MITIGATING SCHOOL VIOLENCE THROUGH THE LENS OF SCHOOL OFFICIALS IN

SOUTHERN STATES

by

Faith Lekela Derrick

Liberty University

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

Doctor of Philosophy in Criminal Justice - Homeland Security

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ABSTRACT

The purpose of this qualitative phenomenological study was to understand the threats of school violence to children and school personnel employed in the South Central and Southeastern part of the United States and to identify strategies to mitigate these threats. The theory that guided this study was Clarke's (2019) Situational Crime Prevention as it aims to improve the understanding of violence and the impact of potential strategies for the prevention of violence. Data for the thematic analysis were obtained directly from school personnel. The information from the findings could aid in understanding the process of threat assessment to determine if improvements are needed and if they do what could be done to accomplish that endeavor. Parents, school personnel, and students may also better understand the threat assessment process and how those policies are enacted to provide a safe school climate for students to be educated and instructors to teach. The findings revealed four themes. Theme 1 was about violence prevention and mitigation through risk assessment and crisis management planning. Theme 2 was about how prevention of unauthorized entry contributed to violence mitigation. Theme 3 concerned the need of school personnel to received active shooter training. Theme 4 consisted of most participants reporting a need for additional safety measures.

Keywords: School safety, school shooting, school violence, threat assessment

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List of Abbreviations

CDC Center for Disease Control and Prevention

FEMA Federal Emergency Management Agency

GaDoe Georgia Department of Education

LGBT Lesbian, Gay, Bisexual, and Transgender

NCES National Center for Education Statistics

NGO Non-Government Organizations

SCP Situational Crime Prevention

SWAT Special Weapons Assault Team

SAMHSA Substance Abuse and Mental Health Services Administration

UNESCO Educational, Scientific and Cultural Organization

CHAPTER ONE: INTRODUCTION

Overview

This phenomenological study examines school violence and the lack of protocols to prevent them in an effort to identify solutions to mitigate school violence. This qualitative phenomenological study provided valuable insight into the issue of school violence. In addition, this study explored mitigation efforts that have been implemented to reduce the risk of school violence. Interviews were conducted with school officials from two medium-sized elementary schools, one medium-sized middle school, a large-sized high school, a large school district, and a medium-sized learning center.

Background

Cornell (2020) posited that over the past twenty-two years, there have been approximately twenty school shootings per year, with the number of victims being twenty-three each year. This number never stayed at a steady pace. In addition, although the years of 2017 and 2018 brought forth a drastic increase in school shootings, overall, there were fluctuations of school shootings each year. While school shootings present the biggest threat to school security, other forms of school violence include harming someone on school property with a knife, fights that result in serious bodily harm, gang violence, sexual violence, and fighting (Center for Disease Control and Prevention CDC, 2022).

Violence at schools is a serious problem even when a gun is not involved. School violence is an important topic to understand as it is a leading public health concern (Green, 2020; Peguero et al., 2020; The Federal Commission on School Safety, 2018). Educational, Scientific

and Cultural Organization (UNESCO, 2019) defined school violence as psychological or physical violence in addition to sexual violence. In the United States, 57% of all primary schools reported violent crimes, while 88% of middle schools did (Bouchrika, 2020). The percentage of high schools is even higher at 90%. There are also incidences of violence that occur to school staff and students off campus not included in these statistics (Bouchrika, 2020).

Before the COVID-19 pandemic, rates of violence in schools decreased, but the threat of violence is still a problem for students (Cornell, 2015). A national survey taken in 2017 revealed that 6% of students had been either injured or threatened with a weapon in the last 12 months. In the last 20 days before taking the survey 6.7% of students had skipped school because they did not feel safe (Kann, et al., 2018). A contributing factor to students feeling unsafe is due to school shooting so public officials and parents have given school safety a high priority (Ghiani et al., 2019; U.S. Department of Education, 2020). There are many different approaches to keeping schools safe such as security cameras and metal detectors (Musu et al., 2019). Other schools have implemented violence prevention programs, and some have combined multiple approaches (Sutton et al., 2021). However, since schools have reopened violence has increased substantially (Meckler & Strauss, 2021). The rise may be linked to increased stress or built-up negative emotions that occurred during the school shutdown and online learning (Meckler & Strauss, 2021).

Research has shown that improving school climate, addressing bullying behavior, and evidence-based violence prevention programs can help to maintain safe learning environments in schools (Lenzi et al., 2017). School climate encompasses factors of student engagement, school safety, and school environment, thus is multifaceted (Bradshaw et al., 2021; Mayer et al., 2021).

Maintaining a healthy learning environment, referred to as school climate, can aid in minimizing violence or the threat of violence (Bradshaw et al., 2021).

Situation to Self

The motivation behind this research, is the continuous issue of school shootings that has overwhelmed the United States. When one looks at the Columbine massacre that occurred 24 years ago by two assailants and the killing of 13 victims, and Parkland that occurred five years ago by one assailant with 17 lives taken, there are still unanswered questions as to why violence in schools are escalating at such a rapid pace. There is a gap that needs to be mended to find answers to why school shootings have considerably turned into a normal occurrence. Answers must be found and mitigation strategies must be put into place to prevent the next school shooting from taking place.

Problem Statement

The problem addressed in this qualitative phenomenological study is the risk of school violence and the need for innovative school security measures to mitigate school violence. Despite steps taken to prevent school violence such as increasing security and better responses to school shootings, the number of school shootings are still increasing in the United States. Federal Bureau of Investigation (FBI, 2020). Nowhere else within the developed countries has documented as many school shootings as the United States (Christensen, 2017; Fox & Fridel, 2018). School shootings are the number one threat to school safety (Cuellar, 2018; Lenhardt et al., 2018). Between the years of 1970 and 2018, there were more than 1,300 school shootings and this number is continuing to rise (Lastrapes et al., 2020). Violence in schools other than

shootings declined between 1992 (181 victims per 1,000 students) and 2019 (30 victimizations per 1,000) (National Center for Education Statistics (NCES, n.d.) However, most crimes take place outside of schools. The total number of incidents of violence, theft, and other crimes in 2018 was 1.4 million (NCES, n.d.).

Purpose Statement

The purpose of this qualitative phenomenological study was to understand the threats of school violence to children and school personnel employed in the South Central and Southeastern part of the United States and to identify strategies to mitigate these threats. Rowhani-Rahbar and Moe (2019) stated that there have been many re-evaluations of safety plans implemented that have cost over 2.7 billion dollars. According to Katsiymannis et al. (2018), not only the Department of Education, but the FBI, and the Secret Service have recommended that all kindergarten through 12th-grade schools put into action threat assessment teams.

This problem has negatively impacted students, staff, faculty, and parents because they feel unsafe at school and fear for the safety of the children (Katsiyannis et al., 2018; Martindale & Blair, 2019; Sadulski, 2019; Seebock, 2018). Student achievement and sense of belonging are also related to school climate (Demiroz, 2020). A cause of this problem is the need for threat assessment as a school violence prevention strategy. A threat assessment is a strategy that allows schools to investigate reported threats and develop specific responses according to the seriousness of the threat in order to prevent acts of violence by assisting troubled individuals before it escalates into acts of violence (Meloy et al., 2021). Evidence-based approaches to

threat assessments in schools should be implemented based on rigorous scientific research (Meloy et al., 2021).

Significance of the Study

The significance of this study is to identify strategies to mitigate violence on school properties. Participants must connect to school violence in some manner such as personal experience, taking training or professional development on the topic, and being involved in lockdown drills. This study adds to the literature to fill the gap in the experiences of school personnel of threat assessment of schools. Katsiyannis et al. (2018) explained the need for qualitative studies on this topic to better understand the routine practices of threat assessments and mitigation strategies of schools. The intervention and management strategies of the threat assessment process of schools also need further research and whether students, staff, and parents were reassured by the process (Cornell, 2018.). Much of the assessments of safety plans are conducted by resource offers employed by the school (Blad, 2018). Education Week Research Center conducted a survey of 400 respondents asking if schools were prepared for an active shooter. The findings showed that one out of five schools are not prepared to address an active shooter. Some reported they never feel completely prepared because they are always searching for how to make improvements and others said they were never trained to work in schools with students (Blad, 2018). However, even if schools are prepared a re-examination of plans is needed after large school shootings. After the Parkland school shooting occurred the Greensburg school district in Pennsylvania reviewed their protocols about fire alarms because Parkland

students were exiting the school in mass in response to a fire alarm when the shooting began.

Still, it is not possible to be prepared for any situation involving school shootings (Blad, 2018).

The information from the findings could aid in understanding the process of threat

assessment to determine if improvements are needed and if they do what could be done to

accomplish the improvements from the perspective of school officials. Parents, school

personnel, police, students, and other stakeholders may better understand the threat assessment

process and how policies are enacted to provide a safe school climate for students to be educated

and instructors to teach.

Research Questions

RQ1: What steps have been taken to mitigate school violence, which includes school

shootings?

RQ2: What type of training have school personnel received to prevent and respond to

school violence?

RQ3: What are some additional strategies that can be put into place and how can they be

implemented?

Definitions

Active Shooter - "Armed persons who use deadly physical force against multiple victims

in situations of unrestricted access" (Chipley & Krimgold, 2012, p. 3-22).

1. *Brady Bill* - The 1993 bill that was passed by Congress to delay the purchase of a handgun to purchasers until the background check was cleared (Stone et al., 2017).

2. *Bullying* - Aggressive behavior that is repetitive and intentionally done to other peers (Rettew & Pawlowski, 2022).

3. *Columbine Effect* - "means that extreme cases exert a disproportionately strong influence on public discourse about the problem" (Muschert, 2019, p. 357).

4. *Mass School Shootings* - "an attack by someone against two or more victims with at least one firearm on school grounds" (Paradice, 2017, p. 136). "A situation in which one or more people intentionally plan and execute the killing or injury of four or more people, not including themselves, using one or more guns, with the killings or injuries taking place on school grounds during the school day or during a school-sponsored event on school grounds" (Weiler et al., 2021, p 89).

5. *Mitigation* - "The ability to reduce the loss of life and property by lessening the impact of a disaster" (Homeland Security, 2022, para. 4).

6. *Mitigation Structural*: - "physical changes or act of protection from disasters or hazards. For example, structural mitigation would be when a family reinforces their home to make it more windproof, or earthquake-proof. In addition, other structural mitigation examples would be things like creating a sandbag barrier around the home when a flood might occur. In general, structural mitigation is the direct actions that people take, build, or move in order to better preserve their life and or property" (Reed, 2015, p. para. 2).

7. *Mitigation Non-structural*- "involves what people can do on a personal level that is not structurally or physically evident as a protective defense such as a surge wall or a storm

shelter. Non- structural mitigation in general would involve things such as having flood insurance. In addition, another example would be a family creating a family emergency plan. Any mental preparedness, training, insurance, discussion, and planning would be considered items of non-structural mitigation" (Reed, 2015, p. para. 3).

8. *Mitigation Strategies* - "Actions taken to avoid risks of potential hazards" (Rybenicek et al., 2020).

9. *School Climate* - The culture of the school the character and quality including perceptions and norms of the school (Deitz et al., 2021). Reflections in the school environment of experiences of both students and school personnel concerning collective ethics, and community, which involve the emotional, and the physical (Straub et al., 2019).

10. *Social Ecology* - "The study of human or nonhuman organisms in relation to their environment" (VandenBos, 2007).

11. *School Shooting* - As with other types of violence, there is no universal definition of school shooting. The K-12 School Shooting Database takes an inclusive approach and defines a shooting as "a gun is brandished, is fired, or a bullet hits school property for any reason, regardless of the number of victims (including zero), time, day of the week, or reason" (Green, 2020, p. 6). The gold standard of definitions of school shootings is: (a) the shooting must have happened on a school-related public stage with an audience, (b) there must have been multiple victims, with at least one shot at random or for their symbolic significance, (c) there must have been one or more shooters who either are or where students of the school in which the shooting took place (Newman et al., 2008).

12. *Threat Assessment* - The process of uncovering evidence that indicate a threat is likely to be conducted as well as the circumstances surrounding the threat. It is different from profiling because the investigation is triggered by a student displaying threatening behavior in some manner combined with personal and demographic characteristics (Cornell, 2020).

13. *Threats to School Safety* - Feeling physically and psychologically protected from danger in school and is an extensively area of researched. Many schools have adopted policies and implemented programs to prevent school violence, in addition to hiring police and other security professionals to be present on campus (Cohen & Espelage, 2020).

14. *Trauma* - An event, series of events, or set of circumstances that is experienced by an individual as physically or emotionally harmful or life threatening and that has lasting adverse effects on the individual's functioning and mental, physical, social, emotional, or spiritual well-being. (Substance Abuse and Mental Health Services Administration SAMHSA, 2014, p. 7)

15. *Violence* - The intentional use of physical force or power, threatened or actual, against oneself, another person, or against a group or community, that either results in or has a high likelihood of resulting in injury, death, psychological harm, maldevelopment or deprivation (Dahlberg & Krug, 2002, p. 5).

Summary

School shootings continue to take the lives of students and teachers even though security measures have been implemented. Therefore, policy changes are called for (Addington, 2019).

School shootings also affect parents and school personnel (Cuellar, 2018; Lenhardt et al., 2018). One of the earliest school shootings occurred in 1956 and two others took place 10 years later (Rocque & Duwe, 2018). In the 1990s several other school shootings happened with grave fatalities including the well-known Columbine High School shooting in 1999 (Harding et al., 2002; Lankford, 2016; Moscqueda et al., 2021; Perlstein, 1998). School shootings have become the number one threat to school safety and the rate continues to excel (Cuellar, 2018; Lenhardt et al., 2018).

Evaluations of safety plans have been conducted at great expense and threat assessment teams were formed as recommended by several federal agencies (Katsiymannis et al., 2018; Rowhani-Rahbar & Moe, 2019). Even so, four out of five schools are not prepared to face an active shooter (Blad, 2018). As explained by Cornell (2020), "In schools, a multidisciplinary threat assessment team investigates reported threats and develops responses that are calibrated to the seriousness of the threat and the student's educational needs" (p. 235). This type of action has been instituted as a preventive measure. Research has shown that when enacted threat assessment teams can decrease student suspensions, and improve school climate (Cornell, 2020).

This problem has negatively impacted students, staff, faculty, and parents because they feel unsafe at school and fear for the safety of the children (Katsiyannis et al., 2018; Martaindale & Blair, 2019; Sadulski, 2019; Seebock, 2018). Therefore, this study was designed to describe and understand threats of school personnel of violence to collect information about improving mitigation. The Situational Crime Prevention Model (SCP) guided the study. The significance of this study is to identify strategies that have been employed by school personnel to mitigate

school violence while filling the gap in the literature for more studies about threat assessments

that have been implemented in schools (Cornell, 2018; Katsiymannis et al., 2018).

CHAPTER TWO: LITERATURE REVIEW

Overview

There have been many school shootings globally, but the United States has the highest number and is the number one country in the world (Hilaire et al., 2022; Silva & Capellan, 2019). Between 1976 and 1999, there was an average of 60 school shootings a year which shows a gradual increase in school violence every fiscal school year (Johnson, 2018; Silva & Capellan, 2019). A global study found that school violence was connected to students' suicidal intentions, poor mental health, the use and abuse of drugs, and truancy (Pengpid & Peltzer, 2019; Senanayake et al., 2019).

The FBI (2020) determined that active shooter occurrences are on the rise with schools in the United States being the target of 20.6% of the time. The deadliest school shooting since May of 2018 was the Oxford, Michigan High School shooting where seven people were wounded and four were killed (Education Week, 2022). However, the shooting in Robb Elementary School in Uvalde, Texas has now surpassed Oxford High School in the number that were killed in a school shooting (Osborne et al., 2022). On May 24, 2022, 21 were killed, two teachers and 19 students, mostly third and fourth graders. This has been deemed the second deadliest shooting at a school in the history of the United States (Osborne et al., 2022). Almost 400 officers responded and were at the scene when the shooter was killed (Associated Press, 2022). A surveillance video showed the inaction and haphazard tactical response of the officers (Associated Press, 2022). The first deadliness school shooting occurred at Sandy Hook Elementary School in 2012 where a total of 26 were killed (Bullock, 2022). In 2021 alone there were 34 school shootings (Education

Week, 2022). Since 2018 at the end of 2021 there were 92 school shootings (Education Week, 2022).

This literature review discusses different aspects of threats of violence including school shootings that have occurred. The research focused on school violence and the causes of school shootings, along with mitigation strategies. The social ecology model was explained along with the connection to this study. There are several sections to this literature review, and each contains articles on topics pertinent to the phenomenon of school violence. The first is the theoretical foundation, which is the social-ecological model. The section of related literature is extensive involving a review of major school shootings that occurred in the United States in the 21st century. Followed by sections on weapons used in school shootings, security failures, and changes that were implemented. The connections between bullying and mental illness as a cause of school shootings are presented. The lack of parental supervision has also been studied as a cause of school shootings. The types of weapons used in school shootings and security initiatives are then discussed. Interactionist strategies are discussed as is the role of social media. Last is a section on the characteristics of some of the school shooters followed by a summary of the chapter.

Theoretical Framework

The (SCP) model was developed on the notion that the environment can be changed to decrease or even prevent crime from occurring (Clarke, 2019). By understanding how people successfully commit crimes, those same factors can help craft interventions so that the opportunities to commit crimes are no longer present thereby preventing the crime (Freilich &

Newman, 2017). While working on a doctorate, Ron Clarke eventually evolved into the founder

of SCP after becoming interested in the opportunity, situational factors, and crime prevention.

His place of employment was a factor as he worked at the Kingswood Training School which

was a school for delinquent boys. The topic of Clarke's thesis was why some boys ran away and

at the time psychological factors were prominent. However, the records Clark (1967) examined

showed found that situational factors such as sunshine and daylight hours participated in boys

running away. Darkness occurring over long periods of time was the opportunity structure as

more boys ran away then and were unseen (Freilich & Newman, 2017).

Specific strategies have been developed for particular problems to stop them from

occurring (Clarke & Goldstein, 2002, 2003). Many of these proactive strategies are in *Problem-

Specific Guides for Police*. The strategies were developed in collaboration with police,

academics, and practitioners (Braga & Kennedy, 2012; Scott & Goldstein, 2012). The objective

is to identify the problem, collect data about the problem (or vice versa), then adopt solutions

followed by again collecting data to determine the sufficiency of the solutions. Scientific

techniques of various kinds of utilized to break down the parts of the problem and then analyze

the problem.

Originally, researchers used computer programs to develop and implement actions,

feedback loops, etc. However, now this is called a script (Cornish, 1994). The script is a

sequence of actions of the behavior of the offender that are required to commit the particular

crime which are described and then analyzed. "Crime [scripts] … involve such chains of

decisions and actions, separable into interdependent stages, involving the attainment of sub-goals

that serve the overall goals of the crime" (Cornish & Clarke, 2003, p. 47). According to SCP, no single factor accounts for a particular crime. But a particular crime happening in a particular situation can lead to particular interventions to prevent the crime (Clarke, 1997).

SCP was developed based on an interdisciplinary model based on research in criminology, psychology, economics, and sociology. Numerous scientific studies have been conducted demonstrating the effectiveness of SCP in decreasing crime (Freilich & Newman, 2017). While enacting SCP the responsibility for the control of crime changes from the police to the private and public entities who are the most competent to decrease it (Opp, 1997). For example, one of the models from economics poses three versions of readiness in which an offender is a decision-maker (Freilich & Newman, 2017):

1. Situations may make individuals ready to commit crimes almost without their being aware of it. These include environmental cues that may provoke or prompt individuals to action (Wortley, 1997, p. 66).

2. Background causal factors ("distal factors") place individuals in different states of readiness (Wortley, 2011), which make them more sensitive to opportunities in the environment and thus account for individual and group differences in propensity to commit a crime (Tilley, 1997, pp. 95–107).

3. Individuals arrive at a conscious state of readiness as a result of evaluating alternative means of meeting a perceived need, and this conscious state is influenced by a host of background and situational factors (Cornish & Clarke, 2003, p. 3).

