Teachers With Handguns: A Qualitative Exploratory Multisite Instrumental Case Study

by

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Abstract

Under Texas law, school districts are able to authorize trained teachers to carry concealed handguns as a deterrent to school gun violence. The study addressed a gap in research regarding teachers' perceptions of school safety with the increased presence of handguns issued to teachers. The qualitative exploratory multisite instrumental case study utilized the transformational leadership theory as a theoretical framework. Transformational leadership theory was an appropriate framework because the theory focuses on leaders who share decision making with subordinates to increase productivity and an overall sense of ownership in a decision. Participating teachers answered three research questions regarding teachers' perceptions of concealed handguns at school, the factors leading to teachers perceiving an increase in safety with teachers carrying concealed handguns, and desired prerequisites or qualifications for authorized teachers who are acting as school marshals or school guardians. By answering the three research questions, teacher perceptions at the three Texas high schools were better understood. Due to the lack of research, a qualitative exploratory case study research design was most suitable for the research. The representative sample included five teachers from three Texas high schools who best represented the average years as a teacher, age, gender, and race of the campus. At each school, the entire population of teachers was represented by the cross-section sample based on demographic data. During the face-to-face interviews, data were collected and then analyzed using NVivo 12 qualitative data review software. State and local school leaders may use the qualitative exploratory multisite instrumental case study when reviewing or adapting legislation or policies.

Dedication

I dedicate this dissertation to my family. To my children Kodey, Bradly, Abigail, and Troy, thank you for putting up with all of the late nights and early mornings, the missed events, and the constant reminders that I needed a quiet house. As I strived to complete this journey, you were right by my side, supporting me as I completed page after page and chapter after chapter. To my bride Sarah, I am eternally grateful for all of your sacrifices of time, money, and adventure. You were able to be supportive during a journey you did not choose, and you reminded me constantly to get back to work so I could complete the dissertation. You spent countless hours listening to me read page after page during countless editing sessions. I could not have completed this journey without you Sarah. Thank you.

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Chapter 1: Introduction

Violence is not a new phenomenon or an isolated occurrence in public schools in the United States. School shootings have occurred in the United States since the mid-19th century but were mostly related to domestic violence (Paradice, 2017). Just after the April 20, 1999, shooting at Columbine High School in Littleton, Colorado, in which 13 students and staff were killed, school administrators, teachers, and lawmakers began making more detailed plans to keep students safe from a rampage-style mass shooting while at school (Ash & Saunders, 2018). From 1996 until 2015, schools in the United States were attacked by assailants using guns over 60 times (O'Dea, 2015).

Many different safety plans have been introduced in schools to deter or stop mass shootings (Crawford & Burns, 2015). The most widespread methods used to stop these attacks have been building relationships with students, increasing campus security, hardening a campus by denying or restricting access to the campus, and creating a culture of shared respect at school (K. A. Anderson, 2018; Goff, 2019; Shuffelton, 2015). Several Texas K–12 schools have begun selecting and training teachers to carry concealed handguns as part of the school's overall campus safety plan (Killin-Guadarrama, 2018).

Many lawmakers and school administrators would like to increase gun control laws and increase mental health funding which makes gaining access to weapons harder for potential shooters and easier to get mental health services (Crawford & Burns, 2015; Knopf, 2018).

Opponents of gun control believe hardening the schools with more handguns available to trained staff and identifying potential shooters prior to an attack as a means to keep students safe while in school are better options for school safety (Crawford & Burns, 2015; Knopf, 2018). The

continued focus of both those in favor of more gun control and those in favor of hardened targets is campus security, making students safer while at school (Crawford & Burns, 2015).

One possible way to reduce or deter gun violence at public K–12 schools is increased gun control legislation and increased mental health care services (Crawford & Burns, 2015). By making access to guns more difficult for would-be shooters, the frequency and severity of mass shootings may be reduced (Crawford & Burns, 2015). When the mental health care needs of troubled students are addressed, students may get the necessary help from trained counselors before deciding to take out aggression on students in a school (Gereluk, Donlevy, & Thompson, 2015).

Another option available to school leaders which may deter gun violence in U.S. schools is hardening access to the buildings and making the security stronger (Arnold, 2015). Useful methods of hardening a school campus are employing a school resource officer (SRO), better access control, locks on doors, cameras, and metal detectors (Perumean-Chaney & Sutton, 2012). More recently, advocates of hardening schools have suggested authorizing school teachers to carry concealed handguns as a method to stop an attack or deter an attacker from attempting to access a school to harm students (Arnold, 2015).

