lt. Merrifield had experience with previous large-scale investigations and knew what to expect, he realized the magnitude of this incident was beyond anything he had experienced. Merrifield said he prepared himself to recognize the scope of what was to come,

and realized it was going to be more then he could understand. This helped him work through what was to follow. Merrifield said, "You just have a realization that this is going to be so much bigger than what you can initially understand. This is going to grow...things are going to happen that I don't even know are going to happen." Merrifield indicated that from an investigative standpoint they were not trying to find a suspect, but because of the enormity of the event, and the resulting necessary investigation, the aftermath was overwhelming. Lt. Merrifield went on to say it helped knowing that other agencies and officers were there to offer assistance in the investigation. He also said it helped knowing that other agencies and officers were there to offer assistance in the investigation and noted that the outside agency response and resources they brought to the investigation were beyond measure. Merrifield indicated that because of those agencies, much of the work put into the investigation was completed in a matter of days, rather than weeks. However, he cautioned that the primary agency responsible for the investigation should realize that those outside agencies and resources will leave at some point and there will still be a tremendous amount of work to do. Merrifield suggested the primary agency should prioritize tasks and utilize those outside resources while they are available.

Lessons Learned

When asked about the biggest lessons learned from the response to the deadliest community college campus shooting, three main themes emerged from the participant's responses. Those themes included: (a) the need for officers to continually train and be prepared for an active shooter incident; (b) the need for communication between law enforcement agencies; and (c) the need for law enforcement to collaborate with higher education.

Preparation/Training

Many of the participants in the current study spoke about the need for law enforcement officers to continually train and be prepared for an active shooter incident. Detective Sergeant Kaney talked about preparation for an active shooter incident and the need to become familiar with the institution where the incident may occur. He stated:

My department, we are only five miles down the highway from this campus but we have never given our officers a walkthrough of the campus, or we've never trained them on what the layout of the campus was, what buildings were where, and what the best route would be. And in my case, I happened to know where that building [Snyder Hall] was, but as we were engaging the shooter, there was another team of officers there, probably 10 officers arriving on scene and they were on another part of the campus because they did not know where to go.

In other words, law enforcement agencies who have institutions of higher education in or near their jurisdiction should take the time to become familiar with the overall layout of the campus and the names of the buildings.

Detective Sergeant Kaney also recounted how his response to this incident was influenced by some research he had previously done about active shooter response. Kaney remembered reading an article in a police magazine about actives shooters, specifically campus shooters, which spoke about how in previous mass shooting incidents, a high percentage of the time when law enforcement engaged an active shooter, the shooter took their own life. Kaney stated:

It [the article] talked about how in most situations when law enforcement arrives on scene and engages the shooter, then there's no more loss of innocent life. And I remember, that greatly influenced my response to this. And I remember kind of thinking about that article periodically after reading it. So, you go in there and you find the suspect, make sure he knows law enforcement is on the scene, engage him as quickly as you can and you're gonna limit his movement and therefore limit his access to additional victims.

Given the fact that Detective Sergeant Kaney knew the location of Snyder Hall and the fact that he had previously researched law enforcement response to previous mass shootings, it is likely he was able to save lives by being prepared for an active shooter situation.

Detective Spingath also spoke about the need to be prepared at all times because law enforcement officers never know when they might be called to respond to an active shooter incident, either while on duty or off. Spingath stated, "Be prepared with what you have, no matter what, whether it's something on duty or something off duty. Don't take anything for granted." Detective Spingath also noted that even if officers routinely prepare themselves, sometimes things do not go as planned. On the day of the shooting, Detective Spingath rode with Detective Sergeant Kaney to get a cup of coffee and left his patrol vehicle at the police station. Spingath said, "I didn't have a vest, I didn't have enough ammo and the only thing I could really rely on was my past training and experience" since he found himself without the resources in his own vehicle

Detective Spingath also talked about preparation and how he changed his duty gear setup after the incident. On the day of the incident, Detective Spingath was wearing normal dress clothes, his sidearm, and a combination magazine and handcuff case, which limited the number of rounds he was carrying. Detective Spingath said, "I can tell you, that handcuff magazine pouch I had, that's like in a closet floor somewhere. I will certainly never, never only carry one magazine with me ever again!"

Sgt. Chrisenbery also talked about how in his own preparation for incidents such as an active shooter, he had prepared a "Go Bag" which is basically a small bag with emergency supplies such as extra ammunition, knee pads, food, water, and even a tourniquet. He prepared this bag so he would have extra supplies in the event he was stuck at a major incident for an

extended time. Chrisenbery also spoke about the concept of mental preparation and its importance for responding officers:

To me, the mental training, in some ways, is almost equally valuable as the actual training itself because I am a firm believer that if you train in your mind that you're going to have to resolve and you're going to have to take decisive action, I think it shortens your actual hesitation or response time when you actually get there. I think it just better prepares you to just go into training mode and not have to rely on all the crazy emotions that may want to run around in your head.

Although Sgt. Chrisenbery had taken the time to prepare additional duty gear to be ready for the response to an active shooter incident, when he arrived on scene he failed to grab the bag when he left his patrol car, leaving those additional resources behind. Since he had just recently prepared the items, it is likely he had not had enough time to train himself to remember to pick it up when he arrived on scene.

Master Officer Rains said the biggest lesson he learned from his experience with his response to the incident was the need for fire, EMS, and law enforcement to train together. He spoke about how training with other public service agencies would be beneficial so that during a critical incident they could "get these guys on that same sheet of music that when I go through the door, I know what this guy's gonna do." In other words, if agencies train together, they would already be familiar with each other and would understand what the other agencies would likely do when they arrived on scene.

Sgt. Eichenbusch also spoke about the need for training, but from a different perspective than some other participants. Sgt. Eichenbusch believed that law enforcement officers who responded to this event to be well trained and prepared to end the threat, but had not trained or prepared for what to do once the shooter had been stopped. Eichenbusch said:

I have no doubt that our guys are trained to respond to the threat and to deal with it. To get the incident stopped, but it is from that point forward I think where we need most of our training and communication, especially between different types of community

shareholders. Like the college, for example. They didn't think about what they're going to do after there's a shooting on campus. They figured the police will come in and take care of everything but it doesn't quite work that way. It's a lot better figuring that out when you're doing training then it is when the real incident is happening.

When asked how law enforcement and colleges could make that happen, Sgt. Eichenbusch said he would try to bring in as large a group of shareholders as he could. He listed law enforcement, fire, medical, local hospital, the VA hospital, and the college. Eichenbusch stated:

Get all those shareholders on board and then have those discussions and go through exactly what would happen if X happened, then what are we going to do as a group and what areas are we deficient in. Where do we need to make some changes or just be more prepared for?

In other words, Eichenbusch suggested that the need to train for the response to an active shooter incident was important; however, he felt that it was also important for agencies to train for the things that will happen once the shooting stopped and the investigation begins.

Lt. Merrifield talked about how many agencies do not think that they will ever be involved in such an incident and have not prepared to do so. Merrifield said, "It's not a part of daily life, and so, there's just recognizing or having an awareness that it could happen to you even when you don't think it's going to happen to you." Additionally, Lt. Merrifield talked about how higher education institutions should have an emergency plan in place and that he was not sure that UCC had that plan in place. Merrifield said, "I would probably say from my experience, what I saw institution-wise, I would say prepare yourself. Have an emergency operation plan that somebody knows where it is at if you have to activate it."

Participants in the current study indicated that both physical and mental training for response to an active shooter helped them in their response to the shooting at UCC. For example, one participant talked about preparing an emergency supply kit to take to the scene of an active shooter in the event they were required to stay in one location for an extended period. Another

participant indicated they had mentally prepared themselves for such an incident and that mental training assisted them with the actual response to the shooting.

Communication

Another theme that developed when participants were asked about lessons learned in the response to the deadliest community college campus shooting was the need for communication. Master Officer Powers talked about communication as being the biggest lesson he learned in the incident, and how agencies need to be able to talk to each other in order to be aware of what is happening around them. When the call of the active shooter on campus came into dispatch, multiple police agencies responded to the incident, but the closest agency to the campus, the Oregon State Police, were initially unaware of the shooting because they operated on a different radio frequency than other agencies. Master Officer Powers said,

Right down the street, right off the main road [to UCC], there is a new Oregon State Police [building], one of their posts is there. I've heard rumors that somebody had to drive by there and inform them because we are not on the same regular channel as their department is, you know, they have their own dispatcher. And I think somebody had to drive by and let them know there was a shooting going on at the UCC.

Had the Oregon State Police been dispatched on the same radio system as other law enforcement agencies, it is possible the response time to the incident would have been reduced since the OSP office is roughly one mile away from the UCC campus. Reduction in response time may save lives since officers nearer the incident would get to the scene of the shooting faster and potentially stop a shooter sooner.

Sgt. Eichenbusch suggested it was important for agencies who are likely to respond to an active shooter incident to communicate with each other prior to such an event. Sgt. Eichenbusch said, "I'd probably have to say it's just to keep communicating and training. A lot of times when we do EOC training in our region, whether it'd be for floods or natural disaster whatever, we

need to have those talks and those conversations and get those questions be answered before something happens."

