

Nova Southeastern University NSUWorks

Fischler College of Education: Theses and Dissertations

Abraham S. Fischler College of Education

1-1-2016

Assessing Educators' School Safety and Security Preparedness at a New Jersey K-12 Nonpublic School

Ronald P. Rinaldi

Nova Southeastern University, RonaldP.Rinaldi@comcast.net

This document is a product of extensive research conducted at the Nova Southeastern University Abraham S. Fischler College of Education. For more information on research and degree programs at the NSU Abraham S. Fischler College of Education, please click here.

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



Part of the Education Commons

Share Feedback About This Item

NSUWorks Citation

Ronald P. Rinaldi. 2016. Assessing Educators' School Safety and Security Preparedness at a New Jersey K-12 Nonpublic School. Doctoral dissertation. Nova Southeastern University. Retrieved from NSUWorks, Abraham S. Fischler College of Education. (90) https://nsuworks.nova.edu/fse_etd/90.

This Dissertation is brought to you by the Abraham S. Fischler College of Education at NSUWorks. It has been accepted for inclusion in Fischler College of Education: Theses and Dissertations by an authorized administrator of NSUWorks. For more information, please contact nsuworks@nova.edu.

Assessing Educators' School Safety and Security Preparedness at a New Jersey K-12 Nonpublic School

by Ronald P. Rinaldi

An Applied Dissertation Submitted to the Abraham S. Fischler College of Education in Partial Fulfillment of the Requirements for the Degree of Doctor of Education

Approval Page

This applied dissertation was submitted by Ronald P. Rinaldi under the direction of the persons listed below. It was submitted to the Abraham S. Fischler College of Education and approved in partial fulfillment of the requirements for the degree of Doctor of Education at Nova Southeastern University.

David Weintraub, EdD Committee Chair

Jennifer Quiñones Nottingham, EdD Committee Member

Lynne Schrum, PhD Dean

Statement of Original Work

I declare the following:

I have read the Code of Student Conduct and Academic Responsibility as described in the *Student Handbook* of Nova Southeastern University. This applied dissertation represents my original work, except where I have acknowledged the ideas, words, or material of other authors.

Where another author's ideas have been presented in this applied dissertation, I have acknowledged the author's ideas by citing them in the required style.

Where another author's words have been presented in this applied dissertation, I have acknowledged the author's words by using appropriate quotation devices and citations in the required style.

I have obtained permission from the author or publisher—in accordance with the required guidelines—to include any copyrighted material (e.g., tables, figures, survey instruments, large portions of text) in this applied dissertation manuscript.

Ronald P. Rinaldi Name

November, 2016 Date

Acknowledgments

First and foremost, I want to dedicate this dissertation to my mother and father, Ann and Ronald, for their intense love, unwavering support, and continued endless devotion to parenting since the day I was born. To my mother, a successful writer and author who always put our family first, I thank you for teaching me family is most important. To my father, whose strong work ethic and integrity I try to emulate every day, thanks for being my role model. To my wife, Lori, thank you for taking on more responsibilities during this time consuming undertaking. To my children, Ronnie, James, and Nicole; I love you very much and thank you for supporting me as I spent countless hours away from you. Ronnie, as you pursue your own terminal degree, I am extremely proud of your efforts and that soon you will be the "real" doctor in the family. James and Nicole, I am sorry for not getting to play as much as you would have liked these past years: I promise to make this up to you.

I need to thank several people whose time in my life has influenced me tremendously. First, two former professors, Dr. Marcus F. Cunliffe and Dr. Don Higginbotham—although passed on—for their dedication to teaching and research that lives within me. Next, my boss, Marcie Fiorentino, for giving me the opportunity and support to recreate myself at a crucial juncture in my life: I will be eternally grateful. I also thank Dr. William Austin and Dr. Thomas Gambino, fellow Nova Southeastern alumni, for their expertise and assistance.

Last, but certainly not least, I must gratefully thank my academic chairs. Dr.

Eugene Costa, for his intense professional dedication to assisting and guiding me, and Dr.

David Weintraub, for his expertise and guidance while seeing me through to the long awaited end. Their importance in this endeavor was crucial and invaluable.

Abstract

Assessing Educators' School Safety and Security Preparedness at a New Jersey K-12 Nonpublic School. Ronald P. Rinaldi, 2016: Applied Dissertation, Nova Southeastern University, Abraham S. Fischler College of Education. Key words: school safety and security, school emergency management plans, school shootings, targeted school violence, first responder training

School shootings and emergencies have created the need for educators to be proficient in emergency response procedures; yet they do not always receive the requisite training. The lack of an established delineated training program for New Jersey, kindergarten to Grade 12 institutions has created a situation where educator preparedness varies immensely at schools. Numerous national events of targeted school violence have exemplified the need for quick and proper responses by educators to mitigate the tragic results until first responders arrive.

The purpose and goal of this study was to assess educators' perceptions and to determine the best practices in creating a comprehensive safety and security training program to prepare educators for school crises in order to offer a model for stakeholders to follow or gain ideas to improve their institution's specific school safety and security emergency plans.

Guided by the U.S. Department of Education's best practices in developing high-quality school safety plans, this study analyzed the perceptions of 60 educators in one New Jersey kindergarten to Grade 12 school on the effectiveness of training. A mixed-methods approach, using a survey questionnaire and interviews, measured changes in the perceptions of these educators after the 15-week program. Data results included a revelation of the implementation of a comprehensive school safety and security plan with related training program resulted in a statistically significant increase in the perceptions of educators' knowledge and abilities to respond effectively to school targeted violence and emergencies. These findings support the concept that best practices in the field of school safety and security management include appropriate and comprehensive school safety and security plans and training for educators to combat and mitigate school targeted violence and emergent events.

Table of Contents

	Page
Chapter 1: Introduction	
Statement of the Problem	
The Topic	
Research Problem	
Background and Justification	
Deficiencies in the Evidence	
Audience	
Definition of Terms	
Purpose of the Study	
Summary	19
Chapter 2: Literature Review	21
Overview	21
History of the Phenomenon	22
Black Swan Event	25
Theories on Active Shooter Phenomenon	26
Threat Assessment	32
Theoretical Framework	35
Educators' Safety Responsibilities	37
Emergency Management Guides	42
Crisis Management Teams	47
Emergency Training for Educators	48
Educators' Perceptions	52
School Security in New Jersey	58
Paradigm Shift	65
Summary	67
Research Questions	
Chapter 3: Methodology	71
Participants	
Instruments	
Procedures	
Data Analysis	
Summary	
Summary	
Chapter 4: Results	
Participant Background	
Data Analysis Results	
Research Question 1	
Research Question 2	
Research Question 3	
Research Question 4	
Summary	125

Chapter 5:	Discussion	.127
Ove	erview	.127
Fine	dings	.127
Rel	ationship of Findings to Literature	.133
Cor	nclusions	.140
Lin	nitations	.143
Rec	commendations for Local Practice	.144
	commendations for Future Research	
	nmary	
References		.148
Appendices	S	
A	Educators' Perceptions of School Safety and Security Training	101
п	Questionnaire	
В	Interview Questions for Teachers and Support Staff	
C	Interview Questions for Administrators	
D	Proposed School Safety & Security Implementations	.191
Tables		7.
1	Cronbach's Alpha Results for EPSSSTQ Likert-Type Scaled Items	
2	Derivation of Researcher's Items in Appendix A	
3	Alignment Between Research Questions and Instrument Questions	
4	Demographics of Participants $(N = 60)$	
5	Preimplementation EPSSSTQ Themes, Questions 25 and 26 $(N = 60)$.	
6	Postimplementation EPSSSTQ Themes, Questions 25 and 26 ($N = 60$)	
7	Preimplementation EPSSSTQ Themes, Questions 27 $(N = 60)$.102
8	Mean and Standard Deviation Results for Overall Likert-Type Scaled	
	Items on Preimplementation and Postimplementation EPSSSTQ ($N =$	
	60)	.109
9	Descriptive Statistics for Preimplementation EPSSSTQ Survey Items	
	6 to $12 (N = 60)$.110
10	Descriptive Statistics for Postimplementation EPSSSTQ Survey Items	
	6 to $12 (N = 60)$.111
11	Descriptive Statistics for Preimplementation EPSSSTQ Survey Items	
	13 to 19 ($N = 60$)	.112
12	Descriptive Statistics for Postimplementation EPSSSTQ Survey Items	
	13 to 19 ($N = 60$)	.114
13	Descriptive Statistics for Preimplementation EPSSSTQ Survey Items	
	20 to 24 (<i>N</i> = 60)	.115
14	Descriptive Statistics for Postimplementation EPSSSTQ Survey Items	
	20 to $24 (N = 60)$.116
15	Postimplementation EPSSSTQ Themes, Question 27 $(N = 60)$	

Chapter 1: Introduction

Statement of the Problem

Although not a new phenomenon, the critical issue of targeted school violence has been recognized as a serious problem and garnered both national and state interest, as well as interdisciplinary debate, since the school shootings by two students at Columbine High School in 1999 (Birkland & Lawrence, 2009; Borem, Cornell, Modzeleski, & Jimerson, 2010; Burdick, 2006; Cornell et al., 2004; Cullen, 2009; Langman, 2015; Muschert, 2007, 2009; Schanlaub, 2009; U.S. Department of Education [USDOE], 2013a). The national fear and subsequent changes in school safety and security policies that had resulted from that one event has been called the Columbine Effect (Muschert, Henry, Bracy, & Peguero, 2014). Active shooter events between 2000 and 2010 occurred more frequently at both public kindergarten to Grade 12 (K-12) schools and institutions of higher education (IHEs; Blair & Martaindale, 2013; Blair & Schweit, 2014). A 2000 to 2013 Federal Bureau of Investigation (FBI) study of active shooter events at educational facilities noted 12 IHE events and 27 kindergarten to Grade 12 (K-12) events (Blair & Schweit, 2014). The phenomenon is not limited to K-12 institutions, IHEs, or even educational institutions here in the United States as targeted school violence has occurred in Erfurt, Germany in 2002; Beslan, Russia in 2004; Tuusula, Finland, in 2007; Winnenden, Gerrmany, in 2009; Kenya, Africa, in 2015; and Saskatchewan, Canada, in 2016 (Allen, Cornell, Lorek, & Sheras 2008; Fisher, 2007; Nickel & Gordon, 2016; Spicer, 2015).

Part of the debate on the phenomenon has been the symbiotic relationship between law enforcement and educational institutions in combating the active shooter incident. The first organization, respectively, is responsible for reaction and response of

law enforcement first responders and special weapons and tactical teams (SWAT) to active shooter incidents (Browman, 2001; Martinez, 2012; O'Brien, 2008a, 2008b). The second organization, the educational institutions, are responsible for providing a safe and secure environment for students and ensuring school emergency plans are in place to respond to targeted school violence (Adams & Kritsonis, 2006; Fein et al., 2002; USDOE, 2013a; Vossekuil, Fein, Reddy, Borum, & Modzeleski, 2004).

Because of the Columbine tragedy, crisis management in the educational setting became a priority and both disciplines have been under pressure to better combat the active shooter on a school campus (Gainey, 2009; Muschert et al., 2014). Law enforcement across the country have subsequently re-evaluated their thinking, training, and protocols to incorporate this new phenomenon of the school shooter (active shooter) into their training scenarios and programs (Allen, 2015; Caster, 2008; Manger, 2014; Martinez, 2012; Moore, 2010; Nichols, 2006; O'Brien, 2008a, 2008b; Police Executive Research Forum, 2014; Scanlon, 2008). Educational administrators, responsible for taking reasonable steps to protect students from foreseeable dangers under the legal status of in loco parentis, have initiated and employed various procedures ranging from zero tolerance to threat assessment to identify substantive threats and prevent targeted school violence (Cornell, 2003; New Jersey School Security Task Force [UJSSTF, 2015; USDOE, 2013a).

Today, educators and law enforcement personnel are more educated and attuned to the warning signs of active shooters and are better prepared to mitigate the number and severity of the events. However, as the number of incidents of targeted school violence since the December 2012 massacre at Sandy Hook Elementary School in Connecticut have remained prolific and high profiled events continue, such as Cummings Middle

School in Texas in January 2012; Taft-Union High School, California, in January 2013; Santa Monica College, California, in June 2013; Arapahoe High School, Colorado, in December 2013; Berrendo Middle School, New Mexico, in January 2014; Marysville-Pilchuck High School, Washington, in October 2014; Wayne Community College, North Carolina, in April 2015; Umpqua Community College in Oregon in October 2015; Alpine High School, Texas, in September 2016; and Townville Elementary, South Carolina, in September 2016; educators and law enforcement need to remain vigilant (Christensen, 2016; Everytown for Gun Safety, 2014; Fantz, Knight, & Wang, 2014). These numerous deadly incidents in the last few years reinforce the ineradicable nature of the phenomenon and the necessity for best practices in school safety and security preparedness. It is understood the question is not whether targeted school violence will happen again, but when will it happen again. The cultural mindset that these events always occur in other places, however, creates a challenge and is a culture that must be changed within the school community. According to Hull (2000),

The potential for a school crisis exists every day classes are in session. A few may believe that these traumatic events will never happen in their schools. For school personnel, the real question is not will an emergency happen in my school, but when the emergency occurs, how prepared will we be to handle the situation? (p. 68)

School community prevention and mitigation requires school officials to overcome the long held belief that the event will not happen at their school (Greenberg, 2007b). More than 15 years after Columbine, even after the tragic events at various types and geographical locations of educational institutions ranging from Sandy Hook Elementary to Umpqua Community College, the same warning against the denial mindset

continues to be heard from school violence experts. As posited in their most recent report on school safety issues and recommendations, the New Jersey School Security Task Force [NJSSTF] (2015) warned educators school safety and security should not be taken for granted and stakeholders cannot act as if the "worst case of unimaginable violence won't happen here" (pp. 14-15). School leaders need to proactively act through the implementation of emergency management (i.e., school safety and security) plans.

The threat of emergency crises demand educational institutions create school safety and security plans (SSSPs) to have measures in place which will prevent or mitigate crisis events (USDOE, 2013a). Despite the emergent demands of these crises, preventative and preparation are only recommended and not required by the USDOE. No federal laws exist mandating states have emergency policies or procedures for the K-12 districts or IHEs (U.S. Government Accountability Office [USGAO], 2007a). Greenberg (2007a) noted there is no federal agency, central authority, national policy center, information clearinghouse, center for model practices, research center, or educational institution dedicated solely to school campus safety and security. Minimal assistance creating SSSPs has been offered by federal or state agencies and the USDOE and Office of Safe and Drug-Free Schools (2007) noted "research on what works in school-based crisis planning is in its infancy" (p. 4). The USGAO (2007a, 2007b) national survey in 2007 found that only 32 of 50 states had established their own laws or policies requiring K-12 institutions have some form of emergency management plan and many of these plans did not include recommended practices. Additionally, the USGAO (2007a, 2007b) survey found that school emergency management plans varied in content; many emergency plans in place did not fully cover the safety needs of special needs students at these schools, and that a significant number of schools did not train with first responders

nor were trained to implement their emergency management plans on a regular basis (USGAO, 2007a, 2007b).

New Jersey is one of the states with established laws mandating K-12 public school districts have a SSSP, and practice mandatory drills (New Jersey Department of Education [NJDOE], 2015a). However, New Jersey school district safety and security plans are similar in composition as those found nationally by the USGAO (2007a, 2007b) and varied in depth, composition, content, and detail. No one plan or template is issued for school districts to follow. Instead, the (NJDOE & Office of Preparedness and Emergency Planning, 2011b) offers a checklist of 91 generic elements for education administrators to use when creating the safety and security plan. Educators are charged with this huge responsibility yet are underprepared to respond effectively to a school emergency.

The Topic

The topic explored in this study was the educators' (teachers, administrators, and support staff) perceptions of the effectiveness of SSSPs with related training classes and drills to enhance their abilities to prepare, react, and respond effectively to an emergency crisis, such as an active shooter incident, at one New Jersey K-12 private school. With the phenomenon of targeted school violence, a daily threat and new protocols in place for law enforcement and educators, the preventative and preparative measures to protect students from targeted school violence incidents fall upon the teachers, administrators, and support staff (counselors, psychologists, health care professionals, resource professionals, secretarial, and custodial) at the school level as mandated by the state law. Educators are tasked to be aware of various emergency procedures and ready to react under high stress situations, especially as the first to respond during an active shooter

incident, yet educators are not provided the tools or training to become proficient in this area of responsibility (Graveline, 2003). Unlike police departments that schedule regular training and ensure their officers are proficient in emergency response procedures and prepared for stressful incidents, schools vary in their emergency management training, if they train at all, and teachers' self-efficacy related to emergency response skills is often low or nonexistent (Bergh, 2009; Brown, 2008; Church, 2011; Collier, 2006; Dube, 2012; Graham, 2009; Kandakai & King, 2002; Kanner, 2015; McDaniel, 2003; Rider, 2015; Session, 2000; Taylor, 2008).

Research Problem

The research problem investigated in this study was that the teachers, administrators, and support staff at one private New Jersey K-12 school have minimal awareness and preparedness knowledge in school emergency safety and security procedures and their abilities to properly respond to an emergent crisis are affected as a result. In the state of New Jersey, school safety and security is the responsibility of school superintendents at the public school level and school leaders at the private school level. State law mandates school leaders have an emergency management plan (SSSP) in place. All school employees must be trained in safety and security procedures, and mandatory security drills be held. Without the state making available to school leaders a comprehensive delineated SSSP to follow, the fact there are no formal training classes offered to educators, and the creation of SSSPs, the training of school personnel in these plans, and the time devoted to these responsibilities result in a varied and sometimes nonexistent state of educator awareness and preparedness from school to school. To magnify the problem, the accountability and burden of this system falls to school administrators who have little experience and no training themselves in the field of

school safety and security, and who have a myriad of other educational administrative issues to deal with, many schools are not prepared even minimally for an emergent crisis (Deegan, 2010). As a result, many educators perceive their abilities to respond to a school emergency crisis, especially the feared active shooter incident as minimal or insufficient. This lack of confidence stems from inadequate education and training in school safety and security issues (Bergh, 2009; Brown, 2008; Church, 2011; Collier, 2006; Dube, 2012; Graham, 2009; Kandakai & King, 2002; Kanner, 2015; McDaniel, 2003; Rider, 2015; Smith-Greer, 2001).

New Jersey law mandates school administrators hold two drills per month, one fire drill and one security drill for each month a school is in operation throughout the year, with security drills designed to the various types of emergencies, such as active shooters, bomb threats, nonfire evacuations, and lockdown drills (NJDOE, 2010a, 2010b, 2010c, 2015b). Yet despite this rigorous drill schedule to ensure the most effective emergency responses by educators, they are not supplied with adequate education and training in school safety and security needed to prepare them to perform these actions (NJSSTF, 2015).

In the researcher's experience, as both a law enforcement officer having been assigned to a SWAT team and as a teacher at both the secondary and higher educational levels, a unique perspective was garnered from working in both disciplines. The researcher has observed a disconnect between the two disciplines, which are joined in a symbiotic relationship in the field of school safety and security, and a fundamental flaw in a process whereby the accountability for the emergency plans, responses, and training to a targeted school violence incident is designated the responsibility of those only trained in education. As a police officer and a SWAT team officer, the researcher had to

attend extensive training courses, obtain certifications, and regularly recertify in the acquired skills to maintain a high level of proficiency in emergency response procedures. As an educator, the researcher attended classes, passed assessments, and obtained teaching certifications to show proficiency in all areas of responsibility (classroom management, curriculum development, learning theory, assessment creation, content knowledge, and teaching strategies) except one--school safety and security. This lack of required safety and security preservice education for teachers and administrators fails to create a high or even moderate level of self-efficacy among educators regarding their responsibilities to their students (McCarty, 2012; Sela-Shayovitz, 2009; Session 2000). Subsequently, if a school's safety and security plans and related training and drills are minimal or nonexistent, the educators' response effectiveness to emergencies, such as an active shooter incident, are seriously affected.

Background and Justification

Events of school violence have existed since the beginning of the establishment of the institution of education (Midlarski & Klain, 2005), but, in the 1990s, the type of violence found at schools took on the more serious feature of shootings (Volokh & Snell, 1998). Several high profiled school shootings from the 1990s began to gain public attention as this type of criminal activity was shocking to parents (Kleck, 2009; Leary, Kowalski, Smith, & Phillips, 2003; Muschert & Carr, 2006; Newman, Fox, Harding, Mehta, & Roth, 2004). The devastating results of targeted school violence and of the term active shooter was made a national concern in 1999 when the Columbine incident occurred and became the iconic event that focused the attention of the members of the media, politicians, and school safety professionals to the problem (Altheide, 2009; Birkland & Lawrence, 2009; Borem et al., 2010; McCabe & Martin, 2005; Muschert,

2009; Muschert et al., 2014). The frequency of active shooter events (one or more persons engaged in killing or attempting to kill multiple people in an area) has increased since 2000 (Blair & Martaindale, 2013). An analysis of 272 campus attacks at IHEs since 1900 determined that the majority have occurred in the 1990s and 2000s (Drysdale, Modzeleski, & Simons, 2010). A study by the FBI of 160 active shooter incidents from various public venues in the United States between 2000 and 2013 shows that these incidents are on the rise and that the second most common incident location was in schools (Blair & Schweit, 2014). Although only 39 of the 160 incidents were school related (27 schools, 12 IHEs), the study findings included that two of the four incidents with the highest number of casualties occurred in educational settings (e.g., Virginia Tech in Blacksburg, Virginia and Sandy Hook Elementary School, Newtown, Connecticut). According to Blair and Schweit (2014), while other academic settings also had high casualty counts "Northern Illinois University in DeKalb, Illinois (five killed, 16 wounded) and Santana High School in Santee, California (two killed, 13 wounded;" p. 15).

When an active shooter event begins, the most important element in minimizing the devastation is time (Blair, Nichols, Burns, & Curnutt, 2013; Blair & Schweit, 2014; Ergenbright & Hubbard, 2012; Martinez, 2007; Parker, 2008; Scanlon, 2008). Response times can vary for law enforcement to an active shooter incident. An average active shooter event lasts 12 minutes with 37% of events shorter than 5 minutes (Nicoletti, 2012). According to Cader (2013), the average first responder's response time can be as long as 18 minutes while Blair, Martindale, and Nichols (2014) calculated a 3-minute median response time. Within that 3-minute, median, response time, an active shooter can inflict so much damage that the five highest casualty events since 2000 happened even

though police arrived within that short time (Blair et al., 2013). One analysis of 84 active shooter events occurring between 2000 and 2010 revealed that 49% ended before police arrived (Blair & Martaindale, 2013) while the FBI study of 160 active shooter incidents between 2000 and 2013 found that 60% ended before their arrival (Blaire & Schweit, 2014). According to Blaire and Schweit, regarding the length of time of active shooter incidents, the FBI identified that "64 incidents ended in 5 minutes or less, with 23 ending in 2 minutes or less" (p. 8). From the moment of the first 9-1-1 call alerting first responders (police, SWAT, and medical personnel), all students, staff, and visitors need to be immediately notified of the event and emergency procedures, such as lockdowns, to be implemented quickly to minimize the damage and number of victims, which can be inflicted in such short periods of time. Lack of training and knowledge of emergency procedures by teachers inhibits the timely manner in which such emergency protocols are performed.

Targeted school violence in the form of an active shooter is a major fear for educators and parents, but other emergent crises, such as bomb threats, gas leaks, dangerous weather conditions, and suspicious persons, require quick and effective responses by school personnel as well. One critical aspect of school safety and security training is the implementation of the correct safety responses by the school population. Invariably, the varied levels and models of SSSPs found at different schools inherently contain weaknesses that stem from the individual profiles of each institution and lack of an overall best practices mandated procedure.

The challenges of a quick and effective response to an emergent event on a school campus follow: creating a SSSP; ensuring best practices in the field are part of the institution's plan; educating, training, and drilling school personnel in the procedures of

the emergency plan; drilling and educating the student population in proper responses to an emergency; and sharing and coordinating information among the school's staff. These challenges, if not met, leave many unaware of what to expect in a crisis situation (Bergh, 2009). Training teachers, administrators, support staff, and students using drills simulating actual crisis situations to minimize panic is vital (Bennett-Johnson, 2004; Bergh, 2009; Kramen, Massey, & Timm, 1999; Zdziarski, Dunkel, Rollo, & Associates, 2007). Nicoletti and Spencer-Thomas (2002) stated, "to survive a violent incident, people need to learn how to overcome inappropriate instincts, impaired senses, motor skills, and tunnel vision" (p. 136). Although police agencies regularly train for these situations, many schools do not (Harvey, 2011; Kapucu & Khosa, 2012; Mitroff, Diamond, & Alpaslan, 2006). An absence of state or federally mandated procedures for preparing, drilling, or implementing emergency responses, such as those for an active shooter, schools are left to individually prepare their own and the resulting policies and procedures vary in content, comprehensiveness, and frequency of practice (Brown, 2008; Church, 2011; Greenberg, 2007a, 2007b; Kandakai & King, 2002; Government Accountability Office, 2007a, 2007b).

Deficiencies in the Evidence

Much has been written on the phenomenon of targeted school violence, most studies were addressing the roots of school violence (Cornell, 2006; Fast, 2008; Jimerson, Nickerson, Mayer, & Furlong, 2012; Newman et al., 2004; Thomas, R. M., 2006), the events of school violence (Blair & Schweit, 2014; Fast, 2008; Langman, 2009, 2015; Lenhardt, Farrell, & Graham, 2010; Newman et al., 2004; Vossekuil, Reddy, Fein, Borum, & Modzeleski, 2000), and the prevention of school violence (Bataille & Cordova, 2014; Jimerson et al., 2012; USDOE, 2013a, 2013b; Volokh, & Snell, 1998; Zdziarski et

al., 2007). However, a few included an examination of teacher preparedness related to security training (Bergh, 2009; Brown, 2008; Cooper, 2008; Dixon, 2014; Graham, 2009; Kanner, 2015; Perkins, 2015; Rider, 2015; Session, 2000). Additionally, the participants in these studies based their views solely upon abilities perceived from training activities and not through actual crisis events implementation. McKenzie (2008) analyzed the perceptions from actual gun on campus crisis incidents where emergency plans were employed. Five school leaders were asked to evaluate their school plans and the effectiveness in responding to the incidents. This study, however, was limited in both number of participants and scope as it did not include teachers on those campuses who are not the ones responsible for creating effective emergency response plans and may have had different perceptions due to their positions.

Understanding these aspects of the phenomenon may have better educated those in the field of school safety attempting to meet its challenges, but will not eradicate this violence completely. Because there is no one comprehensive answer to ending the phenomenon, educators and law enforcement must be effectively prepared to mitigate the damage that occurs when targeted school violence strikes. School safety best practices dictate the formation of threat assessment teams and emergency management plans at the school level to prepare for and mitigate the effects of such events.

The researcher found a gap exists in the literature when it comes to empirical studies understanding the importance and effects of proper preparation of educators for school emergency crises. There is a number of qualitative and quantitative studies examining educator's perceptions regarding educators' safety in school (Bryden & Fletcher, 2007; Dixon, 2014; Gilliland, 2015; Kelling, 2006; Ricketts, 2007; Roberts, Wilcox, May, & Clayton, 2007; Siaosi, 2006; Vettenberg, 2002). Some studies included a

focus on school leaders' abilities to manage crises (Folks, 2008; McDaniel, 2003; McKenzie, 2008), teachers' ability to manage a crisis (Folks, 2008; Graveline, 2003; Kanner, 2015; McDaniel, 2003; McKenzie, 2008; Perkins, 2015; Rider, 2015; Session, 2000; Smith-Greer, 2001; Taylor, 2008; Werner, 2014), and perceptions on violence in schools (Ashford, Queen, Algozzine, & Mitchell, 2008; Church, 2011; Collier, 2006; Finley, 2004; Hemphill, 2008; Henriques, 2010; Jackson, 2015; Peterson, 2006; Schubarth, 2000; Smith & Smith, 2006; Sobel, 2009). Some of these perception studies have a focus on armed personnel in schools (Reyes, 2015), safety related to students with disabilities (Bon, Faircloth, & LaTendre, 2006), terrorist attacks preparedness (Dube, 2012), and active shooter drills (Ryals, 2014). Overall school emergency plans (Cooper, 2008; Graham, 2009; Kehoe, 2015) and overall current levels of safety and preparedness (Bergh, 2009; Boyd, 2011; Brown, 2008; Church, 2011; Dixon, 2014; Dube, 2012; Gilliland, 2015; Graham, 2009; Henriques, 2010; Jackson, 2015; Kanner, 2015; Perkins, 2015; Reyes, 2014; Rider, 2015; Swiontek, 2009) were also examined through the eyes of the educators.

All of the studies included a snapshot of teachers' perceptions of their current abilities to handle various types of emergencies according to the training they had been given. However, Cooper (2008) surveyed teachers' perceptions of their crisis preparation before and again after teachers attended a 6-week training program in a crisis-management plan to measure the effectiveness of training. The plan used was modeled after the Virginia Department of Education *Resource Guide for Crisis Management in Virginia Schools* (Atkinson, 2002) and the Jefferson County Crisis-Management Plan. According to Cooper, "these plans describe in detail examples of format, policies, procedures, checklists, forms, and background information" on crisis management (p.

23). Both guides focused on the preparation for crises and followed the Code of Virginia that mandates the development and implementation of crisis planning. The results of the study included findings of overall improvement in teacher preparedness for a crisis.

It must be noted that the perceptions of teachers' abilities in these various studies were not the result of the actual implementation of security responses (except McKenzie, 2008). None of these educators had experienced an attack at their school, but are in response to teachers' opinions about school violence based on their individual experiences or based upon information on school violence events educators observed discussed in the media and the fear news coverage creates (Dixon, 2014). Therefore, the perceptions were not based upon a real-life emergency crisis and implementation of the training to measure its validity or effectiveness. Without an actual event of a school shooter or other major crisis occurring to test the training, the only other way to measure educators' perception of self-efficacy is through training, drills, and scenarios. Cooper (2008) implemented training as an intervention, but the training was guided by a formal state school crisis management plan for all Virginia schools, which was comprehensive in content and delineated steps schools needed to take to create a plan. Additionally, the teachers in that study took a 6-week training program. Having both well-written comprehensive state guidelines for an emergency management plan and 6 weeks for teachers to attend specific security and safety training, according to the literature, is the exception and not the norm.

In order to fill the gap of empirical evidence found by the researcher this study included an examination of educators' perceptions regarding the effectiveness of safety and security training and drills to enhance their preparation for a school crisis by implementing a school emergency management training program and obtaining data

preintervention and postintervention. The training program intervention was implemented under the similar time constraints faced by administrators when affording in-service training for teachers. Finally, the emergency management plan and training program was created with the minimal resources and guidelines school administrators are offered by the state of New Jersey.

Additionally, in this applied dissertation study, several recommendations for future research made by Rider (2015) were addressed: "first, research related to the specific training needs of teachers for active shooter incidents; [second, research conducted in] other regions" of the country to account for possible variations in needs and perceptions of educators related to active shooters; third, research encompassing not only high school, but K-8 educators as well; and, fourth, research conducted with teachers to improve understanding their perceptions of preparation to respond to active shooters (pp. 153-154).

Audience

This study included an assessment of the perceptions of teachers, administrators, and support staff regarding their abilities to appropriately respond to a school emergency crisis preintervention and postintervention of a comprehensive SSSP with the related training program. Educators have been charged with both understanding and practicing various school emergency drills in order to be aware and ready to respond appropriately and effectively.

The information in this study would benefit school administrators who were in charge of implementing new or updating school security training programs for their teachers and support staff. Administrators would be able to better understand the importance of comprehensive in-service training and identify the weaknesses that may

exist in training programs. Additionally, administrators could gain insights to the importance of collaborating with law enforcement to create or update school security training programs as the skill set for school security and safety was not one school leaders were trained in and was only attained through many years of schooling, training, and experienced law enforcement had from their job responsibility.

Teachers, administrators, and support staff would also benefit from this study as they gained a clearer understanding of the difference between school safety awareness and readiness (Greenberg, 2007b). Educators needed to be made aware of safety and security issues and the related proper responses from information packets or minimal participatory interactions, as well as to be made ready to respond through in-depth training programs and drills which are repetitive, collaborative, substantive, reflective, and constantly updated for best practices (Greenberg, 2007b).

The results presented in this research study would help to identify and examine school security best practices at New Jersey K-12 level schools and allow school administrators to use this information when implementing either new protocols or improving already established protocols at their schools. The results of this research study would serve private K-12 school administrators who need to establish emergency management plans and safety and security training for their teachers and support staff, according to their needs, and also offer valuable insights to public K-12 school district administrators responsible for multiple schools' emergency management plans and educators' training.

Finally, the information in this study could be of use to school leaders in other states as well. The basic threats of school violence, like the active shooter, are universal and no matter what individualistic state laws require their educators do as a response to

the varied emergencies they prepare for, comprehensive and regular in-service, school, security training programs would need to be implemented to make all educators aware and ready to respond.

Definition of Terms

The following terms were used in this applied dissertation and may be unfamiliar to individuals not involved in the field of school safety and security.

Active shooter is a subject who is actively engaged in killing or attempting to kill people at a location using firearms, many times without a method of selection of victims (U.S. Department of Homeland Security, 2008).

Crisis is any unexpected event that disrupts the operations of an institution and poses a threat to personnel or property (Zdziarski, 2006).

Crisis management is a systematic approach of planning and decision making for and responding to a wide range of crises that occurs within an organization (Mitroff et al., 2006; Sherwood & McKelfresh, 2007; USDOE, 2007).