Background of the Study

In the United States, the Second Amendment to the Constitution allows law-abiding citizens the right to own certain types of weapons, including handguns and rifles (Arnold, 2015). The rate of gun ownership in the United States is much higher than in other industrialized countries (Payton, Khubchandani, Thompson, & Price, 2017). Gun rights are the centerpiece of gun debates in schools (Knopf, 2018). Advocates of gun rights would like to increase security at

public schools, while opponents would like an increase in gun control legislation limiting the number of guns available in the United States (Goff, 2019; Keehn & Boyles, 2015).

When a student needs help, teachers are likely to assist and be willing to act as a parent when a child's parent is not present (Rogers et al., 2018). Teachers are an essential part of school safety, often providing guidance to students and consequences for misbehavior (Rajan & Branas, 2018; Rogers et al., 2018). Teachers know the students and have built relationships which may help in an emergency situation (K. A. Anderson, 2018; Goff, 2019).

In rural parts of the United States, police response time can be slow as there are fewer police officers and these officers cover more territory than urban police officers (Webb & Levels, 2014). On average, police response time to a school shooting is nine minutes, but a gunman takes substantially less time to attack and injure or kill students and staff at K–12 schools (Arnold, 2015). In many instances, a shooter causes harm to others until meeting resistance, which is typically an armed police officer (Webb & Levels, 2014). The faster a shooter is met with force in a mass shooting, the faster the shooting ends (Arnold, 2015).

The most prominent causes of school shootings are easy access to guns, not meeting the mental health needs of the shooter, and a loss of personal identity (Keehn & Boyles, 2015; Losinski, Maag, & Katsiyannis, 2015; Paradice, 2017; Payton et al., 2017). Other reasons shootings occur at school are the constant use of social media, the media's effect on the shooter, copycat gun violence, and popularity of shootings in popular culture (Ash & Saunders, 2018; O'Dea, 2015; Shuffelton, 2015). Understanding the commonalities of potential shooters and referring students who need help are important roles of teachers (Losinski, Katsiyannis, Ryan, & Baughan, 2014).

School administrators have tried to deter violence, including shootings, at K–12 public school campuses (Arnold, 2015). Deterring school violence is a primary concern of school leaders (Perumean-Chaney & Sutton, 2012). Methods used to deter school shootings are the use of an SRO, making access to a campus more difficult and restricting access to only those who need access, and building relationships with the students (K. A. Anderson, 2018; Crews, Crews, & Burton, 2013; Somers, Fry, & Fong, 2017). Despite the efforts of school administrators, school shootings in the United States continue to occur (Center for Homeland Defense and Security [CHDS], 2019).

Schools continue to be targets of shootings (Killin-Guadarrama, 2018). Over the first 100 days of the 2018–2019 school year, 18 public school students in the United States were injured or killed at schools due to gun violence (Rogers et al., 2018). In Texas schools, the attacks involving guns continue to increase (Killin-Guadarrama, 2018). As a response to the increase of school shootings, many school district leaders have decided to start issuing concealed handguns to trained teachers as a deterrent to attacks on the schools and the students (Killin-Guadarrama, 2018).

In 2007, following the deadly attack on the Virginia Tech campus which killed 30 people, the Harrold Independent School District (ISD) in Harrold, Texas, started training teachers in the district to carry concealed handguns (Dugyala, 2018). The issuing of concealed handguns to teachers was used as a method to deter any potential school attack and to more quickly stop any person who may enter one of the district's schools to harm the students or staff (Dugyala, 2018). Harrold ISD was the first district in Texas to have teachers carrying concealed handguns as a means of protection (Dugyala, 2018). A total of 170 other school districts in Texas followed

Harrold ISD and have trained and authorized K–12 teachers to carry concealed handguns while at school (Dugyala, 2018; Killin-Guadarrama, 2018).

Opponents of measures allowing teachers to carry concealed handguns focus on the separate roles of educator and police officer or security guard (Crews et al., 2013; Keehn & Boyles, 2015; Weiler & Armenta, 2014). These opponents would prefer to focus on relationship building and identifying mental health concerns earlier through social and emotional well-being training (Keehn & Boyles, 2015). Despite these concerns, more districts in Texas are opting for plans allowing K–12 teachers to carry concealed weapons (Killin-Guadarrama, 2018; Samuels, 2018).