The decision may be either rational or irrational whichever of the three models are used (Tilley, 1997). According to Hsu and Newman (2011), Cornish and Clarke (1986) posited that criminals behave in situations according to the ways they see them. They know their own needs such as wanting money to support their drug habits and an environment that offers them the opportunity to commit a crime to satisfy their need. Yet, why they decide to commit a crime instead of getting a job is not answered by this theory and neither is why a terrorist chooses to hijack an airplane as opposed to bomb a building. The criminal sees their choice as rational to reach the goal even though it may not be seen as rational by others.

There is no grand theory about how to stop a particular crime involved in SCP. Instead, SCP is targeted to a particular crime in a particular situation or context (Felson & Clarke, 2016). There are 25 strategies to develop interventions to decrease crime in particular situations (Freilich & Newman, 2017). An interactive version is available at http://www.popcenter.org/25techniques/. One has to decide which of the 25 strategies to use in a particular situation. Then a review of the literature about that particular crime is called for so that successful interventions are identifiable (Clarke & Eck, 2005). Finally, crafting innovative new strategies are developed (Eck, 2002; Ekblom, 2008). The cost and practicality of an intervention implementation and various other factors are to be considered in the decision of which intervention to utilize (Felson & Clarke, 2016). Public safety, community concerns, individual rights, and other factors will determine which strategies are the most comfortable for the local community (Felson & Clarke, 2016). Solving a crime depends on, "a wide range of institutions and organizations, including corporations large and small, trade associations, unions,

NGOs, and interest groups, as well as government organizations, to solve specific problems of crime (Felson & Clarke, 2016).

The process of SCP applies to this qualitative phenomenological study to understand the threats of school violence to children and school personnel employed in the South Central and Southeastern part of the United States and to identify strategies to mitigate these threats. The interviews may bring about answers that are relevant to the SCP model and these may need to be considered as solutions are developed.

Related Literature

K-12 School Shootings

School shootings are becoming more and more prevalent. Lee et al. (2020) and Paez et al. (2021) stated that school shootings are infrequent rare events compared to the overall shootings as a whole in the United States but school shootings have increased within the last two decades. Lee et al. (2020) and Kalesan et al. (2017) found that since 1966 there has been a 13% to 27.6% increase in shootings in K-12 public schools. Between 1966 and 2008, there was an average of 44 K-12 school shootings, which averages to one shooting per year. Within 42 years there was an average of one shooting per year, showing that instead of violence in schools decreasing, school shootings are a constant occurrence (Lee et al., 2020; Kalesan, et al., 2017). Several factors have come to the front of the discussions that may have caused the increase. One is there are only a few federal gun laws on the sale of guns so there are large variations of state gun laws (Brent et al., 2013; Kalesan et al., 2017). Individual states pass laws about guns and there is a wide range of differences from state to state (Pomeranz et al., 2021).

After the Robb Elementary School shooting in Uvalde, Texas Congress passed the Safer Communities Act which provided $300 million to support school safety even though many schools had already increased their security after other school shootings (S.2938 — 117th Congress (2021-2022). Within the act were other monies to enhance mental health services, extracurricular, summer, and after-school programs, provide further training for school social workers, school counselors, and school psychologists in addition to other specified uses for the funds. The human dimensions of school violence is what needs stronger focus (Moore & Jackson, 2022).

Mental illness services are often obtained through the health system of schools and there is a lack of state and federal funding for these programs (Drake, et al., 2016; Price & Khubchandani, 2022). This leads to another reason for the increase in school violence. The federal government oversees the states concerning mental health services by protecting the rights of citizens, establishing regulating systems, in addition to providing funding for services, research, and innovation thereby establishing and enforcing minimum standards that states can then expand on (Mental Health America, 2022). States can make decisions about their mental health systems, so there is a wide range of differences from state to state (Mental Health America, 2022). Exposure to violence that many students face in their urban communities has been put forth as a reason for the increase. Evidence has shown that there is an increase in morbidity and neurological deficits in connection to gun-related violence (Bushman, 2016; Perkins et al., 2016). However, the connection between school violence and urbanicity has not been evaluated (Kalesan et al., 2016). Students are also exposed to violence in video games,

music, and television (Ali et al., 2019). Media abuse was the term used in a study on university students about the social health effects of students and violence (El-Abd et al., 2019).

Interviews

This section presents some of the school shootings that have occurred in the United States. Telling the stories of what happened not only illustrates how serious this problem is but also presents some of the details of each one. This is intended to illustrate an overall picture of the situation of school shootings even though only a few are presented here. There is no particular reason for choosing these and not others, nor are they in any kind of order.

Columbine High School Shooting

The Columbine high school shooting in Columbine, Colorado was conducted by Eric Harris and Dylan Klebold who took the lives of 12 students and one teacher before taking their own lives on April 20, 1999 (Martaindale & Blair, 2019; Mosqueda et al., 2020; Sci & Ott, 2017). 21 additional people were injured, and gunfire also took place between police and the shooters. Three people were shot trying to escape. In 1999 it was often reported as the deadliest school shooting that had ever happened in the United States, and it has inspired many other school shootings worldwide (Leavy & Maloney, 2009). In fact, Columbine has become a byword for school shootings. However, the Bath School bombing, which happened in 1927 left 44 dead (Leavy & Maloney, 2009).

Harris and Klebold also placed several bombs they had made themselves in the school that failed to detonate in the Columbine High School disaster (Broll, 2020; Comiskey et al.,

2021; Jonson, 2017). Their motivation is unknown, but they had planned the attack for about a year. We do know they wanted to shoot the most victims in the history of the United States, which meant exceeding the 168 people killed in the Oklahoma City bombing (Those Who Were Killed, 2022). This shooting occurred 23 years ago and there have been modifications implemented in security measures to mitigate school at Columbine high school (Broll, 2020; Comiskey et al., 2021; Jonson, 2017).

When analyzing Columbine High School and the failures that took place, it is apparent that when it comes to an active shooter's response needed to be amended. The number one security failure that occurred during the Columbine shootings was the time that it took law enforcement and the Special Weapons Assault Team (SWAT) team to finally enter the building (Martaindale & Blair, 2019; Sadulski, 2019). The shooting started at 11:19 am, and an officer arrived on the scene at approximately 11:24 am and exchanged gunfire with the assailants. Shortly afterwards the shooters went right back into the school, and the officer stayed outside (Flowers & Pixley, 2020; Martaindale & Blair, 2019). There can be many arguments about why the officer did not enter the school to help the students, but it is important to remember that there was no one to back up the officer at this time, he was the only officer on the scene. Seebock (2018) explained that at the time of the shooting in an active shooter event if an officer is not able to safely approach the premises, then he was to wait until everything is clear for entry.

Virginia Tech Shootings

The Virginia Tech shootings occurred on the campus of Virginia Polytechnic Institute and the State University in Blacksburg, Virginia. The attack took place at both Norris Hall and

West Ambler Johnson Residence Hall (Deisinger & Scalora, 2016). On April 16, 2007, Seung

Hui Choi walked onto the campus of Virginia Tech and murdered 32 people before turning the

gun on himself (McMaster, 2019; Jonson, 2017). There were also 17 people injured while trying

to escape (Gius, 2019; Haeney et al., 2018; McMaster, 2019). Ten other people that jumped out

of windows to escape were injured (Deisinger & Scalora, 2016). Jonson (2017) stated that out of

the 35 killed, 30 were students and five were professors. Cho also chained the entry doors to

Norris Hall, which blocked a classroom and laboratory building in the center of the campus

(Grant & Dole, 2020; Kapsidelis, 2019). Then after looking in a classroom, he began shooting

killing a professor and either killed or wounded most of the other students in the same classroom.

He did the same in other classrooms and sometimes returned to the same classrooms (Grant &

Dole, 2020; Kapsidelis, 2019).

Sandy Hook Elementary School Shooting

The shooting that took place at Sandy Hook Elementary School in Newton, Connecticut

on December 15, 2012, has more research data than any other school shooting (Allely, 2020;

Joslyn & Haider-Markel, 2017; Wallis, 2022). This shooting was one of the most significant

school shootings in history, not only because of the number of lives that were taken away on this

day, but because of the 20 young innocent lives between the ages of six and seven years old that

were killed (DiLeo et al., 2018; Levine & McKnight, 2017 & Shultz et al., 2013; Wombacher et

al., 2018).

Adam Lanza was the perpetrator who conducted this horrendous crime, but what makes

this argument significant is the fact that Adam Lanza was a 21-year-old male and had no

connection to this school (DiLeo et al., 2018; Steinkoler, 2017). Even though many school shootings occurred before Sandy Hook and many new laws and mandates were implemented before this shooting but still Adam Lanza was still able to enter this elementary school and commit this shooting (DiLeo et al., 2018; Steinkoler, 2017).

The consequences of the public to Sandy Hook Elementary School shooting have been researched and documented. One result was that gun sales increased sharply and so did the exposure to guns. Soon after the shooting President Barack Obama said it was important to find ways to decrease the likelihood that these types of tragedies occur and proposed new legislation to restrict access to guns (Levine & McKnight, 2017; Stoever, 2019). Based on federal background checks required for gun sales, Levine and McKnight (2017) estimated that during the five months following the shooting, an additional three million guns were sold. This number only includes those who bought from a federally licensed gun seller. In California alone, 26,000 additional guns were sold during the six weeks following the Sandy Hook Elementary school shooting (Studdert et al., 2017). Yet, the increase was limited to White and Latino persons and not among Black persons.

An increase in gun sales is not unusual after a mass shooting. Liu and Wiebe (2019) posited that the number of gun sales out of 124 school shootings that occurred between 1998 and 2016, 21% (26) was related to an increase in gun sales. A decrease in gun sales after shootings was found in 17.7% (22).

School shootings have received much media attention. For example, Sandy Hook Elementary School has been voted the top news topic of 2012, even higher than the presidential

election (Associated Press, 2012). However, after the election of President Trump, gun sales plummeted and were called the Trump slump (LaPlant et al., 2021; Yablon, 2019). Even soon afterward the Marjorie Stoneman Douglas High School shooting in Parkland, Florida, inspired much activism by the surviving students themselves who blamed pundits and politicians on social media (Austin et al., 2020; Braun, 2019; Yablon, 2019).

Marjory Stoneman Douglas High School Shooting

February 14, 2018, Nicolas Cruz walked into Marjory Stoneman Douglas High School and shot 17 people leaving 14 dead (Brezenski, 2018; Eckstein, 2020; Holody & Shaughnessy, 2020; Philpott-Jones, 2018). As of 2021, the Marjory Stoneman Douglas shooting has been named the deadliest school shooting in history (Haddad et al., 2021). Nicolas Cruz had a history of disciplinary actions that were already against him. According to Philpott-Jones (2018), Cruz had previously been suspended for carrying a weapon on campus and had been reported to federal law enforcement for his violent and disturbing behaviors, along with comments that he had made on YouTube about becoming a professional school shooter. Federal law enforcement were warned because of comments and previous actions that were made by the perpetrator, however, it still failed to prevent this young man from taking the lives of individuals (Braun, 2019; Philpott-Jones, 2018).

Oxford High School Shooting

The Oxford High School shooting is cited with new reports as there are no scholarly studies conducted yet. The case in the legal system as parents have sued the principal for telling students not to report various red flags about the shooter (Associated Press, 2021). The Oxford

High School shooting is one of the recent shootings that occurred on November 30, 2021

(Maryland Coordination and Analysis Center [MCAC], 2018). With the many new improved

security measurements that have been implemented this shooting was another carnage that

showed the need for better protocols when there is an active shooter. According to MCAC

(2018), the Oakland County Sherriff Department stated that the shooting was perpetrated by a

15-year-old sophomore by the name of Ethan Crumbley who killed 15 people. Even though the

number of individuals killed was a dramatic decrease compared to previous school shootings, it

still showed that rectifications must be modified to secure schools from active shooters (Kamal

& Burton, 2018; Watts, 2018).

Weapons Used in School Shootings

It is important to note that Columbine High School was a failed bombing, and the only

successful bombs that ignited were the ones that were set up outside by the perpetrators' cars

(Lankford & Hakim, 2011; Mears et al., 2017; Sci & Ott, 2017). The guns that were used in the

Columbine shootings were two semiautomatic weapons that were carried against each of the

criminal's bodies, and each was carrying two shotguns that were carried in their duffel bags

(Jonson, 2017; Kamal & Burton, 2018). Kamal and Burton (2018) and Schildkraut and

Hernandez (2014) stated that the guns given to Eric and Dylan were purchased legally by friends

from private sellers.

In the Virginia Tech shootings, Cho had fired 174 rounds in 11 minutes and still

possessed 200 more rounds of ammunition when he killed himself (Virginia Tech Gunman,

2007). He had purchased two firearms, a Walther P22 .22 caliber pistol and a Glock 19 9mm

pistol both were semiautomatic, so all he had to do after loading them was to pull the trigger each time he fired. The Walther P22 was bought online at PGSCOM, Inc. and he bought the Glock 19 at J-N-D Pawnbrokers located just across the street from Virginia Tech paying with a credit card. His parents said they did not get the bills until after Cho had died and then the bill was over $3,000 (Virginia Governor's Panel Report, 2007).

Like many other school shooters, the weapon that was used in the Sandy Hook Elementary shooting was a Bushmaster XM15-E2S semi-automatic rifle (Brezenski, 2018; Eckstein, 2017). After the Sandy Hook shooting many people including the president sought out change in gun control laws. According to Levine and McKnight (2017), Rood (2018), and Eckstein (2017), in the wake of Sandy Hook Obama spoke forcefully about change needing to be brought forth regarding gun control laws and outlined proposals to restrict easy access to guns. Sandy Hook was the start of the implementation of stricter gun laws being put into effect.

The Stoneman Douglas High School shooting was not any different from many other school shootings that have taken place. Cruz single-handedly conducted this shooting and used one semiautomatic rifle to kill 14 students and injure three teachers (Brezenski, 2018; Philpott-Jones, 2018; Eckstein, 2020). When comparing other school shootings most had only one perpetrator committing the act (Martaindale & Blair, 2019; Mosqueda et al., 2020; Murray, 2017; Sci & Ott, 2017).

In the Oxford High School shooting the shooter used a nine mm SIG Sauer SP 2022 semi-automatic handgun and had two 15-round magazines on him during the shooting (Associated Press, 2021; Boucher, 2021; Vera, 2021; Joseph & Vogt, 2021; Moran, 2021).

Crumbley, the shooter, bought the gun from a local store under his name, even though it is illegal

for minors to own guns in Michigan. However, Sherriff McDonald later stated that the shooter

was with his father when the gun was bought, and he posted about it on social media. His

mother referred to the gun as her son's Christmas present on social media. Police believe at least

30 shots were fired but do not know how the gun was taken into the school (Associated Press,

2021; Boucher, 2021; Vera, 2021; Joseph & Vogt, 2021; Moran, 2021).

Security Failures That Contributed to School Shootings and Changes Made After the

Shootings

The Federal Emergency Management Agency (FEMA) is a United States government

agency that was initiated by President Jimmy Carter in 1979 (Knapp, 2020). The purpose of

FEMA is to respond to disasters that happens in the country in which the state authorities are

overwhelmed with the resources available. FEMA also develops guides about FEMA has

developed mitigation pre-disaster plans to help prepare and plan. The aim is to identify probable

risks and reduce injuries, loss of property, and the time it takes to recover (FEMA, n.d.). A page

of the FEMA (n.d.) website titled Be Prepared for an Active Shooter has information for training

and preparation.

There are also Prep Talks available, one, in particular, discusses school safety presented

by a mother that lost her child to a school shooting and another that was shot in a college

shooting, Michele Gay and Kristina Anderson (FEMA, 2018). In PrepTalks: Michele Gay's

"Rethinking School Safety" measures are discussed and how to implement threat assessment

(FEMA, 2018).

Columbine High School Shooting

Learning about past school shootings can also be valuable. Columbine High School had armed police and a surveillance video system in place at the time of the shooting (Jonson, 2017). The police were criticized in the Columbine High School shooting because the time it took police to enter the school grounds to the time they entered the premises of the school was slow giving the shooters more opportunity to kill victims (Martaindale & Blair, 2019; Sadulski, 2019). Therefore, one of the changes made in security was the introduction of a tactic called Immediate Action Rapid Deployment (IARD), which is for first responders to aggressively confront criminals that pose a life-threatening and immediate threat to public safety (Marquis, 2019). The aim is to rapidly locate and close in on threats to neutralize them as soon as the opportunity presents a resolution to the crisis. First responders also have the authority to disrupt criminals before they become active shooters. In school shootings, the attacker aims to maximize casualties and most happen within the first 15 minutes, therefore waiting for a hostage negotiator is not feasible. The goal of first responders is to prevent attackers from taking full control so they can cause more casualties.

Another part of IARD is emergency medical services (EMS) response actions (Iselin, 2009; Klassen et al., 2019; Simons & Richter, 2020). EMS has changed their response to these types of events, so they are more aggressive, commonly referred to as rescue task force (RFT). There are two medical personnel and two to six law enforcement officers involved (Iselin, 2009; Klassen et al., 2019; Simons & Richter, 2020). Protocols are based on those used by the United States military in war zones so that the RFT enters the school immediately behind an escort of

police so the injured can be treated immediately (Iselin, 2009; Klassen et al., 2019; Simons & Richter, 2020). Lockdown protocols have been put into place in many schools to decrease the number of targets for the shooter to kill since the Columbine shooting.

Virginia Tech Shooting

There were security failures at Virginia Tech were obvious failures. Virginia Tech did not have the proper security on campus to prevent the shooting. Jonson (2017), McMaster (2019), and Lenhardt et al. (2018) stated that the Virginia Tech shooter shot and killed two students in a dormitory before having the chance to walk across campus and murder 30 students and five professors. Security measures should have been in place at the dormitory because officials would have been able to notify the administration of an active shooter on campus.

In the Virginia Tech shootings, Cho was not supposed to be able to buy guns because of a Federal Law, the Gun Control Act of 1968, that prohibited anyone who had a mental illness to purchase guns (18 U.S.C. § 922(g)(4). But under Virginia law, he was not declared unable to care for himself even though he was a danger to himself or others and ordered outpatient treatment instead of inpatient treatment. The law is not clear as to whether he was classified as involuntarily committed, even though the mental health community would have classified him as such, so he was legally able to buy guns in Virginia. Different counties in Virginia interpreted the law differently at the time. This was changed after the Virginia Tech shootings (Virginia Governor's Panel Report, 2007).

The purchase of ammunition by Cho occurred several times at several different stores leading up to the shootings (Virginia Governor's Panel Report, 2007). When he walked into

Norris Hall, he had 400 bullets loose and in magazines. Federal law should have prohibited him from ammunition purchases as there is no background check required and in Virginia, anyone can buy ammunition. Even so, the chances of dying from auto accidents, drug or alcohol overdoses, or a fall are much greater than being shot on campus. The Virginia Governor's Panel Report (2007) made recommendations to clarify issues that arose from the Virginia Tech shootings.

After this deadly shooting, policymakers sought better ways to advance safety measurements on college and university campuses everywhere (Schildkraut et al., 2018; Schildkraut et al., 2019). These improvements were not just made for Virginia Tech but were eventually made for the safety of students and faculty on all campuses in all 50 states. The improvements that were made were tested and implemented in hopes of properly securing college campuses from violence. According to (Musu-Gillette et al., 2018), lockdown drills are now performed at 95% of the schools in the United States. With that said, lockdown drills have been found to be effective (Martaindale et al., 2017; Schildkraut et al., 2020; Schildkraut & Muschert, 2019).

Warning signs of threats and violent behaviors in schools must be taken seriously and reported to the police so the community and school can be safe (Straub et al., 2019). Though prevention is the best, schools should also be prepared to respond to school shootings and recover afterward. Emergency responders are trained for evacuations, to maintain the situation safety, to manage bystanders, to apply basic medical techniques, and to triage in the field. All

first responder agencies need to ensure a good communication system is available (Straub et al., 2019).