Crisis planning is a term referring to the proactive assessment and addressing of vulnerabilities to prevent or minimize the effects of a crisis (Hough & Spillan, 2005).

Crisis planning is also referred to as incident planning or emergency planning.

Safety and security plan is a term that refers to a plan that establishes the policies, procedures, and organizational structure for an organization to respond to emergencies of any nature. The plan includes a description of the roles and responsibilities of emergency management teams, stakeholders, and other individuals during emergency situations.

Safety and security plan also has been referred to as emergency response plan or crisis response plan.

Targeted school violence refers to violent incidents involving an identifiable

subject (perpetrator) who possesses the intent and potential to cause harm to an identifiable target at an educational institution (Borem, Fein, Vossekuil, & Bergland, 1999).

Threat assessment is referred to by the Secret Service and FBI as the set of investigational and operational techniques used by law enforcement to identify, assess, and manage the risk of targeted violence by an individual or group who communicate a threat or engaged in some kind of threatening behavior (Cornell, 2010; Fein, Vossekuil, & Holden, 1995).

Purpose of the Study

The purpose of this mixed-methods study was to assess the perceptions of educators preintervention and postintervention of a comprehensive SSSP with related training program at one K-12, private, New Jersey school. The researcher measured changes in the perceptions of teachers, administrators, and support staff members of their abilities to respond to a number of different school emergencies (e.g., active shooter, evacuations, shelter in place, lockdown, and bomb threat) by using a Likert-type scaled questionnaire given preintervention and postintervention of a school safety training program. The researcher also examined any measurable increase in the preparedness knowledge and capabilities of the participants through interviewing participants, observing emergency drills, and examining archival documents, such as school drill logs, emergency reports, and emergency protocols already established. School personnel took part in a school safety and security preparedness and response training program created by the researcher, which took place over a 15-week period. During the training program, school personnel attended classes, were given resource materials to study and use, and took part in state-mandated emergency drills. The implementation of this training for

educators at a private K-12 New Jersey school served to examine any change in educators' perceptions of their own abilities once they had been exposed to formal training. The researcher also assessed the effectiveness of a comprehensive safety and security training program, uncovered the challenges facing administrators in preparing their schools for emergent situations, and identified best practices in the field of emergency management training for educators.

Summary

The phenomenon of targeted school violence and the problem of its severity since national concerns highlighted it with Columbine in 1999 were introduced in chapter 1. Studies have proliferated ever since by experts in all fields to determine the causes and find the solution to prevent future incidents. The dozens of incidents post-Columbine, such as Virginia-Tech and Sandy Hook, which resulted in some of the phenomenon's highest casualty rates, exemplified the ineradicable nature of this phenomenon. The responsibility of meeting the challenges of targeted school violence had fallen to both law enforcement and school educators. Law enforcement revised its response procedures after Columbine to respond quickly and effectively as first responders to an incident through comprehensive and updated training. School administrators were required to have their staff respond equally quickly and effectively as first responders as well, yet the training has not been as equally comprehensive or updated. With the varied levels of knowledge and experience school administrators had in school safety and security, and the minimally delineated training requirements mandated by the state, effective emergency response training and drilling at the school level was inadequate, especially in the opinions of the educators themselves. The purpose of this mixed-methods study, therefore, was to assess the perceptions of educators preintervention and postintervention of a comprehensive

SSSP with the related training program at one New Jersey, private, K-12 school.

Chapter 2: Literature Review

Overview

In the literature review, an overview and evaluation of the topic of targeted school violence was provided and the theoretical framework of the study was explored. A history of the topic of targeted school violence included a review of the phenomenon as it relates to secondary and higher education and the responses by law enforcement and school administrators. The review includes an address of the responsibilities of educators to provide a safe learning environment, theories of school safety as grounded in Maslow's hierarchy of needs, Marzano's school effectiveness, and Bandura's self-efficacy, and best school safety practices suggested by the experts. A discussion of the studies on educators' perceptions of school safety, response preparedness, and training, and the evolution of school safety law in New Jersey outlined the challenges at the time of this study posed by the phenomenon and established the core theory of this study.

The majority of studies and surveys included an examination of the phenomenon of targeted school violence were conducted and written since the beginning of this century. Since the late 1990s, federal to local organizations attempted to understand exactly what targeted school violence is and how it could be predicted and stopped before it starts (Blair & Schweit, 2014; Crews, 2007; Hinkle & Henry, 2000; Jimerson et al., 2012; Langman, 2015; Lenhardt et al., 2010; Police Executive Research Forum, 2014; Reddy et al., 2001; Zdziarski et al., 2007). The major focus of these studies and surveys consists of attempting to identify who these perpetrators are and why they attack in order to prevent further incidents. Common elements addressed in each follow: delineating the various types of school crises faced by educators, establishing proactive steps for detecting crisis situations early on, creating effective crisis management plans to meet the

challenges, creating crisis response teams of professionals from various professional fields, and engaging the appropriate stakeholders when developing and maintaining these emergency or crisis school plans and responses.

History of the Phenomenon

According to Cornell and Mayer (2010), "School violence is not so much a new problem as a recurrent one that has not been adequately recognized for its persistence and pervasiveness throughout the history of education" (p. 7). School-targeted violence has been part of the American education system since colonial times (Crews & Counts, 1997; McCabe & Martin, 2005). In fact, one of the worst mass killings at a school was in 1927 when a school board member exploded a bomb at the Bath Consolidated School in Bath, Michigan, and then detonated a second bomb in a car, while first responders tried to help killing 45 and injuring 58 (Lindle, 2008). Although this phenomenon dates back as far as education itself has been part of society, academic interest in it has steadily grown since the 1970s (Cornell & Mayer, 2010). Before the school shootings by two students at Columbine High School in 1999, the issue of targeted school violence had been recognized as a serious problem with a number of previous publicized incidents in the 1960s, 1970s, 1980s, and early 1990s (Caulfield, 2000; Fast, 2008; Fein et al., 2002; Hinkle & Henry, 2000; Kleck, 2009; Langman, 2009; McCabe & Martin, 2005; Midlarski & Klain, 2005; Nicoletti, & Spencer-Thomas, 2002; Nicoletti, Spencer-Thomas, & Bollinger, 2010; Rydeen, 2013; Schanlaub, 2009; Warnick, Johnson, & Rocha, 2010; Wike & Fraser, 2009; Zdziarski et al., 2007).

A sudden wave of targeted school violence between 1997 and 1999 exposed a serious trend, which continued into the new millennium (Fisher, 2007). Hinkle and Henry (2000) stated that

the American school system had witnessed the most profound shock since its founding in the 1800s: 25 dead in 1997, 42 dead in 1998, and, to date in 1999, 24 more, making 211 in all since 1992. American education would never be the same. (p. 8)

One of the first targeted school violence incidents to which law enforcement had to respond, react, and terminate occurred 50 years ago when Whitman killed 16 and wounded 32 on the University of Texas in 1966 (Blair et al., 2013; Kolman, 1982; Nicoletti et al., 2010; Snow,1996; Zdiarski et al., 2007). Since the Texas Tower shooting, the necessity for law enforcement to provide specialized equipped and trained officers to handle such incidents has been identified (Blair et al., 2013; Kolman, 1982; Lavergne, 1997; Liebe, 2015; Nichols, 2006; Snow, 1996). This targeted school violence incident, coupled with the civil disorder and riots of the 1960s, charged law enforcement agencies throughout the United States with more formidable responsibilities, which only a new tool (full-time tactical teams with specialized resources) could adequately face (Blair et al., 2013; Kolman, 1982; Liebe, 2015; Nichols, 2006; Snow, 1996). The evolution of SWAT teams since the mid-1960s and the University of Texas tower shooting has led to the incorporation of this tactical asset as a supplemental tool for first responding patrol officers who lack the necessary training and equipment to face highly critical targeted school shooting situations that may involve heavily armored and trained individuals employing homemade bombs, booby traps, and automatic weapons (Anselmi, 2008; Assenmacher, 2008; Blair et al., 2013; California Commission on Peace Officer Standards and Training, 2005; Felts, 2004; Haughton, 2007; O'Brien, 2008b; Snow, 1996; Yarbaugh, 2008).

Although there had been devastating targeted school violence incidents for many

years, it was the highly profiled incident at Columbine that captivated national and state interest, as well as interdisciplinary debate (Muschert, 2009; Muschert et al., 2014). The debate focused upon the reaction and timely response of law enforcement to active shooter incidents (Allen, 2015; Blair et al., 2013; Caster, 2008; Kalk, 2000; Martinez, 2012; Moore, 2010; Nichols, 2006). Two elements of law enforcement respond to these situations, the initial responding officers and the subsequent responding SWAT (Special Weapons and Tactics) teams. After the events at Columbine both of these law enforcement elements across the country subsequently reevaluated their training and protocols to incorporate the phenomenon of the school shooter (active shooter) into their training scenarios and programs. Since then, containing the threat and waiting for SWAT officers to match the dangerous weapons involved is no longer adequate and reevaluated training protocols encompassed preparing and requiring the first few officers on scene to confront active shooters immediately instead of waiting for the full SWAT team to arrive (Allen, 2015; Anselmi, 2008; Blair et al., 2013; Buster, 2008; Caster, 2008; Dino, 2009; Howe, 2006; Martinez, 2012; Nichols, 2006; O'Brien, 2008a, 2008b; Police Executive Research Forum, 2014; Scanlon, 2008; Schanlaub, 2009; Yarbaugh, 2008).

The other major aspect of the debate addressed the educational response to active shooter incidents. Educational institutions have had to incorporate emergency management plans; create crisis management teams; and institute training for faculty, staff, and students to confront targeted school violence events (USDOE, 2013a). Safety on K-12 campuses and IHEs post-Columbine gained additional exposure as a national issue after September 11, 2001, when, in a testimony before the U.S. Senate Select Committee on Intelligence of the United States, FBI Director Mueller (2003) stated schools and universities were categorized as soft targets for terrorist attacks.

Altheide (2009) posited Columbine and other school shootings have been referred to as terrorist activities ever since the 9/11 attacks. As a result of this categorization and the high profile targeted school violence incident at Virginia Tech in 2007, changes in safety policies, the creation of emergency management plans, safety and security training programs with drills for educators, target hardening activities on school campuses, and updated emergency warning systems ensued on campuses of K-12 and higher education across the country (Flynn & Heitzmann, 2008; Fox & Savage, 2009; Gajda, 2006; Gray, 2008; Gunther, 2010; Halligan, 2009; Healy, 2014; Kautzman, 2011; Major Cities Chiefs, 2009; Murr, 2007; Pollack, Modzeleski, & Rooney, 2008; Rasmussen & Johnson, 2008; USDOE, 2007, 2013a, 2013b).

Black Swan Event

Targeted school violence events are random, unexpected, high profile, and hard to predict incidents that are out of the norm. Facts gathered after each tragedy are analyzed to develop an explanation of why that event happened and produce conclusions that it should have been predictable. But as school shootings and other acts of violence continue to occur despite prevention and mitigation practices, the phenomenon continues to demonstrate it is not predictable, but instead a black swan event. The black swan theory developed by Taleb (2007) included an explanation of the existence of events, which have the three traits: are rare, have significant consequences, and seem to be predictable retrospectively; however, are not. Most importantly, Taleb's theory included a postulation that the black swan event is one that was not even ever contemplated to occur. The black swan metaphor included references of the ancient belief that all swans were white until the discovery of black-colored swans in Australia in 1697 (Taleb, 2007). The unexpected finding defied what was thought possible and made the unpredictable

conceivable.

Considered rare events, incidents of school shootings invoke widespread concern, fear, and vulnerability when they occur because of their significant impact, unpredictability, intensive mass media coverage, and the dissolution of society's perception of school safety when an incident makes the headlines (Borem et al., 2010; Chenault, 2004; Hendry, 2015; Lindle, 2008; Muschert, 2007; Schuster, 2009; Stein, 2000; Thomas, P., 2006). These events create emotion-driven reactions by the public that are then followed up with studies by government and educational officials to prevent, mitigate, and predict an undefined and little understood phenomenon (Fein et al., 2002) and by the Congress and state legislatures attempting to pass laws aimed at reducing the recurrence of these events (Heilbrun, Dvoskin, & Heilbrun, 2009; Lindle, 2008).

Theories on Active Shooter Phenomenon

When discussing the active shooter type of event (e.g., Columbine or Virginia Tech), targeted school violence distinguishes a school-based attack in which a perpetrator preselects targets at an educational institution (Reddy et al., 2001; Vossekuil et al., 2000, 2002). This phenomenon has been recognized by experts as one with issues that cannot be completely understood, simply defined, nor resolved by one method alone (Cornell, & Mayer, 2010; Fein et al., 2002; Henry, 2000; Muschert, 2007; O'Toole, 2000).

In the attempt to answer the pressing question of how to prevent targeted school violence, the various disciplines involved focused on the science of profiling the school shooter. Experts in psychology, sociology, criminology, law enforcement, education, and the mental health fields have analyzed targeted school violence shooters in several ways. The most common format consists of dissecting specific shootings cases to gain insights (Blair & Schweit, 2014; Fast, 2008; Langman, 2009, 2015; Lenhardt et al., 2010; Meloy,

Hempel, Mohandie, Shiva, & Gray, 2001; Newman et al., 2004; O'Toole, 2000; Vossekuil et al., 2004). The pioneering study in this format was conducted by the U.S. Secret Service and USDOE, which created the Safe School Initiative (Vossekuil et al., 2000). The Safe School Initiative applied the Secret Service's expertise in physical protection and threat assessment in targeted violence to the USDOE's problem of school violence in hopes of understanding and preventing targeted school violence. The study examined 37 school shootings involving 41 attackers analyzed the data and facts of each case, and developed general characteristics about school shooters and the events. One major finding was that profiling a school shooter was an ineffective way to identify a potential perpetrator or predict a possible targeted school violence event (Sewell & Mendelsohn, 2000; Vossekuil et al., 2000).

Representative of the numerous possibilities for causes of targeted school violence was one study which used the methodology of surveying students themselves for answers to this phenomenon (Gaughan, Cerio, & Myers, 2001). Data collected from over 2,000 respondents in Grades 7 to 12 who were asked to rate 16 possible reasons for school violence identified the top four reasons: being picked on and bullied, revenge, life had little value, and victims of physical abuse at home. However, this study in itself was more significant for the wide range of the 16 choices listed, eight of which follow:

(a) revenge, (b) boredom, (c) violent movies and video games, (d) mental health problems, (e) peer pressure, (f) uncaring teachers, (g) alcohol and drugs, and (g) ease of gun access.

A multitude of studies assign blame for targeted school violence on specific reasons for student anger. A backlash against corporal punishment was posited by Arcus (2002) while perceived challenges to masculinity was postulated by Kalish and Kimmel

(2010) and Tonso (2009). Peers were at the center of many reasons in the form of homophobic bullying and teasing (Kimmel & Mahler, 2003), bullying and harassment (McCabe & Martin, 2005; Vossekuil et al., 2004), paranoia of rejection by peers (Dutton, White, & Fogarty, 2013; Leary et al., 2003), and romantic rejection (Leary et al., 2003). Other personal issues are also attributed to these violent acts like stressful issues in society (Newman et al., 2004; Stein, 2000); strain from, according to Levin and Madfis (2009), "negative experiences or disappointing events" in life (p. 1230); student-teacher conflict (Freie Universitaet Berlin, 2014; Heilbrun et al., 2009); and the characteristics of schools that foster feelings of anonymity or alienation (De Apodaca, Brighten, Perkins, Jackson, & Steege, 2012; Frymer, 2009; O'Toole, 2000).

Many targeted school violent events are seen as the result of mental health issues (Flynn & Heitzmann, 2008, Heilbrun et al., 2009; Langman, 2009, 2015; Metzl & MacLeish, 2015; Siegert & Seigert, 2013; Shah, 2013a), psychiatric medication (Langman, 2009, 2015), identity confusion and childhood abuse (Fast, 2008), and gender and ethnicity issues (DeFour, 2005). One political scientist even attributed school violence to the schools themselves (Thompson, 2014). In a thought provoking hypothesis, Thompson (2014) posited that in progressive education, intellectual subjectivism is taught and students are unable to experience reality or failure. According to Thompson, the end result is a generation of students "with unjustifiably high opinions of themselves" who become confrontational and react with violence when they are criticized, teased, or unsuccessful (p. 216).

Many events are believed to be the result of influential factors. Copycat reasons have long been posited due to exposure to media violence coverage of school shootings (Anderson et al. 2003; Hong, Cho, & Lee, 2010), simple contagion effect initiated by

other school shootings like Columbine (Newman et al., 2004; O'Toole, 2000), viewing perpetrators as stars and a way to gain fame (Fast, 2008; McCabe & Martin, 2005), and even influenced by popular culture: music, movies, and video games (Anderson, 2004; Ferguson, 2008, 2015; Ferguson, Coulson, & Barnett, 2011; Lawrence & Birkland, 2004; Newman et al., 2004). Additionally, nonanger motivating issues are seen as causes as well, such as the ecological system theory (Hong et al., 2010) and using violence as a way of escaping the sense of meaninglessness felt by students in society (Staples, 2000). Various types of criminal activities (Flannery, Modzeleski, & Kretschmar, 2013), the prevalence of guns (Kleck, 2009), and the lack of respect for firearms (NRA News, 2015) have also been other suggested causes for these events.

A review of hundreds of controlled studies by Cornell (2006) dispelled many of the myths and misconceptions about school violence created by some of the studies and suggested that school violence prevention programs and mental health services are more valuable than the emotional reaction educational policies and practices of boot camps, metal detectors, zero tolerance, school uniforms, and Drug Abuse Resistance Education. According to Pollack et al. (2008), the Safe School Initiative program by the federal government even tried to prevent further attacks at schools by analyzing why "bystanders," students who had prior knowledge of targeted violence incidents from schoolmates, chose to either come forward or not with their information (p. 4). This study, although utilizing a very small sample size of only 15 students, highlighted key findings, which require further investigation. Students who failed to come forward with information about a planned attack reported they disbelieved the threat, failed to recognize the immediacy of the attack, or felt they would possibly face negative consequences for reporting a threat. These results have significant implications for school

leaders who should foster a climate of trust at schools to encourage students to share this valuable information to prevent shootings. Whatever factors these various studies identified as possible causes for targeted school violence, most experts and scholars acquiesce to the inevitable realization that school attackers cannot be easily or effectively profiled (Blair et al., 2014; Heilbrun et al., 2009; Langman, 2015; Mulvey & Cauffman, 2001; Pollack et al., 2008; Tonso, 2009; Vossekuil et al., 2000). According to O'Toole (2000), one expert even admitted that "trying to draw up a catalogue or checklist to detect a potential school shooter can be shortsighted, even dangerous" (pp. 2-3).

Some of the empirical research addressed the prevention of targeted school violence by identifying the etiology of school shootings and violence or finding common characteristics (typology) in the actors in order to disseminate these warning signs to stakeholders responsible for school safety (Eng. 2001; Furlong, Bates, & Smith, 2001; Henry, 2009; Langman, 2009, 2015; Levin & Madfis, 2009; Muschert, 2007; Newman et al., 2004; Royer, 2003; Thomas, R. M., 2006). Shortly after Columbine, Eng (2001) analyzed the potential effectiveness of the philosophies of school antiviolence policies and suggested these policies were only reactive and not addressing the social problems kids faced in schools. In a pioneering sociological study, Newman et al. (2004) established five necessary, but not sufficient, conditions that together may explain these events. These conditions involve marginalized boys with psychosocial problems who do not exhibit behavioral problems, have access to guns, and cannot cope with the cultural expectations of the small town, familial communities where they live. Newman et al. argued that these rampage school shootings occur in small towns because they have close-knit, school- and church-run communities where social solidarity and conformity exacerbates the feelings of marginalization of the shooters. Levin and Madfis (2009)

suggested a five-stage sequential model of sociological events, which culminates in a school shooting: chronic strain, uncontrolled strain, acute strain, planning stage, and massacre. These stages evolve and develop over years before the actual event and, therefore, long-term prevention techniques are possible and necessary for prevention.

Fast's (2008) psychological explanation for targeted school violence, derived from analyzing 15 shooters, was the shooters' quest for a ceremonial event—one in which they planned and prepared for so they could take part in a final significant symbolic act before they said good-bye. In a more in-depth clinical analysis of why children kill, Langman (2009) established there were the numerous psychological interwoven variables of "genetics, family relationships, individual personality traits, psychiatric symptoms, and peer relationships" at play when contributing to the makeup of school shooters (p. 193). In a psychological study, Langman (2015) expanded an analysis of school shooters to include not only secondary-level students, but college students and non-school-affiliated shooters as well. Analogous to Langman's (2015) earlier study's typology, the 48 perpetrators in this analyses were characterized as either psychopathic (narcissistic and arrogant), psychotic (schizophrenic and delusional), or traumatized (victims of abuse). Langman (2015) admitted that these characteristics do not stand alone and can be influenced by other factors and are not necessarily the only reasons for school shootings, but can enable professionals to understand why some perpetrators are more susceptible to environmental stresses like bullying, abuse, failure, or rejection.

Despite the apparent all-encompassing approach by the numerous disciplines in analyzing targeted school violence and the resulting multitude of identified reasons for the phenomenon, Muschert (2007) stated the difficulty in understanding why school shootings occur is the disjuncture among the scholars studying the issue. The experts

from the different disciplines arrive at their many different perspectives because of what Muschert calls the *Rashomon effect*, a term referring to the "subjective construction of reality in which observers of a single event perceive incompatible, yet plausible versions of what happened" (p. 61). Due to the mixture of mass media popularized reports, the postincidents scientific reports, the varied types of school shootings, and the multiple points of view from scholars approaching the topic, Muschert asserted there is no unified scholarship on the subject.

Mayer and Furlong (2010) echoed this lack of a unifying framework in understanding the phenomenon, positing the subject is analyzed by the individual domains of "education, psychology, sociology, criminology and public health" with little interdiscipline communications and a resultant research-to-practice gap (p. 19). In the end, the numerous causal factors of targeted school violence, various typologies of attackers, and inherent individualistic issues of the perpetrators makes identifying an individual that will commit targeted school violence extremely difficult at best (Crews, 2007; Heilbrun et al., 2009; Langman, 2015; Mulvey & Cauffman, 2001; Vossekuil et al., 2004; Weatherby, Stratchila, & McMahon, 2010).

Threat Assessment

Noting the weaknesses and ineffectiveness of using the inductive approach of profiling to identify a possible perpetrator or impending targeted school violence event, Reddy et al. (2001) argued a deductive scientific approach through the use of threat assessment was more suitable to identify and assess risks posed by students' intent on these acts. This deductive strategy called threat assessment was originally created by the Secret Service and was adopted subsequently by professionals in the field of school safety (Reddy et al., 2001).

In a seminal study the FBI's National Center for the Analysis of Violent Crime conducted an analysis of 18 school shootings in an attempt to understand the roots of school-targeted violence and prevent future incidents (O'Toole, 2000). By utilizing the expertise of educators, law enforcement, and mental health professionals, it was concluded that profiling was basically ineffective and suggested threat assessment plans to identify future perpetrators to assist in averting future school shootings. Supporting these findings was a study created out of a collaborative effort between the USDOE's Office of Safe and Drug Free Schools and the U.S. Secret Service undertaken from 1999 to 2001 analyzing 37 school shootings involving 41 attackers (Vossekuil et al., 2000). Two subsequent published reports documented the findings of that study (Fein et al., 2002; Vossekuil et al., 2004). These reports discussed and advocated schools adopt a new strategy to mitigate school attacks-threat assessment (Cornell & Williams, 2012; Fein et al., 1995, 2002; O'Toole, 2000; Pollock, Modzeleski, & Rooney., 2008; Vossekuil et al., 2004). This new strategy was initiated using the Secret Service's process for identifying, assessing, and managing assassins on public officials (Borem et al., 1999; Fein & Vossekuil, 1999; Weisbrot, 2008).

Applying a process of evaluating a threat to determine its seriousness and if it was substantive or transient to school violence was the suggestion by the FBI and Secret Service (Cornell, 2006). If a student's threat was considered viable and the student able to carry it out the threat would be considered serious or substantive. Conversely, a passing threat made with rhetorical remarks by a student whose temporary frustration or anger subsides would be taken as not serious or transient. Cornell (2006) reported, "Threat assessment is a process of evaluating a threat, and the circumstances surrounding the threat, to uncover any facts or evidence that indicate the threat is likely to be carried out"

(p. 177). According to Cornell (2010), IHEs should have well-designed emergency crisis plans for when incidents occur and also a threat assessment plan to prevent an incident. Threat assessments for targeted school violence define the gamut of problems faced by school administrators (from traditional bullying to weapons offenses on school grounds) and delineate the warning signs school officials should look for in a prospective school shooter, and are the most prolific topic covered in the literature of active shooter studies (Bauer, Hill, Neiman, & Ruddy, 2010; Cornell, 2006, 2010; Cornell et al., 2004; Dwyer, Osher, & Warger, 1998; Eng, 2001; Flannery et al., 2013; O'Toole, 2000; Pollock et al., 2008; Sokolow, Lewis, Wolf, Brunt, & Byrnes, 2009; Sewell & Mendelsohn, 2000; Vossekuil et al., 2004; Weisbrot, 2008). Advocated as the best practices model in violence prevention strategies for schools and IHEs, threat assessment strategies continue to be reviewed and advocated by experts for their effectiveness in violence prevention (Borem et al., 2010; Cornell, 2010; Cornell & Williams, 2012; Flannery et al., 2013; Langman, 2015; Matthews, 2013; Reddy et al., 2001; USDOE, 2013a, 2013b).

Arriving at the same ineluctable conclusion as many of the studies on targeted school violence, Langman (2015) cautioned the most effective method to preventing school shootings is through threat assessment by campus threat assessment teams that can evaluate potential attackers and respond to the violence. Summing up an analysis of 48 major school, college, and adult school shooting incidents, Langman concluded there is no one solution to prevent school shootings from occurring. Looking at IHEs, Langman also posited that members on the crisis management teams should include top administrators, staff at all levels, local law enforcement staff, and other emergency support responders. Additionally, Langman recommended that students at IHEs should be trained how to identify the warning signs of an individual preparing to commit violence

and know the proper reporting process of that information as they are usually in the best position to observe these signs.

Theoretical Framework

Educators are normally taught about classroom management, individualized learning needs, and creating a positive environment for their students to encourage learning. These are lessons they learn from legal and psychological educational theories they are exposed to in their schooling for the profession (Morrison, 2009). These theories play a crucial role within the social concerns over targeted school violence as the proximity of teachers to these emergency crises place them at the center of the events.

Maslow's hierarchy of needs. Maslow's (1943) theory of hierarchy of needs has fundamental applications to classroom management and student learning, and equally apposite applicability to school safety and security. A psychologist who studied humanistic theories of self-actualization, Maslow (1943, 1954) analyzed the physical, emotional, social, and intellectual qualities of an individual and how they impact learning. According to Maslow's (1943) hierarchy, there are five fundamental needs all humans have and must have met so that an individual reaches self-actualization-one's full potential as a person. These five needs are listed in the order in which they motivate an individual and have often been represented in a hierarchical pyramid starting with the most basic and moving up to the higher growth needs. These needs include physiological needs (e.g., air, water, food, clothing, shelter, sleep), psychological need of safety (e.g., freedom from threat of physical or psychological harm), social needs (e.g., friends, social belonging, affection), and esteem (e.g., respect, recognition, achievement, attention). The fifth and final, or highest, need is considered a higher growth need called selfactualization (e.g., wisdom, fulfilling potential, and meaning).

According to Martin and Joomis (2007), the second level of Maslow's theory, safety, one of the four deficiency needs that a person will be anxious about if not met, can inhibit a conducive learning environment. This aspect of Maslow's theory is related directly to the major issues of school security and safety in the school environment and culture at the time of this study. If students do not feel safe or perceive any environment is safe, they will not be able to fulfill that need and focus upon learning. In their study on pupils' feelings of safety in school, Mooij and Fettelaar (2012) confirmed in order for students to function well in school, they need to believe their schools are safe places where they can attend without fear of being confronted with safety issues, such as bullying or violence. Students who feel that they are not safe in the school environment are more likely to skip school or drop out of school (Davis & Davis, 2007; Shelton, Owens, & Song, 2009). It is incumbent upon school administrators and teachers to establish that safe environment as they are the key components in creating a safe school plan (Sindhi, 2013).

Marzano's levels of school effectiveness. Similar to Maslow's theory, Marzano (2013) explained that for a K-12 school to become a high reliability school, one that is accountable for specific outcomes, there is a need for an established hierarchical structure of five factors that schools must meet: (a) safe and orderly environment, (b) an instructional framework, (c) a guaranteed and viable curriculum, (d) standards-referenced reporting, and (e) a competency-based system. Marzano postulated without school safety "all other activities will suffer" (p. 13). Indicators exemplifying a school has met this Level 1 requirement follow: (a) faculty, staff, student, and parent feelings of safety at school; (b) plans for emergency procedures; (c) knowledge of the procedures and implementation of these plans by the school personnel; (d) updating of emergency plans;

and (e) coordination with law enforcement agencies (Marzano, 2012).

Bandura's theory of self-efficacy. Without the necessary training, educators may have low self-efficacy in their abilities to perform emergency response procedures correctly (Bandura, 1997; Graveline, 2003). Self-efficacy was the theoretical construct of psychologist Bandura (1977, 1993, 1997) who defined it as a belief in one's ability to control a specific situation and influence the outcome. Self-efficacy is a situationspecified self-confidence, which motivates an individual to work harder to ensure success and derives from knowledge, mastery of skills, success in performance, and encouragement. Bandura (1977) reported, "the strength of people's convictions in their own effectiveness is likely to affect whether they will even try to cope with given situations" (p. 193). Essentially, if individuals believe they have the knowledge and skills to handle a situation, then the stronger their perceived self-efficacy. It then follows, according to Bandura, that the stronger the self-efficacy, the more effort and persistence will be expended in the face of obstacles and adverse situations. When educators face school-targeted violence and are required to respond appropriately, only self-efficacy in their abilities will determine the extent of their effectiveness. According to Heath, Ryan, Dean, and Bingham (2007), "the real challenge is not in stating what needs to be done, but in the face and disaster and trauma, carrying out crisis plans and ensuring effective results" (p. 218).

Educators' Safety Responsibilities

Similar to law enforcement, school leaders have had legal responsibilities in their profession for the protection of those they serve—the students. As with the law enforcement, educators have reevaluated and revised their responses to school violence in the face of the new threats of the active shooter since Columbine. Guided by federal and

state law, as well as local educational policies, school administrators have had to add school safety and security to their repertoire of school management skills. The proximity of teachers to these emergency crises and role as the first responder has made school safety and security a more salient responsibility of educators.

In loco parentis. Stuart (2010) reported in loco parentis, which is Latin for, in the place of a parent, is a doctrine describing the legal responsibilities an individual or organization has during the care and custody of a child in the place of the child's parents. The legal source of this relationship as it applies to schools is usually credited to Blackstone's 1765 to 1769 treatise on English common law, Commentaries on the Laws of England, and posits educators share the responsibility of controlling and protecting the child, as a parent would, when in their custody (Stuart, 2010). Students have been entrusted to the school teachers and administrators who must look out for their interests with three legal duties: to instruct students, to supervise students, and to provide for the safety of students (Essex, 2012). It places an affirmative obligation on school personnel to ensure student safety and provide an advantageous learning environment. Under tort principles of negligence, educators have the duty to anticipate foreseeable dangers and to take reasonable steps to protect students from that danger (Essex, 2012). Thus, school leaders are driven, in part, by this legal theory to create and maintain a safe learning environment for their students.

Federal mandates. Although few in number and extremely general in scope, the result of increased targeted school violence on school campuses in the 1990s saw the initiation of several federal policies to attempt to mitigate school violence. These policies had to be adopted and followed by school administrators as part of the safety and security obligations. In 1994, the Gun-Free Schools Act was passed mandating expulsion for a

period of not less than 1 year of any student bringing a firearm to school (Dunn, 2002). Under the No Child Left Behind Act of 2001, states were required to report school safety statistics to the public and school districts had to use federal school-safety funding to establish a plan for keeping schools safe and drug free. Included in these plans were discipline policies, security procedures, prevention activities, student codes of conduct, and a crisis management plan for responding to violent or traumatic incidents on school grounds (No Child Left Behind Act, 2001). In 2011, Presidential Policy Directive 8: National Preparedness was authorized by President B. Obama with policies intended to guide how the nation, from federal level down to private citizens, was going to prevent, mitigate, respond to, and recover from threats posing risk to the security of the country (Brown, 2011). In the Presidential Policy Directive 8: National Preparedness, national preparedness was outlined around five mission areas: (a) prevention, (b) protection, (c) mitigation, (d) response, and (e) recovery. These missions of planning were to be used nationally so all first responders and organizations would be able to work together and confusion would be eliminated during responses to crises. Subsequently, a federally created guide using this framework and delineating six principles for creating a comprehensive school emergency operations plan was published for schools to use when developing their individual emergency management plans (USDOE, 2013a). The goal of the federal guide is to align school emergency plans with national, state, and local emergency procedures and responses so that school leaders and their emergency first responders can work in sync when a school crisis occurs.

Educators as first responders. School personnel are often the first to encounter perpetrators of targeted school violence as the initial responders to the crisis (Buerger & Buerger, 2010; Hull, 2010; Tonn, 2005; USDOE, 2013a; Weimerskirch, 2006).