School districts in the state of Texas are independently administered by an elected local school board and are able to decide on what methods each school district should utilize to protect the students and staff in the district (Crawford & Burns, 2015). With each major shooting in the United States, more school districts in Texas have chosen similar concealed carry policies to Harrold ISD (Dugyala, 2018). The Sandy Hook Elementary School shooting in Newtown, Connecticut, and the Marjory Stoneman Douglas High School shooting in Parkland, Florida, led to rapid increases in the number of school districts in Texas which have authorized teachers to carry concealed weapons as a way to protect the students and staff (Dugyala, 2018).

It is rare for a school in the United States to be attacked by a gunman or gun-wielding students, but the frequency has increased substantially since 2015 (CHDS, 2019). On average, schools in the United States were attacked every 77 days from 2015 through 2018, an increase from the 125-day average from 1999 through the end of 2014 (CHDS, 2019). As the rate of shootings increases, the rate of measures intended to make schools in Texas safer increases by

adding additional methods of keeping K–12 students safe while at school (Dugyala, 2018; Killin-Guadarrama, 2018). More Texas school district safety plans authorize K–12 teachers to carry concealed handguns with each mass shooting at a school (Dugyala, 2018).

Statement of the Problem

Knowing how teachers perceive safety in schools and what leads to those perceptions is an important step in developing meaningful and adequate school safety legislation, school district policy, and individual K–12 school procedures (Winston, 2016). The problem is a lack of existing research on the topic of teacher perceptions of adding concealed weapons to schools and the continued push for effective school safety laws, particularly those involving the addition of concealed handguns (Winston, 2016). By determining the perspectives of certified school teachers, state lawmakers and local school boards in Texas should be better able to make meaningful decisions which include a teacher perspective (Dugyala, 2018; Killin-Guadarrama, 2018).

The results of the qualitative exploratory multisite instrumental case study could be used by decision makers to better understand the overall teacher perspective, both of teachers who would and would not be carrying concealed handguns, when implementing school safety measures which include teachers carrying concealed handguns. As school districts continue to make policies authorizing teachers to carry concealed handguns, each is making the decision without the teachers' perspectives or with only the perspectives of teachers in the local school district (Winston, 2016). By considering teacher turnover and the perspectives of Texas teachers in various settings, local school boards should be better able to make decisions which should not negatively impact teachers.

Purpose of the Study

The purpose of the qualitative exploratory multisite instrumental case study was to ascertain whether public school teachers in three similarly sized Texas high schools perceived an increase or reduction in safety if other teachers assigned to the same schools are allowed to carry concealed handguns. Another purpose was to establish what training the participating teachers require of teachers selected to carry concealed handguns. The qualitative exploratory multisite instrumental case study identified how the carriers should be identified, selected, and trained and what prior qualifications may be desired, such as law enforcement or military training, and if the qualification criteria make a significant difference to the participating teachers. Three high schools in Texas participated in the case study. These participating schools are similarly sized, are located in a rural setting, and have an SRO assigned to the school districts.

By conducting the qualitative exploratory multisite instrumental case study at three Texas high schools which are similarly sized, and interviewing 15 teachers, five at each high school, a more comprehensive understanding was made available regarding teacher perceptions of safety when authorizing other teachers to carry concealed handguns. Due to a lack of information on the topic, a preliminary qualitative study was necessary to build a background and to fill the gap (Creswell, 2014). The information collected from the interviews was coded and compared to identify trends or commonalities in teacher responses (Creswell, 2014; Marshall & Rossman, 2014).

Significance of the Study

The significance of the study was in determining teacher input in regard to concealed weapons on public school campuses in Texas. Literature was lacking associated with teachers

carrying concealed weapons at school and how other teachers perceived the added measures from a safety and security standpoint (Winston, 2016). The teacher perceptions of the overall safety of teachers and students on a campus may be better or worse by adding handguns for teacher use (Winston, 2016). State legislators and local school board members may use the outcomes of the research to guide future decisions regarding school safety and security measures.

If teachers' perceptions of adding the concealed handguns were determined to be favorable, the information could be utilized to suggest an increase in the practice. If the surveyed teachers perceived a reduction in safety by adding concealed weapons, the results may be used by opponents of the measure to note the concerns of the professional educators. Participants in the qualitative exploratory multisite instrumental case study may not have identified strongly for or against the measure to add concealed weapons to school for increased safety. Outcomes of the qualitative exploratory multisite instrumental case study could lead to future use by either proponents or opponents of safety measures involving teachers carrying concealed weapons in K–12 schools in Texas. The results could be used for future research into school safety policies and procedures.