In 69.8% of 63 active shooter events ended in less than five minutes so quick action is essential (Straub et al., 2019). All school personnel and students should be familiar with the beginning signs of a shooting so immediate action can be taken. Response protocols should have been not only developed but practiced in advance. Emergency alert systems have been effective in informing people that this particular incident is not a drill, but really so action can be taken. Advances in technology are making emergency alert systems that are digital that can be very useful. There are different protocols for different emergencies such as fires and shootings (Straub et al., 2019).

After the shooting incident happens and everyone is taken care of recovery begins. Post-Traumatic Stress Disorder (PTSD) is common and is often called invisible wounds which can emerge a long time after the actual event (Straub et al., 2019). For example, two student survivors committed suicide a year afterwards that participated in the Marjory Stoneman Douglas High School shooting in Florida. Identification and treatment are available for PTSD. Signs of symptoms should be communicated to teachers, clergy, caregivers, employers, and students so those who need help will receive it. The invisible wounds may last for years, and treatment is essential (Straub et al., 2019).

One proposal that was implemented was to allow gun license holders the right to carry firearms on campus (Gius, 2019; Schildkraut et al., 2018). Ten states allow faculty, students, and staff to carry concealed weapons on their college and university campuses as of 2018 (Gius,

2019). Twenty-three states allow higher education institutions to decide whether to allow carrying a concealed weapon on campus (National Conference of State Legislatures, 2019). A recent study by Sloan and Fisher (2022) stated that there has been a big debate over carrying concealed weapons on college campuses to keep everyone safe who steps foot on college campuses. After the Virginia Tech shooting, supporters of concealed carrying of guns on campus argued that a good guy with a gun can stop a bad guy with a gun.

However, Gius (2019) found that the right to continue campuses did not help enhance security. The implementation of this policy came from a study that was done across 119 college campuses by over 10,000 students, which found that 4% of respondents felt safe with guns on college campuses for the purpose of protection (Gius, 2019). Whether they were safe is unknown as this study did not address the issue, only the perceptions of students. This study gives accurate validation to help policymakers when implementing the best solutions for school violence to ensure the safety of people who come in and off the campuses. Also, legal supporters, such as policymakers argue that when armed people are presently on-campus students feel much safer (Schildkraut et al., 2018). When someone is knowingly good and who students and staff trust is on campus with an armed weapon the feeling of security is spiked to a whole different level in the opinion of males, Republicans, and gun owners. However, students overall did not support anyone carrying weapons on campuses (Schildkraut et al., 2018). Furthermore, Price and Khubchandani (2022) concluded that the research indicates that there is no evidence that campuses are safer when they have concealed carry policies in place.

Sandy Hook Shooting

With Sandy Hook being an elementary school, it was the school system's main priority to effectively keep the students and all staff members safe from harm. Sandy Hook had extreme security measurements already in place, and they were not out of the ordinary. As soon as the shots were fired teachers started to put the children's safety first and assumed all safety protocols that they were instructed to in training (Shultz et al., 2013). Sandy Hook was the first school shooting where security measurements were effectively used during the shooting. Shultz et al. (2013) found that the rampage was cut short due to law enforcement rapidly arriving at Sandy Hook just in time for the shooter to end his rampage and drop his assault weapon. Although there were 27 people killed including his mother, the fact that police were able to get to the school and take action promptly showed just how much law enforcement has positively transformed in their response to school shootings.

The research has shown that the Sandy Hook shooting was an extremely rare event (Shultz et al., 2013). However, the security measures that were in place and the quick action of the teachers and law enforcement on that day is what helped save many other innocent children's lives. The fact that 20 students and six teachers and staff were gunned down in 12 minutes showed that security measurements are still failing at some point (Allely, 2020; Eckstein, 2017; Joslyn & Hairder-Markel, 2017; Perkins et al., 2016; Shultz et al., 2013; Wallis, 2022). Although all teachers and staff were able to follow all protocols in keeping everyone safe, it is important to consider that not one time were armed security officers said to have been present at the school during school hours.

School resource officers (SRO) are another safety measure to aid in schools. However, only 20% of all private and public schools employ them (Espelage, 2020). Cities, counties, or school districts provide the funding for them (Javdani, 2019). Their duties are to enforce the rules as any law enforcement officer does (Javdani, 2019). After the Columbine shooting the presence of SROs was increased (Ryan et al., 2018).

Marjory Stoneman Douglas High School Shooting

The many failures at Stoneman Douglas High School shooting showed just how overdue the United States is in modifying security measurements in schools. The same failures that occurred at previous school shootings arose at Stoneman Douglas, in that the time lapse it took first responders to respond to the violence that was taking place (Eckstein, 2020; Johnson, 2018). There is an issue for law enforcement to respond to school shootings in an appropriate period, and this issue has continually proven that the delay in response has a negative effect on the lives that could have been saved (Eckstein, 2020; Johnson, 2018).

Another failure of Marjory Stoneman Douglas High School that led to the shooting was that no one watched who was coming in and out of the school. Haddad et al. (2021) stated that the 19-year-old that committed this crime was a former student at the school. According to Rogers et al. (2018), some of the practicalities such as having an armed resource officer in the school, however, this armed resource officer did not have an influence on this day. This resource officer was more than likely well-trained and sworn in, but he was still unable to deter this crime from happening or even keep it from escalating. Bevan (2019) and Heise and Nance (2021) said that the presence of both surveillance and police officers at schools is equally important to keep

schools safe from active shooters. The failures at Marjory Stoneman Douglas High School showed that there needs to be better security to keep schools from attacks.

The Marjory Stoneman Douglas High School shooting showed just how unprepared this nation is when it comes to gun control laws, especially considering the many advances that have been made over the years regarding securing schools from active shooters. There have always been gun control laws, but it was not until the occurrence at Marjory Stoneman Douglas High School shooting that people were questioning the school gun control laws in the United States (Brezenski, 2018). After this shooting, there was a rally about gun control and gun violence in schools. Speeches that were given helped bring about change because the next day the Florida State Legislature raised the age of purchasing firearms and banned knocks stocks that turn semi-automatic weapons into automatic weapons (Brezenski, 2018). This was a great modification because in every school shooting a semi-automatic weapon was used (Brezenski, 2018; Gius 2019; Jonson, 2017; Kamal & Burton, 2018; McMaster, 2019).

Although by 2018, school security measurements had already been expanded there is still a gap that needs to be mended to find the best security measures to implement to prevent another school shooting (Limber & Kowalski, 2020; McCleary & Aspiranti, 2020). However, the security measures at Stoneman Douglas were excellent procedures, but the day the shooting occurred these measures were not properly implemented, such as a code red to lock down the school building (Limber & Kowalski, 2020; McCleary & Aspiranti, 2020).

Oxford High School Shooting

At the time shooting, the security measures at Oxford High School were well up to date, such as informing teachers and staff of suspicious behaviors that are noticed (Michigan.gov, 2022). This is one measurement that was done before the shooting. Michigan.gov (2022) stated that on the day of the shooting, the culprit's parents came to the school for a meeting that was requested by the counselor over the behavior of the student, Ethan Crumbley. With that said, Hošková-Mayerová et al. (2021) stated that because schools are soft targets, which are easily accessible for attacks, which is why security measurements must be enhanced.

Many security failures contributed to the upcoming events on November 30, 2021. As previously stated, on the day that the crime occurred the parents had just left the school from a parents' teachers conference that was requested by the school counselor (Michigan.gov, 2022). This was a major security failure, on both the school side and the parents' side. The research shows that the school knew of this young man's behavioral issues but there was no action done in reprimanding the student's behavior. Another very important issue to bring up is the fact that the parents purchased the gun for the student, which makes them an accessory to the murder (Michigan.gov, 2022). For the parents to purchase a gun for their child and more than likely know the violent characteristics that their child possess is showing just how much the parents failed at parenting and went against every security measurement to help keep the students at Oxford High School safe from attacks. Furthermore, schools have made it their duty to crack down on violent behavior issues from students, but the question that still stands is, how was Ethan Crumbley able to conduct this crime in such a time when security measures were extremely pertinent in schools?

Bullying and School Shootings

Bullying and school shootings are often linked together. The United States Department of Health and Human Services (2020) found that 70% of high school students witnessed bullying in their school and 20% of students in grades nine through 12 were bullied. As many as 600,000 high school students have skipped school due to bullying (De Brey et al., 2021). States have passed laws to develop anti-bullying policies, but that happened only by 2015 (Borgen et al., 2021; Nikolaou, 2017; Seelman & Walker, 2018). The prevalence of bullying in the United States was reported by United Nations Educational, Scientific and Cultural Organization (UNESCO, 2019) to be 27.9% compared to Denmark which has the lowest in two countries at 20.2%. Bullying hinders academic outcomes including college enrollment (Oliverira et al., 2018; Sarzosa & Urzúa, 2021). Anti-bullying laws have been found to reduce the rates of bullying between 9-12.4% in states with strict required enforcement, while Nikolaou (2017) found a reduction of 8.4%. Bullying has been found to contribute to truancy and school dropout while cultivating a dislike for school (Borgen et al., 2021; Sarzosa & Urzúa, 2021). Yet, there were no official policies that addressed bullying until 1999, following the Columbine High School shooting in Georgia that year. Still, there is no federal law that prohibits bullying due to the fact the Bullying Prevention and Intervention Act passed in 2011 was intended to help identify incidents of bullying so they could be reported. The collection of information about bullying was established by other laws (Nikolaou, 2022).

In 2021 the Secret Service reported on bullying and school shootings. The percentage of school plotters of school shootings that were bullied was found to be 19,44% (National Threat

Assessment Center, US Secret Service, US Department of Homeland Security, 2021). Verbal, physical, and social bullying were experienced. Verbal bullying means name-calling, taunting, chastising, shaming, and saying they should kill themselves. Physical bullying is being knocked down, punched, jumped, and pushed. Social bullying consisted of harming the victim's reputation by spreading rumors and publicly embarrassing the victim. Only 14% of the plotters were not bullied, while it is not known if 42% were. Twenty-one percent of the plotters had been bullied (U.S. Secret Service, 2021).

Some people were aware that the plotter was being bullied (U.S. Secret Service, 2021). Fellow classmates knew about it sometimes and at least one parent was aware. Even if school officials knew about it, a few cases showed that the school did not respond to bullying to stop it (U.S. Secret Service, 2021).

Bullying has been a very controversial issue in relation to school shootings. Raitanen et al. (2019) and Blum and Jaworski (2021) stated that many school shootings occur by students who wanted revenge on those who had bullied them. Because of the commonality of bullying, many may look at it as being harmless (Rettew & Pawlowski, 2022). A mass school shooting can occur with the bully being a primary target (Blum & Jaworski, 2021).

When analyzing bullying and past school shootings it is important to analyze how much of a part that bullying had in a shooter's decision to commit such a crime (Blum & Jaworski, 2021). Mears et al. (2017) stated that bullying by peers was found to be the overriding factor behind the actions of school killers. Suit (2017) stated that in the aftermath of the Columbine school shooting journals of the shooter were found stating how they were going to avenge

themselves against the ones who bullied them. According to these authors, there is a linkage between school shootings and bullying as the primary cause.

Mental Illness and School Shootings

When looking at school shootings and the perpetrators who commit these acts of violence, many assume that these individuals must be mentally ill. Farr's (2019) study of 10 school shooters all between the ages of 14 to 18 years old found that all the shooters suffered from depression, with all but one out of the 10 suffering from uncontrollable anger problems, also all but one had tried to commit suicide at least once. A psychiatrist examined all 10 shooters and found that all 10 perpetrators suffered from severe mental illness, with six of the 10 shooters suffering from psychosis-level disorders (Farr, 2019). Farr (2019) stated that one perpetrator was diagnosed as being psychotic, but he was not found to be insane. Blum and Jaworski (2021) argued that it is not mental illness, but poor social conditions that underlie violence in schools that leads to school shootings.

When evaluating past school shooters, such as Lanza, the perpetrator who conducted the Sandy Hook School shooting, it is evident that mental illness needs to be considered (Pinals & Anacker, 2016). Steinkoler (2017) found that throughout Lanza's entire life psychiatrists, psychologists, and doctors constantly examined him. He was diagnosed with Asperger's syndrome as a child (Steinkoler, 2017). Conducting his autopsy, Steinkoler (2017) found that Lanza suffered from extreme brain damage from malnutrition. The literature shows that Adam Lanza did suffer from extreme mental illness and malnutrition was also a prime factor.

Two other school shooters who were mentally ill were the two Columbine perpetrators, Harris and Klebold. Osborne (2018) stated that Eric was a narcissistic psychopath, who just wanted to kill, and Dylan was a depressed individual who just wanted to die. Both individuals were two mentally ill teenagers that conducted crimes against their peers and teachers.

Lack of Parental Supervision and School Shootings

The lack of parental guidance has been said to be the reason students commit violent crimes such as school shootings (DeAngelis, 2018). In the Oxford High School shooting, where charges were filed against the parents for their part in purchasing the handgun for their son. The parents were not guiding their children instead, they are contributing to the problem (Michigan.gov, 2021).

The lack of parental control can impact a school shooter. Paik (2017) stated the importance of a family's involvement in a youth's life when going through a delinquency stage or going through different stages of rebellion. The rebellious actions of youth should not be taken cavalierly. As a matter of fact, courts are starting to change methods and hold parents accountable for their child's offenses (Paik, 2017). Courts administrations are looking beyond the youth to the parents and how they are not paying close attention to their children and what they are doing in their everyday lives (Paik, 2017; DeAngelis, 2018).

Mitigating the Issues of Bullying and Mental Illness

It is important that school bullying be controlled, because if not these issues will continue to persist and violence in schools will increase. Kallciu et al. (2020) stated that all schools need

to be safe from all forms of violence, and that includes bullying. Bullying affects children everywhere, and this issue must be diminished to bring peace among youth everywhere. A great security measurement for protecting United States schools from school shootings is to alleviate the issues of what is causing school violence (DeAngelis, 2018; Kallciu et al., 2020).

Identification of Bullying

The first mitigation strategy is to know how to identify a bully and their victims (Yang et al., 2021). Yang et al. (2021) stated that when identifying a bully one must understand signs of hyperactive activities, hostile behaviors, and their lack of empathy towards others. When these signs are noticed a student, teacher, or even parent should inform the authorities so that action can quickly be taken to help the student who is bullying. Furthermore, a study that was done in 25 countries about school bullying found that bullies and their victims had similar qualities, such as poor relationships with their peers, involvement in alcohol abuse, they are more likely to carry a weapon and reported more health and adjustment issues in schools than any other group of students. These actions would be increasingly noticeable in the victims and their bullies.

Mental Health and Firearms

Understanding the mental health of a potential school shooter is the best way to prevent this catastrophic event from occurring. Individuals who have engaged in mass violence have some form of mental issue according to Pinals and Anacker (2016). These individuals are a prime concern for clinicians because of the rarity of their personalities (Anacker & Pinals, 2018; Pinals & Anacker, 2016). However, to prevent these individuals from harming others these individuals must be identified and averted from gaining access to all firearms. Past school

shooters, such as Dylan Klebold, Eric Harris, Adam Lanza, Seung Hui Choi, and Nikolas Cruz were mentally ill and they all had access to firearms (Anacker & Pinals, 2018; Pinals & Anacker, 2016).

Types of Weapons Used in Most School Shootings

Guns

Most weapons that are used in school attacks are guns. Livingston et al. (2019) found that handguns were used in 81% of school shootings. The majority of fatalities occurred from rifles or shotguns (Brezenski, 2018; Livingston et al., 2019). Gius (2018) examined the relationship between Federal and state gun control laws and school shootings. The results showed that only the assault weapons ban had any effect in reducing the number killed by 54.4%. Background checks, Federal dealer background checks, and concealed carry laws had no impact on the number of people killed. However, the number killed was less than 10 per year. Gius (2018) concluded that it was unclear if gun control was the best policy to reduce the number of victims killed in school shootings.

The type of gun used in a shooting is associated with the severity of the shooting and the number of fatalities is related to the type of guns that are used in a shooting (Livingston et al., 2019). Handguns are used in school shootings, but most fatalities happen by a rifle (Livingston et al., 2019; McElroy & Coley, 2021).

Knives

School stabbings are not as well-known as school shootings are. When hearing of

shootings, such as the Virginia Tech shootings, and the Sandy Hook shootings, all these violent behaviors were at the hands of students with guns (Livingston et al., 2019). Although guns were used in all three shootings, one of the weapons that were found on one of the Columbine perpetrators was a knife, that was not used. However, this still does not negate the fact that knives are not used as weapons in schools (Schildkraut & Elsass, 2016).

Although school stabbings are not that heard of, these attacks can be deadly. In a school in New York City in 2017 18-year-old Abel Cedeno, fatally stabbed 15-year-old Matthew McCree, and then stabbed another student who was 16 who was not identified, (Chapman, 2021). Knives are not as commonly used as weapons in United States schools, but knives are commonly used in other countries. Stabbings are more frequently used in other countries such as the United Kingdom because of the tight strict restriction on possession of firearms (Haylock et al., 2020; Sneath, 2019). Research found that in the United Kingdom knives are the most used as weapons in schools (Haylock et al., 2020; Sneath, 2019). Although the research clearly shows that schools in the United Kingdom are more prone to violence with knives than schools in the United States this still does not negate the fact that any student at any school in the world can conduct a killing with a knife (Deng, 2020).

School Security Initiatives

Physical Strategies

To fight school violence whether it be from shootings or other weapons such as knives it is important to implement the initiatives to combat violence in schools. Lee et al. (2020) stated that schools are considered to be soft targets because of the weak security measurements,

unarmed personnel, and the failure of students to report threats. Sandy Hook and the Virginia

Tech shootings painted the imperfect picture of the security of the United States school systems.

A 2017 study found that crimes at schools are still a major concern for students, parents, and

teachers (Bushman, 2016; Lenzi et al., 2017). Even though there have been many security

measures implemented parents, teachers, and students still fear that there are not enough to keep

schools secure from criminal activity. Cueller (2018) identified three types of safety strategies:

physical, interactionist, and legal strategies. These three strategies are used in hopes of helping

prevent and mitigate crimes in schools.

Structural Strategies

Physical strategies are among the best protocols for preventing a school shooting.

Physical strategies can range from the presence of police officers to metal detectors, the presence

of CCTV surveillance all around the school campus, and blast-proof windows (Cueller, 2018;

Jonson, 2017). These physical security measures are going over and beyond the basics but going

outside the realm is what is needed to protect the schools and the students, teachers, and faculty

from school violence.

Presence of School Police Officers

Forber-Pratt et al. (2021) found that police officers have been entering schools since the

1950s and it was not until the 1990s that law enforcement agencies started to hire police officers

to work in public schools. But having a police officer posted on campus is not enough to prevent

a school shooting from occurring. However, studies have shown that recent school shootings

have spiked an increase in security measures and that includes policing in schools (King &

Bracy, 2019; Sorensen et al., 2021). The study showed that having a police presence on school grounds can help in deterring an armed student or an outsider from entering an institution (Sorensen et al., 2021).

Since the Sandy Hook shootings, there have been 130 school shootings and 1.4 million incidents that were reported of school violence (Wood & Hampton, 2021). This 1.4 million does not include the number of incidents that are not reported. The constant uprising of school violence has prompted the need for increased security resource officers on school campuses everywhere (Wood & Hampton, 2021; Sorensen et al., 2021). Wood and Hampton (2021) found that teachers associate the presence of police officers on school grounds with the safety of the school.

One initiative that has been given in securing schools from crime and violence was to quickly start training programs for law enforcement personnel to secure schools daily (Addington, 2019). Although school security has been around for many years, the increase in school violence has prompted the use of law enforcement at schools all over the nation. However, with the specially trained law enforcement personnel that are present in schools, studies have shown that there are mixed reviews of how effective it is to have police officers on school grounds (Addington, 2019). The presence of trained police officers in schools resulted in negative findings. How effective these (SROs) have not shown consistent benefits (Owens, 2017; Weisburst, 2019). Addington (2019) and Fisher and Devlin (2020) found that with the presence of police officers in schools there was an increase in minor crimes on campuses, such as fighting and the possession of drugs. Addington (2019, 2021) emphasized that the

experiences of Black girls when discussing and setting policies security are an important

consideration because there is a disproportionate effect on Black girls.