The theme of communication is important to not only law enforcement agencies who respond to active shooter incidents, but to all public service agencies. After the September 11, 2001 terrorist attack on the World Trade Center in New York City, law enforcement and other public service agencies in the United States realized that the inability to communicate with the other agencies who responded to that large-scale disaster created significant challenges in disseminating information. Unfortunately, over 14 years later, participants in the current study indicated a possible delay in response by at least one law enforcement agency because that agency operated on a different dispatch frequency than the other agencies.

Collaboration

Another theme that developed when participants were asked about the biggest lessons learned was the need for collaboration between all stakeholders, including law enforcement, higher education representatives, and even the state and local legislators. Master Officer Rains agreed and described a disconnect between law enforcement and higher education in Oregon. Rains said,

One thing I have noticed in Oregon, you know, there is a separation between education and law enforcement. For educators, security is not their priority. It's not on their priority list; it's probably number 100 out of 100. But they need to take a look at that and say, "Hey, maybe we need to be making an effort to understand and work with law enforcement and train with them so that we know what to expect from them."

In other words, if higher education institutions have not made security on their campus a top priority, the institutions should reach out to the local law enforcement agencies who would respond to an incident on campus and work together to prepare in the event it were to happen. By

training and working together, the campus community would become familiar with what to expect from law enforcement when they arrived on the scene of an active shooter incident.

Detective Spingath also spoke about the importance of training and of collaboration with higher education institutions for that training. Spingath suggested higher education administrators fail to recognize the potential for an active shooter incident on campus, therefore, it is unlikely those administrators will take steps to prepare for such an incident:

The obstacles always fall in kind of the administrative loops where, whatever mindset they're in, they live in their little pink fluffy cloud of, "Well, nothing like that's gonna happen here." So joint training [with educators] there has to have an educational training aspect in this. You know, train, train with one another, be familiar with the campuses, be familiar with the personnel there. I think police departments don't have a problem bringing people up to speed on security issues.

In other words, higher education administrators should seek to collaborate with law enforcement to train for a potential active shooter situation on their campus, even though the event is unlikely to occur.

Sgt. Chrisenbery also talked about the need for collaboration between law enforcement agencies and with practitioners of higher education. Sgt. Chrisenbery noted:

So at the highest levels, we probably need to take a hard look at how we're going about keeping our folks safe. And it's going to need to be collaborative with our legislators, our politicians involved, and our school administrators. We need to continue to collaborate across agencies and across borders to come up with the most viable ways to prevent these things from happening. You can't prevent everything, but at the same time, it just needs to be a priority and not go to the wayside just because we have had a couple of good years in our area.

Lt. Merrifield agreed with other participants who suggested law enforcement and institutions of higher education should work together in training for the response to an incident on campus. Lt. Merrifield stated colleges should find out:

How could we do that? How do you liaison with the [law enforcement] responders and how do you communicate with the responders and share with them those kinds of things? Who has access to having a master key that could get the cops in every single room to

clear the campus. Do you have a way to do surveillance? Do you have electronic keys? Do you have pass keys? Where are those located at? Those kind of little details.

Lt. Merrifield suggested the benefit of collaboration between law enforcement and higher education would be the ability to quickly and safely evacuate individuals on campus. Merrifield explained that when the tactical teams were trying to clear different buildings, some people refused to open the door. He felt this was because the individuals were not aware that it was law enforcement trying to rescue them since they had never been trained on what to expect from law enforcement in the event such an incident occurred. Lt. Merrifield recommended that institutions keep an updated emergency operations plan available, with several copies at different locations on campus, so depending on what area is affected, there should be a copy available to find.

When asked about the biggest lessons learned from the response to the campus shooting at UCC, participants shared several examples which centered on three themes. One theme was the need for law enforcement to continually train and prepare for an active shooter incident, even though it may never actually happen. Another theme was the need for law enforcement agencies to be able to communicate with each other on the same radio system and for communication between entities who are likely to respond to an active shooter incident. Additionally, participants indicated the need for collaboration between law enforcement and institutions of higher education so that each entity learns what to expect from each other in the event an active shooter situation occurs.

Chapter Summary

The purpose of the present study was to examine the law enforcement response to the deadliest community college campus shooting in history. I interviewed seven law enforcement officers who responded to or were closely involved with the response to the incident. I also examined more than 1,500 pages of incident reports from law enforcement agencies, more than

600 crime scene photos, more than five hours of audio recordings as well as the documents left by the shooter in his manifesto. Several themes emerged when examining that response including the previous experience in active shooter training as well as changes that occurred in active shooter training after the Columbine High School shooting. Additionally other themes emerged such as law enforcement officer's disbelief or uncertainty of the actual nature of the call, law enforcement's unfamiliarity with the layout of the campus when responding to the call, and the significant amount of chaos that ensued when officers eventually arrived on scene.

Finally, when asked about the biggest lessons that they learned from their response to the campus shooting at UCC, participants shared several examples that centered on three themes. One theme was the need for law enforcement to continually train and prepare for an active shooter incident, even though it may never actually happen. Another theme was the need for law enforcement agencies to be able to communicate with each other on the same radio system and for communication between entities who are likely to respond to an active shooter incident.

Additionally, participants indicated the need for collaboration between law enforcement and institutes of higher education so that each entity learns what to expect from each other in the event an active shooter situation occurs. It was those themes and lessons learned by the officers that informed the present study's conclusions and recommendations for law enforcement and higher education discussed in Chapter 5.

CHAPTER V DISCUSSIONS AND IMPLICATIONS

Overview of the Study

While relatively rare, mass shootings on campuses of higher education are concerning to all constituents. When the news of another mass shooting at an institution of higher education appears, Americans seem surprised it happened again. Although campus shootings are not a recent phenomenon, as they have happened on college campuses as early as the 1960s, the frequency of those shootings has increased. The purpose of this study was to examine the deadliest community college campus shooting in United States history in an effort to develop implications for practice for both law enforcement and higher education constituents.

To address that purpose, the current study focused on three specific research questions:

- 1. What was the law enforcement response to the deadliest community college campus shooting in history?
- 2. Did previous mass shootings inform the law enforcement response to the deadliest community college campus shooting?
- 3. What implications for practice can be derived by studying the deadliest community college campus shooting?

Data Collection

I employed a qualitative, single-case study method to answer the research questions.

According to Creswell (2008), qualitative research "relies on the views of the participants;

...describes and analyzes these words for themes; and conducts the inquiry in a subjective,
biased manner" (p. 46). The current study examined a single case, the deadliest community

college campus shooting in history, and a single-case study design was the method best situated

for studying the event. To ensure I was able to examine the case as intimately as possible, I

conducted interviews with seven law enforcement officers who responded to or were closely involved with the response to the incident. I attempted to gain permission to interview participants employed by the institution studied who were present on campus during the incident, but the administration declined to allow their employees to participate.

In addition to collecting and analyzing the interviews of the participants, I collected and analyzed publically available reports and newspaper articles available on the Internet over the course of approximately eight months. Sources included the *New York Times*, *Los Angeles Times*, Fox News NBC News and Oregon Public Broadcasting. Additionally, I collected official police reports from agencies who responded to the incident. Those reports included law enforcement interviews with victims and witnesses, lab reports, video surveillance, audio recordings of interviews and police dispatch radio traffic.

Analysis of Themes

After completing the data analysis and coding of the participant interviews, several themes emerged with respect to the law enforcement response to the deadliest community college campus shooting. In addition, other themes developed that surrounded lessons learned and had implications for both law enforcement and higher education. I developed Table 3 as a summary of those themes and presented them within the context of the current study's research questions.

When asked about what participants remembered about their response to the shooting, participants remembered: (a) uncertainty and disbelief, (b) unfamiliarity with the location of the incident, and (c) the level of chaos present when they arrived on scene. When asked how previous mass shootings influenced their response, the participants indicated: (a) training in active shooter response changed over time and (b) the Columbine High School shooting in

Colorado had a greater influence on their response than any other mass shooting. Finally, when participants were asked what implications their experience could provide for law enforcement and higher education, participants recommended: (a) training, (b) communication, and (c) collaboration between law enforcement and higher education.

Table 3
Summary of Research Questions and Themes

Research Question One: What was the law enforcement response to the deadliest community college campus shooting in history?		
Theme	Subtheme	
Uncertainty and disbelief	Feeling unprepared	
Unfamiliarity with location	Feeling at a disadvantage	
Level of chaos at the scene	Varied with timing of response	
Research Question Two: Did previous mass shootings the deadliest community college campus shooting?	inform the law enforcement response to	
Theme	Subtheme	
Training for active shooters	Scenario-based training increased Use of simulated weapons	
Training changed after Columbine shooting	Officers trained not to wait	
Deadliest campus shooting in history did not inform	Columbine shooting changed response	
Research Question Three: What implications for practide deadliest community college campus shooting?	ice can be derived from studying the	
Theme	Subtheme	
Training	Training for aftermath of shooting Mental training	

Table 3 (Cont.)

Research Question Three: What implications for practice can be derived from studying the deadliest community college campus shooting?

Theme	Subtheme
Communication	Able to hear other agencies dispatch Between all stakeholders

Collaboration between law enforcement and higher education

Research Question One: What was the law enforcement response to the deadliest community college campus shooting in history?