Guidelines by both federal and state organizations have underscored and reinforced this position (Bureau of Justice Assistance, Office of Justice Programs, U.S. Department of Justice, & International Association of Chiefs of Police, 2009; Dwyer et al., 1998; Fein et al., 2002; Kramen et al., 2009; Major Cities Chiefs, 2009, NJDOE, 2007a, 2007b; NJSSTF, 2015; Pollock et al., 2008; Scala, 2008; USDOE, 2013a, 2013b; Vossekuil et al., 2004). The Department of Homeland Security (2015) clarified that a "first responder" could be anyone, credentialed or not, who is initially at a scene of a crisis and essential for caring for people who may be injured.

Though not normally considered traditional emergency first responders, according to the USDOE (2013a), school personnel are recognized by the federal government as such because they "provide first aid, notify response partners, and provide instructions before first responders arrive" (p. 1). Buerger and Buerger (2010) posited that in the absence or incapacitation of school administrators during a school emergency, such as an active shooter, teachers and other school staff may have to make autonomous decisions to protect their students. Events, such as the April 2003 shooting at Red Lion Area Junior High School in Pennsylvania when a 14-year-old student shot and killed the school principal in the cafeteria; the November 2005 Campbell County Comprehensive High School shooting in Tennessee where a student shot the school principal and two assistant principals after being confronted over a gun, and the December 2012 Sandy Hook Elementary School shooting, all exemplify the first responder status of school staff (Shah, 2013b; Tonn, 2005). After the Sandy Hook Elementary tragedy, Shah (2013b) reported that many school officials debating the pros and cons of arming teachers with concealed weapons have come to the conclusion that they are "the first responders" (p. 14). In January 2016, New Hampshire Democratic Representative K. Rogers stated school

shootings have made teachers first responders and acknowledged their important contributions as such when Representative K. Rogers suggested a bill for state funding for any public school worker who dies in the line of duty (Ramer, 2016).

Understanding this immense responsibility of educators and administrators to create and maintain a safe and secure environment, the Department of Education,

Department of Homeland Security, and Department of Health and Human Services recommended emergency management best practices to include regularly scheduled coordinated practice among educators, law enforcement first responders, and community partners (USGAO, 2007a). Yet in 2007, 8 years after Columbine and the same year as the Virginia Tech tragedy, the USGAO (2007b) assessed the state of emergency management planning and preparation by school districts nationwide and shared four findings:

- 1. Most school districts had taken federally recommended steps to plan and prepare for emergencies, but many emergency management plans did not include the federally recommended practices.
 - 2. Many schools did not have procedures in place to train with first responders.
- 3. Twenty-seven percent of school districts had never trained with any first responders in implementing emergency management plans.
- 4. Ninety-five percent of all school districts had emergency management plans, but the content varied significantly.

Two years later, the National Center for Educational Statistics published a report on the findings of the 2007-2008 School Survey on Crime and Safety, which documented a serious lack of active shooter drills (Neiman & DeVoe, 2009). While 83.0% of schools had emergency procedures for active shooters in their plans, only 52.5% conducted drills for those procedures.

Many times, school personnel will only respond like first responders and will be the only ones to encounter perpetrators, as a study of active shooter events from 2000 to 2010 well-illustrated when it was found 49% of active shooter incidents ended before police arrived and 56% were still ongoing when police arrived (Blair & Martindale, 2013). Under these conditions teachers, administrators, and school staff are critical to rendering proper scene management and care for people injured by an active shooter (U.S. Department of Homeland Security, 2015). To ensure teachers, administrators, and staff respond appropriately to emergency incidents, it is necessary to give them proper and specific training (Allen, 2015; Bergh, 2009; Browman, 2001; Brunner & Lewis, 2005; Dorn, 2015; Dorn, Dorn, Satterly, Shepard, & Nguyen, 2013; Harvey, 2011; Klinger, 2008; Strahler & Ziegert, 2015; Zdziarski et al., 2007).

Emergency Management Guides

As their role and responsibility has evolved from the basic doctrine of physical control and correction under in loco parentis to full-scale safety and security against numerous school emergency crises, educators have utilized assistance from federal- and state-authored guidelines. School campus safety concerns in the wake of more serious and frequent targeted school violence and various incidents increasingly have underscored and reinforced the responsibilities of educators in the protection of students. The evolution of school safety and security responsibilities of educators resulted in a proliferation of school safety guides and plans by federal organizations to assist in their preparedness (Dwyer et al., 1998; Fein et al., 2002; Kramen et al., 1999, 2009; Major Cities Chiefs, 2009; USDOE, 2010, 2013a, 2013b; USDOE & Office of Safe and Drug-Free Schools, 2003; Vossekuil et al., 2004).

The number of high-profile targeted school violence incidents in the 1990s first

prompted federal legislators, law enforcement experts, and education experts to react with studies and guides to assist school personnel in facing the active shooter phenomenon (Pagliocca & Nickerson, 2001). Initially, these guidelines written for schools outlined the warning signs for school leaders to watch for when trying to stop targeted school violence. After the targeted school violence attack at Thurston High School in Springfield, Oregon, in 1998, the USDOE with the U.S. Department of Justice developed an early warning guide for spotting troubled youth. The guide, Early Warning Timely Response, sent to all schools, essentially listed 16 warning signs for educators to use to profile possible violent students and how to respond (Dwyer et al., 1998). Meanwhile, the FBI's National Center for the Analysis of Violent Crime initiated a research project in May 1998, which conducted an analysis of 18 recent school shootings prior to this study in an attempt to understand the roots of school-targeted violence and prevent future incidents (O'Toole, 2000). By utilizing the expertise of educators, law enforcement and mental health professionals, the major conclusion of the report, *The* School Shooter: A Threat Assessment Perspective, was that profiling was basically ineffective and, according to O'Toole (2000), "can be shortsighted, and even dangerous" when trying to prevent an attack (p. 2). The FBI instead suggested schools utilize a threat assessment procedure, which entailed examining each individual threat for validity and substantive nature, and responding appropriately to identify future perpetrators in averting future school shootings (Cornell, 2003; Weisbrot, 2008).

In response to 22 targeted school violence incidents between 1992 and 1999, the International Association of Chiefs of Police recommended the use of school resource officers in addition to technology, such as cell phones, two-way radios, metal detectors, cameras, and alarms in their *Guide to Preventing and Responding to School Violence*

(Kramen et al., 2009). The guide delineated the role of all stakeholders involved in school safety: school administrators, teachers, staff, students, parents, law enforcement officers, and community members. Each stakeholder had certain responsibilities that were explained in detail, while the International Association of Chiefs of Police emphasized creating various programs to address issues that can minimize school violence, such as reducing alienation, promoting respect, after-school activities, counseling services, conflict resolution, diversity, and bullying.

Following the Columbine attack, the U.S. Secret Service and USDOE jointly studied 37 targeted school violence incidents from 1974 to 2000 to identify warning signs of targeted school violence for educators to better understand how to prevent them (Vossekuil et al., 2004). The safe school study found that targeted school violence events were usually planned out well in advance by their perpetrators and often the acts were known by other students before they occurred. This valuable information meant that educators could now attempt some formal preventive techniques. As a result of this information (Fein et al., 2002), the USDOE and U.S. Secret Service published a guide for educators to "identify, assess, and manage students who may pose a threat of targeted violence in schools" (p. iii). Threat Assessment in Schools: A Guide to Managing Threatening Situations and to Creating Safe School Climates incorporated the threat assessment process used by the Secret Service to protect the president and other major political officials, and the findings from the USDOE and Secret Service safe school study about school shootings to guide school leaders in the use of threat assessment teams to combat the phenomenon (Fein et al., 2002).

In January 2007, the USDOE released the first guide to crisis planning for schools based upon federal emergency management practices by Federal Emergency

Management Agency and was essentially a checklist to follow when schools and communities created a crisis plan (USDOE, 2007b). The USDOE (2007b) noted that the "research on what works in school-based crisis planning is in its infancy [and] there is little hard evidence to quantify best practices" (pp. 1-4). The guide, using four phases of emergency management (prevention-mitigation, preparedness, response, and recovery), outlined steps to consider for the various emergencies schools may encounter: natural disasters, severe weather, bus crashes, fires, bomb threats, acts of terror or war, shootings, outbreaks of disease or infections, chemical or hazardous spills, and student or staff deaths. In April 2007, the Virginia Tech shooting occurred and the IHEs had been thrust into the forefront of national concerns over the phenomenon of targeted school violence. In response to that incident, the USDOE's Office of Safe and Drug Free Schools convened an expert panel on emergency management in the field of higher education in Washington, District of Columbia (Drysdale et al., 2010). Acknowledging the differences between K-12 institutions and college and university campuses when creating school safety plans, published a separate guide for IHEs (USDOE, 2010). The IHEs were given the same framework for creating emergency management plans using the four phases of emergency management to address their specific and individualistic challenges: larger geographical areas, campuses with numerous buildings, residential areas, research facilities, constant flow of population on a daily basis, decentralized organizational structures, and perpetrators with different problems and agendas.

Shortly after the release of the USDOE's 2007 guide for K-12 schools, the Department of Justice's Bureau of Justice Assistance updated its original 1999 guide providing strategies for responding to and preventing school violence (Bureau of Justice Assistance, 2009). The 2007 guide included an addressing of the roles of the various

school personnel and also of the members of the local community, law enforcement, and the justice system explaining how these stakeholders could collaborate effectively to formulate violence prevention strategies to create safe learning environments.

To date, the most comprehensive compendium of effective best practices for K-12 school leaders to reference is the *Guide for Developing High-Quality School Emergency Operations Plans* (USDOE, 2013a). This guide, collaboratively developed by the USDOE, U.S. Department of Health and Human Services, U.S. Department of Homeland Security, U.S. Department of Justice, FBI, and Federal Emergency Management Agency, included an offer to K-12 school planning teams expertise in national emergency preparedness and the best practices recommendations to develop or revise their campus emergency operation plans. Aligned with the concepts of the National Incident Management System, the guide includes the best practices in protocols and structures for managing disasters and emergency incidents so that schools can more effectively work with first responders (USDOE, 2013a). Moreover, the guide offers common terminology and procedures used nationwide and allows any school implementing the practices to align its emergency plans on a national scale.

A sister guide was also published separately for IHEs that addressed the characteristics and specific challenges college and university campuses and their populations present in the field of school safety and security (USDOE, 2013b). Both guides were formulated using the best practices learned over the years from incidents of targeted school violence, terrorist attacks, hurricanes, and other emergencies; and the nation's updated approach to preparedness as called for in the 2011 Presidential Policy Directive 8. Ultimately, what had been learned over the years was that emergency planning was best accomplished through a team approach (USDOE, 2013a). The team

consisted of school and community stakeholders who needed to collaborate, coordinate, and integrate efforts towards safety preparedness.

Crisis Management Teams

The most effective combative method to minimize targeted school violence is developing and maintaining proper crisis management teams, emergency plans, and the inclusion of all stakeholders to prepare schools for emergencies (Astor, Guerra, & Acker, 2010; Booker, 2014; Borem et al., 2010; Cornell & Williams, 2012; Davies, 2008; Dunkel & Stump, 2007; Furlong, & Mayer, 2010; Hough & Spillan, 2005; Kramen et al., 2009; Langman, 2015; Larson & Busse, 2012; Matthews, 2013; Sherwood & McKelfresh, 2007; Spencer-Thomas & Nicoletti, 2010; USDOE, 2013a, 2013b). There are numerous stakeholders in the field of campus violence, such as administration, faculty, staff, students, mental health professionals, counselors, campus security or police, local law enforcement, local fire and medical first responders, other emergency management professionals, and community associations (Cornell & Williams, 2012; Mitroff et al., 2006; Spencer-Thomas & Nicoletti, 2010). Forming what is called a coalition by Spencer-Thomas and Nicoletti (2010) these stakeholders bring various expertise and ideas, foster cooperation, and improve communication in an emergency.

According to Astor et al. (2010), schools are complex human organizations that bring together several interacting

groups—students, teachers, teaching assistants, counselors and psychologists, social workers and nurses, support staff, principal, parents, and other relevant constituents in the community. Each group may have unique perspectives on school violence, including how safe the school is as a whole and how to address safety issues. (p. 70)

Discussing the importance of crisis planning in organizations, Hough and Spillan (2005) defined crisis planning as "proactively assessing and addressing vulnerabilities to avoid or minimize the impact of crises" (p. 20) and claimed using a five-step process: establishing a crisis team, analyzing vulnerabilities, employing strategies, utilizing the crisis plans, and assessing the effectiveness of these plans can net these organizations effective crisis preparedness. Critical components of this five-step process include choosing the right people who can perform well under stress to form the crisis management team and ensuring employee preparedness through comprehensive training and drills, which will enable effective and efficient responses.

Emergency Training for Educators

After the Virginia Tech massacre a panel of law enforcement and school governance convened by Virginia Governor Kaine investigated the events and compiled a list of seven lessons learned (Davies, 2008). In addition to providing mental health services, accessing students' mental health records, considering more gun control, and needing a better understanding of FERPA laws, the panel found that emergency planning, communication among stakeholders, and coordinated training among first responders and IHEs were extremely crucial to a well-organized response (Davies, 2008; Zdziarski et al., 2007).

Examining the Sandy Hook School shooting report and interviewing several participants, Campus Safety Magazine analysts arrived at seven major lessons learned from that tragedy (Dorn et al., 2013). Three of the lessons centered on stakeholders being trained in emergency responses positing that staff and students need to learn how to react correctly to the crisis, respond under stress, and change responses as the situation unfolds (Dorn et al., 2013).

Understanding the responsibilities of educational administrators to create and maintain a safe and secure environment under the threat from so many emergency crises the USDOE, Department of Homeland Security, and Department of Health and Human Services issued guidelines. These documents recommended emergency management best practices include regularly scheduled, coordinated practice among schools, the first responders, and community partners (USGAO, 2007a). However, these best practices are only created and initiated at the school district or school level by educational administrators undertrained in school safety and security themselves. In a study of K-12 school administrators' school crisis competencies and preparedness, McCarty (2012) found that 43.8% of administrators received their crisis training through personal experience only, and not through any formal, competency-based, training programs, and their familiarity with various phases of crisis management was minimal. Security training all too often lags behind the need; therefore, according to Bergh (2009), as "teachers are learning the procedures while employed as educators in schools" (p. 38).

Lack of preparedness and training for a targeted school violence event was identified as one main problem in the post-Virginia Tech shooting analysis. The Virginia Tech Mass Shootings Report (Virginia Tech Review Panel, 2007) documented that the campus' emergency response plan covered preparedness and responses to various emergencies, but did not contain policies for shootings. Further, the reported included a notation that emergency situation training for staff and students did not include shooting scenarios. A national study of the IHE crisis plans and preparedness by SimpsonScarborough (2007) revealed that training in emergency response was minimal. The survey of 93 respondents from the National Association of Presidential Assistants in Higher Education yielded the following data: only 68% of IHE emergency plans covered

a campus shooting incident, only 43% of these institutions tested their plans through tabletop discussions, and just 30% tested plans through mock drills. Even more telling of the unpreparedness situation was the frequency of the testing done. Less than half (45%) of IHEs tested their emergency plans once per year, a quarter (25%) tested less than once per year, while 16% tested twice per year (SimpsonScarborough, 2007). Analyzing the relationship between the IHE faculty or staff training and effective emergency response, Harvey (2011) concluded that despite many institutions are prepared with emergency management plans, the plans are not studied or comprehended and there was little participation by stakeholders in training, most notably by faculty.

Once an emergency response plan is developed by a school staff, the dissemination of pertinent information to all stakeholders and the training and practicing of responses to emergent incidents is a critical component to increase the efficacy of a school's crisis response (Bergh, 2009; Harvey, 2011; Heiselt & Burrell, 2013; Hough & Spillan, 2005; Thrower et al., 2008; Kapucu & Khosa, 2012; USDOE, 2007a, 2007b, 2013a; Wilson, 2007; Zdziarski et al., 2007). Taleb's (2007) black swan theory included an explanation that individuals need to adjust their thought process to the existence of these events and create systems that can handle the unpredictable not just attempt to predict an incident. Those systems include educating and training the stakeholders in crisis response. The USDOE identified emergency exercises as a major element of a school's emergency management plan (USDOE, 2007b) and posited that conducting collaborative emergency exercises are useful to verify school emergency management plans; identify the strengths, weaknesses, gaps, and limitations of a plan; and offer all the participants the chance to understand their roles (USDOE, 2006). Zdziarski et al. (2007) explained that a crisis response requires a regularly scheduled training so all staff can

understand their various responsibilities and be prepared during a crisis.

That training can be in the form of conferences, workshops, tabletop exercises, drills, and full-scale simulation exercises (Harvey, 2011; Kapucu & Khosa, 2012; Wilson 2007; Zdziarski et al., 2007). Bergh (2009) suggested a training method for educators beginning with content-level training (i.e., crisis theory and applicability to schools) for a basic understanding and then the implementation of actual simulated drills (p. 42). Exposure to comprehensive emergency simulations and drills, according to Hough and Spillan (2005), increases the likelihood of a successful crisis response.

The International Association of Chiefs of Police, the Bureau of Justice Assistance, and the U.S. Department of Justice espoused the importance of practicing crisis management plans with faculty, staff, students, and law enforcement several times a year utilizing scenarios in a school guide for responding to school violence (Kramen et al., 2009). The USDOE (2010) posited,

routine, multihazard training should be conducted with faculty, staff, and other support personnel, focusing on the protocols and procedures in the emergency management plan. Training should be conducted in conjunction with community partners, as well as integrated with responders' expertise, to ensure consistent learning. (p. 5)

Educators are expected to perform emergency responses under stressful situations, which are hard to create during normal drills. Often, an individual may not be able to react or respond during a crisis because of emotional, physiological, cognitive, or behavioral responses (Kramen et al., 1999). In a study of police officers' psychobiological stress responses to a reality-based school shooting scenario, Strahler and Ziegert (2015) concluded that training scenarios held in a natural and realistic

environment were a more valid approach to understanding stress perception and biological responses of individuals in these situations. According to Strahler and Ziegert, by integrating "biological and emotional responses into training programs," individuals can better prepare themselves in handling these responses while engaged during real-life stressful situations (p. 89). School personnel, students, and other stakeholders facing an active shooter or other crisis will experience the same biological and emotional responses of fear, anxiety, and disorganization and should train to learn the cues for these responses and how they may react (Brock, Sandoval, & Lewis, 2001; Kramen et al., 1999). Real-life training scenarios are recognized as a best-practices method of managing critical incidents. According to the USDOE (2013a), "The more a plan is practiced and stakeholders are trained on the plan, the more effectively they will be able to act before, during, and after an emergency to lessen the impact on life and property" (p. 21).

Educators' Perceptions

The Columbine tragedy and subsequent increased media attention on targeted school violence phenomenon led to discussions about the legitimacy of the new fear surrounding school safety—whether it an issue to panic over or a just media-produced fear (Schildkraut & Muschert, 2014; Schuberth, 2000). Schuberth (2000) reported that an examination of students' and teachers' perceptions of school violence at schools in Saxony, Germany included findings that there was a true profile of school specific violence and warned "we should take seriously the perceptions of pupils and teachers and their primary experiences rather than disparage them as a product of an erroneous approach to the problem of violence" (p. 80).

Building upon Schuberth's empirical method of data collection from students' and educators' perceptions of school safety, there have been a number of qualitative and

quantitative studies completed analyzing educators' perceptions. These studies were conducted at various types of schools from several geographical regions to gauge the effectiveness of school security plans, training, and preparedness (Bergh, 2009; Boyd, 2011; Brown, 2008; Church, 2011; Collier, 2006; Connolly, 2012; Cooper, 2008; Dixon, 2014; Dube, 2012; Graham, 2009; Graveline, 2003; Harvey, 2011; Kanner, 2015; McKenzie, 2008; Perkins, 2015; Rider, 2015; Ryals, 2014; Session, 2000; Smith-Greer, 2001; Swiontek, 2009; Taylor, 2008; Werner, 2014). The importance of studying the perceptions of educators is gaining an understanding of their physiological and psychological needs to respond to emergency situations. Common themes of minimal training, underpreparedness, and perceived inability to handle a school emergency crisis by educators permeate these studies and signal that changes in procedures to improve training are needed. Analyzing these perceptions may also identify reasons for the lack of comprehensive training in order to remediate the problem of inadequate emergency preparedness.

In an early study, Session (2000) analyzed perceived school preparedness of teachers in Mississippi schools. Session documented that almost half reported they did not receive training for school violence and over 90% "perceived a need for comprehensive school violence training for all teachers" (p. 63). Similarly, Church (2011) found Midwestern, urban, kindergarten to Grade 6, school staff lacked training to cope with school violence and believed professional development opportunities should be made a priority to support teachers in the classroom. Collier (2006) explored perceived preparedness for school violence and perceived training needs among middle school teachers on the Hawaiian Island of Oahu. The survey data included findings that more than 25% of the respondents felt unprepared at all or too minimally prepared to manage

school violence and over 70% wanted more training for school violence. With the responses to a survey of faculty and staff at a mid-Atlantic intermediate school, Cooper (2008) revealed 90% agreed there was no comprehensive school safety emergency plan, 98% did not understand the concepts involved in crisis response, and 95% claimed there was no system in place to prepare them for school crises.

Bergh (2009) conducted a study of Michigan school teachers' perceptions of their abilities to perform a lockdown response while experiencing the physiological, emotional, cognitive, and behavioral human responses of a crisis situation. Bergh reported survey findings that some teachers had low levels of confidence in their abilities to conduct lockdown procedures and most teachers wanted more "in-depth training" and realistic drill scenarios to better prepare them for the stressful conditions, which accompany a lockdown emergency (p. 122). This same theme of realistic drill scenarios was discovered by Perkins (2015) when Rhode Island teachers' perceptions of school crisis preparedness were analyzed. Perkins (2015) stated that only 40% of the teachers felt they were prepared to face a school crisis, while 63% reported they "never or rarely [trained for crisis preparedness. Teachers stated the] need for a sense of realism" during drill exercises through collaboration with first responders and holding drills during inconvenient times during the school day (pp. 145-159).

Two studies addressed active shooter response preparedness specifically. Ryals (2014) examined 93 school leaders' perceptions of conducting active shooter drills in public and parochial K-12 schools in Louisiana. Uncovered was a significant difference in preparation: Public school leaders considered their schools more prepared to conduct an active shooter drill than their parochial counterparts. Despite this difference in perceptions, according to Ryals, the two types of schools did share the fact that they had

crisis emergency plans in place yet their respective leaders were not fully "confident in their competency to practice the plan" (p. 124). Rider (2015) studied perceptions of high school teachers in the state of Mississippi to determine whether teachers believed their school districts adequately trained them to respond effectively to an active shooter incident. Although Rider's results included a finding of a common theme of teachers' confidence in their abilities being "related to the number of times active shooter preparation drills take place, [it also uncovered the disturbing fact that] 35.9% of participants stated their school did not practice active shooter incident drills at all," which is in direct violation of Mississippi education law (p. 148).

Smith-Greer (2001) analyzed California teachers' perceptions of their preparedness levels to respond to school violence. An overall perceived lack of training in school violence for these California teachers and administrators left them asking for more training. Graveline (2003) surveyed suburban high school teachers in Connecticut in their self-efficacy at handling a school crisis and found many feared their crisis responses would be ineffective due to a lack of documented roles and responsibilities and minimal training.

Brown (2008) surveyed K-12 teachers from schools in Mississippi, Alabama, Tennessee, Georgia, and Florida for perceptions of personal abilities to handle a school safety crisis. Brown's results revealed a majority of teachers did not "feel adequately trained to handle a crisis at their schools" (p. 108). Kanner (2015) interviewed 10 K-12 teachers from the eastern region of the country for their perceptions of their efficacy in handling school violence. Most (70%) expressed concern that they were not adequately trained to be effective in handling violent incidents in their schools and, thus, were ill-prepared. Werner (2014) surveyed Missouri school counselors' perceptions of individual

and school-wide crisis preparedness and crisis training. The results indicated the more involved school counselors were in school emergency management planning process, the more they felt prepared for a crisis.

Opposing preparedness perceptions between teachers and school administrators were found in two studies. Taylor (2008) studied the perceptions of teachers, support staff, and administrators in handling school violence in California and found teachers' perceptions of preparedness were lower than support staff, while administrators had the highest perceived preparedness level. Graham (2009) surveyed Texas teachers and administrators for perceived preparedness in the planning and preparation for school emergencies. Although Graham reported teachers and administrators felt their schools were minimally prepared for emergencies overall, teachers had a "significantly lower [perception of preparedness for emergencies than administrators and a] significant lower" perception of leadership's commitment to this preparedness than administrators (p. 63).

Two studies found different results from the others. Boyd (2011) conducted a study examining levels of preparedness to respond to acts of violence among Mississippi middle school teachers, assistant principals, and principals. The results of Boyd's study indicated that all viewed themselves as being prepared to respond to violent acts. Dixon (2014) interviewed 10 K-12 teachers from a midwestern city to gain their perceptions of school safety and preparedness after the Sandy Hook Elementary tragedy. Even though the teachers in this study generally believed they were prepared to face a school emergency, many did express the desire for more training and increased frequency of training in school violence response.

Regarding perceptions on the efficacy of school emergency plans and the comprehensiveness of those plans, Swiontek (2009) surveyed North Dakota

superintendents' perceptions of school preparedness plans. Although most of the school districts did report having an emergency plan, only a small number of those plans were perceived comprehensive in nature and more were rated inferior (9.8%) than superior (2.0%). Additionally, only 38.0% of school districts took part in a state-run school security and training program for their staff. McKenzie (2008) investigated the perceptions of school leaders at five Oregon schools that experienced a gun-on-campus incident on the effectiveness of their emergency plans. All five school leaders reported that they felt their individual school responses worked well when the incidents occurred and their staff needed to respond according to the crisis plans they had in place.

Focusing on a specific school emergency crisis, terrorist activities, Dube (2012) collected data on Rhode Island school administrators' perceptions of preparedness to meet a terrorist threat from public and private schools. Dube's study significantly discovered unpreparedness: 35.0% of school administrators discounted the possibility of a terrorist event at their school and unnecessary to prepare for, 25.0% did not feel they were prepared, 9.0% said their staff was not provided training in school security and safety, and 41.3% did not receive training themselves.

At the higher education level Harvey (2011) discovered emergency crisis training for faculty and staff at 27 locations of 2- and 4-year institutions in Missouri was minimal. Further, Harvey revealed even after the widespread movement by IHEs across the country to either create, improve, or just update campus emergency plans after the 2007 Virginia Tech shooting, the emergency management plans from institutions in the study still lacked comprehensiveness, contained inconsistencies, and failed to address proper protocols for communication and lockdown procedures. Connolly's (2012) study on preparedness perceptions at universities found that 50% of faculty and staff did not have

a copy of the campus emergency plans; 75% of the adjuncts, 58% of the administrative staff, and 73% of the nonadministrative staff were unaware of how to report a suspicious person on campus; and 74% of the staff were unsure of what they were expected to do during an emergency. According to Connolly (2012), emergency preparedness on college campuses is nonexistent if stakeholders do not train and know their roles.

With teachers and school administrators directly confronting school emergency crises, it is undeniable that the need the tools and resources was necessary to be effective as first responders. Zdziarski et al. (2007) noted training can offer a crisis repertoire from which to draw when individuals may get nervous or panic and can also build criticalthinking skills necessary to react effectively in crisis situations. These studies in educators' perceptions of their efficacy in awareness, training, preparedness, and abilities documented most educators feel undertrained, unaware of procedures, and unprepared to react in times of crisis under the pressures that stress human emotions. Zdziarski et al. also suggested that there may be different views on preparedness between administrators responsible for the overall program at each school and the teachers in those schools. The studies intimate educators want more training and drills and call for more realistic exercises to hone their skills. Training for targeted school violence incidents needs to include both the physical responses of a lockdown where blinds are closed, doors are locked, and lights are shut off; as well as the emotional and physiological responses experienced by staff during highly stressful situations, yet the latter two responses are often not incorporated in the training (Bergh, 2009).

School Security in New Jersey

There are no federal mandates requiring schools to create or follow a specified or delineated crisis emergency management plan, only that they should have one in place (Folks, 2008; USGAO, 2007b; Greenberg, 2007a; USDOE, 2013a). School safety and security has remained the responsibility of the individual states which have had varied levels of approaches over the years to face the challenges.

The education and training of New Jersey school personnel in the field of school safety and security for public schools has been designated the responsibility of the various school district leaders, according to the 2010 NJAC 6A:16-5.1(d):

The district board of education shall develop and provide an in-service training program for all district board of education employees to enable them to recognize and appropriately respond to safety and security concerns, including emergencies and crises, consistent with the district board of education's plans, procedures and mechanisms for school safety and security and the provisions of this section.

At New Jersey private schools, the responsibility and accountability of this training is even more localized resting with each individual school's chief administrator. Again, the substance and depth of the training is the result of the school's chief administrator's prioritization of, expertise in, and intrinsic motivation to school security and safety. With the myriad issues facing administrators operating a school, such as financial solvency, allocation of resources, and meeting educational mandates school safety and security does not always get the attention it should, nor the time needed, and may not be a high priority until a high profile targeted school violence event occurs (Allen et al., 2008; Folks, 2008; Greenberg, 2007a, 2007b; Sindhi, 2013). However, there are no specially designed, mandated classes offered for training and proper response procedures to teachers, administrators, and support staff at K-12 schools even though all school personnel are required to have training to ensure both an understanding and an expected level of competency in those skills (NJSSTF, 2015).

Without specific criteria delineating the format, content, and frequency of training the ultimate implementation of an in-service, security, training program varies greatly in scope and effectiveness among schools and is greatly dependent upon the knowledge of safety practices and priority assigned to this issue by those administrators in charge (Dube, 2012; Greenberg, 2007a, 2007b; Hull, 2010; McCarty; 2015; Schuster, 2009).

Educators in New Jersey initially addressed the issue of school safety in 1988 when the Department of Education and New Jersey Department of Law and Public Safety first created the Memorandum of Agreement (MOA). This document, a mutual agreement, outlined and explained the responsibilities of the two organizations to collaborate in their efforts to address the alcohol and drug problems of school-aged children (NJSSTF, 2015). This agreement, which has been revised in 1992, 1999, 2007, 2011, and 2015, has evolved to encompass the myriad of new school related safety and security problems of the past 20 years, such as guns in schools, bullying, harassment, computer-crime, safety plans, staff training, school searches, gangs, and child abuse. Public schools, charter schools, and approved private schools for students with disabilities are required to annually adopt and implement the MOA with their local law enforcement agencies (NJDOE, 2015a). Nonpublic schools are exempt from the MOA at this time. Implementation of a school emergency management plan is required by the MOA and each school is supposed to have a school safety security plan (SSSP), which includes communication and decision-making protocols consistent with the provisions of the N.J.A.C. 6A:16-5.1 (p. 42). Section (a) of the 2015 NJAC 6A:16-5.1 (a) statute includes a description of the minimum necessary content of those plans:

1. The protection of the health, safety, security and welfare of the school population.

- 2. The prevention of, intervention in, response to and recovery from emergency and crisis situations.
- 3. The establishment and maintenance of a climate of civility.
- 4. Support services for staff, students and their families. (p. 51).

As for the training necessary to prepare for that plan, the New Jersey Department of Law & Public Safety and NJDOE (2015) MOA specifically reads:

School officials shall annually consult with law enforcement personnel regarding the in-service training program required for all district board of education employees, pursuant to N.J.A.C. 6A:16-5.1(d), to enable them to recognize and appropriately respond to safety and security concerns, including emergencies and crises, consistent with the school district's plans, procedures and mechanisms for school safety and security and the provisions of N.J.A.C. 6A:16-5, School Safety and Security. (p. 43)

No template or specific details are offered to New Jersey school leaders to write the SSSP and no specified training curriculum is offered to them for creating a training program for educators.

Describing events of school violence as a continuum, the NJDOE (2001) initially offered a guide to schools for developing comprehensive safety plans. To assist school personnel in understanding how to create SSSPs and establish best practices in school safety and security the NJDOE issued the *School Safety Manual: Best Practices*Guidelines in 2004, which was updated in 2007 (NJSSTF, 2015). This manual described some best practices in the field of school safety and security covering creating planning teams, collaborating with law enforcement, school building access, updating sharing of emergency information and contact information among all stakeholders involved, and

providing building blueprints and emergency procedures to police, fire, and medical first responders. The update in 2007 included site assessments for schools, target-hardening measures, formal communication protocols, gang awareness policies, and health awareness regarding pandemic influenza (NJSSTF, 2015).

To enable school leaders to meet the requirements established in the MOA and implement school safety best practices from the 2004 School Safety Manual, school administrators were issued guidelines on how to implement the plans and drills in the 2007 guide School Administrator Procedures: Responding to Critical Incidents (NJDOE, 2007b). The guide included instructions and procedures on how administrators and staff should respond to active shooters, bomb threats, evacuations, lockdowns, and public information communication. Each of these crisis responses require a number of steps to complete and the coordinated efforts of the entire school staff. While these steps were outlined in the school administrator procedures guide, it would require practice to train the staff and perform the responses effectively. To this end, in January 2010, Governor Corzine signed into law PL 2009, c. 178, which is referred to as the School Security Drill Law (NJSSTF, 2015). The law requires every school to conduct at least two drills during school hours, one security drill and one fire drill, every month the school is in session. The security drills were meant to allow staff to practice for active shooter incidents, school lockdown events, bomb threats, and nonfire evacuations.