Metal Detectors

Metal detectors are a good asset to school safety. However, metal detectors are usually

found in urban schools, not in rural or suburban schools (Jonson, 2017). King and Bracy (2019)

found that 7.2% of public schools in the years 1999 to 2000 used metal detectors. The small

percentage of schools in the years 1999 to 2000 that had metal detectors were shown to help in

deterring a student active shooter. Further research from Tanner-Smith et al. (2018) and

Steinka-Fry et al. (2016) found that in the years 2011, 2013, and 2014, 8% to 9% of schools in

the United States used metal detectors before students, teachers, and faculty entered the school.

With the increase in school violence that is taking place, this is a very small percentage of metal

detectors that are presently being used in school, this was a slight increase in metal detectors

from the year 1999.

Bhatt and Davis (2018) said it best, that metal detectors are used for one solitary purpose

and that is to keep the bad guys out along with their weapons. Metal detectors can prevent the

entrance of an armed student, teacher, administrator, or even an unknown predator. Yet, many

have argued that the presence of metal detectors increases students' fear and disorder in schools

(Jonson, 2017; Tanner-Smith et al., 2018). Researchers argued that having the existence of

armed police officers along with metal detectors can make students feel like they are in prison,

whether than in a warm and comforting learning environment (Jonson, 2017; Tanner-Smith et

al., 2018). Understanding the perception of the students is very important, however, having the

use of metal detectors present in schools is for the safety of the students, teachers, and faculty. A balance must be maintained so that everyone feels safe without feeling like they are in prison.

Although security measures are common, today, metal detectors are still not that common in schools. Only 2% of middle schools and 4 % of high schools have mandatory walk-through metal detectors (Mallett, 2020). This 6 % is still a very small percentage of schools that use this basic necessity that is needed to keep schools safe. Metal detectors still do not deter or prevent students from bringing weapons to school (Jonson, 2017).

Lockdown Drills

Preparation is one aspect that is needed as far as prevention is concerned. Lockdowns are one way to prepare for a potential mass school shooting. The April 20, 1999, Columbine shootings helped prompt institutions all over the United States to prepare for a school shooting with lockdown drills (Schildkraut et al., 2020). Lockdown drills were another post-Columbine mandate. Starting in the years 2015 to 2016, 95% of public schools were conducting lockdown drills (Schildkraut et al., 2020; Wallace 2020). Furthermore, 95% of K-12 schools are still annually participating in active lockdown drills (Wallace, 2020; Saggers et al., 2021; Schildkraut et al., 2020;). This percentage has stayed consistent for the last five years.

Lockdown drills are focused on one aspect and that is to get the students as far away from harm as possible (Dickson & Vargo, 2017; Saggers et al., 2021). Saggers et al. (2021) and Jonson (2021) explained that this traditional lockdown drill involves moving all students out of sight, locking all doors, and remaining quiet. These three simple steps have been shown to save many students, teachers, and faculty lives.

Along with the positives, there are the negative aspects of lockdown drills that many people are concerned about. Nickerson and Schildkraut (2021) and Saggers et al. (2021) found that in lockdown drills although emergency preparedness was there and even had some improvements, middle and high school children still felt very unsafe. Lockdown drills did help in protecting the students from an active shooter being on campus, but students had a sense of fear while going through the lockdown drills. The same study found that 60.2% of students felt unsafe doing lockdown drills (Nickerson & Schildkraut, 2021; Saggers et al., 2021). Over half of the students felt unsafe with lockdown drills.

Furthermore, the traditional lockdown method and metal detector method do not always save lives. This was shown on March 21, 2005, at Red Lake High School in Minnesota, when a student shooter entered the high school, got past the metal detectors, and shot out the glass windows of the classroom (Jonson, 2017). This was a total backlash to the positive effects of having metal detectors and lockdowns.

Traditional Lockdowns

The traditional way of doing things can be referred to as old-fashioned and outdated, but sometimes the outdated method can be one of the best mechanisms especially when it comes to protecting students, teachers, and faculty in the case of a school shooting. According to Huskey and Connell (2021) and Jonson (2017), one approach that individuals should lean towards if they find themselves at the core of a school shooting is, the traditional lockdown approach; this approach involves locking all internal doors, turning off all lights, staying as low as possible to the ground, staying away from any visible doors and windows, and finally to stay silent until law

enforcement arrives at the scene. This may seem simple, but this method can help save many lives (Huskey & Connell, 2021; Jonson, 2017).

However, the traditional lockdown method and to add the metal detector method do not always save lives as shown on March 21, 2005, at Red Lake High School in Minnesota, when a student shooter entered the high school, got past the metal detectors, and shot out the glass windows of the classroom (Jonson, 2017). This was a total backlash to the positive effects of having metal detectors and lockdowns. However, just because this approach did not work for one school shooting does not mean that this approach should be vetoed.

Non-Structural Mitigation Strategies

Many plots of shootings at K through 12 schools have been successfully averted. This systematic review study examined 67 plots of school shootings between 2006 and 2018 that occurred in the United States (U.S Secret Service, 2021). In the search for publications definition used for an averted attack was a plot in which:

- a current or recently former K-12 school student

- took steps to advance an attack plan

- to cause physical injury to, or the death of, at least one student and/or school employee. (U.S Secret Service, 2021, p. 8)

The plotters have to of taken some sort of action, such as asking peers to join them or surveilling the school, so it could not have been just stating they wanted to shoot people at the school (U.S Secret Service, 2021). These attacks were not related to drug violence, gang

violence, or another separate criminal nexus. Data was taken from the Averted School Violence Database provided by the National Police Foundation. A large majority (84%) of averted school violence was in high schools. Almost half (45%) of the high schools had enrollments of less than 500 and the other 56% had a wide range of enrollment sizes (U.S Secret Service, 2021). Over 90% of the school shooters gave some type of warning about their intentions usually to peers (U.S Secret Service, 2021). Almost half of the averted violence behaviors were inspired by the Columbine attack. One-third (34%) had systems in place to report student behavior that was of a threatening or harmful nature such as phone numbers, online incident forms, and smartphone apps. Text messaging systems, helplines, etc. However, the other two-fifths (43%) of the plotter's clear communications were such that they should have been reported but were not. The process of effective reporting varies widely because of the differences in student demographics, school climate, and police-community trust. Therefore, school leaders must determine what works best for their school (U.S. Secret Service, 2021).

Commonalities have been recommended regarding reporting school safety concerns. Various reporting models were reviewed along with 30 interviews with stakeholders in K through 12 schools across the United States that were conducted in this literature review (Moore, et al., 2022). A snowball sampling technique was used to identify participants willing to be interviewed. The findings can be used to develop safety plans on threat reporting by students (Moore, et al., 2022). Key findings from this study identified important strategies that all schools can utilize:

- Strong relationships between students and school staff are essential for building

trust and robust reporting cultures.

- Approaches to reporting are likelier to support various members of the reporting community, including students, if they emphasize accessibility and cater to ways in which today's student population communicates.

- An anonymous reporting option can help address students' fears of being ostracized by their peers as a result of reporting.

- Reporting programs that give students and others the option to speak or chat directly with an operator trained to interact with someone in crisis provide additional support to youths and can lower barriers to reporting for those not comfortable speaking directly with law enforcement.

- Building awareness and implementing training on the importance of reporting and the means through which students can report information is critical to supporting people seeking to come forward.

- Transparency and communication around how schools act on information reported through a tip line or via other methods influence students' willingness to come forward.

- Gaining buy-in from school leadership, teachers, and other school staff are likelier to lead to an effective and sustainable reporting program. (pp. 43, 44, 45)

- The researchers caution that there is a lack of literature on the different ways of reporting therefore making it impossible to definitively state what works best. Therefore, future research was suggested.

Reporting to Mitigate Violence

Anonymous tip lines have become one of the choices of many schools for mitigating threats of violence (Blad, E., 2018). A study conducted by the U.S Secret Service (2021) and then developed a guide that can be used to create safety plans, called the *Targeted Violence Prevention Plan*. It was suggested that the first thing to accomplish is to establish a multidisciplinary assessment team with a designated leader a senior administrator of the school (U.S. Department of Homeland Security, 2018). Each team member needs to know their role in implementing protocols. Nest to define prohibited and concerned behaviors that could mean a student may engage in violent behavior. Examples are bringing a weapon to school, bullying other students, and other criminal behaviors. Other behaviors may be many absenteeism, dramatic changes in behavior, isolation, erratic depressive behaviors, or using drugs and alcohol. When these symptoms appear students can be offered support such as counseling, tutoring, and mentoring. The student must be assessed though it should be kept in mind that a single symptom does not necessarily mean the student will be violent and if interventions are provided the earlier, they are implemented the better. A central reporting mechanism needs to be established such as a smartphone app., an online form posted on the school website, etc. Everyone including staff, parents, and students need to be trained and know how to report their observations. It is vitally important that team members respond immediately after being informed as someone's safety is at stake. Anonymous reporting should also be provided, and confidentiality is of utmost importance (U.S. Department of Homeland Security, 2018).

Determining the threshold for contacting law enforcement for interventions. Most incidents can be addressed by school personnel and community resources. However, threats of violence and school attacks that have been planned are when local law enforcement can speak to parents or search the possessions of the student making the threat. Procedures need to be established so that all team members clearly understand them and have the ability to put them into action when needed. Documentation of reports and the information that is collected, how it was obtained, from who, the behaviors of concern, and intervention strategies should all be recorded on forms so they are standardized. Checking social media postings and determining if the student has a history of similar behaviors should be included. Assessment procedures should be established for threat assessment investigations such as the following list developed by the U.S. Secret Services:

- The student's motives and goals

- Concerning, unusual, or threatening communications

- Inappropriate interest in weapons, school shooters, mass attacks, or other types of violence

- Access to weapons

- Stressful events, such as setbacks, challenges, or losses

- Impact of emotional and developmental issues

- Evidence of desperation, hopelessness, or suicidal thoughts and gestures

- Whether the student views violence as an option to solve problems

- Whether others are concerned about the student's statements or behaviors

- Capacity to conduct an attack

- Evidence of planning for an attack

- Consistency between the student's statements and actions (United States Department of Homeland Security, & United States Secret Service, 2018, p. 8)

The last step is to develop options of risk management to determine if the student may harm themselves or others (U.S. Department of Homeland Security, 2018). The purpose is to determine if there are factors that show violence is a possibility so strategies can be taken to decrease the chances of the student committing violence. Positive outcomes for the student are the main goal. An individualized management plan is required based on the collected information. It is important to understand that removing the student from school does not eliminate the risk of them harming others or themselves. Several school shootings were committed by students that had been removed or aged out of school. If suspension or expelling the student is necessary team members should make efforts to stay in touch with the student so if their situation is deteriorating, they can respond as needed. Reducing stressors and redirecting the student's motives should be implemented. Creating a positive safe school climate is a school culture built in safety, trust, social and emotional support, and respect. Teachers and staff should intervene in conflicts, and prevent teasing and bullying while encouraging communication and openness with students. Actively listening to students can help build positive relationships so students trust school adults and feel comfortable reporting possible troubling behaviors of their peers. These recommendations are best practices to prevent school violence based on professional scholarly research (U.S. Department of Homeland Security, 2018). Figure 1 is an

illustration of the people involved in assessing threat assessment of a student.

Figure 1.

People and Situations Involved in Conducting a Threat Assessment of a Student
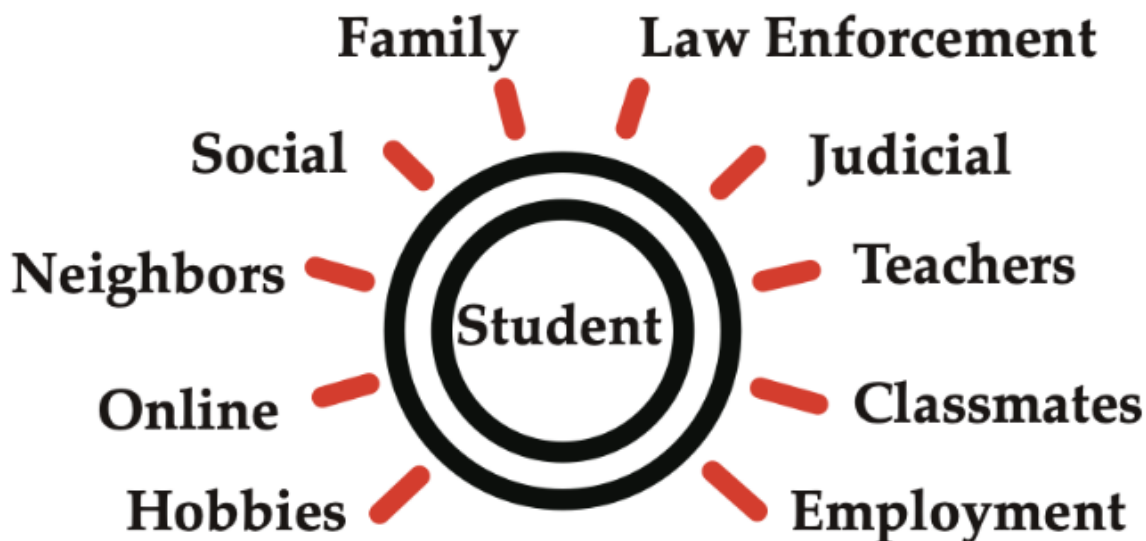
Enhancing School Safety Using a Threat Assessment Model An Operational Guide for Preventing Targeted School Violence by United States Department of Homeland Security & United States Secret Service 2018, p. 7. Copyright: This publication is in the public domain.

Target Bullying

Interactionist strategies when combating violence in schools are just as important as physical strategies. Interactionist strategies' goal is to improve students' interaction and communication skills with each other as well as with teachers and faculty (Cross et al., 2018; Jonson, 2017). Having the right interactionist strategies is very important in schools because research has found a great linkage between bullying and school shootings (Haeney et al., 2018;

Mallette, 2017; Mears et al., 2017; Raitanen et al., 2019). Knowing that certain interactions can become deadly, peers must know how to interact healthily and positively with each other, this is one of the best ways to prevent a school shooting from occurring. According to Mears et al. (2017) and Suit (2017), though other factors were shown to be valid reasons behind why Dylan Klebold and Eric Harris decided to go through with the Columbine 1999, bullying was the single superseding factor behind this particular shooting. If nothing else influences interactionist strategies to be mandated, this particular school shooting should impact awareness of how effective good and positive communication skills can be in the lives of students.

Zero Tolerance

Having good policies to combat school violence is important. Zero-tolerance when it comes to a school setting, means there is no tolerance for any misconduct on school grounds. Zero-tolerance was founded on deterrence theory, which stands strong on three main methods, which are severity, certainty, and celerity (Cornell & Maeng, 2020; Huang & Cornell, 2021; Kodelja, 2019). When students know that there are consequences to their actions, they will be deterred from committing any violent acts on campus. This approach is meant to help deter shootings and other violence from occurring on school grounds.

Zero-tolerance policies have been around for close to three decades (Addington, 2019) (Addington, 2019; Huang & Cornell, 2021). Violence in schools that occurred in the early part of the 20th century are what prompted this policy approach (Mallett, 2020). Many early modern shootings invoked many changes to school policies when it came to securing children in schools.

According to Mallett (2020) when zero-tolerance policies were at their peak, having the

presence of both security guards and police officers as well as security cameras on campus rose significantly. Schools and policyholders saw the need for better security measures to be implemented. However, even with the significant rise in police officers and security cameras in schools, there was still the question of how effective the zero-tolerance approach really was (Kodelja, 2019). Addington (2019) stated that there are too few studies that show how effective zero-tolerance policies are.

Structural Mitigation Strategies

Mitigation strategies are concerned with making changes to the physical building particularly the school building (Chipley & Krimgold, 2012). Structural mitigation is the actions that can be taken to improve the preservation of property and life (Reed, 2015). The vulnerabilities of the school building need to be changed to mitigate damage and loss of life. Explosive blasts may cause a component to fail or the entire structural system may collapse (Chipley & Krimgold, 2012).

The collapse of structure systems may be caused by a chain reaction stemming from a local failure and then spreading throughout the building (Chipley & Krimgold, 2012). New school buildings can be built to withstand chain reaction damage. Certain features can be incorporated into the building to provide good protection and decrease the possibility of chain reaction collapses (Chipley & Krimgold, 2012). There is a long list of recommendations that can strengthen the school building suggested by Homeland Security and FEMA. Examples are to decrease injury from flying fragments using wire mesh in plaster, not placing light fixtures, ductwork, or air conditioners above the ceilings, building smaller schools that are easier to

secure, or building schools within schools meaning the buildings are in clusters that are semi-independent.

Physical Design Vulnerabilities

Shooters can easily gain access to schools when they are unfenced and then they proceed to where they begin shooting. Wooded areas surrounding schools provide hiding places and escape routes. However, brick fencing can function as protection for attackers that can approach undetected (Chipley & Krimgold, 2012). Barred windows prevent the escape of students fleeing from the shooter. During the Columbine High School shooting many students and staff were able to escape using the numerous exit doors but there was no protection from the gunfire. Though locked doors can be a means of protection from shooters. Yet, at Norris Hall at the Virginia Tech campus students barricaded themselves with live bodies and furniture as the doors did not lock and they were not successful, so the death toll rose higher.

Being prepared and trained for shooters can help minimize shock and panic as can preparedness plans and emergency procedures such as lockdowns. There need to be locations where students can hide to protect themselves and alarms can alert them of imminent dangers. Police need to be able to establish a safe perimeter to not only prevent the escape of a shooter but also to keep the public away so authorities have access as they need. In a hostage situation in a school in Besan Russia, there was panic and chaos, people showed up armed with guns and rifles. Even after three days of negotiation, the public kept authorities from managing the situation effectively resulting in increased deaths and injuries. This particular incident also shows the vital need for emergency preparedness plans. Effective communication is essential,

something that did not happen during the incident at the University of Texas. Police radios were only in their cars and cell phones did not exist yet in addition to the limited availabilities of telephone capabilities and telephone lines that soon became jammed. At Columbine different emergency response teams were unable to communicate with each other, only within the teams could communication take place. Cell phones and police radios could not function properly inside the school building at Columbine either.

More Police in Schools

Increasing police presence in schools is often suggested as a way to decrease violence in schools, especially school shootings (Craven, 2022; Fisher & Petrosino, 2022; Gleit, 2022; McKenna & Petrosino, 2021). In the school year of 2017-2018 police officers stationed in over half of the schools in the United States have the power to arrest students according to the National Center for Education Statistics (Diliberti et al., 2019). Data from the School Survey on Crime and Safety (SSOCS) conducted by the U.S. Department of Education in the 2019-2020 school year covered 4,800 public schools. Among the findings was that 83% of schools with enrollments larger than 1,000 students had at least one police officer that carried a firearm (Wang et al., 2022).

Research has shown that having police in schools does not decrease school violence or make schools safer (Craven, 2022; Fisher & Petrosino, 2022; McKenna & Petrosino, 2021). Furthermore, they tend to undermine the success of students and make them feel unsafe by criminalizing students, in addition to destabilizing the school climate. Studies have shown that the police presence in schools results in higher arrest rates, higher expulsion, suspension, and

absenteeism, especially for Black and Latino students (Fisher & Petrosino, 2022; Homer & Fisher, 2020; McKenna & Petrosino, 2021; Weisburst, 2019). The race of students that have the highest rate of exposure to police in their schools are Black people, Native Americans, and Latinx (Fisher & Petrosino, 2022; Gleit, 2022). Even though White students are often exposed to police in schools, police tend to not be tasked with the punishment of White students (Gleit, 2022).