When participants in the current study were asked what they remembered about their response to the deadliest community college campus shooting in United States history, several main themes emerged. First, the officers remembered experiencing disbelief and uncertainty as to whether there was actually an active shooter at the campus. Second, participants expressed a feeling of disadvantage for not being familiar with the UCC campus and the particular building where the shooter was located. Last, participants remembered significant chaos at the scene upon their arrival.

Uncertainty and disbelief. The first theme noted during data analysis and coding of interviews revolved around the level of uncertainty and disbelief that an active shooter incident was actually occurring at UCC. Six of seven participants in the current study expressed either initial disbelief that an active shooter incident was happening or an uncertainty that the incident was actually real and not a training exercise. For example, one participant received text messages from family members alerting them to the event. The participant called their supervisor to see if it was really happening. The participant said, "Then I was just kind of like, wow, I mean this is, this is real. I thought they've [family members] had some bad information but then, when I get

hold with my contacts, they're like, 'No, it's really happened." Another participant thought there must have been a training exercise going on somewhere because:

If that was a real dispatch, I would—with other major calls, we usually hear a dispatch, [they] dispatch any and all available officers or they'll dispatch several different radio number units. This one came out and it sticks in my mind that they only dispatched one unit.

Two of the seven participants thought it might not be an actual active shooter incident but rather a domestic homicide situation where an estranged husband had shot his wife. One participant said, "I remember thinking this is probably some guy that's killing his girlfriend or his significant other. I thought this is probably somebody there who's [sic] some kind of a domestic dispute or something is going on." Another participant thought it could be duck hunters shooting guns near campus since duck hunting season had just opened and the campus was located next to the river where duck hunters liked to hunt. The participant went on to say, "we always train for this, you know, and the mentality is—around here for a lot of people, 'oh it will never happen here."

Overall, a majority of the participants, even though they were law enforcement officers who are trained to expect the unexpected, were surprised when they learned the incident was actually an active shooter on the campus of UCC. This theme of uncertainty and disbelief as to the actual nature of a call of an active shooter has implications for law enforcement officers in other agencies. The potential for officers to react and question the true nature of a call, therefore delaying the response to it, is a real concern to law enforcement officers. Any delay in response to an incident could potentially result in the loss of life or an increase in the number of victims. It is important for officers to react quickly when notified of an active shooter in an effort to respond as quickly as possible.

Unfamiliarity with location. The second theme that emerged with the participants was the fact that a majority of the responding officers were unfamiliar with the layout of the campus. During the current study's incident, 911 calls were made from individuals on campus and dispatchers learned that the shooter was located in a building called Snyder Hall. Dispatchers notified responding officers the shooter was located in a classroom in Snyder Hall. Four of the seven participants indicated they were unfamiliar with the campus layout or the names of any of the buildings. One participant stated, "I remember thinking I really don't know the names of those buildings up in the college, and I didn't like that situation because I really didn't know what the best approach would be in terms of getting there quickly." Another participant was a former student of UCC and when asked about the reported location of the shooter, he stated, "I wasn't familiar, you know. I went to UCC myself. I got a scholarship at my senior high school, I went up to UCC and I couldn't tell you where Snyder Hall was." Another participant had been on campus before to teach an active shooter course to the police academy recruits but was also unfamiliar with the layout of the campus or the names of the buildings. They stated, "I taught active shooter at that college but I've never ventured past their gym area... I didn't know the lay of the land ... they kept saying Snyder Hall, and the science building, I had no idea."

Only two of the seven participants were actually familiar with the campus and the buildings. Both of those participants indicated their familiarity with the campus was because they had previously taught or currently taught at the college. One participant said, "I teach at the Reserve Academy out there, but I was kind of familiar with that building [Snyder Hall]." The other participant who was familiar with the campus said, "I teach part-time at that college in the criminal justice program. So I'm somewhat familiar with the campus ... and fortunately... when dispatch put out that it's happening at Snyder Hall and I knew where that was." Fortunately,

those two participants were the first officers on scene of the active shooter incident and engaged the shooter prior to his suicide in the classroom.

Level of chaos. The third theme expressed by participants was that of the level of chaos they remember upon arriving at the scene of the shooting. In the current study, six of the seven participants talked about the chaos at the scene, whether on the campus or at the other locations associated with the incident. One participant remembered: "I remember hearing people yelling that the shooter was down. But really, there was so much chaos and students screaming and running all over the place and people bleeding." Another participant said, "I hate to say this but initially it was chaotic, it was mess... It was kind of chaotic and it wasn't real clear on who was in charge and what we were going to do next." Another participant noted, "I arrived and [it was] chaotic, there is [sic] already a lot of people there. You got students moving around, we got a college campus and it's chaos."

Although a majority of the officers spoke about the level of chaos, it is important to note that one of the seven participants talked about the scene and did not describe it as chaotic. The participant noted, "I don't remember anybody screaming hysterically anywhere. It was just quiet. Until people, first responders, everything and that's when it started to get loud." The participant explained, "Before that, I just remember it being quiet and that really struck me as odd and you know looking back on it, people were actually in shock."

There are two possible explanations for the participant's experience. First, given the fact that the participant was there as the shooting was still going on, it is possible that not very many people had recognized or understood exactly what was happening, therefore, they may have still been calm. A second explanation is the possibility the participant experienced some auditory

exclusion while responding to the scene. According to Honig and Lewinski (2008), auditory exclusion occurs in stressful situations such responding to an active shooter:

Auditory exclusion or selective attention in the auditory sense also begins to occur with an increase in stress as attention is then focused on the perceived threat. Under these circumstances, information deemed not relevant to the primary task at hand is simply filtered out (p. 134).

In either instance, it is significant to note that out of the seven participants, only one participant indicated a marked lack of chaos as was described by all other participants. Further research into auditory exclusion and the degree of chaos experienced at active shooter incidents should be considered in the future.

Research Question Two: Did previous mass shootings inform the law enforcement response to the deadliest community college campus shooting?

The purpose of Research Question Two was to explore whether previous mass shootings informed the law enforcement response to the deadliest community college campus shooting. Participants described their training for active shooters and indicated that a change in training occurred after a previous mass shooting that took place at a high school in Colorado. Interestingly, none of the participants indicated that the mass shooting at Virginia Tech informed their response to the UCC shooting.

Training for active shooters. I asked participants to describe their previous training in response to active shooter incidents and several participants indicated that there had been a change in that training over time. Many of the participants had been employed in law enforcement for 15-20 years and several of the participants spoke about their initial training for active shooters. The participants indicated the change was from a mostly static style of containment of the scene and waiting for special response teams to arrive to a more scenario-based training that placed officers in mock situations to teach them how to respond in a more

proactive way. Those scenario-based training exercises included the use of role players, which was more realistic since the officers had to interact with real individuals. Also, since the training evolved to use role players, several participants indicated that their agency began to incorporate simulated weapons into the scenarios. Simulated weapons are functioning weapons that are modified to hold either blank cartridges that make sound or projectiles made of a paint marking substance. When asked why they believed their agencies made the change to that type of training, participants indicated they believed it was in response to lessons learned in the aftermath of the Columbine High School shooting.

Training changed after Columbine shooting. When asked how active shooter training had changed over time, several of the participants mentioned the Columbine High School shooting as the incident that changed law enforcement response to active shooter incidents. In 1999, two students entered the Columbine High School armed with firearms and improvised explosive devices. The students spent the next 45 minutes moving throughout the school and killing or injuring students and teachers. The shooters detonated several pipe bombs and a propane bomb. In all, 12 students and a teacher were killed and numerous others were injured. Police responded to the scene and stayed outside the school while waiting for tactical teams to arrive and assemble. Meanwhile, the shooters continued to shoot students and ultimately committed suicide while police waited to gather the necessary resources to enter the building.

One law enforcement officer who responded to the UCC shooting said, "Back in the 90s, it was all about containment. It was all about containing the situation and don't let it grow." The participant went on to say, "Then slowly over time...there was a change of philosophy, and that was, 'We don't have time to wait for the tactical team, the threat had to be ended well before the tactical team can get there." Another participant said: "its [active shooter training] much more

developed now, I think. Prior to the Columbine shooting, there was this theory about how you gather up three or four guys together. Don't go in there by yourself." That philosophy changed as a result of the lessons learned from the law enforcement response to the Columbine shooting.

When I began my career in law enforcement in the late 1990s, I was trained that when responding to an incident such as a shooting, officers should wait until they had an adequate number of other officers and appropriate weapons available prior to entering the scene. Just a few short years after, the training changed and now the standard law enforcement active shooter training teaches the officers that when an event happens, the first law enforcement officer or officers who arrive on scene should move directly to the sound of the shooting in an effort to engage the shooter and end the threat. There is an inherent danger with this type of response; however, the need to end an active shooter incident as quickly as possible outweighs the amount of risk placed on law enforcement officers when responding to such an event.