To improve upon the content of SSSPs and incorporate the myriad issues and activities found on a school campus, the NJDOE and Office of Preparedness and Emergency Planning (2011a) issued the *School Safety and Security Plans: Minimum Requirements*, which listed the required elements to be included in every school district's SSSP (NJDOE & Office of Preparedness and Emergency Planning, 2011a). According to

the NJSSTF (2015), the purpose of the list was "to enhance the development of school district-wide safety and security plans and clearly define its policies and procedures" (p. 11). The document listed the required elements each school needed to address in their plans and came with an accompanying checklist (NJDOE & Office of Preparedness and Emergency Planning, 2011b). However, according to the NJDOE & Office of Preparedness and Emergency Planning (2011a), this document was described in its introduction as not being "a step by step guide for completing a comprehensive emergency response plan" (p. 3). Thus, the creation of a fully comprehensive SSSP was still the responsibility of school administrators who subsequently still had no training or experience in this field; needed to lead the collaborative effort with other stakeholders, such as law enforcement and emergency first responders; and were only given a checklist with no substance.

The state reiterated the necessity for school leaders to improve SSSPs and train educators in emergency responses shortly after the Sandy Hook Elementary school shooting in December 2012. Just as many other states had reacted to the tragedy with hundreds of proposed school safety bills (Shah & Ujifusa, 2013), New Jersey proposed its own school safety legislation, but the state's Department of Education issued a memorandum 4 days after the Sandy Hook shooting reminding all school leaders to update their emergency management plans so they align with the minimum requirements established in 2011 and now set a minimum number of two drills for each crisis (active shooter, bomb threat, lockdown, and nonfire evacuation) to be held per school year (NJSSTF, 2015).

A serious lack of school compliance with emergency planning, training, and resources along with too few trained safety and security personnel at schools to

implement effective plans, procedures, and training classes underscored the lack of uniformity among school districts. In their 2015 report on the state of school safety and security in New Jersey, the NJSSTF recommended a school safety specialist academy to be modeled after a similar one in the state of Indiana, which would train representatives from all schools in the best practices regarding school security and safety, stay current on the most updated resources on school safety, provide ongoing professional development, and take a leading role for school safety in the state (NJSSTF, 2015). Without an agency or oversight organization to monitor safety and security planning and training in public or private educational facilities, these activities will vary in effectiveness greatly placing school safety in a state of vulnerability (Folks, 2008; Greenberg, 2007a; Hull, 2010; Sharp, 2006).

Additional recommendations by the task force included allotting more time within school schedules to train educators in emergency response, training all school personnel and not just certified staff, annual turnkey training by the state to staff and students on school emergency responses, such as lockdowns, bomb threats, and evacuations; and annual ongoing training between schools and first responders to identify weaknesses and improve school emergency response effectiveness (NJSSTF, 2015). Obviously, these are progressive recommendations, which require time and many resources, so the task force also suggested that minimally the state should establish uniform safety and security training throughout the state as soon as possible. The NJSSTF (2015) reasoning behind recommending the increase in frequency, statewide uniformity, and immediacy of educator school safety and security training follows:

Because the majority of active shooter incidents is generally over prior to the arrival of emergency responders, it is important that school staff and students

understand their roles and responsibilities in emergency situations. Even in cases where a police officer is on site during an emergency, school staff must understand that they may be in a position to make life or death decisions for themselves and/or others. School staff must have proper training regarding their school's emergency plan. (p. 19)

Paradigm Shift

In this post-9/11 era of security awareness and highly publicized school and workplace shooting incidents, improving school safety is a nascent field. More than 15 years have passed since the Columbine shooting before which law enforcement protocols emphasized containment and waiting for SWAT teams and educators simply assumed kids would not commit such heinous activities. What has been learned is that a new thought process was needed to combat and mitigate these black swan events because this phenomenon is complicated. There are no definitive answers as to why it occurs, how to predict it, or how to prevent it completely as they continue at both secondary and postsecondary institutions.

School safety and security prevention and mitigation depend on the abilities of school personnel to respond effectively, which is gained only through knowledge and training. According to the USDOE (2013a), "Lessons learned from school emergencies highlight the importance of preparing school officials and first responders to implement emergency operations plans" (p. 1). It is this theoretical model, which this study is based upon. Educators enter their profession without prior school safety and security training or experience and are expected to be knowledgeable in the field of emergency response and able to act under stressful and dangerous situations. This skill set is learned, however, only at the school level and on the job. With no federal or state mandates on security and

safety training curriculums, instructor certification requirements, or evaluation instruments on training effectiveness school staff preparedness is often minimal and ineffective.

While targeted school violence challenges educators and law enforcement, the best practices model of creating a comprehensive school emergency response plan and training all school staff in the implementation of that plan remains the most successful theory behind mitigation to date. The need to create a safe school environment for students and build preparedness self-efficacy among educators is paramount. Both national and state governments recognize this theory and have created mandates requiring law enforcement and school administrators improve protocols when confronting targeted school violence (New Jersey Department of Law & Public Safety and NJDOE, 2015). Manuals providing guidelines outline the steps for the creation of comprehensive emergency management plans through a collaborative effort among stakeholders (NJDOE, 2007a, 2007b; USDOE, 2013a, 2013b).

These mandates, requirements, and guidelines, however, do not ensure proper plans are created or that school staff are trained effectively. Ultimately, school preparedness remains varied in effectiveness among schools nationwide. School safety and security experts in various states are recognizing this shortcoming and are beginning to take steps, as in New Jersey, to improve uniform training and drilling standards (NJSSTF, 2015).

In New Jersey, the policies and protocols for school safety and security are the responsibility of school leaders and remain varied in comprehensiveness, scope, and effectiveness. Prior to this research study, recommendations by New Jersey school safety experts include aligning school emergency plans and procedures with the national

guidelines using the concepts of the National Incident Management System and its command structure called the Incident Command System, a standardized approach for incident management to assist in improving plans, establishing more comprehensive training programs for educators, and utilizing a stakeholder collaborative approach (NJSSTF, 2015; USDOE, 2013a).

School leaders need to implement comprehensive emergency plans with uniformity in procedures, multidisciplinary crisis response teams to employ the threat assessment model to proactively mitigate targeted school violence, and effective training protocols (USDOE, 2013a). School leaders must hold frequent and scheduled emergency drills, best practices trainings for their staffs, and combined response drills with first responders to improve the effectiveness of their emergency responses (New Jersey Department of Law & Public Safety and NJDOE, 2015; NJSSTF, 2015). When educators and law enforcement members respond together to a targeted school violence incident, a symbiotic relationship is required to effectively carry out the emergency management plans. Both organizations need to understand each other's roles and responsibilities and mutually support the other with effectual responses.

Summary

The purpose of this mixed-methods study was to assess the perceptions of educators preimplementation and postimplementation of a comprehensive SSSP with related training program at one K-12, private, New Jersey school. This review of the relevant literature on targeted school violence and school emergency crisis preparation has shown the best practices in mitigating targeted school violence include proactive preparations by educators and law enforcement.

Researchers in school safety have attempted to identify the causes of the

phenomenon and use the profiling of the perpetrators in order to prevent possible future incidents at both the secondary and higher educational levels. Experts from the fields of sociology, psychology, criminology, law enforcement, education, and mental health have deduced there are just too many reasons behind school shootings and any attempt to profile these individuals are inadequate to prevent future incidents effectively. As a result of this deduction, the literature cohesively includes the use of the process of threat assessment, comprehensive emergency management plans, and awareness and preparedness training as the best practices method of mitigating school violence.

The literature also included illustrations there are no formal instruments developed, which can be used to measure levels of emergency management effectiveness and degree of alignment with federal standards or guidelines for federal emergency management. What the few studies of school emergency management plans and teachers' perceptions of safety and security did show is that there is no consistency among schools in the creation, maintenance, and updating of emergency management planning and training.

Several common themes permeate the literature: the ineluctable conclusion that this phenomenon will continue to occur, the responsibilities and accountability of educators to maintain a safe environment for students, the necessity of creating effective crisis management programs through collaboration and engagement of all stakeholders, the forming of interdisciplinary crisis management teams, training of educators in crisis response awareness and preparedness, and the necessity of practicing realistic drills to enhance the response of educators to emergency situations.

Finally, this review underscores how school personnel (e.g., teachers, administrators, and support staff) are considered first responders to school emergencies

and, as such, require the knowledge and skills to perform the duties imposed on them as a result of their initial contact with emergent events. Analyses of the perceptions of these educators have revealed most do not feel prepared to fulfill their emergency response responsibilities effectively and many would like to have more training in those areas. Unfortunately, there are no federal laws mandating educators receive safety and security training and state laws vary widely in the requirements of such training. Although emergency management protocols to improve public school safety and mandating school personnel be trained and prepared are promulgated by some state laws, such as in New Jersey, there are no formal programs in place to provide school safety and security training, professional development, or any compliance oversight. School emergency plans and related training has been left to the individual public school districts and nonpublic schools' leaders. These school administrators often have little or no experience or knowledge in the field of school safety and security yet they are the accountable party in charge of school emergency plans and training.

Although the July 2015 report by the NJSSTF recommended many changes to improve these noted shortcomings in the area of training, these recommendations have not yet been completely acted upon. At the time of this study, the effects of these shortcomings upon educators were the impetus and focus of this study.

Research Questions

Four research questions were utilized to guide this research study:

- 1. What are the perceptions of educators regarding the current status of safety and security training at the school?
- 2. What are educators' perceptions of their own abilities to respond effectively to school emergency crises before taking part in a comprehensive school safety and security

program?

- 3. Using a Likert-type scale, to what extent were the educators' level of confidence in their ability to respond to school emergency crises affected by the implementation of a comprehensive school safety and security training program?
- 4. What do educators at the school consider are the training practices and procedures, which enhanced their knowledge and abilities in preparing and responding more effectively to emergency crises?

Chapter 3: Methodology

The purpose of this mixed-methods study was to assess the perceptions of educators preimplementation and postimplementation of a comprehensive SSSP with related training program at one K-12, private, New Jersey school. This chapter includes an explanation of the methodology used, describe the participants, discuss the instruments used to collect data, and review the research design of this study.

Participants

The researcher selected the institution for this study through purposeful sampling. The school, a private, K-12 school, is representative of the population of private K-12 schools in New Jersey in its organization and staffing requirements. The school is also representative of all K-12 private and public schools in New Jersey in that it has to meet the same state-mandated, school safety, and security drill requirements. As such, administrators face the same challenges and issues in establishing SSSPs and related training as all other K-12 schools in New Jersey.

Choosing this school through purposeful sampling allowed the researcher to employ what Creswell (2008) called "theory or concept sampling, [a strategy, which can] generate or discover a theory or specific concepts within a theory" (p. 216). By studying this school that does not have a safety and security program, a theory can be generated about the effectiveness of implementing a comprehensive SSSP for educators to increase their abilities to respond to emergencies. Finally, the school was also chosen as the director was willing to allow the school staff to participate in the study if they wanted.

The study's sampling frame consisted of 60 state-certified teachers, support staff (i.e., counselors, psychologists, health care professionals, resource professionals, secretarial, and custodial), and administrators from one K-12 private school in New

Jersey. All the school's staff had been invited to participate in the study. The researcher obtained permission to conduct the study from the school director. The researcher announced the intended study at a school staff meeting and provided key details and goals of the study, the length of time of the program and the study, and benefits and risks of participating in the study. For those staff interested in participating, the researcher provided further information necessary to answer any questions. Participants were given a participation letter to read before completing the questionnaire.

The demographics of these educators were representative of K-12 educators at other private and public K-12 schools. Their teaching certifications, academic responsibilities, and school safety and security responsibilities were all similar under the Department of Education teacher certification and induction process, New Jersey Core Curriculum Content Standards, and the Uniform State MOA between Education and Law Enforcement Officials, respectively.

The teachers in this school represented all grade levels (K-12) as the school has elementary, middle, and high school level classes. The teachers, support staff, and administrators varied in age, gender, and work experience. The career history of the intended sample also varied from having taught at other public and private schools, prior to coming to this school, to only having taught at this school. In all respects, the teachers, support staff, and administrators at this school represented the typical characteristics and work experiences of school personnel at other K-12 public and private schools in New Jersey.

Finally, prestudy, the school had no formal safety and security plan or protocols established and lacked a safety and security training program for its staff. The participants' experience in emergency preparedness at the school consisted of holding the

basic state mandated monthly drills (e.g., lockdown drills, evacuation drills, and shelter-in-place drills) once per month with no predrill or postdrill training or preparation. The staff were never issued any documents or resources related to school safety and security to utilize for reference or guidance. In these respects, the school was found to be typical and representative in its preparedness for school emergencies of many K-12 public and private schools in New Jersey.

Instruments

The researcher used a questionnaire, interviews, archival documents, and observations to collect data. The researcher developed a questionnaire instrument with three sections entitled Educators' Perceptions of School Safety and Security Training Questionnaire (EPSSSTQ; see Appendix A). In the EPSSSTQ, respondents are required to complete three sections: a background demographic, 5-point, Likert-type, response items, and three open-ended response questions.

The first section of the EPSSSTQ contained five background questions (Items 1 to 5) to collect general background data on the participants for possible generalization of the data results: number of years teaching (0-1, 1 to 3, 3 to 5, 5 to 10, 10 to 15, 15 to 20, or 20 or more), number of years at current school (0-1, 1 to 3, 3 to 5, 5 to 10, 10 to 15, 15 to 20, or 20 or more), position at school (teacher, administrator, support staff), if participant had prior training in school safety and security (yes or no), and if participants had prior experience working in law enforcement or security field (yes or no). These background items enabled the researcher to take into consideration the effects of any prior safety and security training on the current study any of the participants may have had.

The second section of the EPSSSTQ (Items 6 to 24) contained a 5-point Likert-type scale. A Likert-type scale is a rating scale used to obtain attitudes or opinions about

a topic from participants (Creswell, 2008). The 5-point, Likert-type scale, agreement level responses for this questionnaire's 19 items ranged from 1 (*disagree*), 2 (*somewhat disagree*), 3 (*neutral*), 4 (*somewhat agree*), and 5 (*strongly agree*). The 19 Likert-type scaled survey items in this section of the survey were developed to allow the participants to give their perspectives on general safety, safety and security training of the school, and their individual abilities to perform the responsibilities required by the emergency protocols.

A Cronbach's alpha test was used to estimate internal consistency reliability of these 19 Likert-type scaled survey items. Cronbach's alpha measures the internal consistency or average correlation of items in a survey instrument to gauge its reliability. The coefficient is measured between 0.000 and 1.000 with the closer to 1.000, the higher the internal consistency of the items. A reliability coefficient of .700 to .800 is considered acceptable, .800 to .900 considered good, and .900 or higher considered excellent for social science research (George & Mallory, 2010; Gliem & Gliem, 2003). The Cronbach's alpha for the EPSSSTQ was .887.

The Likert-type scaled survey items were analyzed overall, as well as by three subgroups: seven items (Items 6 to 12) representing the staff's knowledge about general school safety and security at the school, seven items (Items 13 to 19) representing the staff's opinions about the school's specific safety and security training program, and five items (Items 20 to 24) representing the staff's opinions about their individual abilities to perform the required emergency protocols. The Cronbach's alpha for these three subgroups follows: staff's knowledge on general school safety .754, staff's opinions about the safety and security training program .804, and staff's opinions about their abilities to perform the protocols .793.

Table 1

Cronbach's Alpha Results for EPSSSTQ Likert-Type Scaled Survey Items

Subgroups	No. items	Cronbach's alpha
Overall scale	19	.887
Staff knowledge on general school safety	7	.754
Staff opinions about safety training program	7	.804
Staff opinions about abilities to perform protocols	5	.793

Note. EPSSSTQ = Educators' Perceptions of School Safety and Security Training Questionnaire.

The third section of the EPSSSTQ included three open-ended questions addressing the school safety and security training program, which enabled the participants to qualify and elaborate on their beliefs and opinions. The first open-ended question asked what aspect of school safety and security training the participants found most challenging to learn. The second open-ended question asked what part of the school's safety and security program the participants found to be the weakest. Finally, the third open-ended question asked what participants would like to see implemented to improve the school's safety and security training program. These individual perceptions were valuable to identify themes regarding the participants' views on school safety and security training, as well as the effects of the training program implemented during this study.

The researcher was able to produce evidence for the construct validity of the EPSSSTQ through several methods in addition to Cronbach's alpha testing. The first method was an examination of the literature and related studies on SSSPs, trainings, and

preparedness levels of educators, specifically the USDOE's (2013a) *Guide to Developing High Quality Emergency Operations School Emergency Plans* and NJDOE's (2011a) *School Safety and Security Plans: Minimum Requirements*, which guided and supported the best practices content and lucidity of the questions. Several similar studies involving analyses of educators' perceptions on school safety and security have included researcher-created surveys and had reliability and validity confirmed through a mixture of pilot testing, expert reviews, and Cronbach's alpha testing (Boyd, 2011; Brown, 2008; Cooper, 2008; Dube, 2012; Gililland, 2015; Rider, 2015).

Rider (2015) employed a 5-point Likert-type scaled questionnaire for three item subsets: seven items addressing teacher's perceptions of emergency planning, four items addressing teacher perceptions of preparedness for responding to an active shooter incident, and seven items addressing teachers' perceptions of practice and drills for active shooter events. A Cronbach's alpha test for reliability of these three sets of items scored a .945, a .903, and a .959, respectively. In a similarly formatted study of teachers' perceptions on school safety, Gilliland (2015) used a 19-item, researcher-created, Likerttype, scaled survey which scored a .861 in a Cronbach's alpha test. Dube's (2012) study utilized a 25-item, Likert-type, scaled survey on school preparedness for terrorist attacks which scored a .950 on Cronbach's alpha. Boyd (2011) used seven items addressing teacher preparedness, which scored a .859, while Brown's (2008) Likert-type scaled survey contained 11 items regarding teachers' knowledge of emergency skills and four items addressed teachers' beliefs about being adequately trained scoring a .796 and a .793, respectively, in a Cronbach's alpha test. Cooper (2008) utilized the tested Crisis Response Survey adapted from the Resource Guide for Crisis Management in Virginia Schools designed by Atkinson (2002). Fifteen of the 20 Likert-type scaled survey items

on the researcher's EPSSSTQ created to address teacher preparedness and training are similar in content to the Likert-type scaled items from these studies.

Table 2

Derivation of Researcher's Items in Appendix A

Question	Study from which that question or concept came
6, 7	Brown (2008), Gilliland (2015)
8, 9	Brown (2008)
13	Rider (2015)
15	Cooper (2008)
16	Dube (2012)
17 to 21	Rider (2015), Boyd (2011)
22, 23	Brown (2008)
24	Rider (2015), Dube (2012)

Further evidence of content validity came from the researcher's experience. The researcher was a law enforcement officer for 21 years, a member of a county SWAT team for 12 years, and currently serves as a high school teacher and school safety and security coordinator. The researcher's law enforcement career, spanning the time frame from pre-Columbine to well after the Virginia Tech incident in 2007, allowed a participant's role in the changing way of thinking and evolutionary role in tactics, procedures, and training for responding to active shooter incidents. At the time of this study, as a high school teacher, the researcher had experience in the classroom environment and the daily responsibilities of a teacher's accountability for student safety, as well as the schedule of

trainings and emergency drills held throughout the school year. The researcher was also a school safety and security coordinator responsible for the oversight, management, and implementation of the SSSP, training, and drills. Through this position, the researcher had the additional experiences of the many challenges facing educators in being accountable and responsible for school safety and security. With this background, the researcher had the knowledge required to construct appropriate content questions for the questionnaire.

Finally, the researcher established evidence for content validity through the review of the EPSSSTQ by eight experts in the field of school safety and security. These experts consisted of chiefs of police, commanders of SWAT teams, school safety and security directors, and educational leaders all of whom have had training and experience in matters regarding school safety and security management. These professional reviewed the EPSSSTQ and offered opinions and suggestions which assisted the researcher in constructing items with appropriate content that would align with the goal of this study.

In addition to the EPSSSTQ, the researcher conducted interviews of several teachers, administrators, and support staff. These interviews followed a semistructured interview guide approach with open-ended questions to elicit detailed personal opinions and information to identify themes that may not be obtained through the Likert-type scaled items (see Appendices B and C). The interview guide approach uses predetermined open-ended questions that can be reworded in any sequence to meet the interview situation allowing for an interview that is systematic and conversational (Zohrabi, 2013). Unlike the rigid formal interview or the loose informal interview, the interview guide approach allows for focus upon the topic, flexibility during the interview, and the ability to gather much more data from the interviewee.

The researcher was able to produce evidence for the construct validity of the interview questions being asked through the same methods used to develop the EPSSSTQ. This construct validity also assured the questions were guided by the research objectives. Questions were designed to illicit the stakeholders' perceptions and opinions of the state of their school's safety and security training and drilling protocols and procedures at the time of this study. The researcher created separate sets of interview questions for teachers and administrators. School administrators' questions reflected the leadership side of the responsibilities of implementing safety and security plans and related training.

Both interview protocols had several common questions in addition to the individualized discipline questions, as the training and response procedures for teachers and administrators are similar in many aspects of emergency response while administrators are accountable for the oversight and leadership. Many core interview questions related to the research questions were the same in both interview protocols, although there were periphery questions, which were discipline related.

The interviews were tape recorded while the researcher took notes to ensure the validity and reliability of the data. Participants were given a consent form to fill out prior to the interviews. Subsequent to the interviews, member checks were utilized by the participants to confirm the data reliability. Participants reviewed the transcripts to ensure accuracy, which validates the study's accuracy (Creswell, 2008). The researcher transcribed the interviews and reread them several times to fully understand the content. The data were investigated for recurring themes and the results of the interviews were coded. This process allowed for the researcher to identify emergent patterns and themes related to the phenomenon.

Procedures

Design. This mixed-methods, cross-sectional study took place over a 3.5-month period. In order to answer the research questions and address the research problem, the researcher believed that a mixed-methods, cross-sectional design using both quantitative and qualitative data was the best method for this study. Mixed-methods designs have been around since 1959 and became more prevalent in the 1970s (Creswell, 2008). Creswell stated that this method provides "a better understanding of the research problem and questions than either method by itself," especially when one of the research methods alone "is not enough to address the research problem or answer the research questions" (p. 552). A cross-sectional survey design is useful when gathering data on participants' "current attitudes, beliefs, opinions, or practices," thus the way they think about the issues addressed (p. 389). In this study in which perceptions of teachers, administrators, and support staff are being investigated regarding a school safety and security training program, a cross-sectional design could aid in evaluating the program. This design further allowed the researcher to explore the school emergency phenomenon and use both the quantitative and qualitative data to identify any relationships that develop (Creswell, 2008). This strategy allowed the researcher to assess the perceptions of response abilities through the information supplied by the participants.

The value of this method is the integration of numerous types of data into one study, qualitative and quantitative, which allowed the researcher to employ triangulation to compare the results. Through methods, triangulation evidence from several types of data and sources can be cross-checked for corroboration of findings. Interviews (qualitative data) can then be used to support or refute survey (quantitative data) thus strengthening and confirming the findings to ensure a complete investigation (Creswell,

2008).

The first phase of the study involved the use of the Likert-type scaled EPSSSTQ and open-ended questions to gain an understanding of the perceptions of school personnel of the practices and policies regarding safety and security training and preparedness at the school at the time of this study (see Appendix A). The EPSSSTQ was administered to the participants in a paper-and-pencil format at the school at a specific time and date with time allotted to take the survey. The EPSSSTQ took approximately 30 minutes to complete. A coding system was used whereby numeric identifiers were assigned to each questionnaire to ensure confidentiality of the participants and continuity between the preintervention and postintervention questionnaires. When completed, the participants placed their confidential EPSSSTQs in a box marked completed questionnaires.

The second phase of the study was the implementation of a comprehensive SSSP with related training program to include 8 hours of in-service classes, and expert guest speakers; and providing tools, resources, and materials on school safety and security to the staff. Observations were conducted during the classes and the eight emergency drills (see Appendix D). The school safety and security training program was implemented for a 15-week period.

The third phase of the study consisted of readministering the EPSSSTQ to the participants postprogram to collect data on perceptions postintervention. The participants were instructed to mark their questionnaires using the same numeric identifier from their first questionnaire. As was done during the first phase, participants completed the paper-and-pencil format at the school during a 30-minute time frame and deposited their confidential EPSSSTQs in a box marked completed questionnaires when completed.

A fourth and final phase involved interviews to further investigate concerns and

insights identified from the EPSSSTQ. Thirteen participants, several from each area (teachers, administrators, support staff), were randomly chosen to interview. Interviews were held at the school, guided by a semistructured interview guide approach with openended questions for one-on-one interviewing of the various stakeholders to obtain qualitative data. There was one interview guide with 14 questions for teachers and support staff (see Appendix B) and a separate interview guide with 13 questions for administrators (see Appendix C). Although many of the questions were the same, a few questions were different in scope to account for the supervisory responsibilities of the administrators. The interviews lasted approximately 25 minutes. The data sets (EPSSSTQs, interviews, observations, and documents) were referenced to answer the research questions (see Table 3).

Table 3

Alignment Between Research Questions and Instrument Questions

Research Question	Туре	Instrument	Item No.
1	Qualitative	EPSSSTQ Interview questions-Staff Interview questions-Administrator	25, 26 5, 6, 7, 8, 14 6, 7, 11
2	Qualitative	Interview questions-Staff Interview questions-Administrator EPSSSTQ	3, 4, 5, 10, 11 4, 5, 13 27
3	Quantitative	EPSSSTQ	6 to 24
4	Qualitative	EPSSSTQ Interview questions-Staff Interview questions-Administrator	27 5, 9, 12 to 14 4, 5, 8, 9 to 13

Note. EPSSSTQ = Educators' Perceptions of School Safety and Security Training Questionnaire.

Data Analysis

The data-recording protocol the researcher used consisted of a 5-point, Likert-type, scaled survey questionnaire; open-ended short response questions; interview protocols; field notes; observations; and archival documents. A discussion of the quantitative and qualitative data collection follows.

Quantitative data. Quantitative data were collected from the 19-question, Likert-type, scaled EPSSSTQ (see Appendix A). Likert data were used to measure attitudinal scales (Boone & Boone, 2012). Through the data, the researcher obtained a quantitative measure of perceptions of the school staff regarding safety and security training and abilities.

The data on the Likert-type, scaled EPSSSTQ were combined into a single composite score and then by subgroups to measure educators' perceptions and were analyzed using Statistical Package for the Social Sciences (SPSS) software. Multivariate analysis, which is an analysis of the relationships between more than two variables (Bryman & Cramer, 2011), was used to determine if there was a statistically significant difference between the preimplementation and postimplementation questionnaire data and to measure any relationship between the two variables: the safety training program (independent variable) and the increased emergency awareness and preparedness of the educators (dependent variable; Murray, 2013).

Qualitative data. Qualitative data were collected from the text of the open-ended questions numbered 25, 26, and 27 on the EPSSSTQ (see Appendix A), the interviews of teachers and support staff (see Appendix B), and the interviews of the administrators (see Appendix C) through a coding process. Additional qualitative data came from observations of training sessions and the safety and security drills held as part of the

participants' in-service training.

Four categories and themes were identified and exposed in the qualitative data: first, deficiencies and best practices in school safety and security training procedures; second, causal conditions for certain response procedures; third, various limitations and goals stakeholders encountered when creating effective response policies; and, fourth, the effects various training and drilling procedures had on developing effectual emergency response abilities by the school personnel. It was expected that the researcher would find patterns and concepts to develop relationships and a theory regarding achieving improved emergency response abilities of the school teachers, administrators, and support staff.

The researcher used descriptive statistics to discuss findings and patterns from the preimplementation and postimplementation questionnaire data. Transcripts of the staff interviews were open-coded to define categories and concepts of the phenomenon being investigated. Coding is described by Creswell (2008) as an inductive process of segmenting and labeling text data to form themes. Initially, the text was open coded to define categories and concepts of the phenomenon being investigated. During a second phase of analysis, axial coding was employed to further define subcategories and concepts of the interview responses. Finally, through selective coding, the researcher developed a theory from the data categories. The researcher transcribed all interviews verbatim to preserve and ensure the quality of original qualitative data. From the transcripts, the researcher formulated categories and concepts through an initial phase of open coding and a subsequent phase of axial coding. Open- and axial-coding methods of qualitative data analysis were used to categorize data. In open-coding categories are identified from the data. Categories are concepts that stand for phenomena, which are important ideas found in the data (Corbin & Strauss, 2015). In axial coding, subcategories are formed from the identified categories and these subcategories identify the who, when, where, why, how, and with what consequences a phenomena is occurring. Thus data categories are related to their subcategories to explain the phenomena (Corbin & Strauss, 2015). Results of the data analysis are presented in narrative form describing concepts and themes that were developed.

Additional qualitative data were obtained from school archival documents: emergency reports, training logs charting the frequency of training activities, emergency response reports, and emergency management plan reviews. The inferential statistics measured the frequency of emergency training activities, the number of actual emergency responses conducted at the school, and any updates or changes made to school emergency management procedures regarding responses to emergencies. The researcher compared the average performance of the school's staff to determine the variables and generalize the findings to the staff performance postintervention.

Field notes were made by the researcher during observations of emergency drills and training activities held at the school during the study. The observation notes were then analyzed for activities that address the research questions. The frequency, type, and issues addressed during the drills and training activities were categorized and scored by the researcher to establish patterns found and document events of challenges and issues regarding the effectiveness of emergency responses. Field notes were also made by the researcher in collecting pertinent data from archival documents relating to the school's emergency procedures and events.

Summary

This mixed-methods, cross-sectional study was conducted at a private, K-12, New Jersey school over a 15-week period. The study began with administering a perceptions

questionnaire to the staff, which was developed by the researcher, the EPSSSTQ. Then a 15-week comprehensive SSSP with related training program was implemented, after which the EPSSSTQ was readministered to the staff. Interviews were conducted with some of the participants and the school archival documents and emergency drills were analyzed. The quantitative and qualitative data were statistically tested and the results are presented in chapter 4.

Chapter 4: Results

The purpose of this mixed-methods study was to assess the perceptions of educators preimplementation and postimplementation of a comprehensive SSSP with related training program at one K-12, private, New Jersey school. Participants were administered a perceptions survey on school safety and then took part in a comprehensive SSSP with related training program over a 15-week period. Posttraining, the participants were readministered the perceptions survey and some were interviewed regarding their opinions of the program. The goal of the study was to assess educators' perceptions and determine the best practices in creating a comprehensive safety and security training program for educators to prepare for a school crisis in order to offer a model for stakeholders to follow or gain ideas from to improve their institution's specific school safety and security emergency plans. In chapter 4, the results of the statistical analyses are presented.

Quantitative statistical analyses were conducted on the Likert-type, scaled EPSSSTQ administered to participants before they participated in the school safety and security training program (preimplementation) and on the EPSSSTQ administered to participants after the training program was completed (postimplementation). Qualitative analysis was conducted on three open-ended constructed response items (25, 26, and 27) on the EPSSSTQ instrument, and the 13 interviews conducted and the archival documents recovered. The researcher sought to determine if there were changes in staff perceptions of their abilities to respond to a number of different school emergencies after attending the training program and if these changes were statistically significant.

Participant Background

The 60 participants in this study were almost all (65) of the school staff members

(teachers, administrators, and support staff) from one private, K-12 school in New Jersey. Of the 60 participants, 30 were classroom teachers, 25 were support staff (counselors, psychologists, health care professionals, resource professionals, secretarial, and custodial), and five were administrators. Of the 60 participants, 14 were male and 46 female. Participants indicated their years of teaching experience in specific ranges: 13 participants indicated they had been teaching 0 to 1 year, seven participants 1 to 3 years, six participants 3 to 5 years, nine participants 5 to 10 years, six participants 10 to 15 years, six participants 15 to 20 years, and 13 participants over 20 years. Additionally, participants were asked to indicate their years of employment at this specific school: 37 had 0 to 3 years, five had 3 to 5 years, five had 5 to 10 years, two had 10 to 15 years, four had 15 to 20 years, and seven over 20 years. Finally, of the 60 participants only 18 had any prior school safety training and only two had any law enforcement or security experience (see Table 4).

Data Analysis Results

The results and findings of the open-ended questions on the EPSSSTQ, interviews, observations, and archival documents are presented in a narrative discussion under Research Questions 1, 2, and 4. Descriptive statistics for the EPSSSTQ are presented under Research Question 3.

Research Question 1

With Qualitative Research Question 1, the perceptions of educators regarding the status of safety and security training at the school were reviewed. This question was addressed by Survey Questions 25 and 26 on the EPSSSTQ (see Table 5). It was also addressed by several questions from the interviews conducted postimplementation of the 13 teacher and support staff and the administrative members.

Table 4 Demographics of Participants (N = 60)

Attribute	No. participants
Years teaching	
0 to 1	13
1 to 3	7
3 to 5	6
5 to 10	9
10 to 15	6
15 to 20	6
Over 20	13
Years at the school	
0 to 1	17
1 to 3	20
3 to 5	5
5 to 10	5 2 4
10 to 15	2
15 to 20	
Over 20	7
Position	
Teacher	30
Administrator	5
Support staff	25
Prior safety training	
Yes	18
No	42
Prior law enforcement or security experien	ice
Yes	2
No	58
Participants	
Male	14
Female	46

For the teachers and support staff, Interview Questions 5, 6, 7, 8, 11, and 14

addressed the perceptions of the SSSP prior to the comprehensive SSSP put in place through this study (see Appendix E). Likewise, administrators answered Interview Questions 6, 7, and 11 (see Appendix F). The interviews were conducted to gain deeper insight into staff perceptions and elicit more detailed personal opinions and information, which may not have been obtained through the open-ended questions on the EPSSSTQ.