Some schools did away with police officers at their schools only to reinstate them soon afterward due to the concern for school safety (Armus & Natanson, 2021; Geha, 2021). The two most common criticisms were that marginalized students such as students with disabilities, Black, Latino, and Lesbian, Gay, Bisexual, and Transgender (LGBT) students, experienced disproportionally negative impacts (Advancement Project, 2018; Crosse et al., 2021; Gottfredson et al., 2020). Crime deterrence was one reason police were utilized in schools. Yet, the overuse of the formal criminal justice system that occurred for misbehavior increased and these incidents were formerly managed by the school administration. Again, the same marginalized students were negatively impacted. When compared to White students, Latino and African American students were suspended and expelled at higher rates (Cruz & Rodl, 2018; Pesta, 2018; Welsh & Little, 2018). Increases in fears, surveillance, punishment, and behavior problems that tended to ripple out in the school environment fostering negative perceptions in addition to harm to evaluate scores, grades, and attendance (Fisher et al., 2019; Pearman et al., 2019).

There also tend to be fewer resources for other programs when monies are spent on employing police officers in schools (Craven, 2022). According to the U.S. Commission on

Civil Rights (2019), "1.6 million students attend schools with a police officer but with no school counselor" (Craven, 2022, p. 4). This is in agreement with another study (Whitaker et al., 2019). When it comes to budgeting funds policymakers and administrators can either use their power to decide to fund metal detectors and police in the schools which is military logic (Turner & Beneke, 2020). Or the other decision they can use their power for is that of teacher training, hiring school counselors, paying attention, and taking action based on community responses This elevates the transformative logic (Woulfin & Sadler, 2021). Finally, police officers in schools frequently establish relationships with students, especially those of Color for improving their view of police, but many also hope they will become informants in the future (Fisher & Petrosino, 2022; Viano et al., 2021).

Bartlett et al. (2021) reviewed 17 different safety alternative programs to increase equity and establish healthy school climate decrease violence and maintain safe learning environments. A safe and positive school environment is vital to student learning, engagement, and achievement, and alternatives to police presence in schools highlight the prevention of violence as opposed to punishments, are inclusive of all students, pedagogically informed, as well as being cost-effective (Cowan et al., 2021; Leticia, 2020). Some examples are social-emotional learning, trauma-informed schools, mindfulness programs, mental health support, anti-bullying, restorative practices, and school-based teen courts. All have been found to be effective in reducing school violence and increasing safety (Bartlett et al., 2021).

Surveillance

The use of surveillance technology to provide better safety has been implemented in

many schools across the United States. For example, 81% of schools have security cameras and 68% of schools require all personnel to wear badges identifying them as such (Musu-Gillette et al., 2018). A total of 94% of schools now have controlled access to the building (Musu-Gillette et al., 2018). There are a variety of security measures that have been taken in schools such as fences, bulletproof glass, gates, keyless door locks, video cameras, panic button alerts, and limiting areas of access by the use of passcodes (Musu-Gillette et al., 2018; Partner Alliance for Safer Schools, 2020). In the United States, bulletproof doors and windows for school buildings plus bulletproof backpacks for children have made for a $2.7 billion industry market (Cox & Rich, 2018). Tip lines and other types of anonymous reporting have also been implemented (Planty et al., 2020). There have also been other measures implemented such as sniffer dogs, searches, and drug testing (Deakin et al., 2018).

Still, there is no evidence that the use of technologies and cross-data access increases the safety of schools and students (DeVos et al., 2018; Partner Alliance for Safer Schools, 2020; Tanner et al., 2018). Instead, there are studies documenting an increase in arrests and higher discipline rates that occur to marginalized students besides a lower number of students participating in extracurricular activities (Cuellar, 2018; Fisher et al., 2018; Mowen & Manierre, 2017). In addition, lower parental participation levels have also been documented (Dunning-Lozano, 2018; Mowen & Manierre, 2017)

Metal detectors, closed-circuit television systems (CCTVs), and scanners similar to those used at airports have been stalled at many schools to do away with searches of backpacks, lockers, bodies, and cars (Birnhack & Perry-Hazan, 2020; Ma, 2018; Tanner et al., 2018).

Research showed that there was no link between metal detectors and perceptions of school safety, or it has a negative effect on the perceptions of school safety of students (Turanovic et al., 2022). But there have been concerns about equity and privacy regarding security cameras, metal detectors, and other security measures that are visible to students (LoSardo, 2020). High school students used the metaphors of *family*, *soldiers*, and *prisoners* to describe how they feel about CCTVs in their schools (Birnhack & Perry-Hazan, 2020). The same study found that students have conflicting thoughts about CCTVs due to privacy concerns while seeing them as another part of the experience of organizational education (Birnhack & Perry-Hazan, 2020). As one high schoolchild stated:

The cameras are totally for spying on us and not for our security. The teachers actually try to catch us for every little thing. It feels that the teaching staff and the school leadership don't trust us.

The last study presented is that of Tran et al. (2022) who focused on stakeholders' attitudes about the use of CCTV in schools to decrease violence. Interviewing administrators, teachers, and recent students who had graduated from 49 high schools in Vietnam. Thematic analysis was applied. Even though most of the participants believed CCTV did not prevent violence in schools, privacy concerns were much less important than prevention. CCTVs were necessary due to their a) effectiveness in controlling school violence, b) serving other purposes to enhance overall schooling performance, and (3) insufficient existing methods. These necessary beliefs can so be utilized to promote the acceptance of CCTV in schools (Tran et al., 2022).

Risk/Threat Assessment

Determining the level of threat before an attack along with operational, and physical vulnerabilities can reduce risk. But determination is most difficult and requires expertise and resources most schools do not possess. The United States Secret Service investigated and determined that the "causes and modes of attacks were too unpredictable to be a reliable basis for common strategies to reduce the level of threat" (Chipley & Krimgold, 2021, p. 3-39). In such circumstances, protection must stem from addressing vulnerabilities adding surveillance, and removing design flaws to reduce attempted attacks. Response capabilities and preparedness can also decrease losses of life. Access control, intrusion detection, and the ability to conduct an immediate video assessment are important considerations. Many other steps can be taken to minimize the vulnerability of the schools to attacks that can be implemented, too many to list here.

It should be highlighted that the report of Governor Bill Owen in 2001 did NOT recommend all the security measures mentioned in the paragraphs above. Instead, it stated: "The Commission believes the use of security devices should be viewed as a preventive solution for specific problems at individual schools and not as a broad-based antidote to school violence in general" (Chipley & Krimgold, 2021, p. 3-41). Figure 2 Is an illustration of a risk assessment process model to help guide an evaluation procedure of vulnerabilities and mitigation operations.

Figure 2.

Risk Assessment Process Model
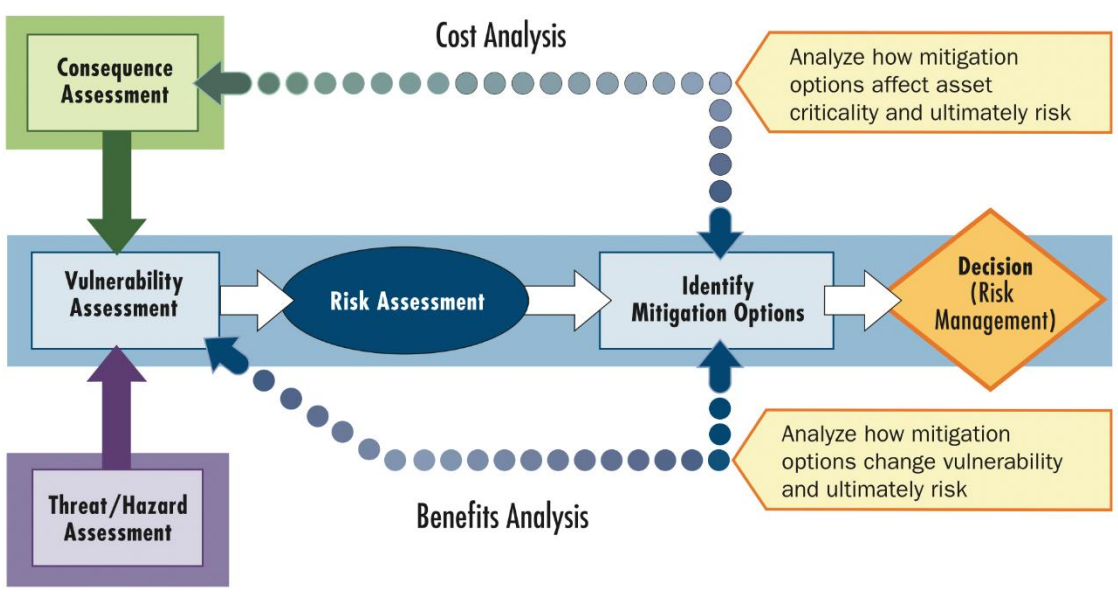
"Primer to Design Safe School Projects in Case of Terrorist Attacks and School Shootings. Buildings and Infrastructure Protection Series" FEMA-428: BIPS-07/January 2012. (2nd ed.) by Chipley, M., Lyon, W., Smilowitz, R., Williams, P., Arnold, C., Blewett, W., Hazen, L., Chipley & Krimgold, F., & US Department of Homeland Security. Place of publication not identified: Distributed by ERIC Clearinghouse. https://www.wbdg.org/FFC/DHS/bips_07.pdf

Role of Social Media in Detecting Threats of School Violence

Social media has become the new norm and can be very valuable when finding useful information about someone (Cornell, 2020). Xiong et al. (2017) stated that social media helps bring new information to light. This information can be a major asset when it comes to many

challenges that are going on in the world today, including school violence (Burton et al., 2021).

During previous school violence such as school shootings that happened in earlier years, social media did not exist, therefore, perpetrators who committed these acts did not have the means of this public media platform to communicate their issues to the people. Because social media is used by everyone both young and old, this media platform can help in identifying issues that adolescents may post on their social media page, that if detected can stop a major crisis such as a school shooting (Burton et al., 2021; Daou, 2019). Alsaedi (2017) said it best, that information that is broadcast through social media can enhance the situational awareness of a crisis. Social media can help in detecting threats of crisis before the occurrence of a school shooting (Burton et al., 2021; Daou, 2019; Shrestha et al., 2020).

There have also been efforts in preventing school violence using social media. Lawmakers have mandated that databases be combined with individual records from state law enforcement and social services agencies with information from people's social media accounts (Herold, 2018). This may seem like an invasion of privacy, but when it comes to keeping schools and children safe from threats, extreme measures such as this must be taken. Herold (2018) mentioned how the perpetrator of Stoneman Douglas High School, Nikolas Cruz had posted on social media threats of becoming a school shooter. If these threats are targeted and captured on social media ahead of time, then violence such as school shootings can be prevented (Byars et al., 2020).

Social media can also help in sustaining coverage of a school shooting. Aslett et al. (2022) stated that although the Parkland School shooting was not the largest school shooting to

ever occurred, due to the advancement of social media this school shooting had more sustained media coverage than any other school shooting in history. The reason for Parkland's sustained media coverage was due to Marjory Stoneman Douglas student's activism combined with social media skills in fighting to make sure that another school shooting would not occur at their school again (Aslett et al., 2022). The students at Marjory Stoneman Douglas School used their advanced social media skills in combating the widespread issue of violence in schools. Furthermore, after the Parkland school shooting, students decided to take the actions of Stoneman Douglas students and use the social media platform to counter school violence (Aslett et al., 2022; Croitoru et al., 2020).

Mitigation Bullying and Mental Illness for School Security

Mitigating bullying and mental illnesses as soon as these tendencies are revealed will help lessen the chances of a school shooting from occurring. Research by Li and Cheng (2017) found that poor relationships among students are associated with violent and devious behavior. One way to deter a school shooting is to help promote healthy relationships among peers. The same was found with the issue of mental illness. O'Reilly et al. (2018) stated that a way of tackling the growing issue of mental health is for schools to continue to promote positive psychological states. When promoting a safe environment that is against bullying and controlling the issue of mental health will ensure a positive atmosphere for the future of schools everywhere (O'Reilly et al., 2018).

Characteristics of School Shooters

Although school shootings can happen anywhere in the world, it is important to have

security and safety measures in place at all times. However, some schools in different areas are more susceptible to school violence than other schools. Research from Baird et al. (2017) and Peguero et al. (2020) found that the most severe school shootings happened in rural suburban schools that were White and had a low poverty rate. The research shows that most school shootings happen in schools that have a high number of students who come from well-established homes. Most school shootings occurred in schools that are grades 9th to 12th and range from the ages of 12 to 18 years old (Farr, 2019; Livingston et al., 2019; Paez et al., 2021). Most school shootings are prone to occur in high schools.

This study on school violence is utilized due to the lack of studies especially on school shootings. According to Peterson and Densley (2021), gun-related fatalities rose the highest in 2020 than any time before due partly to the challenges and stress of the COVID-19 pandemic. Since 2019 there was a 15% increase (Fridel, 2019). Four commonalities were identified between mass shooters, which include school shooters, but also include night clubs and churches for instance (Peterson & Densley, 2021). Mass shooters experienced trauma and childhood abuse. They also experienced crises before the shooting which may have been days or weeks before the incident. They frequently found a script online or in the media they followed or else an ideology. The last is that they had the opportunity to commit a mass shooting (Peterson & Densley, 2021).

Mental Illness and Warning Signs for Potential Violent Behaviors

When a person walks into a school building and kills innocent children, teachers, and faculty, many would think that the person had to have a mental illness (Flannery et al., 2021).

This assertion is a very well-warranted statement; however, it is important to understand mental illness and the warning signs that should be seen to prevent another catastrophe from occurring. When looking at past school shootings such as Columbine, Marjory Stoneman Douglas, and many others, it was found that these adolescents had some form of mental illness (Lee et al., 2022; Osborne, 2018). With that said, warning signs must be distinctly found and targeted.

The best way for such violent behaviors not to transpire when warning signs are given is if a student informs a teacher or faculty of the potentially violent student's behavior (Cornell, 2020). If warning signs about a student are transmitted to an administrator, then actions can be taken place, this is where school counselors and psychologists come into play. The role of the school psychologist is to counter these issues with effective interventions as soon as they are notified of the child's behavior (Flannery et al., 2021).

This data is very important in finding answers for improvement in school security measures because not all schools need the same type of security measures. For instance, little is written about school violence and school shootings in smaller private schools; most school shooting occurs in bigger public schools (Baird et al., 2017). This is not stating that smaller private schools do not need security measurements in place, but some schools may not need an increase in security measures.

Restorative Justice as a Preventive Measure for School Shootings

Restorative Justice can be used to resolve many types of conflict in schools in addition to using the practices of restorative justice as a preventive approach to build relationships in communities such as schools (Fox & Fridel, 2018; Lodi et al., 2021). In the aftermath of harm

that was suffered restorative justice can build a sense of trust and heal the wounds in the social fabric Restorative Justice is a scientific-based practical intervention that has been shown to be effective in reducing violence in schools (Fox & Fridel, 2018; Lodi et al., 2021).

Summary

Although school shootings are not a common occurrence they are still occurring (Haeney et al., 2018; Livingston et al., 2019). Policyholders have still yet to find a resolution therefore, it is up to researchers to find solutions. Columbine was the start of it all for this shooting showed many people that there was a need for the presence of tighter security in United States public schools. Security measures such as metal detectors, police officers, and school lockdowns have been shown to be a success. Having metal detectors present in schools can detect deadly weapons such as guns, knives, and even bombs. However, having a police officer in schools has brought some negative tension, but research has found that many teachers find it to be a safer environment when a police officer was present on school grounds. Even with all the initiatives that have been implemented, still, there is no end to school violence. Policyholders and researchers must come together to find better solutions to protect students, teachers, and faculty. Although it is important to understand the cause of school violence and school shootings, it is just as vital to implement good security measures to keep students safe from hostile and violent attacks in schools.

CHAPTER THREE: METHODS

Overview

Chapter Three presents the methodology for this study. Included are the rationale for choosing the qualitative method and phenomenological design, procedures followed for data collection, and data analysis techniques that were conducted. The criteria for choosing participants, how they were approached, and how the school district was approached were also discussed in this chapter. The ethical considerations are explained along with the different aspects of trustworthiness.

Design

This study explored strategies implemented to strengthen and improve school security from the risk of school violence. Their knowledge was collected from school personnel such as principals, vice principals, and district supervisors, in the Southeast United States. Participant data were collected through semi-structured interviews with school personnel from schools in the South Central and South Eastern regions of the United States. Participants were also recruited from five schools and one school district. These schools included two medium-sized elementary schools, one medium-sized middle school, a large-sized high school, a large school district, and a medium-sized learning center that serves as a school. All participants, including the participant recruited from a school district had prior experience as a school principal.

Moustakas (1994) was the founder of the qualitative phenomenological approach. In qualitative research, there are multiple realities because reality is locally constructed (Denzin &

Lincoln, 2011). The phenomenological approach focuses on the individual perspective of the participants (Lester, 1999; Moustakas, 1994). Creswell and Poth (2016) posited phenomenological inquiry can be characterized by:

- An emphasis on the phenomenon as a single concept

- the importance on broad philosophical assumptions

- Interviews are the common technique for data collection

- Data analysis moves from narrow units to wide-ranging themes

- A description of the essence of the phenomenon is the basic conclusion.

Research Questions

RQ1: What steps have been taken to mitigate school violence, which includes school shootings?

RQ2: What type of training have school personnel received to prevent and respond to school violence?

RQ3: What are some additional strategies that can be put into place and how can they be implemented?

Setting

The interviews took place on Zoom, which is commonly used to communicate over the internet. Using this type of technology to conduct the interviews coincides with the established safety regulations due to the COVID-19 pandemic. There were multiple schools the participants were drawn from, and the schools have a variety in race and ethnicity enrollment, as well as a

range of sizes of student enrollment which strengthened the validity and reliability of the study.

Participants

This study involved the interviews of 10 participants. Participants were school officials who have the responsibility of mitigating threats of violence in schools in the South Central and Southeastern regions of the United States. Creswell and Poth (2018) pointed out that in phenomenological studies sample sizes can range from one to 325, yet others have suggested three to 10. Two authors agreed that 10 was a good number to interview as in-depth rich descriptions are the aim of interviewing (Creswell & Proth, 2018).

Purposeful sampling was used which enables the researcher to determine which volunteers not only fit the criteria for participation but also possess the knowledge and their ability to be articulate, honest, and willing to share (Creswell & Poth, 2016). While Yin (2015) asserted that one needs to consider the composition of the sample. Participants in this study all had experience with the responsibility of mitigating school violence.

The criteria to be a participant in this study were that they must have at least one year of experience in their current position at the school in which they are employed. In addition, participants must have the authority of mitigating violence which can vary widely but both physical and emotional (threats) were included. Participants consisted of principals, vice principals, and district superintendents. Participants do not have to of had direct experience with school shootings. All of the participants had experience as a principal in their careers.

Procedures

Approval for the proposal from the IRB of Liberty University was received. After approval was granted, information about the study was emailed to the schools to seek permission to conduct the study. The permission letter is located in Appendix A. When permission was granted, each employee who fit the criteria for employment was contacted via email to ask if they would like to volunteer for the study. Included was a short questionnaire asking questions to confirm their eligibility to participate. When that was sent back to the researcher the Consent form was sent for participants to sign and return. The consent form is located in Appendix B. There were ten participants who agreed to partake in the study, and ten individuals were interviewed for the study. Participants were screened based on a pre-determined criteria provided in Appendix C. The researcher then went through the returned forms and then appointments were scheduled for each participant. Three days before the appointment each was contacted again with a reminder of the appointment and a link to Zoom to meet the researcher. Then the interview was conducted.

All interviews were audio recorded using the features on Zoom. After the interview was complete, the researcher transcribed them and sent them back to the participant for member checking. No changes were made by the participants. After all the interviews were completed data analysis began following the six steps outlined by Braun and Clarke (2006, 2019). The final report was then composed using quotes from participants' answers to the interview questions and prior relevant literature for support, thus forming Chapter Four and Chapter Five was then composed.