Virginia Tech did not inform response. Surprisingly, none of the participants indicated that Virginia Tech had any influence on their response. One participant indicated they were aware of the Virginia Tech shooting and had read an article about police response to active shooters but the article was not specific to Virginia Tech. Nearly all of the participants mentioned the change in training in response to active shooters that occurred as a result of the Columbine High School shooting. One possible explanation as to why participants did not mention the lessons learned from Virginia Tech could have been the geographic location of this incident. The UCC shooting happened on the West Coast, and the Virginia Tech shooting happened on the East Coast. It is possible there was less exposure to the Virginia Tech shooting in Oregon than in other parts of the country. Another potential geographic explanation could also include the fact that the Columbine shooting was closer to UCC, therefore, it might have had a

greater impact on law enforcement officers in Oregon, than it did on officers closer to Virginia Tech. A third possible explanation was the amount of time that had elapsed between the Columbine shootings and the Virginia Tech shooting. Law enforcement may have had time to learn lessons from Columbine, and implement those changes; therefore, law enforcement officers were not as impacted by the Virginia Tech recommendations. Finally, with a perceived disconnect between law enforcement and higher education that at least one participant indicated existed, law enforcement in that area may not have even been aware of the recommendations from Virginia Tech. It is possible that law enforcement officers directly affiliated with an institution of higher education were more influenced by the recommendations from the Virginia Tech shooting than law enforcement officers who had no higher education affiliation other than having a college campus inside or close to their jurisdiction. Since UCC was a small community college that did not employ law enforcement officers on campus prior to the shooting and not a major research institution with a dedicated law enforcement presence, it is possible that participants in the current study were not particularly influenced by the recommendations from Virginia Tech.

Research Question Three: What implications for practice can be derived by studying the deadliest community college campus shooting?

Finally, participants were asked about lessons learned from their response to the scene of an active shooter. Three additional themes emerged during data analysis and coding of participants' response to Research Question Three. The purpose of this question was to identify what implications for both law enforcement and higher education that could be derived from studying the deadliest community college campus shooting. Those themes developed included:

(a) both mental and physical training, (b) communication, and (c) collaboration between higher education and law enforcement.

Training. When asked about the biggest lessons learned from their response to the deadliest community college campus shooting, five of seven participants indicated that law enforcement should continue to train as they currently do but should consider training with other law enforcement agencies as well as fire and EMS agencies. One participant stated, "You know that in our county it is uncommon for us (multiple police, fire, and EMS to intermingle [for training] in incidents like this." Another participant indicated that continuous training, both mental and physical, is very important for law enforcement officers in order to keep them from becoming complacent. The participant stated, "those of us who have been on the job for a while, it becomes easier to become lax and let those things slide as we get more comfortable on the job." When asked what they recommended to keep officers from becoming complacent, the participant said, "Just try to change things up and throw out curve balls just to change it up so it doesn't get comfortable."

When asked about the biggest lesson learned from the incident, another participant noted "You know, train, train with one another, be familiar with the campuses, be familiar with the personnel there." Another participant said, "The more you can be prepared for it then obviously, you know, that you train and train and train and train and then after a while it just becomes habit." The participant went on to say, "If you do that from the very beginning to the very end, it's a lot more useful. It's a lot better figuring that out when you're doing training than it is when the real incident is happening."

In addition to training prior to the incident actually taking place, one participant indicated law enforcement should train for the aftermath of the incident, not just the response to the shooting itself. The participant noted:

I have no doubt that our guys are trained to respond to the threat to deal with it and to get to the incident stopped. But it's from that point forward I think where we need most of

our, most of our training and communication especially between different types of community shareholders. Like the college, for example, I mean college... they didn't think about what they're going to do after there's a shooting on campus. They figured the police will come in and take care of everything but it doesn't quite work that way. I think that's where training really needs to focus is all the way through to the end.

Another participant mentioned training when they offered advice to law enforcement officers responding to an active shooter incident. The participant said, "I know it sounds a bit cliché but it's kind of simple, it comes down to doing what you're trained to do and using your head, and not let the situation overwhelm you despite the gravity of it."

Finally, one participant spoke about the need to mentally train and prepare for response to an active shooter incident and indicated they felt mental preparation for the incident is just as important, if not more important, than the actual physical training. The participant said,

To me, the mental training in some ways is almost equally is valuable as the actual training itself because I'm a firm believer that if you train in your mind that you're going to have resolve, you're going to take decisive action in those kinds of things. I think it shortens your actual hesitation or response time when you actually get there. I think it just better prepares you to just go into training mode and not have to rely on all the crazy emotions that may want to run around in your head. So, I think it just helps to create a resolve overall in terms of a mindset when you train, when you think on those things and mentally prepare for them.

Officers in the current study spoke about the need to continue training as being one of the biggest lessons they learned in their response to the deadliest community college campus shooting.

Participants indicated that it is not only important to train with each other in the same agency, but that training should also include other law enforcement agencies as well as other emergency service workers

Communication. A second theme that emerged from the participants when asked about lessons learned from their response to the incident, two of the seven participants indicated the need for communication. While both participants mentioned communication, each had a different reason for their recommendation.

The first participant spoke of the need to be able to communicate between agencies while responding to an active shooter incident. In the current study, multiple agencies responded to the incident, but they were not all on the same radio frequency. The Oregon State Police operated on a separate frequency than other agencies in the Douglas County area. The OSP had an office just a mile down the road from the campus but did not hear the initial dispatch. One participant said: "They [OSP] are not on our dispatch system so they got the call really late, and so, as we went by them with lights and sirens, there was a trooper just starting to pull out of their station."

Although the first law enforcement officers arrived on scene less than five minutes after the first 911 call, it is possible that if the State Police and local agencies would have heard the call on the same frequency, response time could have been reduced.

The second participant who mentioned communication spoke of the need for law enforcement to communicate not only within their own agencies, but across other agencies as well when designing and participating in training for major events. The participant noted:

We need to have those talks and those conversations and get those questions answered before something happens...have those discussions and go through what would happen if X happens. Then, what are we going to do as a group...where do we need to make some changes or just be more prepared.

Officers in the current study also talked about the need for law enforcement agencies to be able to communicate when the call of an active shooter incident comes in. Additionally, participants spoke about the need to communicate between law enforcement agencies when developing training for response to active shooters.

Collaboration between law enforcement and higher education. Finally, when participants were asked about lessons learned in their response to the incident, four of the seven participants mentioned the need for collaboration between law enforcement and higher education. Additionally, three of the seven participants indicated the burden of initiating that

collaboration fell on the shoulders of both law enforcement and higher education. For example, one participant stated, "First and foremost, I mean the responsibility of the security on the campus lies with the campus, lies with the school. But, law enforcement agencies that service campuses also need to be proactive about it." The participant also stated,

I know my agency does that so we have officers in the high schools and whenever there is a large gathering or festival or something along those lines, where we know people who are going to congregate, we as an agency reach out to the people organizing that and we come up with the plan. So we take it upon ourselves. So, I think they need to be a little bit of both, I think both sides need to take responsibility for it.

In other words, law enforcement often prepares for large-scale events they know are going to be held in their jurisdiction by reaching out to those venues and the organizers of the event before the event in an effort to prepare for such a large gathering. Law enforcement should take the same approach to the potential of an active shooter incident on a college campus and reach out to the campus beforehand to make preparations.

Another participant agreed that law enforcement and higher education should work closer together but felt there was a degree of disconnect between the two groups. The participant noted, "One thing I have noticed in Oregon, you know, there is a separation between education and law enforcement. For educators, you know, that security isn't their, their responsibility. It's not on their priority list." He went on to suggest that higher education make an effort to collaborate with law enforcement because "they need to take a look at that and say, 'Hey, maybe we need to make an effort to understand and work with law enforcement and train with them so we know what to expect from them."

When asked about their experience in responding to the deadliest community college shooting in history, several themes emerged in their answers. Participants in the current study expressed a level of uncertainty and disbelief that the incident was an actual active shooter event.

Most participants were unfamiliar with the location of the active shooter event, which created some degree of discomfort when they arrived on scene. Additionally, participants spoke of the level of chaos that existed when they made it to the campus. Participants in the current study indicated the recommendations that came after the Virginia Tech shooting did not influence their response; however, they noted a change in active shooter response and training did occur after the Columbine High School shooting. In addition, participants in the study recommended law enforcement officers continue to train for active shooter incidents and that higher education and law enforcement should work together collaboratively in preparation for such an event.

Limitations

As discussed in Chapter III, I chose a qualitative, single-case study design to examine the deadliest campus shooting at a community college. The intent of the current study was to examine that one specific shooting, so the case study design itself limited the current study. While Yin (2009) recommended the necessary steps to conduct case studies, the details of how to accomplish those tasks were largely left up to the individual researcher. The choice to study this single case came with several other limitations due to the limited scope of the study.

The current study included interviews of seven police officers directly involved in the response to the incident. Those officers interviewed were purposefully selected through snowball sampling. I did not interview every officer who responded to the incident, as once I had completed those seven interviews, I felt I had reached the point of saturation with the officers who agreed to participate. I felt it was unlikely I would gain more insights into the response, as the officers I spoke to were the first of the officers on scene, two of which actually engaged the shooter. Since the incident ended quickly, officers who responded after the participants interviewed would not likely have had additional information not gleaned from the participant

interviews. While it was most appropriate to select the participants in this manner, this limited sample size prevented me from broadly applying the results of the study to other incidents. The findings in this study were intended to inform law enforcement and higher education about themes identified by the responding officers, however, they may not be the same themes identified by other officers responding to other campus shootings.