Preimplementation analysis of Survey Question 25. In Open-Ended Question 25 on the EPSSSTQ, the participants were asked what aspect of school safety and security training they found to be the most challenging to learn. Of the preimplementation EPSSSTQ responses, three major themes were identified: different drills, active shooter, and physical environment (see Table 5).

Table 5

Preimplementation EPSSSTQ Themes, Questions 25 and 26 (N=60)

Category	No. responses
Question 25 most challenging aspect to learn	
Different drills	24
Active shooter drill	9
Physical environment	7
Leadership	1
Violent students	1
Drill release code	1
Student concerns	1
Question 26 weakest aspect of program	
Physical environment	19
Communications	11
Drills	11
Student seriousness	1
Who is in charge	1

Note. There were 43 responses in total and 17 responses of no for each question. EPSSSTQ = Educators' Perceptions of School Safety and Security Training Questionnaire.

Different drills. More than half (24) of the respondents identified the emergency drills in the school safety plan (i.e., active shooter, bomb threat, evacuations, shelter-in-place, and others) as challenging to learn. Difficulty in remembering the different response steps to take in each of the various procedures for each of the different drills was a redundant response. Some of the responses follow:

- [1] Differences between what to do in different emergency situations.
- [2] The different requirements for the different scenarios.
- [3] Recalling all processes and procedures for every security emergency.
- [4] Difficult to remember the different types of drills.
- [5] The many types of drills and responses.

Active shooter. Just under a quarter (9) of the respondents claimed an active shooter emergency response was what they found difficult to learn. Memorizing the exact response steps and committing them to mental imagery for muscle memory response under psychobiological stress appeared to be the concerns of many participants. Some of the responses of participants follow:

- [1] How to respond when an emergency takes place such as a shooter, how can we remain calm so that the kids feel safe?
- [2] Knowing the exact priority of response if I witness an active shooter prior to a lockdown
- [3] Active shooter—hard to imagine I could keep a cool head and follow procedures in this particular circumstance.
- [4] How to arrange my classroom in the event we have an active shooter situation.

Physical environment. The school's physical environment was the third most difficult aspect of school safety and security to learn, according to the respondents.

Adapting to different environmental obstacles and understanding the strategies for survival, such as cover and concealment, created this difficulty. Varied sizes and layouts of different classrooms in the school, many of which had several entrances, large windows, and glass partitions challenged the staff when learning how to implement a lockdown scenario in order to keep out intruders. Five of the participant responses follow:

- [1] Each classroom is set up differently so knowing what to do vary depending on where you are.
- [2] Getting all the doors locked in a timely manner.
- [3] Too many entrances to cover.
- [4] So many glass windows and doors that it is hard to find a place out of sight.
- [5] Securing multiple entrances.

Postimplementation analysis of Question 25. When participants were asked to explain what aspect of school safety and security training they found the most challenging to learn after attending the 15-week school safety and security training program (Question 25 on the EPSSSTQ), two answers remained the same as before: active shooter and the different drills conducted. The majority of the respondents stated learning all the different drills remained challenging. The second and third greatest number of participants responded that remaining calm during an emergency was hard to learn and proper response to the active shooter continued to challenge them. Although seven other safety concerns were mentioned, these responses were few (see Table 5).

Different drills. Participants were educated in the various elements of the state mandated drills (i.e., active shooter, lockdown, bomb threat, and shelter-in-place) learned about the numerous scenarios each drill is meant to address, and studied other emergency

responses, such as nonfire evacuations, off-site relocation, and lockouts in the 15-week training program. Through this comprehensive approach to dissecting each emergency and its corresponding response procedures while instilling an understanding that every crisis is different, fluid, and evolving, participants were exposed to the complexity of a crisis response. Many respondents found remembering and performing the correct steps for each response a challenging obstacle. Five of the participant responses follow:

- [1] All the different drills and expectations for each.
- [2] Distinguishing each drill / emergency from one another.
- [3] Recalling the differences between the different drills.
- [4] Trying to recall all the procedures for the various types of emergencies the school could face.
- [5] There are so many scenarios and it is hard to remember.

Remaining calm. How they would act in a real-life crisis situation was repeated to be a major challenge of respondents. During the training, participants analyzed national school emergent events, such as active shooters, and were exposed to simulated crisis scenarios created by law enforcement members, which engaged them in problem solving under highly stressful situations. Educating teachers in the realities and responsibilities as first responders in a critical incident engendered concerns about self-efficacy. Four participant responses follow:

- [1] During an active shooter I do not trust my ability to respond as trained.
- [2] I am not sure how I will deal with a student for 3 to 4 hours alone in my room during certain situations.
- [3] How to keep calm and keep the kids calm during a real active shooter situation.

[4] How to remember what to do for each drill without panicking.

Active shooter. After being trained in active shooter response procedures, some respondents still found this event to be onerous to learn. The themes in this situation centered not how to respond, but more on remembering what to do (procedures) while stressed, remaining calm and keeping students calm, and providing a safe haven in the classroom. A summary of the themes is presented in Table 6. Three participant responses follow:

- [1] Before the training, I would have opened my door for a student banging on it to get in, but now I know better, but that is a hard thing to do.
- [2] How to announce a lockdown if I see an active shooter.
- [3] To be able to remain clear headed and think clearly.

Preimplementation analysis of Question 26. In Open-Ended Question 26 on the EPSSSTQ, participants were asked to explain what they considered to be the weakest aspect of the school's safety and security program. This question was one of the four elements of the strengths, weaknesses, opportunities, and threats matrix, which is a standard, structured, planning tool used to identify an organization's competencies and plan steps to achieve future goals (Harvard Business School Press and the Society for Human Resource Management, 2006). Three major weakness themes surfaced from the responses: physical environment, communications, and different drills (see Table 5).

Physical environment. The largest number of respondents stated they felt the physical environment was the weakest aspect of the school's safety and security program. Participants cited inoperable classroom doors, an unsecured front entrance foyer door, unsecured areas within the school, and no safe zones in some classrooms due to glass windows or room configurations as major security concerns. Three of the responses of

participants follow: "No room to hide in the classroom. . . . Classroom doors only locking from the outside. . . . [and] Lack of locked areas for potentially dangerous tools and equipment" made staff uneasy about the school's security.

Table 6

Postimplementation EPSSSTQ Themes, Questions 25 and 26 (N=60)

Category	No. responses
Question 25 most challenging aspect to learn	
Different drills	26
Remaining calm	6
Active shooter	4
Physical environment	2
Scared students	2
Violent students	2
More safety instructions	1
Calling a lockdown	1
Student locations	1
Missing students	1
Question 26 weakest aspect of program	
Physical environment	14
More training	12
Students not serious	12
Communications	7
Weapons in school	1
Organization	1
Being prepared	1

Note. There were 46 responses in total and 14 responses of no for Question 25, and 48 responses in total and 12 responses of no for Question 26. EPSSSTQ = Educators' Perceptions of School Safety and Security Training Questionnaire.

Communication. Communication was a second major concern noted by 11 respondents. Teachers not having instant communication capabilities with supervisors, or each other, during emergent incidents, such as missing students or student violent behavior troubled many. Two responses of participants, "An inability to communicate

among each other during an emergency when locked down. . . . [and] No ability to communicate during an event to account for all students," revealed concern for students during an emergent event.

Drills. School safety drills was the third major theme that respondents mentioned as a weakness. No postdrill analysis or feedback, inadequate knowledge about protocols for certain drills, and a lack of varied types of drills conducted were weaknesses, according to these staff members. Four responses resonated among the respondents: "Not enough practice. . . . Certain drills are not done enough for practice. . . . More drills needed. . . . [and] Not sure of what is expected of me in certain situations."

Postimplementation analysis of Question 26. When asked to explain what they considered to be the weakest aspect of the school's safety and security program postimplementation of the 15-week school safety and security training program (Question 26 on the EPSSSTQ), the researcher coded four consistent themes. These four major elements identified by participants' responses follow: physical environment, more training, students not serious about drills, and communications.

Physical environment. Of the respondents, the largest group considered the building's physical environment still a major weakness. This was a reasonable and expected result as the 15-week training program period was too short to allow structural changes in the school's infrastructure. Again, the consensus centered on concerns about unlocked or unsecured areas, glass walls or windows that could be broken by an assailant, and classroom configurations. Responses from some of the participants follow: "Our building is the greatest weakness . . . terrible design. . . . The building itself, the first floor is all windows. . . . Unmanned entrance doors. . . . [and] No secure place in classroom to hide."

More training. A quarter of the respondents identified the need for additional training as a safety and security program weakness at the end of the 15-week training. After exposure to the myriad scenarios and types of crises that could occur and needed to be addressed in a SSSP, participants recognized the skill set they were practicing to develop was immense. Participants believed more practice was necessary to improve both memory and efficiency. They also saw a lack of conducting drills with law enforcement as a deficiency and of importance to improving their understanding of real-life emergency response. Some of the participant's responses follow:

- [1] I don't think it is weak, I just think we (I) need more practice.
- [2] Repetition for memory.
- [3] Need more training for staff and students.
- [4] Training with law enforcement on premise.
- [5] We have not drilled yet with law enforcement on lockdown.
- [6] Need the opportunity to drill with law enforcement so we can understand fully what would happen in a real emergency when they are present.

Students not serious about drills. A subtheme only mentioned by one participant as a weakness before the school safety and security training program, students' lackadaisical responses to drills, was now the second major weakness noted by 12 respondents to this question. Some participants' responses that underscored this theme follow: "The students don't take it seriously. . . . Students understanding they need to remain quiet. . . . [and] The students' understanding of its importance—their behavior at some drills is often not serious."

Communications. The fourth most frequent theme mentioned by respondents as a weakness after the 15-week program, communications, had been the second most

mentioned before the program. Although improved radio communications among the supervisors and key staff was implemented in the training program, participants still perceived the need for more efficient and instantaneous communications among all staff in the building as an important safety measure. Similar to the physical environment issues, the implementation of updated communications systems available to all staff members was impossible to complete due to time and financial constraints in this study. Some deficiencies were noted by participants: "All staff not being able to be reached in an emergency. . . . Radios for every classroom. . . . Communications during emergencies / drills. . . . [and] The ability to communicate effectively via phone and e-mail."

Postimplementation interviews. Thirteen random participants, 10 teachers and support staff and three administrators, were interviewed subsequent to the 15-week safety and security training program at the school. The interviews conducted to obtain more in depth opinions and explanations than retrieved from the open-ended responses were analyzed for concepts and themes developed from the results of the two EPSSSTQs (preimplementation and postimplementation) and concepts or themes not discovered from these questionnaires.

Regarding the interview questions related to Research Question 1, in the status of safety and security training at the school, all, but, one of, the themes developed from the interviews matched the themes developed in the analysis of the EPSSSTQ results. The physical environment (i.e., classrooms, doors, building hardware), mastering all the drill protocols, missing students, and minimal communications among staff remained significant themes of concern with interviewees mentioned. Dissecting drill protocols, an intensive training program, and safety-related resource materials were seen as strengths of the status of the safety program implemented in this study. A new theme did emerge

from the interviews, which was coded from statements related to the strengths of the current safety program and training resource materials: assurance in safety because of the presence of law enforcement experience on campus. This theme is discussed under Research Question 4.

Interview Question 6 asked what participants felt was the most pressing safety need in the school. Several issues were raised by the teachers, support staff, and administrators. The physical environment, missing students, and communications were the main themes needing to be addressed. Not surprisingly, teachers and support staff worried about their classrooms while the administrators were concerned about the entire building. Unsecured doors, glass windows that could easily be broken for entry by unauthorized individuals, and an entrance door not outfitted with a slide card access reader were mentioned by teachers. Many classrooms had glass partitions for walls and teachers felt they were at a disadvantage when trying to lockdown their classrooms for an emergency, such as an active shooter incident. Two teacher participants' responses follow: "We need strong Plexiglas or bulletproof glass because we can't secure our classroom. . . . [and another was] unsure how to protect their students when doors do not lock."

Administrators considered total building security and target hardening a safety necessity. One administrator admitted that, in their position, access points to the school and controlling them at all times was a primary pressing safety need, which they struggled with each day. The fear of a stranger or an unauthorized individual getting into the school and committing violent acts made target hardening of the school a goal for them. A second administrator stated that before the school training program, they would have stated that everything related to school safety and security was a pressing need to be

addressed. However, with the recent education of the staff in the field of emergency drills and responses from the training program, this administrator now only worried about building hardware, (locks, windows, and doors) and the ability to lockdown the entire school building securely and quickly.

Missing students raised concerns among teachers, support staff, and administrators. When students left the classroom, either with permission or without, and could not be found, panic set in and the need to establish protocols to locate students who may or may not have exited the building was frequently mentioned as a major safety concern necessitating additional attention in training. Two participant responses follow: "When a student is gone for too long, how do we know if there is a situation we need to take care of? . . . [and] When a student leaves without permission, it is hard to get assistance immediately." This type of event occurred often and was, therefore, a priority concern. With the responsibility of accounting for every student under their immediate supervision, teachers and support staff focused on missing student incidents as one of the scariest events they experience.

Communications, a recurrent theme, was discussed as a pressing safety need by teachers, support staff, and administrators. While a better, more efficient means of communications between staff was a common theme, one element of that theme was being capable of increasing the speed to locate missing students. Some participant comments follow:

- [1] Delays in reaching administrators in the event of a student that has not returned to class makes me anxious and disrupts my teaching duties.
- [2] Radios in every room would help.
- [3] Sometimes calling via the classroom phones leads to unanswered phone calls

or delays in responses.

[5] [One administrator also viewed communications as a pressing safety need and admitted] the ability to connect more quickly is currently being addressed with the administration.

Interview Question 7 asked which school emergency teachers, support staff, and administrators feared the most. All 13 participants interviewed noted the active shooter event as the one school emergency that they feared the most. The consensus of the respondents was nationwide incidents, fears of serious injuries and deaths, and the feelings of helplessness when the shooting begins all combined to make the active shooter a preeminent terror. None of the participants hesitated in their response to this question, and those who expounded on their answer further also added the difficulty in protecting against such an attack made it the most fearful emergency to face.

Interview Question 8 asked teachers and support staff about an emergent incident that occurred that needs to be addressed in training. Again, missing students was the main theme that raised concerns among teachers, support staff, and administrators.

Interview Question 10 asked teachers and support staff what drills they found difficult to perform. As found in the EPSSSTQ responses, the varied emergency drills in the school safety plan (active shooter, bomb threat, evacuations, shelter-in-place, and others) were mentioned as hard to learn. Difficulty in remembering the different response steps to take in each of the various procedures for each of the different drills was the cause for this belief. Respondents also mentioned the active shooter response because of the serious nature of the event and the need to get it right.

Finally, Interview Questions 11 for administrators and 14 for teachers and support staff asked what they felt needed to be updated or improved in the SSSP. Administrators

believed professional development in training needed to continue and attention to the physical environment was an area of necessary constant improvement. The school's physical environment and communications remained the repetitive themes for teachers and support staff.

Research Question 2

Qualitative Research Question 2 was intended to take a look at the educators' perceptions of their individual abilities to respond effectively to school emergency crises before taking part in a comprehensive school safety and security program. This question was addressed by Survey Questions 27 on the EPSSSTQ (see Table 7). It was also addressed by several questions from the interviews conducted postimplementation of 13 teacher and support staff members, and administrative members. Themes were developed from the Interview Questions 3, 4, 5, 10, and 11 for the teachers and support staff (see Appendix E) and from Interview Questions 3, 4, 5, and 13 for administrators (see Appendix F).

Table 7

Preimplementation EPSSSTQ Themes for Question 27 (N=60)

Themes wanted implemented to improve program	No. responses
More training and drills	29
Physical environment	6
Communications	3
Violent students	1

Note. There were 39 responses in total and 21 responses of no for the question. EPSSSTQ = Educators' Perceptions of School Safety and Security Training Questionnaire.

Postimplementation interviews. Before taking part in the comprehensive school safety and security training program in this study, only 18 of the 60 participants reported having any prior school safety and security training (see Table 4). After the 15-week school safety and security training program, interviews were conducted and Interview Question 3 was asked of participants if they received any formal school safety and security training. Of the randomly chosen 10 teachers and support staff interviewed for this study, only three had some type of previous school safety and security training. Of the three administrators interviewed, only one previously attended any type of training. These four participants elaborated on their training.

Interview Questions 3 and 4 for teachers, support staff, and administrators queried the previous training. The scope of these safety trainings can be measured from the responses in the interviews. The trainings these participants attended at their previous schools were described as being superficial and general in substance. One participant stated their previous training was conducted through in-service trainings and mock drills at several schools where they had taught in New Jersey, but all were minimal in depth and intensity. "We did not go into each drill and examine the various scenarios or responses, and not multiple times." A second explained that the school where the training previously was taught (also in New Jersey) offered webinars twice a year on school safety and security and two or three professional development trainings per school year. However this teacher described the information taught was "cursory, generalized, and did not cover all the different types of drills." This teacher felt that safety training that involved watching webinars was not interactive and prevented them from asking questions and getting answers as they attempted to problem solve various scenarios. Another participant explained they had attended a 6-hour countywide (New Jersey)

training program for educators that had been designed as more of a basic introductory overview of the field to introduce educators to the topic rather than any specific plans or individualized crisis responses for educators to follow.

The final participant with safety and security training experience had attended a more formal "incident command, . . . search and rescue, . . . [and] response to active shooter on a school campus" training, but this was from a school in another state.

Although interesting courses, the teacher admitted, only the active shooter class was considered useful for this teacher's daily responsibilities in the classroom. The common themes among all four were trainings had been rudimentary, minimal in substance or depth, not consistent or regularly scheduled, not designed for the specific needs of the classroom teacher, and had no commonality in format.

Interview Question 5 for all participants asked about their abilities to respond effectively to school emergency crises prior to the comprehensive school safety and security training program in this study. Nine participants stated they had no prior training and the consensus was they felt underprepared for emergencies. The four with some prior training believed they had only a cursory knowledge and were generally unsure of their familiarity of emergency responses due to minimal and sporadic training.

Interview Question 10 for teachers and support staff asked what emergency drills participants found difficult to perform. Respondents basically answered all of the drills were difficult. They stated lockdowns during an active shooter emergency, shelter-in-place, and knowing the proper procedures for other crises, such as bomb threats and evacuations. Some emergency responsibilities these educators lacked knowledge in and feared their inadequacies follow:

[1] What are the best ways to respond to an active shooter emergency.

- [2] Understanding my exact role in each drill / incident.
- [3] What is expected of me in each type of emergency.
- [4] What I am supposed to do in a shelter-in-place.
- [5] Hiding during a lockdown.
- [6] Keeping kids quiet.
- [7] Knowing all the different drill responses.

Interview Question 11 asked teachers and staff what safety responsibilities they believed were important for their respective positions, but were unsure how to perform. The same themes from Interview Question 10 were repeated. Teachers and support staff focused on lockdowns to mitigate active shooter outcomes, committing all the correct drill responses to memory so as to effectively react, and "understanding my exact role in each drill or incident."

Archival analysis. The lack of archival documents recovered by the researcher substantiated the minimal substantive SSSP in place and minimal training participants received at the present school prior to this study's training program. The archival documents the researcher intended to collect were school drill logs, emergency logs, school safety and security management procedures, security training logs, and security training curriculum.

The researcher only recovered one binder in the school's administrative office files referencing a SSSP and emergency procedures and responses. The binder contained procedures for the school principal to follow in the cases of a lockdown event, severe weather event, explosion, chemical spill evacuation, and student threats. The binder was created and distributed to all schools in a school district where this school had previously been located over 7 years ago. These procedures had not been updated since that time and

each emergency's response procedure was one page in length. Each emergency procedure explained the steps the school principal was to take and who to contact: the appropriate personnel and authorities, informing staff of the emergency event, and the proper announcements to be made over the public address system. The only information found in the binder directed to the teachers' responsibilities were a few sentences under the lockdown emergency page. Teachers in the classrooms were directed to do only three things: to lock classroom doors, account for students, and wait for further instructions. The binder was kept in the administration office and each page in the binder was stamped confidential. No copies of this binder's information, emergency response instructions, or any additional resource materials were distributed to the staff for reference or direction. This practice was substantiated by one administrator interviewed who has been employed at this school for the past 10 years and stated that they never received safety resources and there was no formal safety and security training beyond conducting monthly fire drills and the occasional lockdown drill.

School emergency logs and safety logs recovered from the administrative offices of the school also failed to offer much more additional information regarding previous school safety and security training. The log book listed only the emergency drill dates for monthly fire drills. No security drill log was kept. No logs were recovered referencing safety and security training, postdrill analysis, or emergency response results by the school staff that may have required lockdown, shelter-in-place, bomb threat, or evacuation responses. Again, this lack of a SSSP with any related training and drills was substantiated by two administrators interviewed who had been with the school for the last 8 and 10 years, respectively.

Preimplementation analysis of Survey Question 27. Before the participants

began this study's safety training program and had only minimal or cursory experience in school safety, they were asked what they would like to see implemented to improve school safety and security training in Open-Ended Question 27 on the EPSSSTQ. The participants responded to this question and identified three major themes: training and drills, physical environment, and communications (see Table 7).

Training and drills. Twenty-nine respondents asked for more drills, more handson practice, different emergency training scenarios, joint drills conducted with law
enforcement, and resource materials to better understand the steps they needed to follow
and to utilize during drills as emergency response instructions. Some responses of the
participants follow:

- [1] More practice time allowed for drills.
- [2] More opportunities to practice safety drills with real-life scenarios.
- [3] Classroom specific training for active shooter emergency.
- [4] Take home materials distributed for review.
- [5] Drills that involve a law enforcement member responding to a mock active shooter scenario and the actions staff take upon specific requests from the law enforcement official [were common requests].

Physical environment. The school's physical environment was referenced as an area of needed safety improvement by six respondents. Teachers and support staff showed concern with their classrooms and individual responsibilities to protect those classrooms. Classroom safety and overall building safety were common themes in these responses:

- [1] Training specific to different classrooms.
- [2] Universal room keys to lock and unlock classroom doors where I may need to

hide.

- [3] Little used rooms / areas with unlocked doors or glass doors should be locked.
- [4] Training to arrange my classroom in the event of an active shooter.

Communications. The final theme of safety and security training improvement identified by Survey Question 27 was communications. This theme mentioned by three of the respondents dealt with staff abilities in signaling an emergency if they witnessed one and in real-time communication during an event when staff are isolated in their classrooms. Two suggestions in the responses follow: "An effective texting system for alerts or warnings. . . . [and] Ability to communicate with supervisors and staff during a critical event."

Research Question 3

Quantitative Research Question 3 looked at the extent to which the educators' level of confidence in their ability to respond to school emergency crises were affected by the implementation of a comprehensive school safety and security training program. The Likert-type scaled survey items were analyzed together as a whole and by three subgroups: Subgroup 1 (Likert-type scaled Survey Questions 6 to 12) representing the staff's knowledge about general school safety and security at the school, Subgroup 2 (Likert-type scaled Survey Items 13 to 19) representing the staff's opinions about the school's specific safety and security training program, and Subgroup 3 (Likert-type scaled Survey Items 20 to 24) representing the staff's opinions about their individual abilities to perform the required emergency protocols.

Overall scale. For the overall scale, consisting of all 19 Likert-type scaled survey items, the results from a within-subjects analysis of variance indicated a significant difference from the preimplementation program, (M = 3.79, SD = .585) to the

postimplementation program (M = 4.43, SD = .317), F(1.59) = 89.492, p < .001, partial $\eta^2 = .603$ (see Table 8). These results were indications that, overall, participants believed they increased their emergency response knowledge and abilities to perform response procedures after attending a comprehensive school safety and security training program. The data included suggestions that this type of school safety training for educators is significantly effective at preparing educators for emergency responses, especially when it addresses the specific needs of the teacher in the classroom.

Table 8

Mean and Standard Deviation Results for Overall LikertType Scaled Survey Items on Preimplementation and
Postimplementation EPSSSTQ (N=60)

М	SD
3.79	.585
1.43	.317
3	.79

Note. EPSSSTQ = Educators' Perceptions of School Safety and Security Training Questionnaire.

Subgroup 1: Staff's knowledge about general school safety and security at the school. An analysis of variance for Subgroup 1 indicated a significant difference from the preimplementation program, (M = 3.57, SD = .663) to the postimplementation program (M = 4.32, SD = .410). The descriptive data for the seven Likert-type scaled Survey Items (6 to 12) referencing the staff's knowledge about general school safety and security at the school prior to the participants taking part in the comprehensive school safety training program (preimplementation EPSSSTQ) are presented in Table 9. The

wide variance in standard deviations (.78 to 1.31) show the basic safety and security information educators are responsible to know in their positions as first responders for their students was not common knowledge among everyone.

Table 9 $Descriptive \ Statistics \ for \ Preimplementation \ EPSSSTQ \ Survey \ Items \ 6 \ to \ 12 \ (N=60)$

Survey item	D	SWD	N	SWA	SA	M	SD
6. I am knowledgeable in New Jersey laws mandating school safety and security laws.	9	4	15	29	3	3.21	1.15
7. I am knowledgeable in my school's emergency management plan.	2	1	5	42	10	3.93	0.79
8. I am knowledgeable in the roles of the Crisis Response Team.	2	11	15	28	4	3.41	0.97
9. I am knowledgeable in my roles and responsibilities regarding safety and security.	1	2	6	27	24	4.13	0.87
10. During an emergency, I know who the schools' Incident Commander is.	7	6	4	25	18	3.67	1.32
11. I am familiar with the emergency response procedures expected of me when LE arrive during an active shooter crisis.	2	13	10	29	6	3.39	1.04
12. I am familiar with the emergency response procedures expected of me when LE arrive during other types of emergencies.	2	16	13	23	6	3.26	1.06

Note. EPSSSTQ = Educators' Perceptions of School Safety and Security Training Questionnaire, D = disagree, SWD = somewhat disagree, N = neutral, SWA = somewhat agree, SA = strongly agree, and LE = law enforcement.

After taking part in a 15-week comprehensive SSSP with related training program, participants' responses to the EPSSSTQ, Likert-type, scaled, survey questions regarding knowledge on general school safety and security showed a significant increase in knowledge (see Table 10). Although the results show an increase in knowledge in all areas, there were some notable changes. Item 7 showed a 27% increase in participants

who strongly agreed they better understood the school's emergency plan. Item 8 showed a 22% increase in those who strongly agreed they had an increased awareness of the roles of the school's Crisis Response Team. Most notable, however, were Items 11 and 12 that indicated a 47% and a 30% increase, respectively, of participants who strongly agreed they felt more familiar with their responsibilities when law enforcement arrive during both an active shooter incident and other emergent events.

Table 10

Descriptive Statistics for Postimplementation EPSSTQ Survey Items 6 to 12 (N = 60)

Survey item	D	SWD	N	SWA	SA	M	SD
6. I am knowledgeable in NJ laws mandating school safety and security laws.	0	3	13	35	9	3.80	0.74
7. I am knowledgeable in my school's emergency management plan.	0	0	1	33	26	4.38	0.53
8. I am knowledgeable in the roles of the Crisis Response Team.	0	2	5	36	17	4.04	0.70
9. I am knowledgeable in my roles and responsibilities regarding safety and security.	0	0	1	24	35	4.50	0.53
10. During an emergency, I know who the schools' Incident Commander is.	0	0	1	21	38	4.59	0.52
11. I am familiar with the emergency response procedures expected of me when LE arrive during an active shooter crisis.	0	2	3	21	34	4.38	0.74
12. I am familiar with the emergency response procedures expected of me when LE arrive during other types of emergencies.	0	2	3	31	24	4.23	.71

Note. EPSSSTQ = Educators' Perceptions of School Safety and Security Training Questionnaire, D = disagree, SWD = somewhat disagree, N = neutral, SWA = somewhat agree, SA = strongly agree, and LE = law enforcement.

Subgroup 2: Staff's opinions about the school's specific safety and security training. An analysis of variance of Subgroup 2 indicated a significant difference from

the preimplementation program (M = 3.86, SD = .679) to the postimplementation program (M = 4.53, SD = .398). The descriptive data for the seven Likert-type scaled survey items (13 to 19) referencing the staff's opinions about the school's safety and security training program before taking part in this study's training program are presented in Table 11. When questioned about the school's safety and security training offered to staff at the school preimplementation of this study's comprehensive safety and security plan with related training program, participants' responses were as varied as their backgrounds.

Table 11

Descriptive Statistics for Preimplementation EPSSSTQ Survey Items 13 to 19 (N = 60)

Survey item	D	SWD	N	SWA	SA	M	SD
13. If I have a question about school safety and security I know where to find the answers.	2	1	3	23	31	4.34	0.91
14. I feel my concerns about school safety and security are addressed when voiced.	1	2	7	29	21	4.15	0.86
15. The school has allocated sufficient time for safety and security preparedness training.	2	3	11	24	20	4.0	1.01
16. The school has provided resources and materials on school safety and security preparedness.	1	3	11	22	23	4.17	0.96
17. The school conducts drills throughout the day to prepare emergency responses for any daily situation.	1	1	7	22	29	4.32	0.86
18. School personnel along with local LE coordinate together in active shooter drills.	13	16	11	12	8	2.65	1.35
19. Overall the school's present safety and security training program is effective for preparing staff for emergencies.	1	8	15	28	8	3.52	0.94

Note. EPSSSTQ = Educators' Perceptions of School Safety and Security Training Questionnaire, D = disagree, SWD = somewhat disagree, N = neutral, SWA = somewhat agree, SA = strongly agree, and LE = law enforcement.

The majority of participants had minimal to no exposure to training and the majority answered neutral or somewhat agreed to all the items except Survey Item 13. There were a higher number of participants answering strongly agreed to knowing where to find answers about school safety and security due to the fact that the researcher was known by participants as having law enforcement experience and assisting school administrators in emergency issues prestudy. As for staff concerns about school safety (Item 14), the amount of time allotted staff for safety training (Item 15), providing staff with resource materials for school safety (Item 16), training done in coordination with law enforcement (Item 18), and overall effectiveness of safety training (Item 19), a large segment of the participants did not think the school offered a training program that afforded them the specific information necessary to be effective responders.

After implementing the 15-week comprehensive SSSP with related training program, the participants' responses in this subsection regarding opinions training also showed a significant increase in positive opinions towards the program (see Table 12). More than double the number of participants now strongly agreed their concerns about school safety and security were addressed (Item 14). Likewise, more than double the amount of participants now strongly agreed the school allotted a sufficient amount of time given to safety training (Item 15). Regarding training materials, more than double the number of participants now strongly agreed the school afforded them resources and materials to train for emergency responses (Item 16). Finally, there was a significant increase in the participants' belief in the integrity about the overall effectiveness of the training program. Preimplementation of the program, only eight participants strongly agreed the school's training was effective for preparing staff for emergencies.

Postimplementation of the 15-week program, 37 participants (an increase of 48%)

strongly agreed the type of training they received for school safety and security was effective for preparing them to respond to emergencies.

Table 12 $Descriptive \ Statistics \ for \ Postimple mentation \ EPSSSTQ \ Survey \ Items \ 13 \ to \ 19 \ (N=60)$

Survey item	D	SWD	N	SWA	SA	M	SD
13. If I have a question about school safety and security I know where to find the answers.	0	0	0	4	56	4.90	0.25
14. I feel my concerns about school safety and security are addressed when voiced.	0	1	5	10	44	4.54	0.71
15. The school has allocated sufficient time for safety and security preparedness training.	0	0	1	11	48	4.83	0.45
16. The school has provided resources and materials on school safety and security preparedness.	0	0	1	7	52	4.83	0.40
17. The school conducts drills throughout the day to prepare emergency responses for any daily situation.	0	1	3	15	41	4.57	0.66
18. School personnel along with local LE coordinate together in active shooter drills.	6	5	19	17	13	3.5	1.21
19. Overall the school's present safety and security training program is effective for preparing staff for emergencies.	0	1	3	19	37	4.5	0.67

Note. EPSSSTQ = Educators' Perceptions of School Safety and Security Training Questionnaire, D = disagree, SWD = somewhat disagree, N = neutral, SWA = somewhat agree, SA = strongly agree, and LE = law enforcement.

Of significance in this subgroup was Item 18 regarding the coordination of training with law enforcement during active shooter drills. This was the only item where there was little change as depicted by the statistical results. The results (SD = 3.5) showed participants felt there was too little or no coordinated training with law enforcement. This result was to be expected as this one element of school safety and security training was not possible to implement multiple times in the short time period of this study (15)

weeks).

Subgroup 3: Staff's opinions about their individual abilities to perform the required emergency protocols. An analysis of variance of Subgroup 3 indicated a significant difference from the preimplementation program (M = 3.99, SD = .745) to the postimplementation program (M = 4.44, SD = .477). The descriptive data for the five Likert-type scaled Survey Items (20 to 24) referencing the staff's opinions about their individual abilities to perform the required emergency protocols prior to attending the 15-week training program are presented in Table 13. Data results indicated a number of participants unsure of their ability to effectively respond to a significant crisis like the active shooter. Participants were unsure of arranging classrooms so as to provide safety from an active shooter and unsure how to properly respond to an active shooter.

Table 13

Descriptive Statistics for Preimplementation EPSSSTQ Survey Items 20 to 24 (N = 60)

Survey item	D	SWD	N	SWA	SA	M	SD
20. I am confident in my ability to arrange my classroom for an active shooter.	7	7	10	16	20	3.45	1.36
21. I am confident in my ability to respond to an active shooter emergency.	3	5	13	25	14	3.52	1.56
22. I am confident in my ability to respond to a bomb threat emergency.	2	2	8	35	13	3.86	.88
23. I am confident in my ability to respond to a nonfire evacuation emergency.	0	2	3	28	27	4.39	0.72
24. I am confident in my ability to respond to a shelter-in-place emergency.	1	2	2	21	34	4.52	0.84

Note. EPSSSTQ = Educators' Perceptions of School Safety and Security Training Questionnaire, D = disagree, SWD = somewhat disagree, N = neutral, SWA = somewhat agree, and SA = strongly agree.