Findings from the literature suggested students in K–12 schools are unlikely to be involved in a school shooting, but if a school shooting did occur, the shooting was over quickly (Arnold, 2015). The research suggested the assailant often stopped shooting within one minute of resistance (Arnold, 2015; Webb & Levels, 2014). There was a substantial and direct correlation to the amount of time an attacker was allowed to attack without resistance to the number of casualties at a school (CHDS, 2019).

Many Texas school districts propose the authorization of teachers carrying concealed handguns is an efficient way to stop a shooter quickly and reduce the number of victims (Webb & Levels, 2014). With the increased rate of shootings in the United States since 2015, schools in Texas are increasing the safety measures to deter attacks (Killin-Guadarrama, 2018; Samuels, 2018). One way schools are increasing safety measures is by introducing a school marshal or guardian plan, both of which allow K–12 teachers to use concealed weapons to stop an attack (Killin-Guadarrama, 2018; Samuels, 2018).

The qualitative exploratory multisite instrumental case study measured the perceptions of teachers at three similarly sized Texas high schools to determine if teachers perceive an increase in safety if other teachers are allowed to carry concealed handguns. Through teacher interviews and coding the teachers' perceptions, the research questions were answered. The results of the research may be utilized by future leaders when determining school safety measures, in particular for any safety measures which include the addition of teachers with concealed handguns and the perceptions of other teachers about the addition of the weapons.

Research Questions

The results of the qualitative exploratory multisite instrumental case study were compared to determine the teachers' perceptions about school safety at three similarly sized high schools in Texas. Each of the three school districts has different school board policies relating to the authorization of teachers with concealed handguns. The policies at the school districts included one which prohibits teachers from carrying concealed handguns, one which allows teachers to carry handguns if approved and trained, and one which allows teachers to have a concealed weapon but the school does not have any teachers performing the role of school

marshal or school guardian. To better understand Texas teacher perceptions at the three schools, the following research questions guided the study:

Research Question 1: What were teachers' attitudes about teachers with concealed handguns at school?

Research Question 2: For those teachers who reported feeling safer with colleagues who had a concealed weapon, what specific experiences influenced the perception of safety? Research Question 3: According to teachers, what training was needed to serve as a school guardian?

By asking each survey participant open-ended questions based on a previous safety survey (Appendix A) conducted by Winston in his 2016 research centered on school safety measures, the perceptions of 15 Texas teachers were identified. The respondents' answers were coded and analyzed to determine if any trends or themes in the information existed. The results were then analyzed individually and by school district to determine if the responses of the teachers were consistent with policies of the district for authorizing teachers to carry concealed handguns. To determine if each ISD supports a policy of authorizing teachers to carry concealed weapons, the board policy for each of the three districts was reviewed.

Theoretical Framework

The qualitative exploratory multisite instrumental case study utilized the transformational leadership theory. Transformational leadership theory focuses on leaders who share decision making with subordinates to increase productivity, shared goals, and an overall sense of ownership in a decision (M. Anderson, 2017). Information relating to increasing safety at K–12 public schools through the introduction of teachers carrying concealed handguns was analyzed

through the transformational leadership theoretical framework (Hart, 2018; Machi & McEvoy, 2017).

By utilizing transformational leadership theories as a theoretical framework, the information is able to be presented in a consistent manner (Grant & Osanloo, 2014). The information included in the study could be contradicting or confusing if the theoretical framework was not used throughout the process. The theoretical framework was essential to the overall process of gathering research; all other information fit within the constraints of the theoretical framework (Grant & Osanloo, 2014).

In the qualitative exploratory multisite instrumental case study, the complete framework was developed during the analysis of data for the gathered information to be examined through the lens of the framework (Grant & Osanloo, 2014). The theoretical framework allows a new way of seeing the information being examined (Hart, 2018). A theoretical framework adds to the topic and to the understanding of presented information (Hart, 2018).