Additionally, there were other limitations to the current study such as the length of the participant interviews, inability to interview college representatives, and the fact that the participants were identified by name in the study. Each participant phone interview lasted an average of one hour, which limited the amount of data collected and limited the time for additional follow-up questions. In addition, I originally planned to interview participants from the institution studied to gain their perspective into the law enforcement response to the shooting. I contacted the institution and presented them with my research protocol and a request to interview several members of the institution, such as faculty or administrators who were present for the incident. The institution administration denied my request for their participation citing the fact that there were pending lawsuits surrounding the shooting, the fact that the official police report had not been released, and indicated their institution had not officially debriefed following the incident

Yet another limitation to the current study was the fact that I identified the officers who participated in interviews. Since local and national media outlets had already identified those officers as having participated in the police response, I felt it was unlikely I could keep their identities confidential. Given the fact that the officers were identified by name in the study, it is possible that some of their responses were different than they would have been had their identities been kept confidential. Finally, given the fact that I conducted the interviews by phone

and I did not actually travel to the scene, it is possible that I missed some of the context and unique atmosphere of the incident. However, since so much time had elapsed since the incident, it would be unlikely I would learn much about the atmosphere of the scene.

Implications for Future Research

Research into school shootings across all educational institutions should be conducted in the future in an effort to discern if the findings in this study hold true for other institutions of higher education as well as primary and secondary schools. Since the specific purpose of this study was to examine the deadliest community college campus shooting, it is not likely the findings in this study will transfer to every institution of higher education or to all primary and secondary schools. Additional research about the law enforcement response to shootings at other institutions as well as response to shootings on the grounds of primary and secondary schools could reveal additional findings valuable to all constituents. Some suggestions for specific areas of further research could include: (a) examining police response to other active shooter incidents on campuses of higher education, (b) expanding the study to include not only higher education but primary and secondary schools, (c) interviewing individuals affiliated with higher education and primary and secondary schools, (d) interviewing law enforcement officers anonymously, and (e) conducting a follow up study with the members of the UCC faculty and administration once the institution settles the lawsuits and has an opportunity to officially debrief the incident.

There are three of the above-mentioned suggestions I feel would be the most valuable as a way to expand the current study's findings. First, I originally planned to include participants from the institution studied, but, as previously mentioned, the institution declined to participate in the study. The lack of participation from the institution was one of the limitations noted in the current study. In its refusal to participate, the UCC administration cited the fact that there were

lawsuits pending against the institution and the college had not yet officially debriefed the incident with its members. As a recommendation for future research, once the lawsuits are settled and the campus has the opportunity to debrief the incident, it would be beneficial to contact the institution and request permission to interview some of the faculty, staff, and administration and gather their perspective of the incident. The lack of perspective from the institution that experienced the deadliest community college campus shooting leaves a gap in the current research into shootings on higher education campuses.

Additionally, a limitation of the current study was the fact that the participants were not anonymous. Given the fact that participants were aware their responses were not confidential, and had the potential to be read by their peers and even supervisors, it is possible the participants did not fully divulge their thoughts and feelings about their response. Another recommendation for further research would be to interview officers who have responded to other campus shooting incidents and present them with the same interview questions as were presented to participants in this study. This additional research would help determine, what, if any similarities exist in law enforcement officers' response to campus shootings when the participants know their identities are confidential.

Finally, it would be beneficial to interview police officers who have responded to other campus shootings geographically situated closer to Virginia Tech. As previously noted, participants in the current study did not seem influenced by the Virginia Tech Review Panel's findings. As a recommendation for further research, it would be valuable to determine whether the recommendations that came from the Virginia Tech Review Panel had a greater influence on the response to officers geographically closer to Virginia Tech and those who work for four-year institutions (rather than local governments) than the officers who responded to the UCC

shooting. Information from the current study has added to the current knowledge and additional suggested areas of research would contribute significantly to the study of higher education campus shootings.

Implications for Practice and Policy

After studying the deadliest campus shooting to occur on the campus of a community college, several implications for both law enforcement and higher education practice were apparent. Given the fact that higher education and law enforcement form a synergistic bond in the aftermath of a campus shooting, some of the implications for practice apply to both law enforcement and higher education fields. Conversely, some of the implications for practice and policy must be addressed by each field independently. The following section examines the implications for law enforcement specifically, higher education specifically, and also discusses implications that impact both law enforcement and higher education collectively.

Law Enforcement

Although police officers are aware that an active shooter incident can happen at any time, even trained law enforcement officers are surprised when a campus shooting occurs. In the current study, several participants indicated a degree of disbelief that the incident was actually an active shooter. Some of the participants remembered thinking that there was some other explanation for the call, such as a training exercise they were not informed about. One of the participants even stopped to think about whether they should actually respond to the incident at all.

Given the fact that some participants had difficulty believing there was really an active shooter at UCC, there may have been a slight delay in their response. One implication for practice and policy for law enforcement would be the need for law enforcement officers to

immediately respond to the call of an active shooter when dispatched, even if there could be a different explanation for the actual nature of the call. By limiting the delay in the response time, it is possible that additional victims would be saved due to a more rapid law enforcement arrival on the scene

In addition, law enforcement officers in the current study expressed concern about their unfamiliarity with the campus, specifically the building where the active shooter was located. When the call about an active shooter on the campus of UCC came in, participants indicated that they were familiar with the location of the campus; however, they were unfamiliar with the layout of the campus or the names of any of the buildings. The UCC campus is not located within the city limits of any of the responding officers' jurisdiction and those officers may have never even actually been to the campus. While it was not surprising that responding officers did not know the layout of the campus, their unfamiliarity with the campus caused some of them to respond to a different part of the campus, which delayed their response to the actual classroom. Again, any delay in locating and stopping an active shooter could result in further loss of life.

Given the fact that many of the law enforcement officers who responded to the campus were unfamiliar with it, another implication for law enforcement practice and policy is the need for agencies to become familiar with any institution of higher education within a reasonable response distance from their jurisdiction. Officers routinely train and learn the layout of businesses and schools within their jurisdiction but may not be familiar with those higher education institutions outside their jurisdiction. Law enforcement should reach out to those institutions to gather maps of the campus, names of the buildings, layout of the buildings, and locations of entrance and exit from the campus. Law enforcement should include that information in field training of new officers as well as for current officers in an effort be more

informed about the layout of the campus in the event of an active shooter. The more familiar with the campus the officers are, the less likely there will be a delay in the response to the campus in the event of an active shooter, which could potentially save lives.

Finally, participants in the current study talked about their previous active shooter training and indicated that the training never prepared them for the aftermath of the shooting. The participants indicated that the training generally prepared them for response to the scene, how to deal with the immediate threat, but never included what the officers should expect once the shooter had been stopped. According to the participants, law enforcement active shooter training evolved over time from a philosophy of responding to the scene, containing the situation, and waiting for special response teams to a philosophy of responding to the incident and immediately locating and engaging the subject. Participants also spoke about the change to scenario-based training exercises that included the use of role players and simulated weapons.

Given the fact that officers only routinely train for the response to an active shooter incident, another implication for law enforcement practice and policy would be the need to design training scenarios that begin with the aftermath of an active shooter incident where the shooter was neutralized. The scenario could work forward from there to train them on what to expect in the aftermath of the shooting. Many of the participants spoke about the chaos that they experienced once the shooter had been located and was deceased. In the aftermath of the shooting, multiple law enforcement, fire, and EMS agencies responded along with the news media, family members of students on campus, and various other interested parties. Law enforcement training for the aftermath of the shooting could include training on how to triage wounded persons, how to communicate between all responding agencies, and how to deal with the news media and bystanders. Additionally, that training could include not only immediate

responders such as fire and EMS workers, but also hospitals, medical examiners, and even temporary morgue workers if necessary. The scenarios could be tabletop exercises where representatives of all interested parties gather in a large conference center and discuss what their response and responsibilities include. Emergency management officials often conduct such exercises to prepare for large-scale events such as natural disasters. However, law enforcement training could be adapted to cover the response to an active shooter incident since many of the same agencies are involved.

Higher Education

While the focus of the current study was to examine the law enforcement response to the deadliest community college campus shooting, implications for higher education practice and policy developed after interviewing officers who responded to the incident. It is important to note that while the current study was limited to law enforcement officers' perceptions, some of the recommendations made by the participants apply to institutions of higher education.

First, participants indicated that institutions of higher education should have a plan in place to address what will happen before and after an active shooter incident on their campus. In other words, administrators of higher education should realize that there is a chance their campus could be affected by an active shooter and have a plan in place to deal with it in the event it actually occurred. Although shootings on the campus of a higher education are a relatively rare occurrence, the possibility still exists. An implication for higher education practice and policy would be to develop a strategic response to the potential threat of an active shooter and have a plan in place to address it if it happens. Administrators should not only develop a plan, but it is incumbent upon them to communicate that plan to the students, faculty, and staff at their

institution. It is not enough to simply design a plan; the institution must take the additional step of training members of the campus about the plan.