Responses to the Likert-type scaled Survey Items 22, 23, and 24 also indicated a

consensus of inadequate abilities to respond to a bomb threat, nonfire evacuation, or shelter-in-place emergency. These four specific school crises are the emergency drills school staff mandated by New Jersey state law to have knowledge in and perform on a monthly basis throughout the school year. Postimplementation of this study's comprehensive SSSP with related training program, there was a significant result in the increase in confidence in the staff's perceptions of their abilities to respond effectively to a school crisis (see Table 14). Although the training program only lasted 15 weeks, a higher percentage of participants either somewhat agreed or strongly agreed they were confident in their abilities in these four different response emergencies.

Table 14

Descriptive Statistics for Postimplementation EPSSSTQ Survey Items 20 to 24 (N = 60)

Survey item	D	SWD	N	SWA	SA	M	SD
20. I am confident in my ability to arrange my classroom for an active shooter.	0	2	4	23	31	4.35	0.76
21. I am confident in my ability to respond to an active shooter emergency.	0	2	3	28	27	4.30	0.72
22. I am confident in my ability to respond to a bomb threat emergency.	0	2	3	28	27	4.35	0.72
23. I am confident in my ability to respond to a nonfire evacuation emergency.	0	1	1	24	34	4.52	0.62
24. I am confident in my ability to respond to a shelter-in-place emergency.	0	0	1	20	39	4.64	0.51

Note. EPSSSTQ = Educators' Perceptions of School Safety and Security Training Questionnaire, D = disagree, SWD = somewhat disagree, N = neutral, SWA = somewhat agree, and SA = strongly agree.

The percentage of participants whose confidence in their abilities to arrange their classroom for an active shooter rose from 60% to 90%. The number whose confidence in responding to an active shooter rose from 65% to 91%. An increase of 78% to 92% of

participants agreed or strongly agreed to their abilities to respond to a bomb threat. The results included indications that less of an increase from the preprogram status of staff abilities regarding nonfire evacuations and shelter-in-place drills. Staff confidence was fairly high preimplementation of the program. This may be a function of the drills themselves that require less procedural knowledge and problem solving than active shooter and bomb threats.

Research Question 4

Qualitative Research Question 4 required looking at what educators at the school consider are the training practices and procedures that enhanced their knowledge and abilities in preparing and responding more effectively to emergency crises. This question was addressed by Open-Ended Question 27 on the EPSSSTQ. It was also addressed by several questions from the interviews conducted postimplementation of 13 teachers, support staff, and administrative members. These were Interview Questions 5, 9, 12, 13, and 14 for teachers and support staff and Interview Questions 4, 5, 8-13 for administrators (see Appendices E and F).

Postimplementation analysis of Question 27. After attending the 15-week comprehensive school safety and security training program, participants were asked on the EPSSSTQ (Question 27) what they would like to see implemented to improve school safety and security training. This same question was asked during the interviews (Items 12 and 14 for teachers and staff and Item 11 for administrators). The respondents' answers were coded into two major themes: more training and drills, and communications (see Table 15). Interestingly, these themes were the same two of the three suggestions (improved physical environment was the third) respondents made to this same question preimplementation of attending the training.

More training or drills. Twenty-nine of the participants stated they would like to see more training and more drills implemented going forward in the school's safety and security program. Upon learning about and understanding the many different types of school emergencies, the various response steps for each, and that emergent events are fluid and evolve as they progress, participants realized problem solving was one of their emergency responsibilities.

Table 15

Postmplementation EPSSSTQ Themes, Question 27(N=60)

Themes wanted implemented to improve program	No. responses
More training and drills	29
Communications	6
Physical environment	3
Students not serious	3
Room supplies Armed staff	1 1

Note. There were 46 responses in total and 14 responses of no for the question. EPSSSTQ = Educators' Perceptions of School Safety and Security Training Questionnaire.

Fearful they would not be able to think quickly enough and properly respond to events as crises unfolded exposing them to stressful conditions, participants felt the need to practice. Practicing drills, remembering specific response protocols, becoming more efficient and comfortable when performing emergency responses when under stressful conditions, and training with law enforcement were the elements of training the participants requested. Some of the responses of participants underscored this feeling of heightened awareness of their responsibilities to perform effectively:

- [1] More hands on practice.
- [2] Interaction with law enforcement response.
- [3] An active shooter drill with police response.
- [4] Engaging scenarios.
- [5] More and different drills.
- [6] More practice.
- [7] Situational discussions to better remember how to respond.
- [8] More hands on activities and practice scenarios.

Communications. The second major theme for improving the safety and security training program centered on communications. Immediate notification of a critical situation and the ability to stay in communications during an emergency again was important to staff who felt isolated in their classrooms. Respondents requested, "Text message system to alert all staff, . . . Radios throughout the school, . . . An e-mail to go out when active shooter drill is actually a drill, [and] Cell-phone- or texting-based emergency communications system."

Postimplementation interviews. Participants interviewed after the 15-week SSSP implementation were asked several questions related to Research Question 4 regarding the training practices and procedures they feel enhance their response abilities (see Appendices E and F). Interview Question 5 for teachers and support staff, and Questions 4 and 5 for administrators asked if the educators felt the 15-week training program in school safety and security prepared them to respond effectively to school crises. All, but two, of the respondents claimed they believed they were prepared and confident. Their responses follow:

[1] I definitely feel like its prepared me, the possible scenarios that could happen,

just the various drills and what to do.

- [2] Yes, I used to be more paranoid about what on earth would I do if something happened and then each time we had one of our professional development trainings another possible school emergency scenario was addressed, so I got closer and closer to being more prepared.
- [3] I feel that I have been prepared to respond effectively because of the emergency guide handed out and the emergency response posters in each room.
- [4] Yes because I did not know how to deal with the kids during an emergency and now I feel more ready to do so.
- [5] Yes I think having the drills every month or twice a month have been very good and the mock drills are effective too just getting us prepared for the feeling of what it is like in the event we have to do an actual emergency response.
- [6] Yes I do think I can be effective because it has helped me think through the scenarios that could possibly happen in our school and prepare for a variety of emergencies that I hadn't thought about prior to the training.

Two participants were not completely certain of the effectiveness of the training on their response abilities. One participant initially agreed to feeling prepared, but then clarified the answer stating,

- [1] But I do think, though, in an emergency you follow your instincts and you would hope people would use common sense. [Another participant questioned the effectiveness of the theory alone:]
- [2] I think it helped, but it has not prepared me to handle a true, true emergency. Not having experienced a real situation, it's hard to visualize going through the event. With the variety of different crises, I don't have the experience.

Interview Question 9 for teachers and support staff and Interview Question 12 for administrators asked how educators learned school safety and security responses the most effectively. Participants felt better prepared and confident after attending the safety training program, but how they learned best was of significant importance. The training program included drills, mock scenarios, tabletop exercises, PowerPoint presentations, videos, guest speakers, reference materials (i.e., handouts, articles, emergency reference flip chart, posters), and question-and-answer sessions. Twelve participants interviewed stated they learned the course material best through drills and mock scenarios, and one of them stated this in conjunction with the emergency reference flip chart. In addition, nine stated the flip chart also helped after the drills and scenarios, while three also added videos assisted them in absorbing and retaining the safety information.

- [1] By drills or mock scenarios, being able to do it.
- [2] From mock scenarios and doing, like when we did a missing person drill one day.
- [3] I think personally what is most effective are mock scenarios just because when you are watching a presentation there are questions not raised as when people are acting out a scenario and come across issues needed to be worked out.
- [4] I personally learn the best through mock scenarios, I am very hands on.
- [5] I learn from the materials given to us and drills, but I learned more from the training materials.
- [6] The manual (flip chart) that we now have has synthesized the training and responsibilities and a greater understanding.

From the administrators' points of view, the school staff learned safety and security responses through all the methods of delivery that were provided in this study's

training program, but also hinted they needed more. Two responses follow:

- [1] I think they learn from all of them, through all of them. It seems the staff had so many more questions than you would think they would have, they need ample time to learn.
- [2] I believe for our staff they need more hands-on kinesthetic drills are best, they have heard the classwork, they need to do the 'do' part to see how they react.

Interview Questions 13 and 10 for teachers and support staff, and for the administrators, respectively, asked participants to evaluate what they felt was the strength of the school's safety and security training program. Nine respondents stated the school safety and security emergency reference flip chart, a resource which was issued to all school staff during the program, coupled with the organized training was the strength. The flip chart was developed by the researcher and listed each emergency and the requisite steps to take by teachers and administrators. The quick reference pages included each type of school emergency response and also the building floor plans, contact phone numbers, student medical concerns, and documents staff would utilize for attendance and student-parent reunification. Having a flip chart delineating the emergency response steps for each type of emergency that allowed quick and easy reference was highly valued by these participants. Some of the common participant responses follow:

- [1] Our flip chart, for sure, one-hundred thousand percent, the flip chart.
- [2] The guide makes it easier to remember or refresh memory of the correct response for each emergency.
- [3] The in-service emergency instruction classes and the flip chart has taken safety training to a higher level.
- [4] The implementation of the protocol steps to take for emergencies and the flip

chart for quick reference, I feel that quick reference is an absolute strength.

- [5] You and the flip chart.
- [6] You and the flip chart [identified a new theme not developed on the EPSSSTQ: assurance in safety because of the presence of law enforcement experience on campus].

Eight participants interviewed stated that they believed the researcher's background combined with the instructional training was the strength of the safety program. Having a retired law enforcement officer as part of the school's staff made them feel safe and assured them that the training they received was proper and suitable for their needs. Having someone with the background, knowledge, and experience to develop, organize, and conduct a school safety training program was a valuable asset to them.

Their expectations were grounded in the notion that school safety and security responses to emergencies were skill sets possessed only by law enforcement members, and not educators. To these educators, law enforcement personnel were the experts trained in and solely qualified to teach this field. Some of the responses of teachers and support staff follow:

- [1] Having you here to educate us. I don't think a lot of public schools have that opportunity. You could answer a lot of questions much more easier than a Principal could, I believe.
- [2] Honestly, I think the fact that we have a retired police officer here, although you are a teacher now, but to answer questions and give us our training, this has got to be the best part of our school safety plan.
- [3] You. No, I do, I think that your knowledge, and confidence, and your background is what's going to help our school to understand what we need to do

as a group and to keep our kids safe.

Administrators shared this belief and reiterated it in an additional question (Question 8) asking them who was in charge and responsible for the school's SSSP. The administrators interviewed admitted, although ostensibly being responsible for school safety and security, they had no experience or training to prepare them to sufficiently instruct their staff properly in emergency management and response. The responses of two administrators follow:

- [1] We have a good (safety) leader who is giving us good information and we are ahead of many other schools in terms of what that information is.
- [2] I think you are the strength of the program, our safety officer. Having a person in charge that takes school safety and security seriously and has the knowledge the rest of us do not have.

A final strength, mentioned by six participants, was the training drills and scenarios held during the 15-week training program. A set training schedule, participation in drills on a regular basis, practicing scenarios to allow problem solving, and actual hands-on activities were seen as the elements that made the SSSP useful. Four of their responses follow:

- [1] Having the consistency in training on a regular basis in order to learn
- [2] Hands on drills and the monthly drills to get us prepared for the feeling of an emergency.
- [3] The flip chart coupled with mock scenarios and drills.
- [4] I think the fact that we do it on a consistent basis, there is a lot of variety in terms as to how we are exposed to the information. I mean the different ways the information is presented. The movies are helpful to make it sort of real for some

people who maybe don't want to think about these kinds of things.

Finally, administrators were queried about the biggest barriers to improving school safety and security in Question 9. The two major themes administrators discussed were centered on finances to obtain necessary resources and the time constraints of running a school and meeting the myriad demands of testing, curriculums, and other educational responsibilities.

Summary

The purpose of this mixed-methods study was to assess the perceptions of educators preimplementation and postimplementation of a comprehensive SSSP with related training program at one K-12, private, New Jersey school. The researcher administered a safety and security questionnaire, the EPSSSTQ, with the Likert-type scaled items and open-ended questions to 92.3% (60 of 65) of the total staff consisting of teachers, support staff, and administrators to obtain the perceptions of staff regarding school safety. The researcher then implemented a SSSP with scheduled training to the staff over a 15-week period. Subsequent to the training the EPSSTQ was readministered to measure changes in the participants' perceptions. Additional data were collected from 13 randomly chosen participants who were interviewed after the training program for more in-depth analysis of opinions and ideas. After transcribing the interviews, member checking was completed by having participants review the transcripts to ensure accuracy of the information collected.

Using methods triangulation, the researcher checked the findings of the quantitative results (EPSSTQ) and the qualitative results (interviews, archival data, and observations) against each other to compare results. The data results in this study included indications that educators benefitted from a comprehensive school safety and

security training program. Data results from the EPSSSTQs and the interviews indicated that a comprehensive safety and security training plan with related training for staff increases the self-confidence perceptions of the staff when they reflect upon their abilities to effectively respond to school emergencies. The major themes developed from the data indicated teachers are concerned with knowing how to protect their classrooms, obtaining more training to make emergency response an activity they can perform under stressful situations, understanding their specific responsibilities when facing a crisis, and getting support from the school administrators in various ways so they can be better prepared to face a crisis. Notable in the responses was that administrators who are charged with school safety and security by the state acknowledged their inadequate preparedness to provide proficient safety and security training and their reliance upon professionals in the field to fill this void. Most significantly, the data results showed educators had a desire to learn much more about school safety and security and were very aware and concerned about their lack of knowledge in the subject. Educators expressed their specific concerns and made known their requests to better enable them to respond effectively to a school emergency.

Chapter 5: Discussion

Overview

Chapter 5 includes a discussion of the study's findings. The purpose of this mixed-methods study was to assess the perceptions of educators preimplementation and postimplementation of a comprehensive SSSP with related training program at one K-12, private, New Jersey school. The goal of the study was to assess the educators' perceptions and determine the best practices in creating a comprehensive safety and security training program for educators to prepare for a school crisis in order to offer a model for stakeholders to follow or gain ideas from to improve their institution's specific school safety and security emergency plans.

The researcher administered a safety and security questionnaire, the EPSSSTQ, to staff consisting of teachers, support staff, and administrators at a private K-12 New Jersey school. These educators then took part in a 15-week comprehensive SSSP with related training program and were then readministered the questionnaire to measure their changes in perceptions. Additionally, 13 participants were interviewed and school archival documents reviewed.

Findings

Population. Participants taking part in this study were all school employees in a private, K-12, New Jersey school. Their positions included classroom teachers, support staff (counselors, psychologists, health care professionals, resource professionals, secretarial, and custodial), and administrators. The demographics of these educators were representative of educators at other private and public K-12 schools. Their teaching certifications, academic responsibilities, and school safety and security responsibilities were all state mandated. Many participants previously worked at other New Jersey

schools. In all respects, these participants represented the typical characteristics and work experiences of school personnel at other K-12 public and private schools in New Jersey. The 60 participants in this study made up 92.3% of the total staff at the school, which was a significant factor in the overall school safety and security training program. The school drills held during the 15-week program were conducted with a near entire contingent of trained staff, which allowed for almost complete untainted results regarding learned skills from this program.

Research Question 1. Research Question 1 follows: What are the perceptions of educators regarding the current status of safety and security training at the school? Preimplementation of this study's training program, participants noted the different state mandated drills (active shooter, lockdown, bomb threat, and nonfire evacuations) and managing the school's physical environment under emergency scenarios as the most challenging aspects of school safety to learn. These responsibilities required skill sets participants were not prepared for or taught when they became educators. They were, however, expected to be as knowledgeable in this topic as they were for building content area curriculums or knowing classroom management skills.

After the 15-week safety program intervention, the participants' answer to the same question generated similar results. The different emergency drills were still the major challenge. Although the data did not show any change after the program regarding participants' difficulty in learning the different drills, the challenge was not in the understanding, but in the implementation of the drills. Participants' interview statements exposed that once the participants were educated in each drill's specific response protocols, they were more worried about practicing and mastering the numerous steps required rather than knowing what crises the drills were meant to mitigate. Data did

indicate the training program was successful in increasing self-efficacy in the active shooter response abilities of participants.

Even a more challenging skill to master was the ability to remain calm during an emergent crisis. The training program exposed participants to the real-life results and factual information of past school crises, instructed them in the numerous skills required as a first responders to a school crisis, and disseminated specific information about the different emergencies school personnel may face. After absorbing these facts, the respondents now questioned their ability to react effectively under stressful situations.

Educators' perceptions about what they considered to be the weakest aspect of the school's current safety and security program resulted in three major "weakness" themes before the training program: the school's physical environment, communications, and drills. Postprogram safety training weakness responses again included the school's physical environment for the same reasons, communications for the same reasons, and drills because of the belief not enough were conducted for effective mastery. Participants wanted more drills to hone their newly learned skills and acclimate to crisis scenario situations. A fourth notable weakness developed from the training program—students' lack of seriousness during drills. Respondents explained students would talk during lockdown drills, not follow teachers' directions, and generally took the different drill situations lightly and lackadaisically. Respondents suggested safety and security training designed for students to remedy this shortcoming.

The final two areas addressed under Research Question 1 follow: (a) the most pressing safety need at the school and; (b) the most feared emergency. The consensus of surveys and interviews identified the building's physical environment and communications among staff as safety issues that needed immediate attention. Not

surprisingly, teachers and support staff focused upon the individual classroom's physical environment concerns while administrators focused on total building target-hardening challenges. All the interviewees gave the same answer, however, when asked about the school emergency they feared most. Unequivocally, they all stated they feared the active shooter event.

Research Question 2. Research Question 2 follow, What are educators' perceptions of their own abilities to respond effectively to school emergency crises before taking part in a comprehensive school safety and security program? The majority (70%) of participants had no formal school safety and security training prior to this study. For the remainder that had attended school safety and security training programs from their previous schools, the feedback suggested these different programs were superficial in scope, introductory in purpose, and randomly offered lacking any formal or comprehensive formatting. Educators hinted that they left these programs with more questions than answers.

Those who had no exposure to safety and security training stated they felt underprepared for emergent situations. The school's archival documents underscore the lack of a SSSP and emergency protocols to assist these educators in their response needs. The paucity of the archival records included confirmation that there was no formal school emergency plan, no organized or consistent training, and the absence of resource materials for distribution among the staff. These respondents perceived their shortcomings were in the areas of knowing the exact protocols for various drills, understanding the specific responsibilities expected of them during a crisis event, and how to obtain these skills effectively.

To address these perceptions of inadequacy, respondents were asked what they

wanted implemented to improve safety and security training. Three themes were developed in their responses: more drills to practice skills, training in creating a safer classroom environment during emergencies, and more access to communications at the classroom level.

Research Question 3. Research Question 3 follows: Using a Likert-type scale, to what extent were the educators' level of confidence in their ability to respond to school emergency crises affected by the implementation of a comprehensive school safety and security training program? Results from a within-subjects analysis of variance indicated a significant difference from the pretraining program (M = 3.79, SD = .585) to the posttraining program (M = 4.43, SD = .317), F(1.59) = 89.492, p < .001, partial $\eta^2 = .603$. These results included indications that postimplementing the 15-week comprehensive SSSP with related training program, participants believed they increased their emergency response knowledge and abilities to perform response procedures. The data suggested this type of school safety training for educators is significantly effective at better preparing educators for emergency responses, especially when it addresses the specific needs of the teacher in the classroom.

Likert-type scaled survey item subgroups individually presented data supporting the effectiveness of the program. In the first subgroup, analyzing staff knowledge about overall school safety and security, the respondents indicated an increased knowledge about the SSSP, role of the Crisis Response Team, and individual staff member's responsibilities in an actual emergency.

Subgroup 2, referencing staff opinions about the school's specific training program, displayed increased improvement regarding staff safety concerns, time allotted by the school for staff safety training, and availability of resources and materials for

safety subsequent to the training program implementation. However, one area did not change in the staff's opinions and that was coordinated training with law enforcement.

This outcome was not surprising as this one element of the safety and security training plan was not possible to implement multiple times in the short time period of this study.

Subgroup 3, addressing staff abilities to perform emergency protocols, presented significant increases in the percentage of participants whose confidence to arrange their classrooms for lockdowns and respond to an active shooter event rose. The results included indications that less of an increase in staff abilities performing nonfire evacuation drills and shelter-in-place drills, which may be a function of the drills themselves requiring less individual procedural knowledge and problem solving than active shooter or bomb threat drills.

Research Question 4. Research Question 4 read: What do educators at the school consider are the training practices and procedures, which enhanced their knowledge and abilities in preparing and responding more effectively to emergency crises? Data indicated more drills and training were the primary avenue for enhancing knowledge and abilities. Respondents requested more drills, mock scenarios, and hands-on training to build muscle memory and acclimate to stressful situations.

Finally, the participants interviewed considered the strength of this study's implemented safety and security plan with related training program was twofold: the safety and security emergency reference flip chart and law enforcement experience. The flip chart allowed quick and easy referencing of various protocols many respondents were struggling to memorize or recall under stressful situations. In addition to this resource, 62% of respondents believed having law enforcement personnel on staff to train them made the overall safety and security plan relevant to the safety needs of the school and

appropriate in context and information.

Relationship of Findings to Literature

The findings of this study on school safety and security training would offer research-based strategies important for both school administrators and members of law enforcement. These findings are of extreme relevance to the goals of proper preparation for and mitigation of the tragic outcomes of school emergency events.

Research Question 1. Regarding the perceptions of educators regarding safety and security training at their school one result of importance to note elucidated a major flaw in the battle against school targeted violence: the deficiency of adequate safety and security training for educators. Research was documented that many educators feel underprepared to face school emergencies due to minimal training (Bergh, 2009; Brown, 2008; Church, 2011; Cooper, 2008; Dube, 2012; Kanner, 2015; Perkins, 2015).

Participants in this study indicated similar perceptions of inadequacy. This study showed that, despite these best practices and recommendations, 70% of the participants had no prior safety and security training even given the fact that 40 of them had been teaching in excess of 3 years.

Like the school in this study, many schools do not have a SSSP in place, do not train with first responders jointly in drills, and fail to train regularly for emergency procedures (Neiman & Devoe, 2009; U.S. Government Accountability Office, 2007b). Cooper (2008) found faculty and staff not understanding the concepts involved in crisis response due to a lack of a comprehensive school safety plan. The consensus among the professionals in the field of school safety and security at the time of this study confirm a comprehensive SSSP incorporating, among other things, a formal training curriculum with regularly scheduled drills to identify gaps and weaknesses in the plan is paramount

in preparing for and subsequently responding effectively to a school emergency (NJSSTF, 2015; USDOE, 2013a).

Federal recommendations call for creating and maintaining a SSSP with related training while the state of New Jersey mandates drills be regularly conducted with related educator training (NJDOE, 2015; USDOE, 2013a). In the USGAO's (2007b) nationwide assessment of emergency management planning, the school districts that were found to have implemented emergency management plans had plans with significantly varied content. For the 30% of participants in this study who did have exposure to school safety and security training from other schools where they previously worked, the findings indicated their training programs varied in depth and substance. There was no common theme or structure to the programs and these participants admitted to being insufficiently trained when entering this study's school safety and security program. Educators' safety and security preparation has to be content driven with a specific lexicon and common procedures that ready them to effectively respond to a crisis and afford them a working knowledge when moving to another school within the state.

Research Question 2. In reference to educators' perceptions of their own abilities to respond effectively, most participants believed they were underprepared. Similar research on educators' perceptions was documented that many educators do feel ill-prepared to face school emergencies as a result of little or no training (Bergh, 2009; Brown, 2008; Church, 2011; Cooper, 2008; Dube, 2012; Kanner, 2015; Perkins, 2015). The value in studying the perceptions of educators is in gaining an understanding of their physiological and psychological needs to respond to emergency situations. Educators are expected to perform emergency responses under stressful situations, which are hard to create during normal drills. Studies by Morgan (2014), Strahler and Ziegert (2015), and

Zdziarski et al. (2007) concluded training scenarios held in a natural and realistic environment were a more valid approach to enabling individuals to handle the biological and emotional responses real-life stressful situations create. In this study, some participants indicated a fear of how they would perform during a real-life emergency. A majority stated, however, they learned emergency response skills best through hands-on activities, such as drills, mock scenarios, tabletop exercises, and joint training with law enforcement. Leaders at the USDOE (2013a) posited realistic simulated events with practice and training would foster effective actions by school stakeholders. Additionally, the USDOE suggested full-scale exercises with multiagency attendance to execute realistic training, while Martinez (2012) highlighted the imperativeness of the police and school official coalition to prepare. Participants' perceptions and feedback in this study support this concept. Sixty-three percent wanted more training and drills and many called for these to be in conjunction with law enforcement to attain a more realistic setting.

Another important finding relative to the stressfulness participants felt due to the enormity and critical nature of their emergency responsibilities was their search for assistance in preparing themselves. Research from safety and security professionals included conclusions that best practices include making available appropriate and relevant resources on the SSSP, its policies, and its procedures (i.e., a quick reference guide) as a way of supporting educators' response capabilities (USDOE, 2013a). One SSSP element in this study's program was the creation and adoption of a school safety and security emergency response reference chart. The researcher developed and designed this reference guide in a flip chart format for ease of use and as a quick reminder to the specific response steps required by each type of school emergency. The participants' survey and interview responses overwhelmingly considered this tool one of the strengths, if not the

overall strength, of this study's training program. The flip chart assisted them in times of high stress when memory fails or nervousness sets in to cloud judgement. A resource, such as this, was expected to be of value by the researcher from observations and information in this study. Educators, working in a field not primarily concerned with the first responder trade and lacking emergency response skills, go to work with a teaching mindset. Unlike law enforcement, which is geared towards crises management and trained with the survivalist mindset to confront dangerous situations, educators find it difficult to shift into a first responder mode and react with lucid responses. Therefore, supplementing training with materials and tools is of significant value in school safety and security management.

The results in this study illustrated another gap in overall school safety and security management at educational institutions, which concerns staffing. Research and recommendations by the NJSSTF (2015) identified the need for a law to require school safety and security training for all of a school's staff, not just certified teachers. Several lessons learned from previous school shootings centered on all stakeholders being trained in emergency responses (Dorn et al., 2013). Staff at the USDOE (2013a) noted that everyone involved in the SSSP must know their individual roles and responsibilities, and specifically cited substitute teachers as a group necessitating school safety and security training. Almost half of the participants in this study were support staff (counselors, psychologists, health care professionals, resource professionals, secretarial, and custodial); some who also act as classroom substitutes. Werner (2014) found school counselors have greater self-efficacy in school crises if they are more active in crisis planning and training. These support staff are often not considered as significant to student safety as the classroom teachers that are thought of when viewing nationwide school tragedies. On a daily basis, substitutes are found throughout all schools and an

integral part of the staffing process, yet never attend in-service training for school issues and procedures.

Research Question 3. The EPSSTQ quantitative survey data included findings that educators' perceptions of their confidence to respond to school emergency crises changed significantly after attending a comprehensive SSSP with related training.

Participants felt more prepared and these results replicated those of one previous research study in which school staff members attending crisis management training also increased their levels of crisis response performance (Cooper, 2008). The participants' increased self-efficacy in crisis response, as posited by Zdziarski et al. (2007), requires regularly scheduled training so all staff can understand their various responsibilities and be prepared during a crisis. The varied methods of training implemented in this program (e.g., conferences, workshops, tabletop exercises, drills, and simulation exercises) are best practices identified by experts in the field (Harvey, 2011; Kapucu & Khosa, 2012; USDOE, 2013a; Wilson 2007; Zdziarski et al., 2007).

Research Question 4. Educators found the training practices and procedures enhanced their knowledge and abilities in crisis response. Participants emphasized they learned from drills and hands-on activities, which allowed them to practice. Research in the field of school safety was documented that often educators will be the first responders to a critical school event because of the brevity of emergent incidents and the time lag between calling 9/11 and the arrival of law enforcement (Blair & Martindale, 2013; Blair & Schweit, 2014; Shah, 2013b). The New Jersey Security Task Force (2015) recommended training for school staff to enable them to slow and retard the advances of school aggressors so as to give law enforcement members time to arrive. The data in this study included findings that a significant percentage of participants requesting more

training and drills to hone their response skills be incorporated into the school's SSSP.

These educators were enlightened to their first responder position and their understanding they would need to react and mitigate an emergency personally while law enforcement staff are en route, and want a more proactive approach to their training. A resulting change in the cultural mindset occurred among the staff and administrators as a consequence of a comprehensive safety training program aimed at educators.

This change in the cultural mindset of educators and the value placed upon emergency training and drills is very essential to improve school safety and security. Research has shown that crisis response requires regularly schedule and consistent training for staff to understand their responsibilities, educators are better prepared for crises, educators are more confident in their abilities, and training increases the likelihood of a successful crisis response (Dorn et al., 2013; Hough & Spillan, 2005; USDOE, 2013a; Zdziarski, 2006; Zdziarski et al., 2007). The recommendations for improving school safety and security by the NJSSTF (2015) included formal annual turnkey training for school staff on safety training and school districts allocate adequate time within school schedules for training sessions. The results in this study included an increase in the self-efficacy perceptions of participants having attended regularly scheduled and consistent training, albeit only 15 weeks in length. This study included confirmation that administrators shifted their mindset to acknowledging the priority of school safety as they witnessed the intense interest of their staff and numerous questions participants had regarding their expected responsibilities.

Participants in this study also noted they felt safer and more confident in the value of the school's SSSP because of direct law enforcement involvement. A majority of participants interviewed elaborated on their confidence that they were presented with an

appropriate and meaningful safety program because it was developed by someone with law enforcement knowledge and experience and not just a school administrator. Educators, by virtue of their positions, understand more than anyone about content area expertise. New Jersey, state-certified, highly qualified teachers must have a higher educational degree in their content area in order to teach. Just as math teachers may not feel proficient in teaching English, educators are cognizant of the fact they do not possess the skill sets and experience to instruct school safety and security. To add to this finding, the researcher also made note of numerous statements made by teachers, administrators, and even students at the school in which feelings of safety and security were heightened simply by having a retired law enforcement officer on staff, even if in the position as an educator in the classroom. These perceptions are valuable to understand by school administrators and law enforcement as most school districts appoint an educator as the school safety and security liaison to organize and run school drills, while SSSPs are to be developed by school administrators who may or may not utilize law enforcement expertise.

Another relevant issue substantiated by this study was the placement of accountability for school safety and security. Staff and administrators wanted an appropriate training program. As stipulated by New Jersey state laws, the responsibilities regarding school safety and security lay with the school administrators at the county or district level, and for private schools at the individual school level. Charged with creating a comprehensive SSSP and establishing adequate and effective emergency response protocols, school administrators do not have the training or background sufficient to fulfill this immense obligation (McCarty, 2012). Administrators at the school in this study were no different in their lack of training for this facet of the job. They all admitted

they were not sufficiently prepared or knowledgeable to manage school safety and security and, ultimately, looked to law enforcement experience for assistance and guidance.

To remedy this shortcoming, state laws included suggestions that school leaders work together with their local law enforcement agencies to create a comprehensive SSSP, but the issues uncovered in this study confirmed a lack of time, minimal personnel resources in both professions, and a cultural attitude placing school safety as a low priority, which can limit these joint collaborations accomplished (Greenberg, 2007b; USGAO, 2007b).

The only document mandating New Jersey school safety and security compliance is the MOA. Meant to ensure joint collaboration on school-related emergencies and criminal issues (New Jersey Department of Law and Public Safety & NJDOE, 2015), the MOA calls for school safety and security joint collaboration and suggests annual consultations between school administrators and local law enforcement on SSSPs, educator safety training, and joint drills with first responders by school administrators. However, as was substantiated by this study, there is no oversight to ensure compliance or to what extent these activities are followed and performed. The results, therefore, can be as minimal as exemplified in this study, which found an outdated and ineffectual SSSP, and no interagency collaboration.

Conclusions

In this study, a SSSP with related training program was implemented for a private New Jersey school that did not have a substantive or updated emergency plan. The SSSP and training was designed within the parameters of the mandates of the state, using the best practices in the field of school safety and security as posited by federal and state

school safety and security management experts. With this SSSP and related training program at the time of this study, the school now meets the state requirements for school safety management. As a result, the data from the preprogram and postprogram questionnaires on educators' perceptions on school safety and security and the participants' interview statements showed a statistically significant improvement in the emergency response self-efficacy perceptions of the staff.

An analysis of this study on the school safety and security policies and training procedures may be presented in an executive summary and a full report that is both a critique and guide to inform the school leadership and governance, county prosecutor, and local law enforcement agencies. This analysis can be offered for ideas to improve the type and methods of training made available to K-12 school personnel on school safety and security for effective responses to targeted school violence. The results of this research study may assist in three ways: (a) school administrators to establish or reorganize training programs and response protocols for school personnel, (b) county prosecutor's offices in their efforts in formulating any countywide protocols and programs for local law enforcement and schools to train, and (c) local law enforcement agencies in collaborating with their respective schools when creating or updating SSSPs and related training and drills for preparing to respond to targeted school violence incidents and other emergencies.

The findings of this study have significant implications for school administrators and law enforcement officials involved in school safety and security for schools in New Jersey and other states. With respect to New Jersey schools' present emergency response capabilities, not all schools have similar SSSPs or training programs. Although the state leaves school emergency plans and training to the local districts and private institutions to

organize and develop, there are minimal parameters and similar challenges all the schools must contend with to be responsible and effective when a school emergency or violent incident occurs. This study has shown the lack of oversight, compliance, and conformity throughout the state can result in underprepared school staff charged with the enormous responsibilities as first responders to violent school incidents.