Because allowing school teachers to carry concealed handguns is a new and drastically different approach to school safety, the transformational leadership theory was suitable as a theoretical framework (Buck, Yurvati, & Drake, 2013). Finding a new way to increase safety in schools is potentially a transformative practice (Killin-Guadarrama, 2018). The plan, which allows teachers to carry handguns, is gaining popularity in Texas but is still considered an alternative safety measure (Dugyala, 2018; Killin-Guadarrama, 2018).

The qualitative exploratory multisite instrumental case study may determine a perception from Texas teachers which is favorable to the transformative policies of authorizing teachers to carry concealed handguns (Dugyala, 2018). Teachers may perceive the measure as

counterproductive and not transformative in nature as the teachers' opinions were not sought prior to implementing the measure (Shuffelton, 2015). By analyzing the information gathered in the questionnaires and using the transformational leadership theory as a framework, the information was better understood.

ISDs in Texas are deciding to issue handguns to teachers to carry concealed while at school to increase school safety; teachers have not shared in the decision on a large scale, according to the limited available literature (Winston, 2016). Increasing the protection of schools in Texas is necessary (Killin-Guadarrama, 2018). The debate regarding the various methods of securing schools is centered on the best way of achieving the goal of safe schools (Dugyala, 2018). K–12 students ought to be safe while at school, and the focus should be on learning and not on the threat of an attack (Crawford & Burns, 2015).

Definitions of Terms

Common concepts and terms are used within the study and are refered to as key terms.

The key terms listed are not an exhaustive list. The terms used in the qualitative exploratory multisite instrumental case study are defined as follows.

Administrator: A licensed public school administrator who is able to make decisions about personnel and policies of a school and school district. The individual oversees the finances of the school and ensures the operations of the school are being conducted in an appropriate manner (Department for Professional Employees, 2016).

Concealed carry: Holding the necessary credentials to carry a handgun hidden from public view. Being properly able to conceal carry includes a necessary state-mandated background check, training course, and weapon qualification (USA Carry, 2018).

Educator: A teacher or administrator whose job is education of K-12 students. The individual is hired by a K-12 public school district (Jennings, 2018).

Guardian plan: A plan in the state of Texas which allows a school district to authorize teachers in the district to carry a concealed handgun for the specific purpose of increasing school safety and security. In the plan, a trained educator who has a concealed weapons license carries the handgun concealed at all times while at work (Killin-Guadarrama, 2018).

Gun control legislation: Laws which prevent, restrict, or limit access to guns or particular types of guns in the United States. The intent of the laws is a decrease in the number of guns available in order to reduce gun violence (Duignan, n.d.).

Hardened target: A location or building to which access has been made more difficult. If the target is hardened, gaining access may be less attractive for someone who wants to harm people (Safe Havens International, 2014).

Independent school district (ISD): A public school district in the state of Texas which is independent of any other taxing agency and is itself able to tax citizens (My Texas Public School, 2019). Each ISD is able to make independent policies on many issues relating to schools and school safety.

Marshal plan: Plan requiring more extensive training and qualification of educators before allowing each to carry a concealed handgun. The marshal plan requires handguns to be locked in a safe in the educator's office or classroom when not in an emergency situation (Texas Commission on Law Enforcement, 2018).

Mental health care: A type of health care which is specifically designed to care for mental, emotional, social, or psychological needs of a patient. The goal of mental health care is

to address a concern, treat the area, and increase the quality of life for the patient through counseling, medications, or a combination of the two (U.S. Department of Health & Human Services, 2017).

School resource officer (SRO): A specifically trained law enforcement officer who is assigned to an ISD or individual public school. An agreement between the ISD and the local law agency establishes the role of the SRO (National Association of School Resource Officers, 2018).

Teacher: A certified and licensed K–12 public teacher whose primary job duty is instructing students in the curriculum in a school (Department for Professional Employees, 2015). For the study, a teacher holds a certification by the state and works for an ISD.

Limitations

One of the limitations of the qualitative exploratory multisite instrumental case study is the challenge to duplicate. As with any qualitative case study, the participants may have different lived experiences, which may result in a different outcome if the study is duplicated (Flick, 2018; Merriam, 1998). When conducting a multisite qualitative case study, the participant answers may vary from one participant to another and over time as conditions or experiences change (Flick, 2018). Duplicating the study with the same procedures might be possible, but the results would differ with each additional participant. These difficulties may cause the final results to be altered if the study were duplicated (Flick, 2018).