Along with the implication of the need for higher education to develop a plan for an active shooter, participants in the current study suggested that higher education also work with local law enforcement agencies prior to an active shooter event in an effort to learn what the law enforcement response will be. A participant in the current study indicated that while clearing the buildings on campus after the shooter was deceased, they had trouble in removing some individuals from their classrooms because those individuals did not believe it was actually the police. Therefore, an additional implication for higher education practice and policy is the need to become familiar with what the law enforcement response to their campus would entail, from how law enforcement will deal with the shooter, triage wounded students and staff, and what the officers would do after the shooter is stopped. Many students, faculty, and staff may be unaware that the police will search all of the buildings on the campus after the shooter is located to ensure there are no additional suspects. If students, faculty, and staff are trained for what to expect from the law enforcement response, they may be able to further assist the law enforcement efforts to conclude the incident and eliminate the uncertainty the campus may experience if they are not aware of what to expect.

Law Enforcement and Higher Education

Some of the implications derived from the current study tend to affect law enforcement practice and policy separately from higher education. Those implications such as the need to respond as quickly as possible, the need to be familiar with the campus, and the need to train for the aftermath of an active shooter are specific to law enforcement. Likewise, implications for higher education policy and practice tend to affect only higher education. Those implications

such as the need to develop a plan to prepare for an active shooter, and the need to learn what to expect from the law enforcement response and communicate that to their constituents are specific to higher education. Although those implications are specific to each group, there are implications for practice and policy that affect law enforcement and higher education collectively.

For example, most participants in the study indicated a high degree of chaos at both the shooting scene as well as at the location of the reunification center at the fairgrounds.

Participants spoke about seeing students near the classroom where the shooter was located running around and screaming, with some of them bleeding. Additionally, one participant talked about how chaotic the scene at the fairgrounds was which was supposed to be the location where family and friends would be reunited with students. In reality, because of the numerous law enforcement representatives that gathered at the fairgrounds, there was confusion about who was in charge and what information should be given. An implication for both law enforcement and higher education practice and policy is the need for both groups to realize that there is likely to be a high degree of chaos at the scene of an active shooter and steps should be implemented to ensure the timely release of information. If both groups understand and plan for there to be chaos at the incident, appropriate direction can be given to employees on both sides who have the responsibility to organize the scene and the subsequent release of information.

A second implication for both law enforcement and higher education centered on the need for law enforcement and higher education to collaborate when training for and developing a response to an active shooter on a college campus. Several participants spoke about how they believed there was a disconnect between the two groups and recommended that both work together in developing training and implementing training for their representatives. For example,

one participant believed that UCC did not have a plan in place to respond to an active shooter and therefore the campus was unprepared. Another participant felt that, in general, higher education administrators do not give much thought to the possibility of an active shooter event at their campus. Additionally, some participants indicated they believed that the campus community was not aware of how the police would respond to such an event, and because of that lack of knowledge, it made it difficult for law enforcement to complete their responsibilities.

An implication for both law enforcement and higher education practice and policy, is the need for both entities to reach out to each other and develop a response plan that includes both sides interests. Such a response plan should include training together, not only for the response to the incident, but also for the aftermath of the shooting. This collaboration between law enforcement and higher education should have the single focus of mitigating the loss of life in the event a subject enters the campus and starts harming individuals present. For law enforcement, it should include knowledge of the campus, the names of the buildings, and access to the campus. For higher education, it should include knowledge of what law enforcement will do when they arrive on the scene of an active shooter. If both entities are familiar with each others response, it will likely reduce the response time to resolve an incident and thus has the potential to save lives.

Chapter Summary

This chapter discussed the findings and drew implications for practice and research from a qualitative, single-case study of the Umpqua Community College campus shooting on October 1, 2015 in Roseburg, Oregon. The UCC campus shooting was the deadliest community college campus shooting in United States history and was the deadliest campus shooting to happen on any campus of higher education since the Virginia Tech shooting in 2007. The purpose of the

study was to examine the law enforcement response to the deadliest community college campus shooting in an effort to identify themes and implications for both law enforcement and higher education constituents. Additionally, the current study sought to examine law enforcement active shooter training to see if previous mass shootings informed the law enforcement response to the deadliest community college campus shooting. Finally, the current study examined lessons learned by the law enforcement officers who responded to the incident in an effort to identify implications for both law enforcement agencies and higher education administration, faculty, staff, and students.

This chapter identified areas of future research into higher education shootings.

Suggested areas of further study include examining other shootings that happened on higher education campuses, interviewing individuals from other institutions who experienced campus shootings, and expanding the study to include primary and secondary school shootings to determine if findings in the current study could be more broadly applied to other incidents. These recommendations will help address the current gap in the research concerning shootings at educational institutions.

References

- Anderson, M., Kaufman, J., Simon, T.R., Barrios, L., Paulozzi, L., Ryan, G. ...Potter, L. (2001). School-associated violent deaths in the United States, 1994-1999. *Journal of American Medical Association*, 286(21), 2695-2702.
- Auxemery, Y. (2015). The mass murderer history: Modern classifications, sociodemographic and psychopathological characteristics, suicidal dimensions, and media contagion of mass murders. *Comprehensive Psychiatry*, *56*, 149-154.
- Barrett, P.M. (2012). Glock: The rise of America's gun. New York: Broadway Paperbacks.
- Bartula, A., & Bowen, K. (2015). University and college officials' perceptions of open carry on college campus. *Justice Policy Journal*, 12(2), 1-17.
- Baxter, P., & Jack, S. (2008). Qualitative case study methodology: Study design and implementation for novice researchers. *The Qualitative Report*, *13*(4), 544-559 http://www.nova.edu/ssss/QR/QR13-4/baxter.pdf.
- Bennett, K., Kraft, J., & Grubb, D. (2012) University faculty attitudes toward guns on campus. *Journal of Criminal Justice Education*, 23(3), 336-355.
- Bjelopera, J. P., Bagalman, E., Caldwell, S. W., Finklea, K. M., & McCallion, G. (2013). *Public mass shootings in the United States: Selected implications for federal health and safety policy*. Congressional Research Service. 2013, 1-36.
- Blair, P. J., & Schweit, K. W.. (2014). *A study of active shooter incidents, 2000-2013*. Texas State University and Federal Bureau of Investigation, U.S. Department of Justice, Washington D.C. 2014.
- Bruch, H. (1967). Mass murder: the Wagner case. *American Journal of Psychiatry*, 124(5), 693-698.
- Cavanaugh, M. R., Bouffard, J. A., Wells, W., & Nobles, M. R. (2012). Student attitudes toward concealed handguns on campus at 2 universities. *American Journal of Public Health*, *102*(12), 2245-2247.
- Cho, D., & Gardner, A. (2007). An isolated boy in a world of strangers. The Washington Post. Retrieved from: http://www.washingtonpost.com/wp-dyn/content/article/2007/04/20/AR2007042002366.html
- Creswell, J. W. (1998). *Qualitative inquiry and research design: Choosing among five traditions*. Thousand Oaks, CA: Sage Publications, Inc.
- Creswell, J. W. (2008). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research (3rd ed.)*. Upper Saddle, NJ: Pearson Education, Inc.

- Creswell, J. W. (2014). Research design: Qualitative, quantitative, and mixed methods approaches. Los Angeles, CA: Sage Publications, Inc.
- Dietz, M. (1986). Mass, serial, and sensational homicides. *Bulletin of the New York Academy of Medicine*, 62, 477-491.
- Drysdale, D., Modzeleski, W., & Simons, A. (2010). *Campus attacks: Targeted violence affecting institutions of higher education*. U.S. Secret Service, U.S. Department of Homeland Security, Office of Safe and Drug-Free Schools, U.S. Department of Education, and Federal Bureau of Investigation, U.S. Department of Justice. Washington, D.C., 2010.
- Duwe, G. (2004). The patterns and prevalence of mass murder in twentieth-century America. *Justice Quarterly*, 21(4), 729-761.
- Flannery, D. J., Modzeleski, W. & Kretschmar, J.M. (2013). Violence and school shootings. *Current Psychiatry Reports*, *15*: 331. doi: 10.1007/s11920-012-0331-6
- Follman, M., Aronsen, G. & Pan, D. (2012). US mass shootings, 1982-2012: Data from Mother Jones' investigation. *Mother Jones*. Retrieved from http://www.motherjones.com/politics/2012/12/mass-shootings-mother-jones-full-data
- Fox, J. A., & DeLateur, M. J. (2013). Mass shootings in America: Moving beyond Newton. *Homicide Studies*, 1-21. doi: 0.1177/1088767913510297.
- Francescani, C., & Coffman, K. (2012) Accused gunman sent notebook to psychiatrist. Retrieved from: http://www.reuters.com/article/2012/07/25/us-usa-shooting-denver-notebook idUSBRE86O1BP20120725.
- Hancock, D. R., & Algozzine, B. (2003). *Doing case study research: A practical guide for beginning researchers*. New York: Teachers College Press.
- Holmes, R. M., & Holmes, S. T. (1992). Understanding mass murder: A starting point. *Federal Probation*, 56(1), 53.
- Honig, A., & Lewinski, W. J. (2008). A survey of the research on human factors related to lethal force encounters: Implications for law enforcement training, tactics, and testimony. *Law Enforcement Executive Forum*, 8(4), 129-152.
- Kleinfield, N. R. (2007, April 22). Before deadly rage, a life consumed by a troubling silence. *The New York Times*. Retrieved from http://www.nytimes.com/2007/04/22/us/22vatech.html?r=o
- Kyle, C. (2013) American gun: A history of the U.S. in ten guns. New York: CT Legacy, LLC.