Until such time as some of the recommendations by the NJSSTF (2015) are implemented, such as a state-run school safety specialist academy to disseminate common knowledge and training to staff at all schools, full-time security personnel on all campuses, more intensive safety training and drills involving schools and law enforcement, more allotted time during school hours for staff safety training, and communication systems connecting all staff to school administrators, schools must focus on more effective training for their staff.

This study provides insights into what the teachers need and want from their point of view and positions to better prepare themselves for their emergency responsibilities. From the unique viewpoint of the researcher who has been both a law enforcement officer and educator in the classroom, members of each profession have unique responses and different concerns when confronting the same school emergency. Educators focus primarily on the safety of their students while members of law enforcement focus primarily on the school intruder.

On their own, most educators will not seek out the requisite information or speak openly about their insufficient knowledge on the topic of school safety. Equally, most educators do not know where to look for assistance in gaining school safety and security resources and knowledge believing they will receive it when their superiors in the administration deliver it. Finally, the SSSPs, trainings, and resource materials finally

offered may not always be pertinent or reliable depending on the source.

Just as not all school administrators are sufficiently prepared to develop their staff's emergency capabilities, similarly, not all law enforcement members are prepared to understand the unique settings and challenges educators face in classrooms. Teachers are confined to rooms filled with students and separated from coworkers and real-time information. During an emergent incident, this isolation combined with the unfamiliar feelings of stress and fear affect teachers.

This study included exemplifications of the imperative need for schools to have a SSSP with a comprehensive training program to increase staff response effectiveness proactively. These plans and training programs must be developed by school administrators with law enforcement expertise so that the collaborative product includes the mutual understanding of each other's roles in their common goal of stopping or mitigating targeted school violence. This study offers recommendations for training to enable a more complete understanding of the roles of each discipline in their common goal to employ the best practices available to maintain a high level of efficient response to violent incidents at school campuses.

Limitations

The purpose of this study was to assess the perceptions of educators regarding school safety and security training. This study was limited to the staff of only one school in which 60 of 65 members of that staff took part. Although these participants may be similar in regard to age, gender, and experiences in the field of education and representative of educators at other schools in New Jersey, the results of the study may not necessarily generalize to the field of school safety and security in all other schools.

Personal prejudices will be an issue that may impact the findings of this study

and, therefore, must be considered as a limitation to the research. Interviews may not completely uncover the shortcomings of any policies and procedures due to the sensitivity of some aspects of the topic and the personal feelings of those who may have taken part in creating these policies and procedures. Additionally, the possibility that participants may offer socially or politically desirable answers may contribute to limitations to the research.

A final limitation of this study was related to time. A common problem in the educational system, allotting and scheduling adequate time to gather all staff together and implement training specific to just one topic is always extremely difficult. This safety and security training intervention was conducted over a 15-week period. Classroom training was only 8 hours in total while drills, conducted during school hours, were limited in duration as well. Brevity of time is not conducive to effective learning and these time constraints may have some impact on the data results.

Recommendations for Local Practice

As has been discovered in this study, the researcher recommends New Jersey schools take a look at their current SSSPs and ensure there is related training for staff to understand the responsibilities outlined in the SSSPs. The state leaders mandate schools have a 91-point SSSP covering all aspects of school operations and planning for all types of emergencies. Yet this manual is useless if all stakeholders at the school are not acquainted or knowledgeable in the specific responses that relate to these safeguards.

Additionally, in conjunction with that training, the researcher recommends one common crisis response program with one lexicon and similar protocols be adopted statewide so emergency responses and emergency training are similar school to school.

This shared program will enable all educators to have a common foundation in safety and

security skills, which they can take with them as they change jobs from school to school. One common response protocol will enable law enforcement agencies to respond with similar tactics and strategies when they assist neighboring districts in these highly dangerous events that require massive first-responder turnouts. Finally, and, most importantly, one common and shared emergency response protocol will allow these two disciplines—education and law enforcement—to work seamlessly in their symbiotic relationship as they prevent and mitigate targeted school violence and school crises.

Recommendations for Future Research

The focus of this study was to measure the effects of implementing a comprehensive SSSP with related training to the staff at one private K-12 school. While a school's safety and security training curriculum can be created with meaningful and best practices standards, the ultimate effectiveness of that program can only be measured through the eyes of the teachers it was developed to educate. Further research on the effectiveness of school safety and security management should include similar studies analyzing these implementations on a larger number of schools to establish generalizations to the population. Future researchers should investigate how these implementations influence staff responses at different types (i.e., public, charter, elementary, middle, and high school) of schools as well. Demographic-driven research collecting data on safety program effectiveness by gender, age, and time in-service training of educators may prove helpful in creating future programs.

A suggestion for future research would be a study that encompasses analyses of schools with established SSSPs and training to determine if that training is effectively meeting the needs of teachers. Research should analyze the methods of creating those schools' emergency training programs, as these programs are, at best, to be a product of a

collaborative effort between administrators and law enforcement members. Researchers should also conduct a comparative study of SSSPs and training programs comparing those created by school administrators with those created by law enforcement personnel to provide insights into strengths and weaknesses of different skill sets and related methods of operations.

Of extreme value would be comparative research analyzing SSSPs at schools where law enforcement officers are stationed on campus. This specific research should correlate whether educators feel the same emergent need to learn and be knowledgeable in matters of school safety and security with the presence of first responders on site to those of schools without law enforcement presence.

A final recommendation is to conduct research on real school crises events at schools with and without SSSPs and related training programs. Analyzing the responses at schools, with and without SSSPs and training programs in place, which have experienced real-life emergencies to include, but, not limited to, bomb threats, evacuations, active shooter, weapons on campus, and medical emergencies, may offer insights into the specific training practices that have benefitted educators.

Summary

This study was conducted to gain a deeper contextual understanding of the perceptions of educators regarding their school safety and security response capabilities and needs. The goal was to determine the best practices in creating a comprehensive safety and security training program to prepare educators for a school crisis in order to offer a model for stakeholders to follow or gain ideas from to improve their institution's specific school safety and security emergency plans. Best practices in the field of school violence prevention and mitigation dictate stakeholders must be educated in SSSPs and

the related crisis response procedures. Educators are the first responders to school emergency crises and must be ready to create time barriers against intruders until law enforcement officers arrive.

With the continuation of these black swan events, a paradigm shift has occurred and the cultural thinking in education has been changed to accept and adopt the new responsibilities these events present. Yet the organizational aspects of preincident preparation are substantially inadequate to meet the demand of school safety and security sufficiently. Leaders in both fields of education and law enforcement must understand the shortcomings of localism and exclusivity when combating a common foe, and make up for lost time with comprehensive and mandated programs for educators. Prioritizing safety and security training is the only way to prepare for the exigencies of the next black swan.

References

- Adams, C. M., & Kritsonis, W. A. (2006). An analysis of secondary schools' crisis management preparedness: National implications. *National Journal for Publishing and Mentoring Doctoral Student Research*, *1*(1) 1-7.
- Allen, E. (2015). Designing safe and effective active shooter exercises. *The Tactical Edge*, 33(3), 20-22.
- Allen, K., Cornell, D., Lorek, E., & Sheras, P. (2008). Response of school personnel to student threat assessment training. *School Effectiveness and School Improvement*, 19, 319-332.
- Altheide, D. L. (2009). The Columbine shootings and the discourse of fear. *American Behavioral Scientist*, 52, 1354-1370.
- Anderson, C. (2004). An update on the effects of playing violent video games. *Journal of Adolescence*, 27, 113-122.
- Anderson, C. A., Berkowitz, L., Donnerstein, E., Huesmann, L. R., Johnson, J. D., Linz,D., & Wartella, E. (2003). The influence of media violence on youth.Psychological Science in the Public Interest, 4, 81-110.
- Anselmi, R. (2008). SWAT and EOD combined operations. *The Tactical Edge*, 26(4), 26-29.
- Arcus, D. (2002). School shooting fatalities and school corporal punishment. *Aggressive Behavior*, 28, 173-183. doi:10.1002/ab.90020
- Ashford, R., Queen, J. A., Algozzine, B., & Mitchell, G. (2008). Perceptions and record of violence in middle and high school. *Behavioral Disorders*, *33*, 222-232.
- Assenmacher, P. (2008). SWAT training for patrol: The time is now. *The Tactical Edge*, 26(3), 70-74.

- Astor, R. A., Guerra, N., & Acker, R. V. (2010). How can we improve school safety research? *Educational Researcher*, *39*(1), 60-78.
- Atkinson, A. (2002). Resource guide for crisis management in Virginia schools.

 Richmond: Virginia Department of Education.
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change.

 *Psychological Review, 84(2), 191-215.
- Bandura, A. (1993). Perceived self-efficacy in cognitive development and functioning. *Educational Psychologist*, 28(2), 117-148.
- Bandura, A. (1997) Self-efficacy: The exercise of control. New York, NY: W. H. Freeman.
- Bataille, G. M., & Cordova, D. I. (Eds.). (2014). *Managing the unthinkable: Crisis*preparation and response for campus leaders. Sterling, VA: Stylus Publishing,

 LLC.
- Bauer, L., Hill, M. R., Neiman, S., & Ruddy, S. A. (2010). A profile of criminal incidents at school: Results from the 2003-05 National Crime Victimization Survey Crime Incident Report (NCES 2010-318). Washington, DC: U.S. Department of Education. Retrieved from http://nces.ed.gov/pubs2010/2010318.pdf
- Bennett-Johnson, E. (2004). The root of school violence: Causes and recommendations for a plan of action. *College Student Journal*, *38*, 199-202.
- Bergh, B. (2009). A qualitative study of school lockdown procedures and teachers' ability to conduct and implement them at the classroom level (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses. (UMI 3354065)
- Birkland, T. A., & Lawrence, R. G. (2009). Media framing and policy change after Columbine. *American Behavioral Scientist*, *52*, 1405-1425.

- Blair, J. P., & Martaindale, M. H. (2013). *United States active shooter events from 2000 to 2010: Training and equipment implications*. San Marcos: Texas State University.
- Blair, J. P., Martaindale, M. H., & Nichols, T. (2014, January). Active shooter events from 2000 to 2012. *FBI Law Enforcement Bulletin*, Retrieved from http://leb.fbi .gov/2014/january/active-shooter-events-from-2000-to-2012
- Blair, J. P., Nichols, T., Burns, D., & Curnutt, J. R. (2013). *Active shooter: Events and response*. Boca Raton, FL: Taylor & Francis Group, LLC.
- Blair, J. P., & Schweit, K. W. (2014). A study of active shooter incidents, 2000-2013.Washington, DC: Texas State University and Federal Bureau of Investigation,U.S. Department of Justice.
- Bon, S. C., Faircloth, S. C., & LeTendre, G. K. (2006). The school violence dilemma: Protecting the rights of students with disabilities while maintaining teachers' sense of safety in schools. *Journal of Disability Policy Studies*, *17*, 148-157.
- Booker, L. (2014). Crisis management: Changing times for colleges. *Journal of College Admission, Winter 2014*, 17-23.
- Boone, H. N., & Boone, D. A. (2012). Analyzing Likert data. *Journal of Extension*, 50(2), 15.
- Borem, R., Cornell, D. G., Modzeleski, W., & Jimerson, S. R. (2010). What can be done about school shootings? :A review of the literature. *Educational Researcher*, 39(1), 27-37. doi:10.3102/0013189X09357620
- Borem, R., Fein, R., Vossekuil, B., & Berglund, J. (1999). Threat assessment: Defining an approach for evaluating risk of targeted violence. *Behavioral Sciences & the Law, 17*, 323-337. doi:10.1002/(SICI)1099

- Boyd, J. A. (2011). Preparedness levels of middle school teachers, assistant principals, and principals to respond to acts of violence in a Mississippi school district (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses. (UMI 3477160)
- Brock, S., Sandoval, J. & Lewis, S. (2001). *Preparing for crisis in the schools: A manual for building school crisis response teams* (2nd ed.). New York, NY: John Wiley & Sons.
- Browman, D. H. (2001, April 4). Police adopt rapid response to shootings. *Education Week*, 20, 1, 16-17.
- Brown, J. T. (2011). Presidential Policy Directive 8 and the National Preparedness

 System: Background and issues for Congress. Washington, DC: Congressional Research Service.
- Brown, L. L. (2008). *The role of teachers in school safety* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses. (UMI 3329730).
- Brunner, J., & Lewis, D. (2005, September). A safe school's top 10 needs. *Education Digest*, 71, 21-24.
- Bryden, P., & Fletcher, P. (2007). Personal safety practices, beliefs and attitudes of academic faculty on a small university campus: Comparison of males and 107 females (Part 1). *College Student Journal*, 41, 613-622.
- Bryman, A., & Cramer, D. (2011). *Quantitative data analysis with IBM SPSS 17, 18 & 19: A guide for social scientists*. New York, NY: Routledge.
- Buerger, M. E., & Buerger, G. E. (2010, September 8). Those terrible first few minutes:

 Revisiting active-shooter protocols for schools. *FBI Law Enforcement Bulletin*,

 79, 1-10.

- Bureau of Justice Assistance, Office of Justice Programs, U.S. Department of Justice, & International Association of Police Chiefs. (2009). *Guide for preventing and responding to school violence* (2nd ed.). Alexandria, VA: International Association of Chiefs of Police.
- Burdick, C. (2006). The impact of governance, operations and technology on critical emergency response: Lessons from Columbine. *Campus Law Enforcement Journal*, *36*(6), 11-13.
- Buster, C. (Ed.). (2008, June). Patrol response challenge. Law and Order, 56, 62-68.
- Cader, S. (2013, September 1). Training and regular security drills for education institutions are just as important as physical security tactics. *American School & University*. Retrieved from http://asumag.com/crisis-amp-disaster-planningmanagement/security-best-practices?page=2
- California Commission on Peace Officer Standards and Training. (2005). SWAT:

 Operational guidelines and standardized training recommendations.

 (POST2005TPS-0369). West Sacramento, CA: Author.
- Caster, R. (2008, April). Ten things the chief needs to know about school shootings. *Law* and *Order*, *56*, 77-80.
- Caulfield, S. L. (2000). Creating peaceable schools. *Annals of the American Academy of Political and Social Science*, 567(1), 170-185.
- Chenault, S. (2004). An overview of the relationship between juvenile school shootings and the media. *Journal of the Institute of Justice & International Studies*, 1(4), 101-111.
- Christensen, J. (2016, June 12). Why the US has the most mass shootings? Retrieved from http://www.cnn.com/2015/08/27/health/u-s-most-mass-shootings/

- Church, G. (2011). *Urban teachers' perceptions of school violence* (Doctoral dissertation). Retrieved from ProQuest Dissertation and Theses database. (UMI 3450791)
- Collier, K. E. (2006). *Middle school teacher perceptions of violent behavior, safe school elements, and preparedness* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses. (UMI 3233797)
- Connolly, M. (2012). Is your college really ready for a crisis? *Community College Journal of Research and Practice*, *36*, 376-378.
- Cooper, K. (2008). Effectiveness of school crisis-management planning and training to improve preparedness (Unpublished doctoral dissertation). Nova Southeastern University, Fort Lauderdale, FL.
- Corbin, J. M., & Strauss, A. (2015). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (4th ed.). Thousand Oaks, CA: Sage.
- Cornell, D. G. (2003). Guidelines for responding to student threats of violence. *Journal of Educational Administration*, 41, 705-719.
- Cornell, D. G. (2006). *School violence: Fear versus facts*. Mahwah, NJ: Lawrence Erlbaum.
- Cornell, D. G. (2010, February). Threat assessments in college settings. *Change: The Magazine of Higher Learning*, 42, 8-15.
- Cornell, D. G., & Mayer, M. J. (2010). Why do school safety and order matter? *Educational Researcher*, 39(1), 7-15.
- Cornell, D. G., Sheras, P. L., Kaplan, S., McConville, D., Douglass, J., Elkon, A., McNight, L., . . . Cole, J. (2004). Guidelines for student threat assessment: Field test findings. *School Psychology Review*, *33*, 527-546.

- Cornell, D., & Williams, F. (2012). Student threat assessment as a strategy to reduce school violence. In S. R. Jimerson, A. B. Nickerson, M. J. Mayer, & M. J. Furlong (Eds.), *Handbook of school violence and school safety* (pp.503-514). New York, NY: Routledge.
- Creswell, J. W. (2008). Educational research: Planning, conducting, and evaluating quantitative and qualitative research (3rd ed.). Upper Saddle River, NJ: Pearson Education.
- Crews, D. (2007). Combating targeted school violence: Inside and outside attackers.

 Kernersville, NC: Applied Crime Prevention, LLC.
- Crews, G. A., & Counts, M. R. (1997). The evolution of school disturbance in America:

 Colonial times to modern day. Westport, CT: Praeger.
- Cullen, D. (2009). Columbine. New York, NY: Twelve Publishing.
- Davies, G. K. (2008, February). Connecting the dots: Lessons from the Virginia Tech shootings. *Change: The Magazine of Higher Learning*, 40, 8-15.
- Davis, S., & Davis, J. (2007) Schools where everyone belongs: Practical strategies for reducing bullying (2nd ed.). Champaign, IL: Research Press.
- De Apodaca, R. F., Brighton, L. M., Perkins, A. N., Jackson, K. N., & Steege, J. R. (2012). Characteristics of school in which fatal shootings occur. *Psychology Reports*, *110*, 363-377. doi:10.2466/13.16.PR0.110.2.363-377
- Deegan, W. J. (2010). *Regulation versus reality: School safety plans and accountability* in southern California K-12 schools (Master's thesis). Retrieved from ProQuest Dissertations and Theses (UMI 1493009)
- DeFour, D. C. (2005). Gender and ethnicity issues in school violence. In F. Denmark, H. H. Krauss, R. W. Wesner, E. Midlarsky, & U. P. Gielen (Eds.), *Violence in*

- schools: Cross-national and cross-cultural perspectives (pp.8-99). New York, NY: Springer Science and Business Media.
- Department of Homeland Security. (2008). *Active shooter: How to respond*. Washington, DC: Author.
- Department of Homeland Security. (2015). First responder guide for improving survivability in improvised explosive device and/or active shooter incidents.

 Washington, DC: Office of Health Affairs.
- Dino, J. T. (2009). A study in police preparedness to respond to active shooter situations to provide a safer learning environment in the schools of Bergen County, New Jersey (Unpublished doctoral dissertation). Seton Hall University, South Orange, NJ.
- Dixon, L. F. (2014). *Teachers' perceptions of safety and preparedness for acts of violence within schools in light of recent school shootings* (Doctoral dissertation).

 Retrieved from ProQuest Dissertations and Theses. (UMI3643402)
- Dorn, M. (2015, December 1). 10 critical protocols for enhanced school terrorism preparedness. *Campus Safety Magazine*, 23, 32-33.
- Dorn, M., Dorn, C., Satterly, S., Shepard, S., & Nguyen, P. (2013, December 2). 7 lessons learned from Sandy Hook. *Campus Safety Magazine*, 21, 14-19.
- Drysdale, D. A., Modzeleski, W., & Simons, A. B. (2010, April). *Campus attacks: Targeted violence affecting institutions of higher education*. Washington, DC:

 U.S. Service, U.S. Department of Education, Federal Bureau of Investigation.
- Dube, M. W. M. (2012). Rhode Island school terrorist attack preparedness (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses database. (UMI 3546109)

- Dunkel, N. W., & Stump, L. J. (2007). Working with emergency personnel and outside agencies. In E. L. Zdziarski, N. W. Dunkel, J. M. Rollo, & Associates (Eds.), *Campus crisis management: A comprehensive guide to planning, prevention, response, and recovery* (pp. 121-143). San Francisco, CA: John Wiley & Sons.
- Dunn, M. J. (2002, June 1). Security solutions: Knowing legislation, learning about the Gun-Free Schools Act of 1994. *American School and University*.
- Dutton, D. G., White, K. R., & Fogarty, D. (2013). Paranoid thinking in mass shooters.

 *Aggression and Violent Behavior, 18, 548-553.
- Dwyer, K., Osher, D., & Warger, C. (1998). *Early warning, timely response: A guide to safe schools*. Washington, DC: U.S. Department of Education.
- Eng, L. (2001). Social perspectives on school antiviolence policies. *Values and Policy*, 1-13. Retrieved from http://www.cjas.org/~leng/violence.pdf
- Ergenbright, C. E., & Hubbard, S. K. (2012). Defeating the active shooter: Applying facility upgrades in order to mitigate the effects of active shooters in high occupancy facilities Monterey, CA: Naval Post Graduate School.
- Essex, N. L. (2012). School law and the public schools: A practical guide for educational leaders (5th ed.). Upper Saddle River, NJ: Pearson Education.
- Everytown for Gun Safety. (2014). *Analysis of school shootings: December 15, 2012-*December 9, 2014. Retrieved from http://everytown.org/article/schoolshootings/
- Fantz, A., Knight, L., & Wang, K. (2014, June 19). *A closer look: How many Newtown-like school shootings since Sandy Hook?* Retrieved from http://www.cnn.com/
- Fast, J. (2008). *Ceremonial violence: A psychological explanation of school shootings*. New York, NY: Overlook Press.

- Fein, R. A., & Vossekuil, B. (1999). Assassination in the United States: An operational study of recent assassins, attackers, and near-lethal approaches. *Journal of Forensic Sciences*, 44, 321-333.
- Fein, R. A., Vossekuil, B., & Holden, G. A. (1995). *Threat assessment: An approach to prevent targeted violence*. Washington, DC: U.S. Department of Justice, Office of Justice Programs, National Institute of Justice.
- Fein, R. A., Vossekuil, B., Pollack, W., Borum, R., Modzeleski, W., & Reddy, M. (2002). *Threat assessment in schools: A guide to managing and to creating safe school climates.* 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.
- Felts, J. (2004). Rarely used, part-time SWAT teams: An evaluation. *The Tactical Edge*, 22(1), 18-20.
- Ferguson, C. J. (2008). The school shooting/violent video game link: Causal relationship or moral panic? *Journal of Investigative Psychology and Offender Profiling*, 5, 25-37.
- Ferguson, C. J. (2015). Do angry birds make for angry children?: A meta-analysis of video game influences on children's and adolescents' aggression, mental health, prosocial behavior, and academic performance. *Perspectives on Psychological Science*, 10, 646-666.
- Ferguson, C. J., Coulson, M., & Barnett, J. (2011). Psychological profiles of school shooters: Positive directions and one big wrong turn. *Journal of Police Crisis Negotiations*, 11, 1533-2586. doi:10.1080/15332586.2011.581523
- Finley, L. L. (2004). School violence: Issues of teacher voice and domination. *Journal of*

- *School Violence*, *3*(1), 63-77.
- Fisher, C. (2007, June). School violence: Shooting ducks in a pond. *Crime & Justice International*, 23(1), 46-47.
- Flannery, D. J., Modzeleski, W., & Kretschmar, J. M. (2013). Violence and school shootings. *Current Psychiatry Reports*, 15(1), 331-338. doi:10.1007/s11920-012-0331-6
- Flynn, C., & Heitzmann, D. (2008). Tragedy at Virginia Tech: Trauma and its aftermath.

 Counseling Psychologist, 36, 479-489.
- Folks, K. H. (2008). School-safety preparedness: A qualitative study of principals' perceptions of using a school-safety checklist (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses database. (UMI 3373136)
- Fox, J. A., & Savage, J. (2009). Mass murder goes to college: An examination of changes on college campuses following Virginia Tech. *American Behavioral Scientist*, 52, 1465-1485.
- Freie Universitaet Berlin. (2014, August 27). Conflicts with teachers are risk factor for school shootings. *Science Daily*. Retrieved from http://www.sciencedaily.com/releases/2014/08/140827092107.htm
- Frymer, B. (2009). The media spectacle of Columbine: Alienated youth as an object of fear. *American Behavioral Scientist*, 52, 1387-1404.
- Furlong, M. J., Bates, M. P., & Smith, D. C. (2001). Predicting school weapon possession: A secondary analysis of the youth risk behavior surveillance survey.

 *Psychology in the Schools, 38, 127-139.
- Furlong, M. J., & Mayer, M. J. (2010). How safe are our schools? *Educational Researcher*, 39(1), 16-26.

- Gadja, R. (2006). Safe schools through strategic alliances: How assessment of collaboration enhances school violence prevention and response. *Journal of School Violence*, *5*(1), 63-80.
- Gainey, B. (2009). Crisis management's new role in educational settings. *The Clearing House*, 82, 267-274.
- Gaughan, E., Cerio, J. D., & Myers, R. A. (2001). *Lethal violence in schools: A national study final report*. Alfred, NY: Alfred University.
- George, D., & Mallery, P. (2010). SPSS for Windows step by step: A Simple Guide and Reference 17.0 Update. (10th ed.). Boston, MA: Pearson.
- Gilliland, B. M. (2015). *High school teachers' perceptions of safety in rural high* schools (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses database. (UMI 3709621)
- Gliem, J. A., and Gliem, R. R. (2003, October). *Calculating, interpreting and reporting*Cronbach's alpha reliability coefficient for Likert-type scales. Proceedings of the Midwest Research to Practice Conference in Adult, Continuing and Community Education (pp. 82-88). Columbus: Ohio State University.
- Graham, B. (2009). Emergency operation preparedness in Texas public schools: A survey of administrator and teacher perceptions (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses database. (UMI 3447684)
- Graveline, M. M. (2003). *Teacher self-efficacy at managing a school crisis* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses. (UMI3108261)
- Gray, R. H. (2008, April). Virginia Tech 1 year later: How campuses have responded. *Campus Safety Magazine*, 16, 18-28.
- Greenberg, S. F. (2007a). State of security at U.S. colleges and universities: A national

- stakeholder assessment and recommendations. *Disaster Medicine and Public Health Preparedness*, *1*(S1), S47-S50.
- Greenberg, S. F. (2007b). Active shooters on college campuses: Conflicting advice, roles of the individual and first responder, and the need to maintain perspective.

 *Disaster Medicine and Public Health Preparedness, 1(S1), S57-S61.
- Gunther, W. (2010). Decisive action for campus shootings: Creating a force multiplier.

 Campus Law Enforcement Journal, 40(3), 18-21.
- Halligan, T. (2009). Safety systems: Technologies, programs help colleges react in emergencies. *Community College Journal*, 79(6), 16-18.
- Harvard Business School Press and the Society for Human Resource Management. (2006). *The essentials of strategy*. Boston, MA: Harvard Business School.
- Harvey, K. M. (2011). Exploring the relationship between planning and training, and response to campus safety incidents (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses. (UMI 3487753)
- Haughton, B. (2007). 10 things for patrol . . . when SWAT is on the way. *The Tactical Edge*, 25(1), 40-48.
- Healy, J. (2014, January 17). In age of school shootings, lockdown is the new duck and cover. *The New York Times*, p. A1.
- Heath, M. A., Ryan, K., Dean, B., & Bingham, R. (2007). History of school safety and psychological first aid for children. *Brief Treatment and Crisis Intervention*, 7, 206-223. doi:10.1093/brief-treatment/mhm011
- Heilbrun, K., Dvoskin, J., & Heilbrun, A. (2009). Toward preventing future tragedies:

 Mass killings on college campuses, public health, and threat/risk assessment.

 Psychological Injury and Law, 2, 93-99. doi:10.1007/s12207-009-9040-9

- Heiselt, A. K., & Burrell, S. M. (2013). Presidential perspectives of crisis preparedness at Christian higher education institutions. *Christian Higher Education*, 11(4), 260-271. doi:10.1080/15363759.2010.544614
- Hemphill, R. S. (2008). *Have teacher perceptions toward school violence impacted their work? A henomenological study* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses (UMI 3320167)
- Henriques, J. M. (2010). *Perceptions of school violence: School personnel views of violent behavior and preparedness* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses. (UMI 3433745)
- Henry, S. (2000). What is school violence?: An integrated definition. *The ANNALS of the American Academy of Political and Social Science*, 567, 16-29.
- Henry, S. (2009). School violence beyond Columbine: A complex problem in need of an interdisciplinary analysis. *American Behavioral Scientist*, 52, 1246-1265.
- Hinkle, W. G., & Henry, S. (2000). School violence. *The ANNALS of the American Academy of Political and Social Science*, 567, 8-15.
- Hong, J. S., Cho, H. & Lee, H. S. (2010). Revisiting the Virginia Tech shootings: An ecological systems analysis. *Journal of Loss and Trauma*, 15, 561-575.
- Hough, M. G., & Spillan, J. E. (2005). Crisis planning: Increasing effectiveness, decreasing discomfort. *Journal of Business & Economics Research*, 3(4), 19-24.
- Howe, P. (2006). *School shootings Wait and see is not an option!* Retrieved from http://www.combatshootingandtactics.com/published.htm
- Hull, B. (2000, May 1). The question is not if, but when. *American School & University*, 72, 68-69.
- Hull, B. (2010). Changing realities in school safety and preparedness. Journal of Business

- Continuity & Emergency Planning, 5(1), 440-451.
- Jackson, M. L. (2015). A comparison among stakeholders' perceptions in regards to school climate and safety at a small, private religious school (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses. (UMI 3701586)
- Jimerson, S. R., Nickerson, A. B., Mayer, M. J., & Furlong, M. J. (Eds.). (2012). *Handbook of school violence and school safety* (2nd ed.). New York, NY:

 Routledge.
- Kalish, R., & Kimmel, M. (2010). Suicide by mass murder: Masculinity, aggrieved entitlement, and rampage school shootings. *Health Sociology Review*, 19, 451-464.
- Kalk, D. (2000, April 1). School terrorism: A tactical overview. *Police Magazine*, 24, 76.
- Kandakai, T. L., & King, K. A. (2002). Preservice teachers' perceived confidence in teaching school violence prevention. *American Journal of Health Behavior*, 26, 342-353.
- Kanner, S. (2015). Staff preparedness perceptions when confronting violent incidents in school: A qualitative inquiry (Doctoral Dissertation) Retrieved from ProQuest Dissertations and Theses. (UMI3728027)
- Kapucu, N., & Khosa, S. (2012). Disaster resiliency and culture of preparedness for university and college campuses. *Administration and Society*, 45, 3-37.
- Kautzman, A. (2011). Active shooter in the library: How to plan for, prevent, and survive the worst. *Library Leadership and Management*, 25(1), 1-9.
- Kehoe, C. (2015). School emergency management planning process and development of school emergency operations plan (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses. (UMI 3715946)

- Kelling, I. K. (2006). *Elementary teacher perceptions of school violence: Safe school elements and responsibility* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses. (UMI 3236517)
- Kimmel, M. S. & Mahler, M. (2003). Adolescent masculinity, homophobia and violence:

 Random school shootings 1982-2001. *American Behavioral Scientist*, 46, 1439-1458.
- Kleck, G. (2009). Mass shootings in schools: The worst possible case for gun control. *American Behavioral Scientist*, 52, 1447-1464.
- Klinger, A. L. (2008). An analysis of factors that increase the priority and effectiveness of crisis response in a school district (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses. (UMI 3329496)
- Kolman, J. A. (1982). A guide to the development of special weapons and tactics teams. Springfield, IL: Charles C. Thomas.
- Kramen, A., Massey, K., & Timm, H. (1999). *Guide for preventing and responding to school violence*. Alexandria, VA: International Association of Chiefs of Police.
- Kramen, A., Massey, K., & Timm, H. (2009). *Guide for preventing and responding to*school violence (2nd ed.). Alexandria, VA: International Association of Chiefs of Police.
- Langman, P. (2009). Why kids kill: Inside the `minds of school shooters. New York, NY: Palgrave Macmillan.
- Langman, P. (2015). School shooters: Understanding high school, college, and adult perpetrators. Lanham, MD: Rowman & Littlefield.
- Larson, J., & Busse, R. T. (2012). A problem-solving approach to school violence prevention. In. S. Jimerson, A. B. Nickerson, M. J. Mayer, & M. J. Furlong

- (Eds.), *Handbook of school violence and school safety* (2nd ed.; pp. 45-56). New York, NY: Guilford.
- Lavergne, G. M. (1997). A sniper in the tower: The true story of the Texas Tower massacre. Denton: University of North Texas Press.
- Lawrence, R. G., & Birkland, T. A. (2004). Guns, Hollywood, and school safety:

 Defining the school-shooting problem across public arenas. *Social Science Quarterly*, 85, 1193-1207.
- Leary, M., Kowalski, R., Smith, L., & Phillips, S. (2003). Teasing, rejection, and violence: Case studies of the school shootings. *Aggressive Behavior*, 29, 202-214. doi:10.1002/ab.10061
- Lenhardt, A. M. C., Farrell, M. L., & Graham, L W. (2010). Providing anchors-reclaiming our troubled youth: Lessons for leaders from a study of 15 targeted school shooters. *Educational Forum*, 74, 104-116.
- Levin, J., & Madfis, E. (2009). Mass murder at school and cumulative strain: A sequential model. *American Behavioral Scientist*, 52, 1227-1245.
- Liebe, B. (2015). Addressing claims of police militarization. *The Tactical Edge*, *33*(2), 82-92.
- Lindle, J. C. (2008). School safety: Real or imagined fear? *Educational Policy*, 22, 28-44.
- Major Cities Chiefs. (2009). Campus security guidelines: Recommended operational policies for local and campus law enforcement agencies. Retrieved from https://www.bja.gov/Publications/MCC_CampusSecurityGuidelines.pdf
- Manger, T. (2014). Columbine was a wake-up call In *The police response to active* shooter incidents (Critical issues in policing series, Introduction, pp. 1-2). Washington, DC: Police Executive Research Forum.