Another limitation of the qualitative exploratory multisite instrumental case study is the amount of time needed to conduct a thorough analysis of the open-ended responses for each participant. Scripting face-to-face interviews, coding the results, discovering themes, and

analyzing the qualitative data takes time. To ensure accurate processing of the abundant amounts of data, all information was processed through NVivo 12 software. NVivo is a qualitative data analysis tool designed to ensure data accuracy when sorting and analyzing an abundant amount of scripted data such as notes or transcripts from face-to-face interviews.

To ensure the results of the interviews were dependable and reliable, each participant was asked to conduct a member check (Birt, Scott, Cavers, Campbell, & Walter, 2016), which involved meeting with each participant after the transcript and notes of the face-to-face interview were printed and organized in order to ensure the accuracy of the data (Birt et al., 2016). Participant checks are a necessary part of the qualitative exploratory multisite instrumental case study as a way to reduce misinformation or any bias which may enter into a qualitative study (Flick, 2018). These limitations would not influence the results of the qualitative exploratory multisite instrumental case study.

Scope and Delimitations

The scope of the qualitative exploratory multisite instrumental case study makes individual interviews with teachers necessary to determine the perception of each teacher regarding school safety. In particular, the qualitative exploratory multisite instrumental case study gathered perceptions of adding concealed handguns to schools. A delimitation for the qualitative exploratory multisite instrumental case study was limited participation in engaging with interviews. Only certified teachers who were employed and under contract to teach in one of three participating Texas school districts were permitted to be part of the study.

An additional delimitation from the qualitative exploratory multisite instrumental case study was the voluntary teachers who participated in the study were an accurate representation of

the campus. The 15 participants were not an accurate representation of the teachers in the state but provided an excellent representation of the individual school where the participant was employed. The misrepresentation may be particularly true of teachers from large, urban areas who may not perceive the same threats or solutions as the participating teachers from smaller rural schools. To better determine any differences, a study comparing teacher perceptions in urban versus suburban or rural settings may be necessary to address the delimitation.

Another delimitation to the qualitative exploratory multisite instrumental case was the sample size. The sample for the research consists of 15 teachers, five teachers from each of the three high schools in Texas. A sample size of 15 teachers was appropriate for a preliminary qualitative study; a larger sample may result in more variations in responses if the study is subsequently repeated. Five teacher participants from each of the three high schools participated in one-hour face-to-face interviews and answered 28 questions based on teacher perceptions of school safety, particularly when other teachers are allowed to carry concealed handguns while on campus.

A final delimitation to the qualitative exploratory multisite instrumental case study was the timeliness of the study. With an average school attack happening every 77 days in the United States, an attack just before the interviews could have occurred (CHDS, 2019). If an attack on a school was heavily covered by the media and had numerous casualties, the responses of the participants may have reflected the feelings about the single incident and not the overall perception of school safety (Weiler, Cornelius, & Skousen, 2018). The scenario could have unfairly skewed the results of the qualitative exploratory multisite instrumental case study to

favor an increase in protection when in reality the need may not have been as prevalent should an attack not occur.

Assumptions

Three key assumptions were made for the qualitative exploratory multisite instrumental case study. The first assumption was the interview questions were understood by all of the participants. To ensure the assumption was met, each participant was given access to the questions in writing along with the questions which would be read orally by the participant.

The second assumption was the accuracy of the data source used to obtain a proper representative population of the campus. The state issues a Texas Academic Performance Report (TAPR) each academic year which indicates campus averages (Texas Education Agency [TEA], 2019). The specific areas with information about average years as a teacher, age, gender, and race were used as a cross-section of the campus to get a representative sample. By comparing the results of the TAPR with the answers from the teachers' demographic data, a representative sample was achieved.

The third assumption was the 15 participants of the qualitative exploratory multisite instrumental case study provided honest answers to the 28 interview questions. To increase the truthfulness of participants, each participant was given research confidentiality information and was allowed to review answers in a member check before a final analysis of the collected data. Any misconceptions or errors in the information could then be identified and corrected by the participants. By addressing each of the assumptions, the impact of each assumption was addressed and isolated in the qualitative exploratory multisite instrumental case study.

Chapter Summary

The qualitative exploratory multisite instrumental case study was necessary as schools in Texas continue to authorize teachers to use concealed handguns as a measure to deter school mass shootings and to increase school safety. By interviewing teachers at three high schools in Texas, information was available to better determine if teachers support the measures to authorize teachers to carry concealed handguns while at school. ISDs in Texas continue to authorize the use of teachers as school marshals or school guardians to reduce or deter school gun violence (Killin-Guadarrama, 2018).