The Researcher's Role

The researcher's role in this study was primarily as an interviewer, transcriber of interviews, analysist, and composer of the final reports. The researcher also composed the discussion of Chapter Five using her knowledge from the prior literature and data from the interviews to interpret the findings to answer the research questions.

The role of the researcher was to bring to light the issues of school violence and the implications that can possibly help in determining if improvements are needed to accomplish the goal of helping to keep students, faculty, and staff safe from violent acts in schools. The findings can help not only faculty and staff, but the findings can also help in finding solutions whereas if guns are needed in classrooms as well as in the hands of (SROs) in hope of keeping schools safe from harm. These findings can assist policymakers in helping to determine prevention strategies and policies for mitigating school violence going forward.

Data Collection

Data collection started after approval from the IRB. Permission to recruit was obtained in writing from the school administration. School administrators from the selected schools were given recruitment letters via email to inform them of the study in an effort to recruit participants. Prospective participants were provided a letter of informed consent and interviews did not commence until a signed informed consent form was received. This process continued until 10 participants agreed to participate and sent the letter of informed consent back to the researcher. In total, 11 participants initially agreed to participate in the study, however, interviews were conducted with a total of 10 participants due to one participant no longer having availability.

Interviews

The collection of data was done by semi-structured interviews. Open-ended interview questions were provided to the participants that are designed to answer the research questions. Interview questions are located in Appendix D. Follow-up questions were utilized for clarification and to explore deeper. Semi-structured interviews are commonly used in phenomenological studies (Creswell & Poth, 2018). Interviews were recorded via Zoom and transcribed by Trint (https://trint.com). Transcripts were sent to participants for their review and member checking once the transcribing is complete. Member checking ensures accuracy by providing the participant the opportunity to review the transcript before data is analyzed (Birt et al., 2016). Member checking is important because the researcher may impose their values, personal beliefs, or bias onto the research process (Mason, 2017). If participants find the transcripts inaccurate, the participant can send comments to the researcher about what needs to change. Only the researcher had the authority to determine if the comments the participants sent required adjustments to the transcripts. Once all the interviews were transcribed and members checked the data analysis proceeded.

Data Analysis

Data analysis consisted of the six steps of thematic analysis described by Braun and Clarke (2006, 2019). The first step is to become acquainted with the data by reading over the transcripts several times one at a time. Simultaneously, the researcher noted any biases, values, or personal beliefs in a journal so that she did not interfere with the analysis process and impair understanding. This is referred to as reflexivity, which is a process of acknowledging the work

by becoming aware of the reflective and relational nature of the task (Russell & Bohan, 1999).

Every participant and researcher brings to the interaction of the interview pre-existing

perspectives and experiences (Bronfenbrenner, 1979). The knowledge that is generated is co-

created by that interaction (Flick, 2022). Therefore, the researcher needs to continually mediate

and evaluate their expectations and understandings while viewing the data from a lens of

subjectivity (Bronfenbrenner, 1979).

Data were collected and analyzed to recognize emerging themes to answer the research

questions. Dedoose software was used to conduct the code. The codes that appear most often

were grouped into themes. The most common themes were utilized to answer the research

questions. The data analyzed were applied to the research questions once saturation is reached.

Quotes were used from the participants that are then backed up with prior relevant

literature. (Braun & Clarke, 2006, 2019). Using the lens of the SCP model to view the

participant's answers allowed a better understanding of the participant's perspectives, which in

turn answered the research questions. Participant data were triangulated among participants and

existing literature.

Trustworthiness

Trustworthiness has been debated since the publishing of Lincoln and Guba's seminal

work in the 1980s (Guba & Lincoln, 1981, 1989; Lincoln & Guba, 1985). The validity was

introduced as part of establishing the trustworthiness of a study to fully understand the social

context of the phenomenon must be taken into account for the researcher to know what the

meaning is to the participant (Denzin & Lincoln, 2011). Trustworthiness is made up of these factors: credibility, dependability, and transferability (Lincoln & Guba, 1985).

Credibility

Noble and Heale (2019) posits that credibility refers to how truthful and how believable the research is. Credibility is one of the vital stages to a research that one must not look over. Initiating trustworthiness in research is crucial in administering credibility in research (Patton, 2015). Credibility was maintained in this study through member checking, triangulation of data among participant responses, and the use of qualitative data software Dedoose.

Dependability and Confirmability

Dependability and confirmability are similar to reliability in quantitative studies and deal with consistency, which is addressed through the provision of rich detail about the context and setting of the study. Dependability ensures reliability and consistency within the study. Dependability fosters trustworthiness by focusing on whether the study would yield the same results if conducted twice. Dependability was maintained in this study by utilizing a sample that represented schools from several different states. Triangulation among participant responses and with extant literature also fostered dependability in this study. Participant responses developed themes to answer the research questions. Participants were provided the same interview questions to ensure dependability. Confirmability also relates to trustworthiness in the study by ensuring that the findings emerged from participant responses and not from the researcher's personal motivation or biases.

Transferability

Transferability is another aspect of qualitative research that is associated with trustworthiness; it refers to the possibility that what was found in one context applies to another context, population or setting. Transferability was maintained in this study by utilizing a sample that each had experience as a school principal. By collecting data from participants through interviews based on pre-determined interview questions, the researcher was able to gain an in-depth understanding of their dealing with violence in the school setting and mitigation strategies.

Ethical Considerations

All of the participants consisted of educator personnel who have volunteered to participate in the study. The aim was to ensure the safety of the participants as well as to minimize the risk (McCosker et al., 2001). Confidentiality was met by not using any participant identifiers such as names or their employers. Furthermore, confidentiality was met by being labeled as numbers. Participants were required to sign an informed consent letter and were informed they have the right to quit anytime without incurring any consequences. The informed consent form is located in Appendix B.

All of the data on the personal computer of the researcher was password-protected for security. In addition, any copies kept on a flash drive or paper will be kept in a locked cabinet to which only the researcher has the key.

Summary

This chapter presented the methodology of the qualitative phenomenology study of the knowledge held by participants of threats of violence to school personnel. The SCP model guided the study, the objective for using the model is to improve the understanding of violence and the impact of potential strategies for the prevention of violence. Data were collected through interviews with 10. Participants came from schools in the South Central and Southeastern part of the United States and have held the role of principals, vice principals, and district superintendents. Each participant had experience with the responsibility of protecting students and helping to find better mitigation strategies for their schools. Thematic analysis was applied to determine commonalities in the answers of the participants who are expected to answer the research questions. All data factors of how the researcher plans to ensure the trustworthiness, validity, and reliability of the study were explained. Procedures to ensure the research is conducted ethically were also included.

CHAPTER FOUR: FINDINGS

Overview

The purpose of this qualitative phenomenological study was to understand the threats of school violence to children and school personnel employed in the South Central and Southeastern part of the United States and to identify strategies to mitigate these threats. Data was collected for this study through interviews with principals, vice principals, and district superintendents who had at least one year of employment at their school. Themes were developed for threats of school violence to children and strategies to mitigate these threats. This study was an exploration of strategies that could be implemented to strengthen and improve school security from the risk of school violence. Despite steps taken to prevent school violence such as increasing security and better responses to school violence, the number of school violence is still increasing in the United States (FBI, 2020).

The data analysis technique applied in this study was thematic analysis (Braun & Clarke, 2006; 2019). The thematic analysis involves steps in coding and clustering the findings into themes of commonalities (Braun & Clarke, 2006; 2019). Thematic analysis was used for the interviews and surveys. In the current study, forming the data into codes and then into clusters allowed a better understanding of threats of school violence and the identification of innovative school security measures to mitigate school violence. Data from each interview and each survey were thematically analyzed separately followed by triangulation comparing the data with each data collection technique. The literature review supplied insight into the known and unknown information regarding school violence, then that information was used to support the themes that

emerged from the analysis in the final report. Reflexivity was also implemented simultaneously to mitigate personal biases, values, and beliefs through the use of a journal the researcher kept throughout the research process. The journal enables the researcher to become aware of the reflective and relational nature of the task (Russell & Bohan, 1999).

Using the SCP model the following questions supplied a focus to examine and evaluate threats of school violence and strategies to improve the mitigation thereof changing the environment is a core principle of decreasing or even preventing crime from occurring (Clarke, 2019). By understanding how people successfully commit crimes those same factors can help craft interventions so that the opportunities to commit crimes are no longer present thereby preventing the crime (Freilich & Newman, 2017).

RQ1: What steps have been taken to mitigate school violence, which includes school shootings?

RQ2: What type of training have school personnel received to prevent and respond to school violence?

RQ3: What are some additional strategies that can be put into place and how can they be implemented?

To draw conclusions related to the research questions, qualitative semi-structured interviews were conducted with school personnel to collect data. School personnel also completed a survey. The results were triangulated to gain a deeper understanding of the threats

of school violence and to identify strategies to mitigate school violence. Transcripts of both the interviews and the survey were triangulated.

After describing the demographics of the participants, the chapter presents the findings gained from the analysis. The word subjects followed by 1, 2, 3, etc. are used to protect the confidentiality of the participants and the role of the participants are given to help identify who each partaker in the research. How each individual theme was developed is described using the answers from the participants. The chapter ends with a summary.

Demographics of Participants

A total of 10 participants were selected because each participant served as an individual case study. Thematic analysis was applied to participant responses to develop emerging themes to answer the research questions. Case studies depend on multiple sources of data to connect in a triangulation fashion (Yin, 2018). According to Creswell (2018), case studies usually include about four to five cases. Creswell and Guetterman (2019) posit that larger numbers of cases can become bulky and can result in superficial data due to the need to report details about each participant in the study. The researcher selected 10 participants because this sampling provided enough rich information to reach saturation without exaggerating data.

The 10 participants utilized in this study consisted of varying descriptive demographics. Six participants were females and four participants were male. All participants had over 10 years of administrative leadership roles within the school districts. Experience included principals, assistant principals, and director experiences. All participants were principals at their schools,

however, four participants who were former principals went on to remain in the school system but continued with higher positions at the district level.

Recruitment materials that detailed the study was provided to school administrators in various school districts in the southcentral and southeastern regions of the United States, that conveyed information about the study to potentially qualified participants within their school districts. Participants were screened and a total of 10 were selected. The screening process was meticulous, and each participant had to meet all requirements of the screening questions that can be found under (Appendix C). After the requirements were found to be met all participants were contacted and the consent form was sent to each individual and signed. Table 1 provides a summary of the results.

Table 1

Description of Participants (n=10)

Participants By Subjects	Gender	Years in Administration	Highest Rank in Administration
Subject 1	female	15	Principal
Subject 2	female	33	Assistant Principal
Subject 3	female	23	Principal
Subject 4	female	34	Assistant Principal

Subject 5	female	17	Assistant Principal
Subject 6	female	24	Principal
Subject 7	male	14	Principal
Subject 8	male	15	Director of Student Services
Subject 9	male	20	Chief of Staff
Subject 10	male	33	Principal

Subject 1

15 years

Experience - School Improvement Specialist and served as assistant principal at a high school

Subject 2

33 years

Experience- Assistant Principal at a high school

Subject 3

23 years

Experience- Principal and served as an elementary teacher

Subject 4

34 years

Experience- Assistant principal at a high school and served as a teacher

Subject 5

17 years

Experience- Restorative Justice Specialist and served as an assistant principal at an elementary

school

Subject 6

24 years

 Experience- Principal and served as assistant principal, and was Dean of Students and a teacher

Subject 7

14 years

Experience- Serves as Principal at an elementary school and served as teacher

Subject 8

15 years

Experience- Director of Student Services and served as Principal of a high school

Subject 9

20 years

Experience- Chief of Staff for his school district and served as principal of elementary school

Subject 10

37 years

Experience- School Effectiveness Specialist and served as principal of high school

Results

Theme Development

Through a qualitative multiple case study, the perspectives and experiences were captured from 10 experienced administrators on their experiences of violence within the schools. All 10 participants had at least 15 years of administration experience. Each participant had experience as a principal.

Formal approval was obtained from each participant, because each state is different, the researcher did not have to go through the school districts for approval, all individuals the researcher spoke with gave permission to interview them. A recruitment email was approved by the IRB at Liberty University (Appendix C) and was used to recruit participants from schools in Mississippi, North Carolina, Georgia, and Louisiana. All 10 participants were screened via the IRB approved screening criteria on the Approved Informed Consent Form and all participants were contacted via phone and email. The participants fulfilled the screening criteria and signed a

copy of the Informed Consent Form. The Informed Consent Form was sent to each participant via email.

Each participant signed and scanned the consent form and sent it back over to the researcher by email. Each interview was conducted via zoom, this was done to ensure comfortability for the participant. Each interview process was transcribed through the Trint software. Each transcript was reviewed by the researcher through the voice recording to ensure accuracy of what the participant was saying. Once the transcript was transcribed by the researcher, the researcher emailed the transcript over to the participant for member checking. No participants made any revisions, everything was cleared and good to move forward.

Furthermore, the data was analyzed in the computer-assisted qualitative data analysis software Dedoose using the inductive, thematic analysis recommended by Braun and Clarke (2006; 2019). The procedure had six steps. In the first step of the analysis, the data were read and reread in full to gain familiarity with them (Braun & Clarke, 2006). The purpose of this step was to gain an understanding of the dataset as a whole, to be able to identify patterns within and across the different participants' responses. During this step, handwritten notes were made regarding potential patterns in the data, including repeated words, phrases, and ideas.

Table 2 of the analysis involved coding the data (Braun & Clarke, 2006). The participants' responses were first broken down into phrases or groups of phrases that each expressed one idea relevant to addressing a research question. Those data excerpts were then assigned to initial codes, with different data excerpts that expressed similar meanings being assigned to the same code. The following statement from Subject 8 was an example of a data

excerpt: "We have locked all exterior doors, we lock those doors, so those doors are locked at all times." This response indicated the relevant meaning that exterior doors were always locked at Subject 8 school to prevent unauthorized entry. The response was assigned to a code, each code was labeled with a brief, descriptive phrase that summarized the meaning of the data assigned to it. The code to which Subject 8 response was assigned was labeled, 'locked doors.' A different participant, Subject 1, stated, "exterior doors are closed and locked, just so as not to allow any entrance throughout the building." Subject 1 statement had a meaning similar to that of Subject 8 response, so it was assigned to the same code, 'locked doors.' Overall, 147 data excerpts from across the 10 transcripts were assigned to 26 codes. Table 2 indicates the initial codes and the number of data excerpts assigned to each of them during Step two of the analysis.

The number of participants who contributed to the code in their schools were assigned to the specific code under 'n of participants contributing,' and the number of times that precise code was mentioned throughout the interview was matched to that specific code under 'n of data excerpts included.

Research Question Responses

RQ1: What steps have been taken to mitigate school violence, which includes school shootings?

RQ2: What type of training have school personnel received to prevent and respond to school violence?

RQ3: What are some additional strategies that can be put into place and how can they be

implemented?

Table 2

Initial Codes

Activity, alphabetical order	*n* of participants contributing (*N*=10)	*n* of data excerpts included (*N*=147)
Active shooter drills	9	13
Arming security personnel	1	2
Cameras	4	4
Communication by reporting potential threats	2	3
Gaining community support to reduce school violence	1	1
Conducting a risk assessment	9	11
Dedicated security personnel	6	10
Established relationship with first responders	5	5
Fences and gates	4	6
Having a crisis plan and team	8	11
Informing parents of campus strategies and issues	3	3

Lobby guard and ID check	4	6
Locked doors	9	19
Long-term planning is needed	1	1
No additional strategies	4	4
Open campus	1	1
Open door alarm	1	2
Panic button	2	2
Partnering with mental health providers	2	2
Roles assigned in advance	2	3
Safety training	6	8
Single access point	6	9
Structural mitigation needs	1	2
Students and staff need preparation	5	5
Trained to close doors	4	6
Training students	6	8

In Step three of the analysis, themes were formed (Braun & Clarke, 2006). Themes were formed by grouping related codes. The primary themes are boldened on the chart below. For

example: communication, conducting a risk assessment, dedicated security personnel are all

forms of violence prevention and mitigation steps, which is the primary theme. All the codes

that were similar or had similar meaning were all grouped together. After that they were broken

down and grouped into 4 preliminary themes. Codes were identified as related when the data

assigned to them expressed different aspects or elements of the same overarching idea. For

example, the code 'locked doors' was grouped with six other codes, including but not limited to

'lobby guard and ID check,' 'fences and gates,' and, 'single access point.' The eight codes were

identified as related because they all indicated mechanisms and procedures that the participants'

schools utilized to prevent unauthorized entry, as a violence prevention strategy. Overall, the 26

codes were grouped into four preliminary themes. Table 3 indicates how the codes were grouped

to form preliminary themes.

Table 3

Grouping of Codes into Themes

		n of data
Theme	*n* of participants contributing	excerpts included
Code clustered to form theme	(*N*=10)	(*N*=147)
Violence prevention and mitigation steps	10	46
Communication		

Conducting a risk assessment

Dedicated security personnel

Established relationship with first responders

Having a crisis plan and team

Informing parents

Roles assigned in advance

Unauthorized entry prevention   9   49

Cameras

Discrepant data - Open campus

Fences and gates

Lobby guard and ID check

Locked doors

Open door alarm

Panic button

Single access point

Training   10   37

Active shooter drills

Partnering with mental health providers

Safety training

Trained to close doors

Training students

Strategies for future implementation	10	15

Arming security personnel

Community coalition

Discrepant data - No additional strategies

Long-term planning is needed

Structural mitigation needs

Students and staff need preparation

Step four of the analysis involved reviewing the themes (Braun & Clarke, 2006). The themes were checked against the original data to ensure that they corresponded to patterns of meaning within and across the participants' responses to apply triangulation. The themes were also cross-validated against one another to ensure that each one represented an idea distinct from the others.

In Step five, the themes were named (Braun & Clarke, 2006). First, the data assigned to each theme was reviewed to assess its meaning. Second, each theme was compared to the three research questions to identify which question it was relevant to address. Third, each theme was named with a propositional phrase that indicated the relevance of the data assigned to it to address the research question. Table 4 indicates how the preliminary themes were named.

Table 4

Naming of Themes

Preliminary theme label		Finalized theme name
Violence prevention and mitigation steps	→	Theme 1 100% of participants perceived that combatting violence prevention and mitigation were through risk assessment and crisis management planning
Unauthorized entry prevention	→	Theme 2. 100% of participants indicated mitigation strategies that are used in the prevention of unauthorized entry that can contributed to violence
Training	→	Theme 3. 90% of participants reported School personnel received active shooter training

Strategies for future implementation	→	Theme 4. 60% of participants reported a need for additional safety measures

Step six of the analysis involved presenting the findings (Braun & Clarke, 2006). The findings were presented by writing Chapters Four and Five of this study. This subsection has included a high-level overview of the findings. The following subsection is a more detailed presentation.

Research Question Responses

This subsection is organized by research questions. Under the heading for each research question, the themes used to address it are presented.

Table 5 is an overview of how themes were used to address the research questions.

Table 5

Alignment of Themes with Research Questions

Research question	Theme(s) used to address the question
RQ1: What steps have been taken to mitigate school violence, which includes school shootings?	Theme 1. 100% of participants perceived that combatting violence prevention and mitigation were through risk assessment and crisis management planning

	Theme 2. 100% of participants utilized structural features in preventing unauthorized entry to mitigate school violence
RQ2: What type of training have school personnel received to prevent and respond to school violence?	Theme 3. 90% School personnel received active shooter training
RQ3: What are some additional strategies that can be put into place and how can they be implemented?	Theme 4. 60% participants reported a need for additional safety measures

Research Question 1:

RQ1: What steps have been taken to mitigate school violence, which includes school shootings?

RQ1 focused on the steps that the participants' schools had taken to mitigate school violence, including school shootings. Two themes were used to address this question, including: (Theme 1) violence prevention and mitigation were through risk assessment and crisis management planning, and (Theme 2) prevention of unauthorized entry contributed to violence mitigation. The theme addressing the training provided to school personnel is presented under Research Question 2. The following subsections are presentations of the Research Question 1 themes.