- Lavergne, G. M. (1997) A sniper in the tower: The true story of the Texas tower massacre. Texas: Bantam.
- Lemieux, F. (2014). Effect of gun culture and firearm laws on gun violence and mass shootings in the United States: A multi-level quantitative analysis. *International Journal of Criminal Justice Sciences*, *9*(1), 74.
- Merriam, S. (2009). Qualitative research: A guide to design and implementation. San Francisco, California: Jossey-Bass.
- Miller, M., Hemenway, D., & Wechsler, H. (1999). Guns and gun threats at college. *Journal of American College Health*, 51(2), 57-65.
- Neuman, J., & Macias, T.M. (2007, August 31). Report weaves dark tale of gunman's past. *The LA Times*. Retrieved from http://articles.latimes.com/2007/aug/31/nation/na-vatech32
- Newman, K.S., Fox, C., Harding, D.J., Mehta, J., & Roth, W. (2004). *Rampage: The social roots of school shootings*. New York, NY: Basic Books.
- Newman, K., & Fox, C. (2009). Rampage shootings in American high school and college settings, 2002-2008. *American Behavioral Scientist*, 52(9), 1286-1308.
- Nolte, W., & Kelly, R. (2016). *Umpqua Community College year seven self-evaluation*. Retrieved from Umpqua Community College website: https://www.umpqua.edu/images/resources-services/campus/accreditation/downloads/UCC-Updated-Year-7-Report.pdf
- Oregon Public Broadcasting (2015) Umpqua Community College to have full-time officer after shooting. Retrieved from: https://www.opb.org/news/article/umpqua-community-college-to-have-full-time-officer-after-shooting/
- Patten, R., Thomas, M. O., & Wada, J. C. (2013). Packing heat: Attitudes regarding concealed Weapons on college campuses. *American Journal Criminal Justice*, 38:551-569. doi: 10.1007/s12103-012-9191-1.
- Patton, M. Q. (2002). *Qualitative research and evaluation methods* (3rd ed.). Thousand Oaks, CA: Sage Publications, Inc.
- Quizon, D. (2011). Legislative proposals in 9 states would allow guns on campuses. *The Chronicle of Higher Education*. Retrieved from http://chronicle.com/article/Legislative Proposals-in-9/126392/
- Schildkraut, J., & Elsass, H. J. (2016). *Mass shootings: media, myths, and realities*. Retrieved from https://o-ebookcentral-proquest-com.library.uark.edu

- Smith, T. (2012). To conceal and carry or not to conceal and carry on higher education campuses, that is the question. *Journal of Academic Ethics*. *10*, 237-242. doi: 10.1007/s10805-019161-8
- Thompson, A., Price, J. H., Dake, J., & Teeple, K. (2013). Faculty perceptions and practices regarding carrying concealed handguns on university campuses. *Journal of Community Health: The Publication for Health Promotion and Disease Prevention*, 38(2), 366-373. doi: 10.1007/s10900-012-9626-0
- Vanderhart, D., Johnson, K., & Turkewitz, J. (2015). Oregon shooting at Umpqua College kills 10, Sheriff says. The Ney York Times. Retrieved from https://www.nytimes.com/2015/10/02/us/oregon-shooting-umpqua-community-college.html.
- Virginia Tech Review Panel (2007). Mass shootings at Virginia Tech, April16, 2007: Report of the Virginia Tech Review Panel presented to Timothy M. Kaine, Commonwealth of Virginia, August 2007. Available online at http://vtreviewpanel.org/report/index.html
- Vossekuil, B., Fein, R., Reddy, M., Borum, R., & Modzeleski, W. (2004). *The final report and findings of the Safe School Initiative: Implications for the prevention of school attacks in the United States*. Washington, DC: U.S. Department of Education, Office of Elementary and Secondary Education, Safe and Drug-Free Schools Program and U.S. Secret Service, National Threat Assessment Center, Washington, D.C., 2004.
- Wike, T. L., & Fraser, M. W. (2009). School shootings: Making sense of the senseless. *Aggression and Violent Behavior*, 14 (2009), 162-169.
- Yin, R. K. (2009). Case study research: Design and methods (4th ed.). Los Angeles, CA: Sage Publications, Inc.
- Ziv, S. (2015, October 5). Father of Umpqua Community College shooter says gun laws must change. *Newsweek*. Retrieved from http://www.newsweek.com/father-umpqua-community-college-shooter-says-gun-laws-must-change-379934.

Appendix A

Research Protocol

IRB Project Number 17-05-706

UNIVERSITY OF ARKANSAS INSTITUTIONAL REVIEW BOARD PROTOCOL FORM

The University Institutional Review Board recommends policies and monitors their implementation, on the use of human beings as subjects for physical, mental, and social experimentation, in and out of class. . . . Protocols for the use of human subjects in research and in class experiments, whether funded internally or externally, must be approved by the (IRB) or in accordance with IRB policies and procedures prior to the implementation of the human subject protocol. . . Violation of procedures and approved protocols can result in the loss of funding from the sponsoring agency or the University of Arkansas and may be interpreted as scientific misconduct. (see Faculty Handbook)

Supply the information requested in items 1-14 as appropriate. **Type** entries in the spaces provided using additional pages as needed. In accordance with college/departmental policy, submit the original **and** one copy of this completed protocol form and all attached materials to the appropriate Human Subjects Committee. In the absence of an IRB-authorized Human Subjects Committee, submit the original of this completed protocol form and all attached materials to the IRB, Attn: Compliance Officer, MLKG 109, 575-2208. Completed form and additional materials may be emailed to irb@uark.edu. The fully signed signature page may be scanned and submitted with the protocol, by FAX (575-6527) or via campus mail.

A Case Study of the Umpqua Community College Shooting

1. Title of Project

		, , , ,		Č .		
2.	(Students must have a faculty member supervise the research. The faculty member must sign this form and all researchers and the faculty advisor should provide a campus phone number.)					
		Name	Department	Email Address	Campus Phone	
	Principal Researcher	Tim Wilson	RHRC	tpwilson@uark.edu	4175292506	
	Co-Researcher	n/a				
	Co-Researcher	n/a				
	Co-Researcher	n/a				
	Faculty Advisor	Dr. Michael Hevel	RHRC	hevel@uark.edu	4795754924	
3.Researcher(s) status. Check all that apply.						
	☐Faculty ☐ Staff ☒	Graduate Student(s)	Undergraduate Studente	(s)		
4.	Project type					
	Faculty Research Staff Research	□ Thesis / Dissertation □M.A.T. Research	Class Pr	-	dependent Study / ac. Spec. Project	
5.	Is the project receiving extramural funding? (Extramural funding is funding from an external research sponsor.)					
	No ☐ Yes. Specify the source of funds					

IRB Project Number

6.	Brief description of the purpose of proposed research and all procedures involving people. Be specific. Use additional pages if needed. (Do not send thesis or dissertation proposals. Proposals for extramural funding must be submitted in full.)						
	Purpose of research:						
	the purpose of this study is to conduct a case study with a focus on law enforcement officers of a campus shooting which occurred in a small community college in Oregon in 2015.						
Procedures involving people: I would like to visit, if possible, with the officers who responded to the shooting, as well as other representatives of law enforcement who were involved. All subjects will be initially contacted by phone to determine if they would be willing to participate and then be provided with the informed consent form to sign along with the anticipated questions to be asked. Each interview is expected to take 45-60 minutes. Each interview will be audio recorded for the purposes of transcription and the original recording will be destroyed after transcription. The interviewee will be identified by name in the transcript and subsequent use of any quotes in the study. Pseudonyms will not be used for those individuals interviewed as it would not be difficult to determine the particular institution being studied and many of the potential interviewees would have had their names published as first responders to the incident in the media.							
7.	Estimated number of participants (complete all that apply)						
	Children under 14 Children 14-17 UA students5-6_Adult non-students (18yrs and older)						
8.	Anticipated dates for contact with participants:						
	First ContactMay 15, 2017 Last ContactJuly 15, 2017						
9.	Informed Consent procedures: The following information must be included in any procedure: identification of researcher, institutional affiliation and contact information; identification of Compliance Officer and contact information; purpose of the research, expected duration of the subject's participation; description of procedures; risks and/or benefits; how confidentiality will be ensured; that participation is voluntary and that refusal to participate will involve no penalty or loss of benefits to which the subject is otherwise entitled. See <i>Policies and Procedures Governing Research with Human Subjects</i> , section 5.0 Requirements for Consent.						
	 ☑ Signed informed consent will be obtained. Attach copy of form. ☐ Modified informed consent will be obtained. Attach copy of form. ☐ Other method (e.g., implied consent). Please explain on attached sheet. ☐ Not applicable to this project. Please explain on attached sheet. 						
10	. Confidentiality of Data: All data collected that can be associated with a subject/respondent must remain confidential. Describe the methods to be used to ensure the confidentiality of data obtained.						
	All data collected will be stored on a password protected external hard drive as well as a password protected laptop. All phone interviews will be transcribed and kept on these devices of which only I have the password to access the information.						
11	. Risks and/or Benefits: Risks: Will participants in the research be exposed to more than minimal risk? F Yes F No Minimal risk is defined as risks of harm not greater, considering probability and magnitude, than those ordinarily encountered in daily life or during the performance of routine physical or psychological examinations or tests. Describe any such risks or discomforts associated with the study and precautions that will be taken to minimize them.						