Limited literature is available to determine if other teachers perceive the measure as a safe method to increase school safety. By conducting interviews with open-ended questions, teachers at three similarly sized high schools were able to share perceptions of school safety. The school policies at each of the three districts were then examined to determine if the policies pertaining to the school marshal or guardian plan have any impact on the teachers' perceptions in the same district.

The information from the 15 participants was analyzed to determine if any trends or themes emerged. The coded information was then filtered through the transformational leadership theoretical framework to decide if the individual school sites were sharing decision making with the teachers in regard to campus safety, specifically in authorizing the use of concealed handguns by teachers. The results of the information could be useful for future research on school safety or by school leaders when deciding if a similar policy should be employed at another school in Texas.

In the next chapter, the literature is reviewed. The chapter contains sections on the literature search strategy, theoretical framework, transformational leadership, literature review, and gap in the literature. The results of the literature review revealed a need for the study.

Chapter 2: Literature Review

School safety for K–12 students is an important responsibility of state legislators, school administrators, and teachers (Gereluk et al., 2015; Losinski et al., 2015). Texas laws allow teachers to carry concealed handguns and act as security guards to protect K–12 students in schools across the state should the local school district decide to enact the measures (Killin-Guadarrama, 2018). Passing the legislation is a problem because public school teachers have not been adequately polled to determine if each feels as if the legislative measure aids in increasing safety at schools (Winston, 2016). Ascertaining whether secondary public school teachers perceive an increase in safety if other trained teachers assigned to the same campus are carrying concealed handguns is vital. Predetermining qualifications for selecting the teacher assigned to carry the concealed handgun allows for uniformed selection criteria. Knowing how each teacher assigned to carry a concealed handgun is trained is important to understanding whether other teachers perceive a greater sense of comfort with guardians carrying concealed handguns on the campus.

Some opponents have argued the laws allowing teachers to carry handguns have blurred the lines between the role of an educator and the role of a security officer (Crews et al., 2013; Keehn & Boyles, 2015; Weiler & Armenta, 2014). Proponents of the law have argued the teachers are capable of acting quickly to protect K–12 students and lessen the effects of a school shooting (Arnold, 2015; Webb & Levels, 2014). The purpose of the qualitative exploratory multisite instrumental case study was to ascertain whether public school teachers in three similarly sized Texas high schools perceive an increase or reduction in safety if other teachers assigned to the same schools are allowed to carry concealed handguns. Another purpose was to

establish what training the participating teachers require of teachers selected to carry concealed handguns. The qualitative exploratory multisite instrumental case study determined if participating teachers would perceive a greater sense of safety with established criteria for how trained teachers are identified and trained and what prior qualifications may be desired, such as law enforcement or military experience.

In the United States, school violence involving guns has become a reality, happening over 60 times since 1996 (O'Dea, 2015). In Texas, two differing opinions on how to keep K–12 students safe and what makes a school safe are regularly presented (Webb & Levels, 2014). The debate in Texas is centered on how to accomplish the vital task of keeping K–12 students safe when gun violence at schools has been increasing regularly over the past two decades (Webb & Levels, 2014). Some lawmakers and educators wish to increase gun control laws and increase mental health funding, while others argue hardening the target with more handguns and identifying potential shooters is the best approach to securing campuses across the state (Crawford & Burns, 2015; Knopf, 2018). The proposals involving gun control and increased mental health support for disturbed or troubled K–12 students strive to stop an attack by removing access to guns and by supporting someone in crisis before the individual attempts a mass shooting (Arnold, 2015; Becerra, 2018).

Texas legislators allow respective school boards to decide if each school district should sanction teachers to protect K–12 students with concealed handguns as an option, and how each teacher is selected and trained (Crawford & Burns, 2015; Winston, 2016). An important step in making a meaningful decision should be ascertaining whether teachers perceive an increase in safety with an increased gun presence on campus. Another important aspect to consider is

whether the perception of safety has any opportunity cost in a decrease in learning or in meaningful relationships with K–12 students (Minshew, 2018). By increasing guns on campus and allowing teachers selected by the school district superintendent to carry concealed handguns, the K–12 students and staff may perceive a loss of safety and may not be ready to learn or work in the environment (Rajan & Branas, 2018).