Theme 1: Violence prevention and mitigation was through risk assessment and crisis management planning. All 10 participants contributed data to this theme. The findings indicated that the participants perceived conducting a risk assessment as an effective means of preparing to mitigate school violence. The participants also described having a crisis management plan and team as effective mitigation measures. 60% of the subjects also reported that their schools had dedicated security personnel, either in the form of (SROs) or security guards who were not police officers. 50% of the subjects reported that their schools had also established relationships with their local first responders as a mitigation measure.

All of the participants reported that they perceived conducting a risk assessment as an effective means of preparing to mitigate school violence, including school shootings. Participants defined risk assessments to mitigate school violence in saying, "a proper risk assessment will help determine areas of weakness, areas that need to be addressed to prevent these types of things [school violence] from happening." "Conducting a proper risk assessment helps to proactively address any issues before something bad happens." It was reported that having a risk assessment conducted by an outside party was effective. "Exponentially, especially when you have someone from outside to come in and do them, and so that's what has happened here." It was recommended that risk assessments should be conducted annually at all campuses in a school district, and that having an outside party conduct the evaluations contributed to their thoroughness:

"I encourage anyone to get a risk assessment done yearly. I mean, it may cost a penny, but get them done, and let somebody come in with a fresh set of eyes, disconnected to

you, to show you some problems that you have, and so, we had that done. They went to every campus we have, every campus, and they identified, hey, you might need to look at this."

Subjects reported that instead of hiring a contractor to conduct a risk assessment, their district invited feedback from stakeholders: "sometimes allowing students, parents, community teachers to complete those risk assessments can give you ideas they originally didn't think about. Everybody looks at stuff from a different perspective." It was recommended that administrators conduct informal risk assessments during walk-throughs of their campuses: "I definitely think that just walking around your campus, thinking like, 'what would we do here? What could we do here? How can we make this safer?' I think that's super important." "There was a risk management division," and that representatives of that department would visit schools to, "pinpoint some areas that were concerning," such as, "they came by and looked at doors, 'hey, let's get some of the stuff away from this door so that if kids, staff, have to escape, they can escape freely there." "The district has two liaisons who come to our building at least once a week to follow up that we are following the standards and protocols. So, on a weekly basis, we are evaluated and given feedback."

50% of participants further reported that having a crisis management plan and the team at their school was an effective preparation for mitigating school violence, including school shootings. "We have a Crisis Prevention Intervention Team (CPI) in place to help with that [school violence], a crisis prevention intervention team. So, that's one major thing that I think we have in place to help mitigate." "We have a what we call a SERT team, which is our safety

team. We meet regularly to discuss things that might potentially come up, we do drills

regularly." "Every school has to have a safety plan. In that safety plan, it explains to all of our

staff what they do for school violence." "We do have a crisis plan that we present to our school

board every year in September . . . that all of our teachers everyone should be familiar with." It

was reported that the crisis management plan at their school had assigned roles for personnel to

assume in the event of school violence:

> "We all have this flip chart of responsibilities that are outlined in our crisis plan. We
>
> have someone in charge of social workers or someone in charge of nurses. I'm in charge
>
> of the ministerial staff, getting them there. We have someone who will be at the
>
> command station and then someone who will be at the reunification site as the leader of
>
> that station."

60% of participants reported that their school sites had dedicated security personnel.

"We have four SROs who are armed, but we also have some security guards, and they're also

armed." "There are eight people covering two schools, and one of them on both campuses is

going to be at the front door. As soon as someone walks in, they are going to see somebody

there with a gun." "So, this year, we actually got an SRO three days a week. But what he does

is, he does a walk-through every day, but he works on campus three days a week." "I have two

SROs, and I think that both of them were trained pretty well by [the local police department] . .

. one of my officers is a SWAT officer."

50% of participants indicated that as a violence mitigation measure, they had established

relationships with their local first responders' "keeping those relationships [with first responders]

very positive. I allow our local police department to come in. They'll do a walkthrough, things of that nature." "They're normally here for about 30 minutes, and they just kind of drive through, check, make sure everything looks okay, no suspicious behavior, and they'll let me know when they are on campus and when they leave." "They got the local police department involved in the training." Thus, 100% of the participants reported enacting measures in preparation to mitigate school violence, including school shootings. Conducting risk assessments, having a crisis management plan and team in place, having dedicated security personnel, and coordinating with local first responders were the most frequently reported preparations for non-structural mitigation. The following theme addressed structural mitigations.

Theme 2: Prevention of unauthorized entry contributed to violence mitigation. The participants indicated that they utilized structural features to mitigate school violence. The most frequently reported structural mitigation measure was locking all exterior doors and keeping them locked at all times, particularly when this system was used to funnel all visitors to the campus to a single, guarded access point where they would have to present ID before being admitted to the rest of the school. Fences and gates and cameras were also used to prevent unauthorized entry on 80% of participants' campuses.

90% of participants reported that all exterior doors at their schools were kept locked, and the remaining 10% reported providing discrepant data indicating that they had an 'open campus,' without locked doors. "We have locked all exterior doors. So, those doors are locked at all times." "They just check exterior doors to ensure that they are closed and locked, just so as not to allow any entrance throughout the building." "No one gets into this building unless they are

buzzed in, we have the doors locked." "Every door is locked. There's only one door that people are allowed to enter." On 60% of participants' campuses, the policy of keeping all exterior doors locked at all times was used to funnel visitors through a single access point. "Once their [visitors are] buzzed in, they're only allowed to enter one office. And the person who's in that office has to actually mash a button under her desk in order to allow you entry into the rest of the school building. So, the worst thing that could happen is that you are buzzed in, and you're able to injure that one person that's in that one office. And she actually sits behind a bullet-resistant screen."

"There is only one way in and one way out." "We have protocols in place to ensure that no one comes into our building unless someone buzzes them in. Our secretaries have cameras, and we can see who it is, ask them what they want, then buzz them in." 60% participants' schools also had a policy of using a single access point to check the IDs of visitors before admitting them to the rest of the building. "We have where our visitors check-in, we called it a lobby guard, where they put their driver's license in and they run a little background check on them." Background checks are run on all visitors who would interact with students: "we are mandated to have every visitor complete a background check. If you volunteer for any interaction with kids, you have to be a registered volunteer. That is even to come to eat lunch with your child." There are some instances where some parents could not enter the campus: "unfortunately, we've had instances where if there are parents who are registered offenders that are not to be on campus, it is going to send that message, and the police will be dispatched if that parent is on campus." Another participant reported that "only teachers and administrators and district personnel have access to

the building." "All teachers are required to have a visible ID while they're on campus, not only teachers but administrators as well. You have to have your ID, and it has to be visible."

40% of subjects reported that fences and locked gates were used to mitigate violence by preventing unauthorized entry to the campus. "Once we put that gate up, it just completely locks our campus down, no one can walk through. You cannot walk through this campus, you just don't have access." "We do have gates that are locked that keep the perimeter secure."

40% of subjects indicated that their schools had security cameras. "We have cameras for our doorbell," to enable staff to identify visitors before admitting them. "We have a camera system." Thus, 100% participants indicated that their schools relied to some extent on structural features to mitigate school violence. The most frequently reported structural security measure was locking exterior doors, which were often used to funnel visitors through a single access point where they could be identified prior to being admitted. 80% of subjects' schools also used fences, gates, and security cameras for added security. The following theme addressed the kinds of training provided to school personnel to mitigate school violence.

Research Question 2:

RQ2: What type of training have school personnel received to prevent and respond to school violence? The theme used to address this question was:

Theme 3: School personnel received active shooter training. 90% participants reported that their schools' personnel underwent active shooter training to teach them what to do in the event of a school shooting. Responses that school personnel were trained to implement

included hiding, turning off lights, and barricading doors. 40% of participants also reported that independently of active shooter drilling, their staff was trained to keep exterior doors closed and locked. 60% of participants further indicated that students received some drilling and training in preparation to mitigate school violence.

One participant did not report that their staff received active shooter training. "We do active shooter or intruder drills, and that's something that happens once a month." "If we ring the bell or we give the alert, they know how to get out of sight, lock the doors." One participant reported that only the SERT underwent active shooter training, but that it was done off-campus under realistic conditions: "my SERT and administrative team, we have been through a training where it's off-campus, where you go through an active shooter drill, and they did it like it was an actual shooter. You hear the gunshots and everything."

"I took my staff this summer during the teacher workdays before school came back in session. I took them to an active shooter training that our district gives with in conjunction with the police department. And we went through a thorough, half-day training on what to do in the event of an active shooter. They taught us strategies to use in order to barricade the doors . . . I took everyone, and we closed down the entire school. So, secretaries went, custodians went. It wasn't just my certified staff."

"We have active shooter training, that is a mandated training that we participate in by the state level." "We are given regular, ongoing training in how to prepare for intruders. It's called CRAST, which is an acronym for Critical Response/Active Shooter [Training]." We're given that training twice a year. . . it's detailed and it's required, teachers cannot opt out of it. They are

required to be at their training and following the training." "Our school district just recently, this school year in the fall, had all employees go through active shooter training again." The district did a mock active shooter training . . . at a teacher in-service. They did not tell the teachers, and they did not warn anyone that it was going to happen. So, nobody knew that it was real or fake."

Independent of active shooter training, participants reported that school personnel were trained to ensure that exterior doors were always closed and locked. "We've been doing a lot of that practice just . . . making sure that the door catches so that it is all the way closed." "As administrators, we check teachers' doors at least twice a week, and then district personnel checks us." "If we happen to walk the hall and the teacher's door's unlocked, that teacher is given first a verbal reprimand and then a written reprimand for not following protocols."

60% of participants added that the students in their schools received some training or drilling for violence mitigation.

"We have strategies for students. The students here know what to do in case there is a lockdown. They know they cannot go to a classroom because no one's going to open a door. They got to find a safe place, get in there, and hide."

"We do drills regularly. We had some situation where it was just a drill, and we went through the drill, and students had to block the doors." "We practice ensuring that when they [students] leave from lunch, or when they leave for specials, that there is a child responsible for closing the door so that no doors are left open." Thus, the participants reported that staff and students received dedicated training in mitigation strategies for an active shooter scenario. Staff in some

schools were trained through realistic simulations in police facilities, and students and staff were also trained through drills in their schools. The following theme indicated mitigation measures that the participants described as needed but lacking at the time of the study.

Research Question 3

RQ3 was: What are some additional strategies that can be put into place and how can they be implemented? The theme used to address this question was:

Theme 4: Most participants reported a need for additional safety measures. 60% participants indicated that there were additional strategies they wanted to implement. The remaining 40% participants provided discrepant data indicating that there were no additional measures they wished to implement. The most frequently reported need was for measures to address the mental health concerns that would likely arise among staff and students in the aftermath of an incident of school violence. Some participants also mentioned a need for armed security personnel, long-term crisis management planning, and community involvement in school security.

20% of participants indicated a need in their schools for preparation to address the mental health consequences of incidents of school violence for staff and students.

> "The thing that we always point out that we lack is making sure that we have grounded or connected the mental component to all of this. Like, how do we really deal with trauma? How do we name this trauma and understand that we may have some post-traumatic stress that's happening? I think we focus so heavily on being physically prepared. . .

I'm sitting here thinking like, I never really talked to my staff about a mental part of this, right? How do you deal with the possibility of losing a student that was in your care?"

Another participant reported "we've never thought about what we can put in place in case something does happen," citing as a consequence of this lack of preparation that teachers had not been ready to calm frightened students after a drill: "I do have some elementary kids in my building. Some of them began to get frightened or panicked because they didn't know what was going on [during a drill]. And they had to be comforted by the adults." "Meeting the emotional needs that would need to be met if there were one [an incident of school violence], I definitely feel like there's some growth needed in that area." "The teachers, there's pretty much not a whole lot of proactive type of really training or professional development or anything like that for addressing the emotional part of the aftermath of something [violent] did happen."

Other mitigation needs were mentioned by only one participant each. One participant wanted to arm the staff member who screened and admitted visitors to the school building. "The only additional thing that I could think of would be to arm the person at that front office. She's the one that buzzes people in and out. . . she would be the only one that would be a fatality." There was a perceived need for a more long-term focus in school violence mitigation planning, referencing changes over time in technology and the availability of firearms. "You can't just look at the here and now. I think you have to look at the future one because technology is improving. And two, because access to guns or just weapons, in general, is so much easier." There was a perceived need for community involvement in maintaining school safety and preventing unauthorized entry to the campus: "I would love to think if we could have community

collaboration and cooperation, and just community members being aware of those that are trusted and not in our [school] zone." There was a need for additional fencing to funnel visitors through an entrance where they could be identified and screened: "If it were possible to fence the perimeter of our land that we're on, they won't be able to as easily access school property . . . Because as it stands now, literally I could just walk on campus." "If you see this fence, you see cameras, you're less likely to consider it [the school] an easy target."

Summary

Three research questions were developed to guide this study. RQ1 was: what steps have been taken to mitigate school violence, which includes school shootings? Two themes were used to address this question. The first RQ1 theme was: violence prevention and mitigation through risk assessment and crisis management planning. The findings indicated that the participants perceived conducting a risk assessment as an effective means of preparing to mitigate school violence. The participants also described having a crisis management plan and team as effective mitigation measures. Most participants also reported that their schools had dedicated security personnel, either in the form of (SROs) or security guards who were not police officers. 50% of the participants reported that their schools had also established relationships with their local first responders as a mitigation measure.

The second RQ1 theme was: the prevention of unauthorized entry contributed to violence mitigation. The participants indicated that they utilized structural features to mitigate school violence. The most frequently reported structural mitigation measure was locking all exterior doors and keeping them locked at all times, particularly when this system was used to funnel all

visitors to the campus to a single, guarded access point where they would have to present ID

before being admitted to the rest of the school. Fences and gates and cameras were also used to

prevent unauthorized entry on some participants' campuses.

CHAPTER FIVE: CONCLUSION

Overview

The purpose of this qualitative phenomenological study was to understand the threats of school violence to children and school personnel employed in the South Central and Southeastern part of the United States and to identify strategies to mitigate these threats. The problem is the risk of school violence and the need for innovative school security measures to mitigate school violence. Even though more security measures have been implemented the number of school violence is still increasing across the nation (FBI, 2020). The United States has more school shootings than any other developed country (Christensen, 2017; Fox & Fridel, 2018). The number one threat to the safety of students in schools is school shootings (Cuellar, 2018; Lenhardt et al., 2018). This qualitative phenomenological study aimed to understand the threats of school violence to students and school personnel employed in the South Central and Southeastern part of the United States and to identify approaches to mitigate the security threats.

There was a need for threat assessment as a school violence prevention strategy. A threat assessment strategy allows schools to investigate reported threats and develop specific responses according to the seriousness of the threat to prevent acts of violence by assisting troubled individuals before it escalates into acts of violence (Meloy et al., 2021). Evidence-based approaches to threat assessments in schools should be implemented based on rigorous scientific research (Meloy et al., 2021). The study fills this gap in the literature by providing various strategies for violence prevention in schools.

The knowledge gained from this study can help schools implement strategies to mitigate school violence. This knowledge is important for the safety of students and school personnel to effectively prevent school violence (Meloy et al., 2021). Clarke's (2029) SCP was used to gain a deeper understanding of school violence and identify strategies that can be implemented to mitigate threats of school violence. The study was relevant to the SCP model in terms of gaining knowledge to help change the environment to decrease or prevent crimes from occurring. By understanding how people commit crimes that same information can be used to craft effective interventions to eliminate the opportunity to commit crimes thereby preventing the crimes from occurring (Freilich & Newman, 2017). The SCP model guided the research question as each question was crafted to help participants explain what could be done the change the environment of the school to remove opportunities for people to commit crimes such as instituting violence prevention and mitigation steps identified by the participants. The following research questions were developed through the application of SCP to extract from participants how school violence could be mitigated or even prevented:

RQ1: What steps have been taken to mitigate school violence, which includes school shootings?

RQ2: What type of training have school personnel received to prevent and respond to school violence?

RQ3: What are some additional strategies that can be put into place and how can they be implemented?

These were the themes that emerged from the data analysis. The first theme was to conduct a risk assessment and develop a plan for crisis management. The second theme was the prevention of unauthorized entry. All school personnel need to receive active shooter training was the third theme that emerged from the data. The fourth and final theme was the need for additional safety measures to be taken. Each of these themes contributed to the SCP model in that they represent effective ways of mitigating or preventing school violence (Clarke, 2019).

Summary of Findings

After data analysis was completed, the findings highlighted conducting a risk assessment and having a crisis management plan and the team as effective mitigation measures against school violence. Participants also reported hiring dedicated security personnel as a mitigation measure. Regarding the prevention of unauthorized entry contributing to violence mitigation, participants indicated having utilized structural features to mitigate school violence, such as locking all exterior doors and keeping them locked at all times. Fences, gates, and cameras were also used to prevent unauthorized entry on some participants' campuses.

The findings revealed active shooter training among security personnel for future school emergency shooting attacks. Active shooter training teaches security personnel what to do in the event of a school shooting. Responses that school personnel was trained to implement included hiding, turning off lights, and barricading doors. The results also demonstrated that students received some drilling and training in preparation to mitigate school violence. Most participants reported a need for additional safety measures. The most frequently reported need was for measures to address the mental health concerns that would arise among staff and students in the

aftermath of an incident of school violence. Some participants also mentioned a need for armed

security personnel, long-term crisis management planning, and community involvement in

school security. Chapter Five includes an interpretation and discussion of the findings, study

limitations, implications, and recommendations for research.

Discussion

The discussion and interpretation of findings were based on research questions and

themes described below.

Research Question 1

RQ1 focused on the participants' schools' steps to mitigate school violence, including

school shootings. Two themes emerged during data analysis, as discussed below.

**Theme 1: Violence prevention and mitigation were through risk assessment and

crisis management planning.** The findings highlighted conducting a risk assessment as an

effective means of preparing to mitigate school violence. The crisis management plan and team

were also described as effective mitigation measures. Most schools had dedicated security

personnel, either (SROs) or security guards who were not police officers. Conducting a risk

assessment as an effective means of preparing to mitigate school violence, including school

shootings, may help determine areas of weakness and areas that need to be addressed to prevent

this type of school violence from happening. The findings imply that risk assessment identifies

areas of weaknesses that intruders may use so that they can be addressed before shooting

incidents. The findings are consistent with past research indicating that determining the threat

level before an attack and operational and physical vulnerabilities can reduce the risk of school

violence (Chipley & Krimgold, 2021).

Proper risk assessment helps proactively address any security issues before a shooting

happens. Participants recommended that an outside party conduct an annual risk assessment at

all school district campuses to enhance its thoroughness. The implication is that school violence

can be prevented through active and annual risk assessments at all campuses. The results add to

the previous research indicating that protection and prevention must stem from addressing

vulnerabilities, adding surveillance, and removing design flaws to reduce attempted attacks in

schools (Chipley & Krimgold, 2021). Response capabilities and preparedness can also decrease

losses of life. Access control, intrusion detection, and the ability to conduct an immediate video

assessment are important considerations (Meloy et al., 2021). Although the current study

reiterated the need for risk assessment, prior research indicated that a threat assessment strategy

allows schools to investigate reported threats and develop specific responses according to the

seriousness of the threat to prevent acts of violence by assisting troubled individuals before it

escalates to acts of violence (Meloy et al., 2021). Evidence-based strategies for threat

assessments in schools should be implemented based on rigorous scientific research (Meloy et

al., 2021).

The study indicates that having a crisis management plan and a team at school could be

an effective preparation for mitigating school violence, including school shootings. The findings

imply that having a risk management plan and team in schools helps to prevent violence and

more school shootings. As a result, schools need to have a crisis management plan to mitigate

school violence. The study supports earlier research indicating that risk assessment can rapidly locate and close in on threats to neutralize them as soon as the opportunity presents a resolution to the crisis ((Marquis, 2019). Marquis (2019) reported that first responders also have the authority to disrupt criminals before they become active shooters because in school shootings, the attacker aims to maximize casualties, and most happen within the first 15 minutes; therefore, waiting for a hostage negotiator may not be feasible. The goal of first responders is to prevent attackers from taking full control so they can cause more casualties, and a risk management plan can assist in achieving school shooting prevention goals (Simons & Richter, 2020). The findings have contributed to previous literature by establishing that risk management planning and teamwork in schools help to prevent more school violence.