Benefits: Other than the contribution of new knowledge, describe the benefits of this research, especially any benefits to those participating.

12.	Check sheets:	all of the following that apply to the proposed research. Supply the requested information	on below or on attached				
	☐ A.	Deception of or withholding information from participants. Justify the use of deceptio information. Describe the debriefing procedure: how and when will the subject be infand/or the information withheld?					
	☐ B.	Medical clearance necessary prior to participation. Describe the procedures and note to taken.	he safety precautions to be				
	□ C. □ D.	Samples (blood, tissue, etc.) from participants. Describe the procedures and note the safety precautions to be taken Administration of substances (foods, drugs, etc.) to participants. Describe the procedures and note the safety precautions to be taken.					
		Physical exercise or conditioning for subjects. Describe the procedures and note the sa Research involving children. How will informed consent from parents or legally authoras from subjects be obtained?					
	☐ G.	Research involving pregnant women or fetuses. How will informed consent be obtained fetus?	ed from both parents of the				
	☐ H.	Research involving participants in institutions (cognitive impairments, prisoners, etc.). institutions involved. Attach letters of approval. Letters must be on letterhead with ori transmission is acceptable.					
	□ 1.	Research approved by an IRB at another institution. Specify agencies or institutions in approval. Letters must be on letterhead with original signature; electronic transmission					
	☐ J.	Research that must be approved by another institution or agency. Specify agencies or letters of approval. Letters must be on letterhead with original signature; electronic tra	nstitutions involved. Attac				
13.		ist for Attachments following are attached:					
	V.5335	onsent form (if applicable) or					
	⊠ Le	etter to participants, written instructions, and/or script of oral protocols indicating clearly	the information in item				
	L	etter(s) of approval from cooperating institution(s) and/or other IRB approvals (if applica-	able)				
	□ Da	ata collection instruments					
	0-14-15 (1-15) (1-15) (1-15) (1-15)						
4.	Signatu	res					
	subject	ree to provide the proper surveillance of this project to insure that the rights and welfare s/respondents are protected. I/we will report any adverse reactions to the committee. As a procedures after the project has been approved will be submitted to the committee for renewal of approval for any project when subject/respondent contact continues more than	dditions to or changes in review. I/we agree to				
	Princip	al Researcher Tim Wilson	Date05/01/2017				
	Co-Res	earcher	_ Date				
	Co-Res	earcher	Date				

Appendix B

Interview Questions

A Case Study of the Umpqua Community College Campus Shooting

Proposed interview questions

- 1. What is your current title?
- 2. How long have you been in your current position?
- 3. Can you tell me how you came to have a career in law enforcement?
- 4. How did you come to work for LAW ENFORCEMENT AGENCY?
- 5. Can you describe any training regarding active shooters?
- 6. Did any of this training change over time?
- 7. Can you describe what you remember about the mass shooting that occurred at Umpqua Community College in October 2015?
- 8. Was this your first experience with an active shooter situation?
- 9. If not, how did your first experience with an active shooter situation guide your response to this active shooter incident?
- 10. What recommendations would you have for police departments and community colleges given your experiences on that day?
- 11. In what way did your previous training regarding active shooters guide your response to this mass shooting?
- 12. What is the biggest lesson you took away from your experience with this campus shooting?
- 13. In what ways has your experience with this active shooter incident changed your planned response to another active shooter situation?
- 14. What sort of obstacles did you encounter when you responded to the call of an active shooter?

IRB #17-05-706

Approved: 06/02/2017 Expires: 05/18/2018

Appendix C

Informed Consent

Title: A Case Study of the Umpqua Community College Shooting

Investigator(s): Tim Wilson, Doctoral Candidate

University of Arkansas

College of Education and Health Professions

Higher Education Program 324 Graduate Education Building Fayetteville, Arkansas 72701

479-575-3208

Faculty Advisor: Dr. Michael S. Hevel

Assistant Professor of Higher Education College of Education and Health Professions (RHRC)-Rehabilitation, Human Resources,

And Communication Disorders 324 Graduate Education Building Fayetteville, Arkansas, 72701

479-575-4924

University of Arkansas Office of Research Compliance 109 MLKG 1424 W. Martin Luther King, Jr. Fayetteville, AR 72701 Office: 479-575-4572

Description: The present study will offer a case study of the mass shooting at Umpqua Community College in October 2015. The purpose of these interviews is to examine the response to the shooting at Umpqua Community College from the perspective of individuals who were involved in the response or present when the incident occurred. Each interview is expected to take 45-60 minutes. Each interview will be audio recorded for the purposes of transcription and the original recording will be destroyed after transcription. The interviewee will be identified by name in the transcript and subsequent use of any quotes in the study.

Risks and Benefits: The benefits include contributing to the knowledge base of the effects of mass shootings on campuses of higher education. There are no anticipated risks to participating in the study.

Voluntary Participation: Your participation in the research is completely voluntary. You may choose at any time to discontinue the interview. You will have the opportunity to preview the questions to be asked as well as being able to examine the proposed use of any quotes documented in the interview before they are published in the study.

Confidentiality: Your identity will be safeguarded by the researcher and all information obtained by the researcher will be held on a secure laptop and hard drive which the researcher will have the exclusive access to. All information collected will be kept confidential to the extent allowed by law and University policy. Right to Withdraw: You are free to refuse to participate in the research and to withdraw from this study at any time. Your decision to withdraw will bring no negative consequences — no penalty to you.

Informed Consent: I,	, have read the description,				
(please print)	orint)				
including the purpose of the study, the procedures to be used, the potential risks, the confidentiality, as well as the option to withdraw from the study at any time. Each of these items has been explained to me by the investigator. The investigator has answered all of my questions regarding the study, and I believe I understand what is involved. My signature below indicates that I freely agree to participate in this study and that I have received a copy of this agreement from the investigator.					
Signature	Date				

Appendix D

Member Checking Email

A Case Study of the Umpqua Community College Shooting Principal Researcher: Tim Wilson Faculty Advisor: Dr. Michael S. Hevel

From: Wilson, Timothy

Sent: [DAY, MONTH XX, 2017]

To: [PARTICIPANT]

Subject: Interview transcript

[PARTICIPANT],

On [DATE], you participated in an interview as part of a research study I conducted regarding the shooting at the Umpqua Community College.

First, thank you for your participation. As anticipated, your participation yielded valuable information that will help inform my research findings and contribute to the larger body of research on campus shootings.

Second, I' ve attached a record of your interview. To ensure that research findings are as accurate

as possible, I request that you review the record and provide me with your feedback. Please mark your comments on the document itself or attach a document with your comments.

Please note that your feedback is requested by [DATE], after which date I will assume you approve the record as it is in its current form. I will provide a follow up email when I select which actual quotes I will be utilizing, if you wish.

I hope you'll give the document your careful attention. Feel free to contact me as you review the

record if you have questions, comments, or concerns.

Tim Wilson Assistant Professor Criminal Justice Administration Missouri Southern State University

Appendix E

Institutional Review Board Documentation

A Case Study of the Umpqua Community College Shooting Principal Researcher: Tim Wilson Faculty Advisor: Dr. Michael S. Hevel



Office of Research Compliance Institutional Review Board

June 2, 2017

MEMORANDUM

TO: Tim Wilson

Michael Hevel

FROM: Ro Windwalker.

IRB Coordinator

RE: New Protocol Approval

IRB Protocol #: 17-05-706

Protocol Title: A Case Study of the Umpqua Community College Shooting

Review Type:

EXEMPT SEXPEDITED FULL IRB

Approved Project Period: Start Date: 06/02/2017, Expiration Date: 05/18/2018

Your protocol has been approved by the IRB. Protocols are approved for a maximum period of one year. If you wish to continue the project past the approved project period (see above), you must submit a request, using the form Continuing Review for IRB Approved Projects, prior to the expiration date. This form is available from the IRB Coordinator or on the Research Compliance website (https://vpred.uark.edu/units/rscp/index.php). As a courtesy, you will be sent a reminder two months in advance of that date. However, failure to receive a reminder does not negate your obligation to make the request in sufficient time for review and approval. Federal regulations prohibit retroactive approval of continuation. Failure to receive approval to continue the project prior to the expiration date will result in Termination of the protocol approval. The IRB Coordinator can give you guidance on submission times.

This protocol has been approved for 6 participants. If you wish to make any modifications in the approved protocol, including enrolling more than this number, you must seek approval prior to implementing those changes. All modifications should be requested in writing (email is acceptable) and must provide sufficient detail to assess the impact of the change.

If you have questions or need any assistance from the IRB, please contact me at 109 MLKG Building, 5-2208, or irb@uark.edu.