- Martin, D., & Joomis, K. (2007). Building teachers: A constructivist approach to introducing education. Belmont, CA: Wadsworth.
- Martinez, L. (2007). When the wolf comes-preparing for an active shooter response.

 *Campus Law Enforcement Journal, 37(6), 18-20.
- Martinez, L. (2012). The police response to critical incidents in academic institutions. *Journal of Police Crisis Negotiations*, 12, 69-77.
- Marzano, R. J. (2012). *Marzano levels of school effectiveness*. Bloomington, IN: Marzano Research Laboratory.
- Marzano, R. J. (2013). Becoming a high reliability school: The next step in school reform. Bloomington, IN: Marzano Research Laboratory.
- Maslow, A. H. (1943). A theory of human motivation. *Psychological Review*, *50*, 370-396.
- Maslow, A. H. (1954). *Motivation and personality*. New York, NY: Harper and Row.
- Matthews, J. (2013). School safety 101: Preparing schools and protecting students.

 Ovilla, TX: Community Safety Institute.
- Mayer, M. J., & Furlong, M. J. (2010). How safe are our schools? *Educational Researcher*, 39(1), 16-26.
- McCabe, K. A., & Martin, G. M. (2005). School violence, the media, and criminal justice responses. New York, NY: Peter Lang.
- McCarty, S. P. (2012). *K-12 School leaders and school crisis: An exploration of*principals' school crisis competencies and preparedness (Doctoral dissertation)

 Retrieved from ProQuest Dissertations and Theses. (UMI 3529552)
- McDaniel, T. R. (2003). The perceived preparedness levels of middle school teachers, assistant principals, and principals to respond to an act of violence on campus

- (Doctoral dissertation) Retrieved from ProQuest Dissertations and Theses. (UMI 3073179)
- McKenzie, K. (2008). *School crisis and staff preparedness* (Doctoral dissertation)

 Retrieved from ProQuest Dissertations and Theses. (UMI 3325678)
- Meloy, J., Hempel, A., Mohandie, K., Shiva, A., & Gray, T. (2001). Offender and offense characteristics of a nonrandom sample of adolescent mass murderers. *Journal of the American Academy of Child and Adolescent Psychiatry*, 40, 719-728.
- Metzl, J. M., & MacLeish, K. T. (2015). Mental illness, mass shootings, and the politics of American firearms. *American Journal of Public Health*, 105, 240-249.
- Midlarski, E., & Klain, H. M. (2005). A history of violence in schools. In F. Denmark, H.
 H. Krauss, R. W. Wesner, E. Midlarski, & U. P. Gielen (Eds.), *Violence in schools: Cross-national and cross-cultural perspectives* (pp. 37-57). New York,
 NY: Springer.
- Mitroff, I. I., Diamond, M. A., & Alpaslan, C. M. (2006, February). How prepared are America's colleges and universities for major crises? Assessing the state of crisis management. *Change*, 38, 61-67. (EJ745664)
- Mooij, T., & Fettelaar, D. (2012). School and pupil effects on secondary pupils' feelings of safety in school, around school, and at home. *Journal of Interpersonal Violence*, 28, 1240-1266.
- Moore, C. (2010, January). School safety on a shoestring budget. *Law Enforcement Technology*, 37, 24-31.
- Morgan, J. D. (2014). Using stress to make a better officer. *The Tactical Edge*, 24(4), 26,28,30,32,34,36.
- Morrison, G. S. (2009). Teaching in America (5th ed.). Upper Saddle River, NJ: Pearson

- Education.
- Mueller, R. S. (2003, February 11). *Testimony: before U.S. Senate Select Committee on Intelligence of the United States*. Washington, DC: FBI. Retrieved from https://www.fbi.gov/news/testimony/war-on-terrorism
- Mulvey, E., & Cauffman, E. (2001). The inherent limits of predicting school violence.

 *American Psychologist, 56, 797-802.
- Murr, A. (2007, August 20). Is your campus safe?: Many colleges have new security systems in place: But students and parents still need to do some detective work.

 Newsweek, 74.
- Murray, J. (2013). Likert data: What to use, parametric, or nonparametric? *International Journal of Business and Social Science*, 4(11), 258-264.
- Muschert, G. W. (2007). Research in school shootings. *Sociology Compass*, 1, 60-80.
- Muschert, G. W. (2009). Frame-changing in the media coverage of a school shooting:

 The rise of Columbine as a national concern. *Social Science Journal*, 46, 164-170.
- Muschert, G. W., & Carr, D. (2006). Media salience and frame changing across events:

 Coverage of nine school shootings, 1997-2001. *Journalism & Mass*Communication Quarterly, 83, 747–66.
- Muschert, G. W., Henry, S., Bracy, N. L., & Peguero, A. A. (2014). *Responding to school violence: Confronting the Columbine effect*. Boulder, CO: Lynne Rienner.
- Neiman, S, & DeVoe, J. F. (2009). *Crime, violence, discipline, and safety in U. S. public schools: Finding from the school survey on crime and safety, 2007-2008* (NCES 2009-326). Washington, DC: U.S. Department of Education.
- New Jersey Department of Education. (2001). A guide for the development of a district-wide school safety plan. Trenton, NJ: Department of Education.

- New Jersey Department of Education. (2007a). *School safety and security manual best practices guidelines*. Trenton, NJ: Department of Education.
- New Jersey Department of Education. (2007b). School administrator procedures:

 Responding to critical incidents. Trenton, NJ: Department of Education.
- New Jersey Department of Education. (2010a). *Provision of training on school safety,*security. In School preparedness and emergency planning: Law, Statute and

 regulations (chap. 178; N.J.S.A. § 18A:41-7). Retrieved from http://www.state

 .nj.us/education/schools/security/drill/Law.pdf
- New Jersey Department of Education. (2010b). School security drill defined. In School preparedness and emergency planning: Law, Statute and regulations (N.J.S.A. § 18A:41-6). Retrieved from http://www.state.nj.us/education/schools/security/drill/Law.pdf
- New Jersey Department of Education. (2010c). School security drill law. In School preparedness and emergency planning: Law, Statute and regulations (N.J.S.A. § 18A:41-1) Retrieved from http://www.state.nj.us/education/schools/security/regs/
- New Jersey Department of Education. (2015a). School safety and security plans. In School preparedness and emergency planning: Law, Statute and regulations (Subchap. 5, N.J.A.C. § 6A:16-5.1). Retrieved from http://www.state.nj.us/education/schools/security/regs/code.shtml
- New Jersey Department of Education. (2015b). *School security drill law*. In *School preparedness and emergency planning: Law, Statute and regulations* (chap. 178; N.J.S.A. 18A:41-1, 6A:16-5.1, & 18A:41-7). Retrieved from http://www.state.nj. us/education/schools/security/regs/code.shtml
- New Jersey Department of Education & Office of Preparedness and Emergency Planning.

- (2011a). School safety and security plans: Minimum requirements. Trenton, NJ: Department of Education.
- New Jersey Department of Education & Office of Preparedness and Emergency Planning.

 (2011b). School safety and security plan review checklist. Trenton, NJ:

 Department of Education.
- New Jersey Department of Law and Public Safety, & New Jersey Department of Education. (2015). A uniform state memorandum of agreement between education and law enforcement officials (rev. ed.). Trenton, NJ: New Jersey Department of Education.
- New Jersey School Security Task Force. (2015). New Jersey school security task force report and recommendations. Trenton, NJ: Department of Education.
- Newman, K. S., Fox, C., Harding, D. J., Mehta, J., & Roth, W. (2004). *Rampage: The social roots of school shootings*. New York, NY: Perseus Books.
- Nichols, T. (2006). The pendulum swing: Preparing our first responders. *Campus Law Enforcement Journal*, 36(6), 22-24.
- Nickel, R., & Gordon, J. (2016, January 23). Four dead in worst Canada school shooting in decade, suspect caught. *Reuters*. Retrieved from http://www.reuters.com/article/us-canada-shooting-idUSKCN0V02KT
- Nicoletti, J. (2012). Detection and disruption of insider/outsider perpetrated violence (lecture, Colorado Emergency Preparedness Partnership). Retrieved from https://www2.fin.ucar.edu/sites/default/files/Detection-Disruption-Prevention-WPV_UCAR.pdf
- Nicoletti, J., & Spencer-Thomas, S. (2002). *Violence goes to school*. Bloomington, IN:

 National Education Service.

- Nicoletti, J., Spencer-Thomas, S., & Bollinger, C. (2010). *Violence goes to college. The authoritative guide to prevention and intervention*. Springfield, IL: Charles C. Thomas.
- No Child Left Behind Act of 2001, 20 U.S.C. § 6319 (2008). Retrieved from https://www.gpo.gov/fdsys/granule/CRI-2008/CRI-2008-NO-CHILD-LEFT-BEHIND-ACT/content-detail.html
- NRA News. (2015, September 23). NRA news commentary: School shootings happen because kids don't respect firearms [Web log post]. Retrieved from http://mediamatters.org/blog/2015/09/25/nra-news-commentary-school-shootings-happen-bec/205787
- O'Brien, R. (2008a, May 28). Active shooter response revisited: Part 1 [Web log post].

 **Law Enforcement Magazine*. Retrieved from http://www.policemag.com/blog/swat/story/2008/05/active-shooter-response-revisited-part-1.aspx
- O'Brien, R. (2008b). Active shooters and SWAT. *Law Enforcement Magazine, June11*.

 Retrieved from http://www.policemag.com/blog/swat/story/2008/06/active-shooters-and-swat.aspx
- O'Toole, M. E. (2000). *The school shooter: A threat assessment perspective*. U.S. Department of Justice [Monograph]. Washington, DC: Federal Bureau of Investigation.
- Pagliocca, P. M., & Nickerson, A. B. (2001). Legislating school crisis response: Good policy or just good politics? *Law and Policy*, 23, 373-407.
- Parker, B. (2008). When seconds count your backup is minutes away. *The Tactical Edge*, 26(4), 78, 80, 82.
- Perkins, J. C. (2015). Preparing teachers for school tragedy: Reading, writing, and

- *lockdown* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses database. (UMI 3705630)
- Peterson, A.R. (2007). The changing role of the classroom teacher in response to school violence (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses database. (UMI No. 3256625)
- Police Executive Research Forum. (2014, March). *The police response to active shooter incidents*. Washington, DC: Police Executive Research Forum.
- Pollock, W. S., Modzeleski, W., & Rooney, G. (2008). *Prior knowledge of potential* school-based violence: Information students learn may prevent a targeted attack.

 Washington, DC: U.S. Secret Service and U.S. Department of Education.
- Ramer, H. (2016, January 14). Lawmaker: School shootings have made teachers first responders. *Concord Monitor*, A2, pp.1.
- Rasmussen, C., & Johnson, G. (2008). The ripple effect of Virginia Tech: Assessing the nationwide impact on campus safety and security policy and practice.

 Minneapolis, MN: Midwestern Higher Education Compact.
- Reddy, M., Borem, R., Berglund, J., Vossekuil, B., Fein, R., & Modzeleski, W. (2001). Evaluating risk for targeted violence in schools: Comparing risk assessment, threat assessment, and other approaches. *Psychology in the Schools*, *38*, 157-171.
- Reyes, R. (2014). School shootings and principals' perceptions of armed personnel in an education setting (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses (UMI3665500)
- Ricketts, M. L. (2007). K-12 teachers' perceptions of school policy and fear of school violence. *Journal of School Violence*, 6(3), 45-67.
- Rider, C. F. (2015). Teachers' perceptions of their ability to respond to an active shooter

- *incident* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses (UMI 3686925)
- Roberts, S., Wilcox, P., May, D., & Clayton, R. (2007). My school or our school?: The effects of individual versus shared school experiences on teacher perceptions of safety. *Journal of School Violence*, 6(4), 33-55.
- Royer, E. (2003). What Galileo knew: School violence, research, effective practices, and teacher training. *Journal of Educational Administration*, 47, 640-649.
- Ryals, C. C. (2014). School leaders' perceptions of conducting active shooter drills

 (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses. (UMI 3646191)
- Rydeen, J. (2013, March). The security equation. *American School and University*, 10(3),42.
- Scala, M. (2008, June). Keeping our schools safe and secure: An overview from the New Jersey State Police. *School Leader Magazine*, *37*, 24-26
- Scanlon, J. (2008, June). Blueprint of a bloodbath: A tactical training expert defines a plan for active shooter situations. *Law Enforcement Technology*, *35*, 40, 42-47.
- Schanlaub, R. (2009, June). School shootings: A look back, a look ahead. *Law and Order*, 57(6), 56-60.
- Schildkraut, J., & Muschert, G. W. (2014). Media salience and the framing of mass murder in schools: A comparison of the Columbine and Sandy Hook massacres.

 Homicide Studies, 18, 23-43. doi:10.1177/1088767913511458
- Schubarth, W. (2000). Incidents of violence from the standpoint of pupils and teachers:

 An empirical study in Saxony's schools. *European Education*, *32*(1), 80-94.

 doi:10.2753/EUE1056-4934320180

- Schuster, B. (2009). Preventing, preparing for critical incidents in schools. *National Institute of Justice Journal*, 262, 42-46.
- Seigert, M. S., & Seigert, B. S. (2013, August). Inside the mind of the active shooter:

 Knowing your adversary is the first step to stopping your school's worst enemy.

 Security Technology Executive, 23, 20-23.
- Sela-Shayovitz, R. (2009). Dealing with school violence: The effect of school violence prevention training on teachers' perceived self-efficacy in dealing with violent events. *Teaching and Teacher Education*, 25, 1061-1066.
- Session, N. L. (2000). A survey of teacher preparation to effectively address school violence in Mississippi public schools (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses (UMI 9981385)
- Sewell, K. W., & Mendelsohn, M. (2000). Profiling potentially violent youths: Statistical and conceptual problems. *Children's Services: Social Policy, Research, and Practice*, *3*, 147-169.
- Shah, N. (2013a, January 9). Advocates worry shootings will deepen autism's stigma:

 Adam Lanza reported to have Asperger's syndrome. *Education Week*, 32, 18.
- Shah, N. (2013b, February 21). Teachers already armed in some districts: As a once-unthinkable idea gains currency, educators ask: what happens if I miss? *Education Week*, 32, 1, 14, 15.
- Shah, N., & Ujifusa, A. (2013, April 24). School safety legislation: A tally by state. *Education Week*, 32, 21.
- Sharp, H. M. (2006). When a school crisis occurs: What parents and stakeholders want to know. Lanham, MD: Rowman & Littlefield Education.
- Shelton, A. J., Owens, E. W., & Song, H. (2009). An examination of public school safety

- measures across geographic settings. Journal of School Health, 79, 24-29.
- Sherwood, G. P., & McKelfresh, D. (2007). Crisis management in practice. In E. L. Zdziarski III, N. W. Dunkel, J. M. Rollo, & Associates (Eds.), *Campus crisis management: A comprehensive guide to planning, prevention, response, and recovery* (pp. 55-72). San Francisco, CA: Jossey-Bass.
- Siaosi, L.A. (2007). *High school teacher perceptions: School violence, safe school*elements, and effective discipline plans (Doctoral dissertation). Retrieved from

 ProQuest Dissertations and Theses. (UMI 3237768)
- Siegert, M., & Seigert, B. S. (2013, July). Inside the mind of an active shooter: Knowing your adversary is the first step to stopping your school's worst enemy. *Security Technology Executive*, 23, 20-23.
- SimpsonScarborough. (2007, October 4). When disaster strikes: How well are colleges prepared for a crisis? Retrieved from http://www.slideshare.net/Nostrad/when-disaster-strikes-how-well-are-colleges-prepared-for-a
- Sindhi, S. A. (2013). Creating safe school environment: Role of school principals. *Tibet Journal*, 38(2), 77-89.
- Smith-Greer, S. (2001). *Teacher preparedness to manage an act of school violence*.

 (Doctoral Dissertation) Retrieved from ProQuest Dissertations and Theses. (UMI 3013375)
- Smith, D. L., & Smith, B. J. (2006). Perceptions of violence: The views of teachers who left urban schools. *The High School Journal*, 89(3), 34-42.
- Snow, R. L. (1996). SWAT teams: Explosive face-offs with America's deadliest criminals.

 New York, NY: Plenum Press.
- Sobel, R. S. (2009). School safety and violence programs as seen through the eyes of

- *instructional staff and students* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses. (UMI 3388675)
- Sokolow, B. A., Lewis, W. S., Wolf, C. R., Brunt, B. V., & Byrnes, J. D. (2009, January).

 Threat assessment in the campus setting. *National Behavior Intervention Team*Association Whitepaper. Retrieved from https://nabita.org/resources/threat-assessment-tools/
- Spencer-Thomas, S., & Nicoletti, J. (2010). Building barriers to violence part I:

 Amassing the army. In J. Nicoletti, S. Spencer-Thomas, & C. Bollinger (Eds.),

 Violence goes to college: The authoritative guide to prevention and intervention

 (pp. 74-80). Springfield, IL: Charles C. Thomas.
- Spicer, B. (2015, November 17). Preparing for the terrorist threat to schools. *Campus Safety Magazine*, 23, 36-37.
- Staples, J. S. (2000). Violence in schools: Rage against the broken world. *The ANNALS* of the American Academy of Political and Social Science, 567, 30-41.
- Stein, H. F. (2000). The 1999 Columbine High School massacre as American metaphor. *Journal for the Psychoanalysis of Culture and Society*, 5, 217-236.
- Strahler, J., & Ziegert, T. (2015). Psychobiological stress response to a simulated school shooting in police officers. *Psychoneuroendocrinology*, *51*, 80-91.
- Stuart, S. (2010). In Loco Parentis in public schools: Abused, confused, and in need of change. *University of Cincinnati Law Review*, 78, 969-1005.
- Swiontek, S. W. (2009). School emergency preparedness in North Dakota public school districts (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses. (UMI 3406183)
- Taleb, N. N. (2007). The black swan: The impact of the highly improbable. New York,

- NY: Random House.
- Taylor, N. E. (2008). Responding to violence on campus: Perceived preparedness at continuation high schools (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses. (UMI 3301966)
- Thomas, P. (2006a, October 3). Why the spike in school shootings? Retrieved from http://abcnews.go.com/GMA/story?id=2521025
- Thomas, R. M. (2006). *Violence in America's schools: Understanding, prevention, and responses*. Lanham, MD: Rowman & Littlefield.
- Thompson, C. B. (2014). Our killing schools. *Society*, *51*(3), 210-220.
- Thrower, R. H., Healy, S. J., Margolis, G. J., Lynch, M., Stafford, D., & Taylor, W. (2008). Overview of the Virginia Tech tragedy and implications for campus safety: The IACLEA blueprint for safer campuses. West Hartford, CT: International Association of Campus Law Enforcement Administrators.
- Tonn, J. L. (2005, December 28). Tennessee killing underscores job dangers for leaders. *Education Week*, 25, 1, 19.
- Tonso, K. L. (2009). Violent masculinities as tropes for school shooters: The Montreal massacre, the Columbine attack, and rethinking schools. *American Behavioral Scientist*, 52, 1266-1285.
- U.S. Department of Education. (2006). Emergency exercises: An effective way to validate school safety plans. *ERCM Express*, 2(3), 1-8.
- U.S. Department of Education. (2007). Planning and conducting a functional exercise.

 Helpful Hints for School Emergency Management, 2(4), 1-4.
- U.S. Department of Education. (2010). Action guide for emergency management at institutions of higher education. Washington, DC: Author. Retrieved from

- https://www.edpubs.gov/document/ed005103p.pdf?ck=7
- U.S. Department of Education. (2013a). *Guide for developing high-quality emergency*operations school emergency plans. Washington, DC: Office of Safe and Healthy

 Students.
- U.S. Department of Education. (2013b). *Guide for developing high-quality emergency*operations plans for institutions of higher education. Washington, DC: Office of Safe and Healthy Students.
- U.S. Department of Education, & Office of Safe and Drug-Free Schools. (2003).Practical information on crisis planning: A guide for schools and communities.Washington, D.C: U.S. Department of Education.
- U.S. Department of Education, & Office of Safe and Drug-Free Schools. (2007).Practical information on crisis planning: A guide for schools and communities.Washington, DC: Office of Drug Free Schools.
- U.S. Department of Homeland Security. (2008). *Active shooter: How to respond*.

 Washington, DC. Retrieved from https://www.dhs.gov/xlibrary/assets/
 active_shooter_booklet.pdf
- U.S. Department of Homeland Security. (2015). First responder guide for improving survivability in improvised explosive device and/or active shooter incidents.Washington, DC: Office of Health Affairs.
- U.S. Government Accountability Office. (2007a, May). Status of school districts' planning preparedness (Pub. No. GAO-07-821T). Washington, DC: U.S. Government Printing Office.
- U.S. Government Accountability Office. (2007b, June). Emergency management: Most school districts have developed emergency management plans, but would benefit

- from additional federal guidance (Pub. No. GAO-07-609). Washington, DC: U.S. Government Printing Office.
- Vettenburg, N. (2002). Unsafe feelings among teachers. *Journal of School Violence*, 1(4), 33-49.
- Virginia Tech Review Panel. (2007, April 16). Mass shootings at Virginia Tech: Report of the review panel presented to Governor Kaine, Commonwealth of Virginia.

 Retrieved from http://cdm16064.contentdm.oclc.org/cdm/ref/collection/p266901coll4/id/904
- Volokh, A., & Snell, L. (1998). School violence prevention: Strategies to keep schools safe (Policy Study No. 234). Los Angeles, CA: Reason Public Policy Institute.
- Vossekuil, B., Fein, R. A., Reddy, M., Borum, R., & Modzeleski, W. (2004, June). *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. Secret Service, National Threat Assessment Center, Office of Elementary and Secondary Education, Safe and Drug-Free Schools Program, and U.S. Department of Education.
- Vossekuil, B., Reddy, M., Fein, R. A., Borum, R., & Modzeleski, W. (2000). *U.S.S.S.*safe school initiative: An interim report on the prevention of targeted violence in schools. Washington, DC: U.S. Secret Service, National Threat Assessment Center.
- Warnick, B. R., Johnson, B. A., & Rocha, S. (2010). Tragedy and the meaning of school shootings. *Educational Theory*, 60(3), 371-390.
- Weatherby, G. A., Stratchila, S., & McMahon, B. (2010). School shootings: The deadly result of teasing and ostracism? *Journal of Criminology and Criminal Justice and*

- *Education*, 2, 1-15.
- Weimerskirch, M. (2006). Emergency exercises: An effective way to validate school safety plans. *Emergency Response and Crisis Management Express*, 2(3), 1-4.
- Weisbrot, D. M. (2008). Prelude to a school shooting? Assessing threatening behaviors in childhood and adolescence. *Journal of the American Academy of Child and Adolescent Psychiatry*, 47, 847-852.
- Werner, D. (2014). Perceptions of preparedness for a major school crisis: An evaluation of Missouri school counselors. *Journal of School Counseling*, *12*(3). Retrieved from http://files.eric.ed.gov/fulltext/EJ1034779.pdf (EJ1034779)
- Wike, T., & Fraser, M. W. (2009). School shootings: Making sense of the senseless.

 *Aggression and Violent Behavior, 14, 162-169.
- Wilson, M. E. (2007). Crisis training. In E. L. Zdziarski, N. W. Dunkel, J. M. Rollo, & Associates, *Campus Crisis Management: A comprehensive guide to planning, prevention, response, and recovery* (pp. 183-204). San Francisco, CA: Jossey-Bass.
- Yarbaugh, C. (2008, December). Rapid deployment for active shooters. *Tactical Response Magazine*, 6, 92-94.
- Zdziarski, E. L. (2006). Crisis in the context of higher education. In K.S. Harper, B. G. Paterson, & E. L. Zdziarski (Eds.), *Crisis management: Responding from the heart* (pp. 3-24). Washington, DC: NASPA.
- Zdziarski, E. L., Dunkel, N. W., Rollo, J. M., & Associates. (2007). *Campus Crisis Management: A comprehensive guide to planning, prevention, response, and recovery*. San Francisco, CA: Jossey-Bass.
- Zohrabi, M. (2013). Mixed-methods research: Instruments, validity, reliability and

reporting findings. Theory and Practice in Language Studies, 3, 254-262.

Appendix A

Educators' Perceptions of School Safety and Security Training Questionnaire

clo	osely represents your experience.			
1.	Number of years teaching:			
	0-11-33-55-1010-1515-2020+			
2.	Number of years at current school:			
	0-11-33-55-1010-1515-2020+			
3.	Position:Teacher			
	Administration			
	Support Staff (Health care professionals, counselors, psychologists, secretarial,			
	custodial)			
4.	I have had prior training in school security and safety procedures (professional development, in-service classes) prior to working at this school:			
	YESNO			
5.	I have had prior experience working in the law enforcement / security fields.			
	YESNO			

<u>Educators' Perceptions of School Safety and Security Training Questionnaire</u> *Background information.* For each of the following please check the response that most

Likert Items. For statements 6-24 mark the response that most closely represents your feelings.

0.	protocols.	n the New Jersey laws mand	nating school safety and security		
	-	somewhat disagree	neutral		
	somewhat agree	somewhat disagree somewhat agree			
7.	I am knowledgeable in	n my school's emergency m	anagement plan.		
	disagree	somewhat disagree	neutral		
	somewhat agree	somewhat agree			
8.	I am knowledgeable in the roles of the Crisis Response Team.				
	disagree	somewhat disagree	neutral		
	somewhat agree				
9.	I am knowledgeable in my role and responsibilities regarding safety and security				
	as a school staff member (teacher, administrator, support staff).				
	disagree	somewhat disagree	neutral		
	somewhat agree				
10.	During an emergency	know who the school's Inc	eident Commander is.		
	disagree	somewhat disagree	neutral		
	somewhat agree	somewhat agree			
11.	I am familiar with the	emergency response proced	lures expected of me when law		
	enforcement arrive du	ring an active shooter crisis	•		
	disagree	somewhat disagree	neutral		
	somewhat agree				
12.	I am familiar with eme	ergency response procedure	s expected of me when law		
	enforcement arrive du	ring other types of emergen	cies.		
	disagree	somewhat disagree	neutral		
	somewhat agree	somewhat agree			
13.	If I have a question abo	out school safety and securi	ty, I know where to find the		
	answer.				
	disagree	somewhat disagree	neutral		
		somewhat agree			

<u> </u>	· ·	y are addressed when voiced.
	somewhat disagree	neutral
somewhat agree	somewhat agree	
15. The school has alloca	ted sufficient time for safety	y and security preparedness
training.		
	somewhat disagree	neutral
somewhat agree	somewhat agree	
16. The school has provide	ded resources and materials	s on school safety and security
preparedness.		
disagree	somewhat disagree	neutral
somewhat agree	somewhat disagree somewhat agree	
17. The school conducts	drills throughout the day (v	arious times: lunch, class hours,
before school, after se	chool) to prepare emergency	y responses for any daily
situation.		
disagree	somewhat disagree	neutral
somewhat agree	somewhat agree	
18. School personnel, alo	ng with local law enforceme	ent, coordinate together in active
shooter response dril	ls.	
disagree	somewhat disagree	neutral
somewhat agree	somewhat agree	
19. Overall the school's p	present safety and security t	raining program is effective for
preparing staff for er	nergency crises.	
	somewhat disagree	neutral
	somewhat agree	
20. I am confident in my	ability to arrange my classi	room for an active shooter
incident.	·	
disagree	somewhat disagree	neutral
somewhat agree		_
21. I am confident in my	ability to respond to an act	ive shooter emergency.
disagree	somewhat disagree	neutral
somewhat agree	somewhat agree	

22. I am confident in my	ability to respond to a bom	b threat emergency.
disagree	somewhat disagree	neutral
somewhat agree		
23. I am confident in my	ability to respond to a nonf	ire evacuation emergency.
disagree	somewhat disagree	neutral
somewhat agree	somewhat agree	
24. I am confident in my	ability to respond to a shelt	er-in-place emergency.
disagree	somewhat disagree	neutral
somewhat agree	somewhat agree	
and use examples to suppo	rt your opinions. There is no nts please use the back of thi	-27 please answer the question limit on your response. If more is form and identify which
25. What aspect of school s learn?	safety and security training d	o you find most challenging to
26. What do you feel is the	weakest part of your school	's safety and security program?

training?				

Appendix B

Interview Questions for Teachers and Support Staff

Interview Questions for Teachers and Support Staff

- 1. What is your position at the school?
- 2. How long have you been in your current position?
- 3. What, if any, formal training do you have in school safety and security?
- 4. What types of training have you had?
- 5. Do you feel the training you have received in school safety and security has prepared you to respond effectively? Why?
- 6. What do you believe is the most pressing safety need in your school? Why?
- 7. What school emergency do you fear the most?
- 8. Can you explain an emergent incident that you have experienced in the school which you feel needs to be addressed by the safety and security training program?
- 9. How do you feel you learn school safety and security responses the most effectively (classes, drills, mock scenarios)?
- 10. What, if any, emergency drills do you find difficult to perform?
- 11. Can you explain the safety responsibilities you believe are important for you to know in your position yet are unsure of how to perform?
- 12. What emergency drill activities, if any, would you like to see incorporated in your school's training program?
- 13. What do you feel is the strength of your school's safety and security program?
- 14. What do you feel needs to be updated or improved regarding your school's safety and security response plan?

Appendix C

Interview Questions for Administrators

Interview Questions for Administrators

- 1. What is your position at the school?
- 2. How long have you been in your current position?
- 3. What, if any, formal training do you have in school safety and security?
- 4. Do you feel the training you have received in school safety and security has prepared you to manage school safety and security effectively? Why?
- 5. Do you feel the training you have received in school safety and security has prepared you to respond to an emergency effectively? Why?
- 6. What do you believe is the most pressing safety need in your school? Why?
- 7. What school emergency do you fear the most? Why?
- 8. Who is in charge (responsible) for maintaining the school safety and security emergency plan, updating it, and why?
- 9. What do you believe are the biggest barriers (factors inhibiting) to improving school safety and security in the school?
- 10. What do you feel is the strength of your school's safety and security emergency management plan?
- 11. What do you feel needs to be updated or improved regarding your school's safety and security emergency management plan?
- 12. How do you feel the staff learn school safety and security responses the most effectively (classes, drills, mock scenarios)?
- 13. Can you explain the safety responsibilities you believe are important for you to know in your position yet are unsure of how to perform?

Appendix D

Proposed School Safety & Security Implementations

Proposed School Safety & Security Implementations by Ronald P. Rinaldi

The following activities are being proposed to bring training classes, emergency drills, tools, and other resources to the faculty, administration, and support staff in order to create a more effective emergency response program for our school.

Over the course of 3 months writer would like to implement several interventions for the entire staff of the school regarding training and practicing for the state mandated emergency drills: active shooter, lockdown, bomb threat, and evacuation. It is the goal that with these interventions teacher, administrator, and support staff knowledge and abilities to be prepared for and respond effectively to any number of possible school emergencies will be increased and ultimately more effective than the current present levels.

Presently our staff's safety and security experience varies due to 1) each individual's years in the profession, training previously received, and understanding of security protocols; 2) an informal and sparse training program and; 3) the common challenges of time constraints and acclimation to a new campus environment. To respond effectively as a whole, it is imperative that this level of safety awareness and preparedness be equal among the school's personnel and brought to a level of effectiveness suitable to meet the safety needs of our population.

It is intended that the following proposed schedule of activities and interventions will be a more fully comprehensive program and accomplish much of the training necessary to attain a higher level of awareness and maintain a proficient level of preparedness. The program will 1) address the myriad issues which writer has found to be major challenges and impediments to getting our school's personnel at a basic preparedness and awareness level of proficiency; 2) initiate a training program which will bring all personnel to a common starting point upon which to build and; 3) commence a regularly scheduled training program for the school. Once attaining the intended level of proficiency through these interventions, a regularly scheduled training program will need to be implemented for the future to maintain proficiency, update information and response procedures as needed, and meet the state requirements dictating all school board employees be regularly trained and proficient in school safety and security response protocols.

In order to perform the following activities over the course of the next few months it will be necessary to allot a certain amount of time to the training, drills, and interventions. Writer is requesting that this request is taken into consideration as the results of the proposed activities will be of immense value to the school.

Proposed Schedule

Month 1:

- Survey to gather information on faculty and staff.
- 2 in-service training classes on emergency drills and awareness (In-house)
- 2 emergency drills
- 1 Crisis Response Team meeting
- Follow up with staff on results of 2 emergency drills
- Individualized classroom safe zone inspections
- Addition of tools and resources (Posters, reference manual, related articles)

Month 2:

- 3 in-service training classes on emergency drills and awareness (In house/LE)
- Training videos
- 3 emergency drills
- 1 Crisis Response Team meeting
- Follow up with staff on results of 3 emergency drills
- NJDOE inspection of drill
- Addition of related materials for instruction (articles, state laws)

Month 3:

- 3 in-service training classes on emergency drills and awareness(In house/LE)
- Training videos
- 3 emergency drills
- 1 Crisis Response Team meeting
- Follow up with staff on results of 3 emergency drills
- Survey on results of interventions.

Tools:

- Resource materials (professional articles, state laws, state documents)
- Training videos
- Radio assignments/ Radio log
- Staff expertise form
- Emergency posters
- Emergency electronic chat room/drop box
- Communications equipment
- Floor plan of school with zones marked
- Flip Chart Reference Manual
- Attendance sheets
- Reunification sheets
- Front entrance emergency sign
- Room numbers/classroom safe zones