The study highlighted the presence of a Crisis Prevention Intervention Team in place among schools to help with school violence, which is a crisis prevention intervention team. A crisis management plan helps to address school violence and provide safety to schools. As a result, all schools need a safety plan to help mitigate school violence and provide assistance in case of an emergency in schools. Though the current study reveals that crisis prevention intervention is the best, previous research demonstrates that schools should also be prepared to respond to school shootings and recover afterward (Straub et al., 2019). Emergency responders should be trained for evacuations, maintain safety, manage bystanders, apply basic medical techniques, and triage in the field as well as all first responder agencies, to ensure a good communication system is available (Straub et al., 2019). The study's findings have added to past

studies by revealing that crisis management plan helps to address school violence and provide safety to schools.

Schools may also have armed security personnel and security guards who have also armed in any attacks on students and schools. The security guards and officers need training in all security areas and are given guns. A violence mitigation measure can also be established through relationships with local first responders. The participants reported enacting measures in preparation to mitigate school violence, including school shootings. The findings add to past research demonstrating that although zero-tolerance policies were at their peak, having the presence of both security guards and police officers and security cameras on campus rose significantly as a school violence prevention strategy (Mallett, 2020). However, even with the significant rise in police officers and security cameras in schools, there was a need for security guards and officers to train in all areas of security and be given guns in preparation for any school shooting incident (Kodelja, 2019). Research findings contribute to previous literature by demonstrating that schools may need security personnel who are armed and security guards who are also armed for any attack on students and the school.

Theme 2: Prevention of unauthorized entry contributed to violence mitigation.

The study findings indicate that schools keep their exterior doors locked. However, one participant reported school's exterior doors remained open at all times. The policy of keeping all exterior doors locked at all times was used to funnel visitors through a single access point to mitigate any strange entry of people through school gates. The results imply the need for exterior locked doors and fences in schools to prevent the entry of unauthorized persons to

engage with students. The results align with empirical research highlighting that shooters can easily access schools when they are unfenced and proceed to where they begin shooting. Wooded areas surrounding schools provide hiding places and escape routes (Chipley & Krimgold, 2012). However, brick fencing can protect attackers that can approach undetected, and barred windows prevent the escape of students fleeing from the shooter (Chipley & Krimgold, 2012). Though locked doors can be a means of protection from shooters, during the Columbine High School shooting, many students and staff could escape using the numerous exit doors, but there was no protection from gunfire (Diliberti et al., 2019).

Most schools may also have a policy of using a single access point to check the IDs of visitors before admitting them to the rest of the building by conducting background checks on all visitors to the campus who interact with students. Based on federal background checks required for gun sales, Levine and McKnight (2017) indicate that an increase in gun sales is not unusual after a school mass shooting, which promotes the need for background checks among visitors entering the campus. Using security cameras in schools for doorbells enables staff to identify visitors before admitting them to keep the campus secure. Similar findings to current study results were established in past research, indicating that there are many different approaches to keeping schools safe such as security cameras and metal detectors (Musu, Zhang, Wang, Zhang, & Oudekerk, 2019). The findings have added to past research by revealing that schools may use security cameras to improve school safety and the safety of students and school personnel.

Research Question 2

RQ 2 focused on the training school personnel receive to prevent and respond to school violence. One theme emerged during data analysis, as discussed below.

Theme 3: School personnel received active shooter training. The results revealed that school personnel underwent active shooter training off-campus under realistic conditions to teach them what to do in the event of a school shooting. School administrators and certified staff participate in mandatory training, including preparing for intruders. The findings concur with previous literature demonstrating that being prepared and trained for shooters can help minimize shock and panic among school personnel and students as preparedness plans and emergency procedures such as lockdowns. There was a need for locations where students could hide to protect themselves against dangers (Wang et al., 2022). The study indicated the need for school personnel training to implement preventive measures, including hiding, turning off lights, and barricading doors. Consistent with current study findings, previous research also highlighted that one initiative given in securing schools from crime and violence was training programs for law enforcement personnel, students, and school staff to secure schools daily (Addington, 2019).

Independently of active shooter drilling, school staff should be trained to keep exterior doors closed and locked. Most participants further indicated that students received some drilling and training in preparation to mitigate school violence. Staff and students were trained through realistic simulations in police facilities and shooter drills in their schools on how to manage situations in the case of a school shooting. Research findings discovered the need for active shooter drilling among students and staff training on managing any school shooting emergency.

The current study results concur with past studies indicating that lockdown drills focus on getting students as far away from harm as possible (Dickson & Vargo, 2017). Saggers et al. (2021) and Jonson (2021) reported that this traditional lockdown drill involves moving all students out of sight, locking all doors, and remaining quiet. Lockdown drills help protect students from an active shooter being on campus, although students experience a sense of fear while going through the lockdown drills. Although shooter drilling has some positives, Nickerson and Schildkraut (2021) and Saggers et al. (2021) found that lockdown drills through emergency preparedness there and have some improvements, middle and high school students feel very unsafe. The results have contributed to previous literature by establishing the need for training in active shooter drilling among school personnel and students to prevent school violence and casualties in case of an active shooting in schools.

Research Question 3

RQ3 was based on some additional strategies that can be put into place and how they can be implemented. One theme emerged during data analysis, as discussed below.

Theme 4: Most participants reported a need for additional safety measures. The most frequently reported additional strategy was the need for measures to address the mental health concerns that would arise among staff and students in the aftermath of an incident of school violence. The need for armed security personnel, long-term crisis management planning, and community involvement in school security are additional strategies to mitigate school violence. While current study findings revealed arming security personnel to prevent school violence, previous literature highlighted a proposal to allow gun license holders the right to carry

firearms on campus and arm security personnel on campus (Gius, 2019; Schildkraut et al., 2018). Gius (2019) indicated that ten states allowed faculty, students, and school staff to carry concealed weapons on their college and university campuses as of 2018 (Gius, 2019).

A previous study by Sloan and Fisher (2022) stated that there had been a debate over carrying concealed weapons to keep everyone safe on college campuses. After the Virginia Tech shooting, supporters of concealed carrying of guns on campus argued that a good guy with a gun could stop a bad guy with a gun. The findings have added to the literature by suggesting that security personnel should be allowed to carry guns or armed as a long-term crisis management plan to prevent a school shooting.

One participant reported that the mental health component of responding to school violence had not been addressed. As a result, the results established the need for schools to prepare to address the mental health consequences of incidents of school violence for staff and students. Consistent with current research findings, previous research also established the need for support to increase mental health services for students and staff pre and post-school violence (Moore & Jackson, 2022). There is a need for funding mental health services, extracurricular, summer, and after-school programs, providing further training for school social workers, school counselors, and school psychologists in addition to other specified uses for the funds. The human dimensions of school violence are what need stronger focus (Moore & Jackson, 2022). O'Reilly et al. (2018) stated that a way of tackling the growing issue of mental health is for schools to promote positive psychological states. Promoting a safe environment against bullying

and controlling the issue of mental health will ensure a positive atmosphere for the future of schools (O'Reilly et al., 2018).

Arming the staff members who screen and admit visitors to the school building should be mandatory as a countermeasure to any expected attack on the school. Concurring with current study findings, past literature indicated that legal supporters, such as policymakers, argue that on-campus students feel much safer when armed people are present (Schildkraut et al., 2018). When someone is knowingly good and whom students and staff trust is on campus with an armed weapon, the feeling of security is spiked to a different level in the opinion of males (Schildkraut et al., 2018). In contrast to the current study findings, Price and Khubchandani (2022) concluded that there is no evidence that campuses are safer when they have concealed carry policies in place. The results of the current study add to the empirical literature by indicating that arming staff members should be mandatory to prevent school violence.

The presence of a police officer on school grounds was mentioned by participants reporting they felt safer this way. The presence of police officers at schools was an important factor that researchers stated to keep schools safe from active shooters (Bevan, 2019; Heise and Nance, 2021). However, Rogers et al. (2018) highlighted that having an armed, trained officer on campus did not have an impact to keep the shooting at Marjory Stoneman Douglas High School from escalating when a former student committed the crime because no one was watching who was coming and going from the school (Haddad et al. (2021). Even so, lessons learned from this shooting encouraged the Florida State Legislator to raise the age for a person to purchase a semi-automatic weapon, that weapon of choice for school shootings (Brezenski, 2018; Gius 2019;

Jonson, 2017; Kamal & Burton, 2018; McMaster, 2019). The current study contributed to the literature about the importance of police officers' presence on school campuses continually.

The study findings indicated the perceived need for community involvement in maintaining school safety and preventing unauthorized entry to the campus. Previous research reveals that most school incidents can be addressed through collaboration among school personnel and community resources (Pomeranz et al., 2021). However, law enforcement needs to talk to when local community and parents about the possessions of the student making such threats (Pomeranz et al., 2021). The findings have contributed to past research by demonstrating the need for community involvement in maintaining school safety.

Implications

The information from the findings could aid in understanding the threat assessment process to determine if improvements are needed and if they do what could be done to accomplish the improvements from the perspective of school officials. Parents, school personnel, police, students, and other stakeholders may use the study findings to better understand the threat assessment process and how policies are enacted to provide a safe school climate for students to be educated and instructors to teach. Schools can also use the study findings to arm their security personnel to prepare for the eventual school shooting. After the Parkland school shooting occurred, the Greensburg school district in Pennsylvania reviewed its protocols about fire alarms because Parkland students were exiting the school in mass in response to a fire alarm when the shooting began. Still, it was not possible to be prepared for any situation involving school shootings (Blad, 2018). Policymakers may use the study findings

to implement school shooting prevention strategies and policies enacted by all schools in the United States.

Schools can use the findings to implement shooter drilling programs to equip students and staff with key measures for combating school shooting incidents. Law enforcement departments can also use research findings to understand measures to be taken to improve school security, such as deploying security officers on time during school attacks and arming school security personnel with firearms to counterattack the shooters in school. District school leadership may apply the study findings to implement training programs for students, school staff, and security on handling school violence and prevention strategies, including locking gate doors and background checking school visitors.

Delimitations and Limitations

The researcher adopted a purposive sampling technique. The purposive sampling technique is prone to researcher bias because the researcher makes subjective or generalized assumptions while selecting the sample participants (Creswell & Poth, 2016). Another limitation was the criteria used to select participants indicating that they must have at least one year of experience in their current position at the school where they are employed. The limitation is that participants without such qualities with the best knowledge of school shooting mitigation strategies were left out, thereby affecting the transferability of findings. The geographical setting of the study also limited the study. The study's setting was in the South Central and Southeastern regions of the United States, which may limit the transferability of findings to other regions.

Recommendations for Future Research

Having adopted the purposive sampling technique, future studies should be conducted using random sampling to avoid researcher bias. The researcher recommends that future research consider participants with less than one year of experience who know about school violence, thereby enhancing the transferability of findings. The geographical setting of the study limited the study. The study's setting was in the South Central and Southeastern regions of the United States, which may limit the transferability of findings to other regions. In this regard, future research should be conducted in different geographical locations in the United States to permit the transferability and generalizability of findings. Although studies have indicated the need for mental health services to detect and identify signs of violent behaviors in students to prevent school violence, there is a need for further research to be conducted to determine the need for mental health services in the aftermath of the school shooting. Further research should be conducted to examine the need for arming school security personnel to prevent a school shooting.

Summary

This qualitative phenomenological study aimed to understand the threats of school violence to children and school personnel employed in the South Central and Southeastern part of the United States and to identify approaches to mitigate the security threats. A cause of this problem was the need for threat assessment as a school violence prevention strategy. Conducting a risk assessment and having a crisis management plan and the team is effective mitigation measures against school violence. The study highlighted locking all exterior doors

and keeping them locked at all times, using fences and gates, and using cameras to prevent unauthorized entry on campuses. The research identified active shooter training among security personnel for future emergency shooting attacks in schools as a measure to prepare for potential school shooters. Such training teaches security personnel what to do in the event of a school shooting. The findings also revealed that students should receive some drilling and training in preparation to mitigate school violence.

Additional measures, including measures to address the mental health concerns that would arise among staff and students in the aftermath of an incident of school violence, were reported in this study. Such measures would prevent mental health problems among school staff and students in the event of a school shooting. Measures such as armed security personnel, long-term crisis management planning, and community involvement in school security were also mentioned as the key strategy to mitigate school violence. The study findings have contributed to the previous literature and filled the gap in research by establishing various strategies and measures for mitigating school violence.

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APPENDICES

APPENDIX A: PERMISSION LETTER

Dear Potential Participant,

As a student in the Helms School of Government at Liberty University, I am conducting research as part of the requirements for a Doctoral Degree in Criminal Justice Homeland Security. The purpose of my research is to find better mitigation strategies when combatting this war of violence in schools, and I am writing to invite eligible participants to join my study.

Participants must be 30 years of age or older, must have worked in a position where they can implement changes and have a voice when it comes to security measurements in schools, such as working as a principal, administrator, school resource officer, etc. Participants, if willing, will be asked to complete an audio-recorded interview via Zoom. Participants will have the opportunity to review their interview transcripts to ensure accuracy. It should take approximately 60 minutes to complete the procedures. Names and other identifying information will be requested as part of this study, but the information will remain confidential.

To participate, please feel free to contact me and the consent documentation will be sent to you promptly, and from there an interview date and time will be scheduled.

A consent document will be emailed to you. The consent document contains additional information about my research. If you choose to participate, you will need to sign the consent document and return it to me either in person or via email prior to the start of the interview.

All participants will receive a $10 gift card for their time.

Sincerely,

Faith Derrick
Doctoral Candidate, Liberty University

APPENDIX B: CONSENT FORM

Title of the Project: Mitigating School Violence through the Lens of School Officials in Southern States

Principal Investigator: Faith Derrick, Doctoral Candidate, Helms School of Government, Liberty University

Invitation to be Part of a Research Study

You are invited to participate in a research study. To participate, you must be 30 years of age or older, and have a key role in managing security protocols in schools, such as working as a principal, administrator, school resource officer, etc. Taking part in this research project is voluntary.

Please take time to read this entire form and ask questions before deciding whether to take part in this research.

What is the study about and why is it being done?

The purpose of the study is to bring a deeper awareness of school violence in elementary, middle, and high schools, and to find better mitigation strategies to help end this war of school violence.

What will happen if you take part in this study?

If you agree to be in this study, I will ask you to do the following:

1. First task/procedure will be to participate in an audio-recorded Zoom interview that will take no more than 30 minutes, and this interview will be transcribed through Trint.

2. Second task/procedure will be transcript review. This procedure will take approximately 30 minutes, and this step will be done to ensure accuracy from the participant.

How could you or others benefit from this study?

Participants should not expect to receive a direct benefit from taking part in this study.

Benefits to society include a safer environment for students, teachers, faculty, and staff.

What risks might you experience from being in this study?

The expected risks from participating in this study are minimal, which means they are equal to the risks you would encounter in everyday life.

How will personal information be protected?

The records of this study will be kept private. Published reports will not include any information that will make it possible to identify a subject. Research records will be stored securely, and only the researcher and chair will have access to the records.

- Participant responses will be kept confidential by replacing names with pseudonyms.

- Interviews will be conducted in a location where others will not easily overhear the conversation.

- Data collected from you may be used in future research studies and/or shared with other researchers. If data collected from you is reused or shared, any information that could identify you, if applicable, will be removed beforehand.

- Data will be stored on a password-locked computer/in a locked file cabinet. After three years, all electronic records will be deleted, and all hardcopy records will be shredded.

- Interviews will be conducted via Zoom and transcribed through Trint. Recordings will be stored on a password locked computer for three years. The researcher and members of her doctoral committee will have access to these recordings.

How will you be compensated for being part of the study?

Participants will be compensated for participating in this study. At the conclusion of the interview, participants will receive a $10 gift card.

Is study participation voluntary?

Participation in this study is voluntary. Your decision whether to participate will not affect your current or future relations with Liberty University If you decide to participate, you are free to not answer any question or withdraw at any time without affecting those relationships.

What should you do if you decide to withdraw from the study?

If you choose to withdraw from the study, please contact the researcher at the email address/phone number included in the next paragraph. Should you choose to withdraw, data collected from you will be destroyed immediately and will not be recorded or included in the study.

Whom do you contact if you have questions or concerns about the study?

The researcher conducting this study Faith Derrick you may ask any questions you have now. If you have questions later, **you are encouraged** to contact Faith Derrick at phone number ▆▆▆ ▆▆▆▆ and/or email ▆▆▆▆▆▆▆▆▆ . You may also contact the researcher's faculty sponsor, Dr. Jarrod Sadulski at ▆▆▆▆▆▆▆▆ .

Whom do you contact if you have questions about your rights as a research participant?

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, **you are encouraged** to contact the IRB. Our physical address is Institutional Review Board, 1971 University Blvd., Green Hall Ste. 2845, Lynchburg, VA, 24515; our phone number is 434-592-5530, and our email address is irb@liberty.edu.

Disclaimer: The Institutional Review Board (IRB) is tasked with ensuring that human subjects research will be conducted in an ethical manner as defined and required by federal regulations.

The topics covered and viewpoints expressed or alluded to by student and faculty researchers are those of the researchers and do not necessarily reflect the official policies or positions of Liberty University.

Your Consent

By signing this document, you are agreeing to be in this study. Make sure you understand what the study is about before you sign. You will be given a copy of this document for your records. The researcher will keep a copy with the study records. If you have any questions about the study after you sign this document, you can contact the study team using the information provided above.

I have read and understood the above information. I have asked questions and have received answers. I consent to participate in the study.

 The researcher has my permission to audio-record me as part of my participation in this study.

_____

Printed Subject Name

Signature & Date

APPENDIX C: Screening Questions

1. What school or school district are you employed?

2. What is the title of your present position?

3. How long have you worked in your present position?

4. Have you completed any training for emergencies where violence of some type was involved?

5. Did you help developed implementation protocols for emergency situations?

APPENDIX D: INTERVIEW QUESTIONS

1. On a scale of 1 to 10, with 1 being the least and 10 the most or highest, please

2. respond to the following:

    a. My school is prepared for acts of school violence.

    b. Please provide feedback for why you chose the response you did

3. In the last 5 years, pick the number of years my school has experienced acts of school violence.

4. What steps has your school taken to prevent, prepare for, mitigate, respond to and recover from school violence?

5. On a scale of 1 to 10, with 1 being the least and 10 the most or highest, please respond to the following:

    a. My school has provided the necessary training to help prevent and respond to acts of violence on school property.

    b. Please provide feedback on why you chose the response you did.

6. On a scale of 1 to 10, with 1 being the least and 10 the most or highest, please respond to the following:

7. My school has done everything possible to improve the physical security of schools to prevent unauthorized people from entering campus.

    a. Please provide feedback on why you chose the response you did.

8. What type of structural mitigation strategies are in place at your school?

9. What non-structural mitigation strategies, such as program planning or educational classes, have been put into place to prevent or lessen the risk of a shooting from occurring within your school?

10. How have recent incidents of school violence influenced school security at your site?

11. On a scale from 1 to 10, has your school done enough to mentally prepare students, faculty, and staff for possible incidents of school violence?

    a. Please provide feedback on why you chose the response you did.

12. How can risk assessments of school campuses improve school security?

13. Are there unique things your school has done to increase security and provide a safe environment for students to learn? Can you explain, please?

14. On a scale of 1 to 10, with 1 being the least and 10 the most or highest, please respond to the following:

    a. I feel safer this year than I did in the years before at school.

    b. Please provide feedback for why you chose the response you did.

15. Given the previous questions, is there anything else you think the school should or could do to prevent, prepare for, mitigate, and respond to any potential act of violence at your school?