Exploring available literature allowed an enhanced and more in-depth understanding of reasons for and against allowing teachers to carry concealed handguns in Texas schools. Costs associated with implementing the measures abound, and in low-income schools the measure may not be possible due to increased costs (Minshew, 2018; Winston, 2016). Owning guns is a constitutional right of the citizenry, and some people support or are against the right extending to teachers in Texas classrooms as a means of protecting K–12 students and teachers (Arnold, 2015; Losinski et al., 2014).

Literature Search Strategy

Online libraries provided access to multiple databases for research purposes. Advanced searches on ProQuest, Academic Search Complete, and ERIC were used to query the results for the literature review. Three databases were utilized to ensure saturation of the topic as the databases were each tied to different academic fields of study (Machi & McEvoy, 2017). Supporting information was obtained through basic keyword searches on the Google Scholar website. To increase the reliability of the information, the focus of the literature review was material produced on or after 2014.

The search words and themes for the literature review were *school*, *shooting*, *safety*, *teacher*, *teacher* perceptions, *guns*, *laws*, *causes*, *preparation*, *deter*, *failure*, *accident*, and

bullying. Other keywords or phrases searched for in the literature review were mass shooting, active shooter, school security measures, Texas, United States, school marshal, and guardian plan. Peer-reviewed information on any of the themes increased the credibility of the research (Hart, 2018). The key words which generated the most relevant and usable information were teacher perceptions and mass shooting.

Theoretical Framework

The qualitative exploratory multisite instrumental case study favored the transformational leadership theory, which focuses on leaders who share decision making with subordinates in order to increase productivity and buy-in (M. Anderson, 2017). While researching a gap in the available and relevant literature, filtering all existing information through a theoretical framework to determine the soundness of the existing information was essential (Hart, 2018; Machi & McEvoy, 2017). Using a theoretical framework ensured the information being researched flows when presented in the dissertation (Grant & Osanloo, 2014). If the framework were ignored, the information may have been contradicting or confusing because the theoretical framework acts as a blueprint or starting point for all other information. The theoretical framework was the building block of the research project, and all other information fit onto the foundation (Grant & Osanloo, 2014).

When presenting a qualitative exploratory multisite instrumental case study, the theoretical framework is often developed or refined during the analysis of data or coding phases (Grant & Osanloo, 2014). The quantitative research framework can be completely developed in the beginning, which is the primary reason for the difference in how the framework is developed (Grant & Osanloo, 2014). The qualitative research is gathered and analyzed by a person, and the

individual should not be persuaded or tempted to interfere with the outcomes (Grant & Osanloo, 2014). In addition to the many aspects of a theoretical framework mentioned in the Grant and Osanloo (2014) article, Hart (2018) added important information about the purpose of a theoretical framework. The theoretical framework provides a new way of looking at a topic or new concept; the framework adds to the understanding of presented information (Hart, 2018).

For the qualitative exploratory multisite instrumental case study, the transformational leadership theory was used as a theoretical framework. Educational leaders who are making decisions to introduce guns in schools are attempting to increase safety in a new way (Killin-Guadarrama, 2018). The forward-thinking plan, which allows teachers to carry handguns, may or may not be safer. The qualitative exploratory multisite instrumental case study may determine secondary school public teachers perceive an increase in safety by introducing more handguns to the school. The staff or student behaviors at a K–12 school with concealed carry policies for some teachers may be affected positively or negatively due to other teachers carrying concealed handguns. Lawmakers in Texas agree something should be done to protect the vulnerable K–12 students while at school (Crawford & Burns, 2015). Maintaining the status quo in school safety may not reduce the frequency or deadliness of school shootings (Shapiro, 2015).

Burns's 1979 transformational leadership theory has been used to increase the intrinsic motivation within individuals of an organization to reach the group's shared goals (Bass, 1999). The transactional leadership theory seeks to please subordinates with tangible rewards for service instead of striving for meaningful and lasting changes (Bass, 1999). Transformational leadership is unique because the leadership transforms the behaviors, attitudes, and beliefs of the subordinates in a professional group (M. Anderson, 2017). In transformational leadership, the

leader and the followers raise expectations for each other to increase the intrinsic motivation (M. Anderson, 2017).

Assigning handguns to teachers as a way to increase safety at school would be considered transformational if teachers perceive the measure as effective and support the measure jointly to keep the campus safe (M. Anderson, 2017). Teacher opinion should be used to shape the policy of the local school district because teachers can support measures other teachers help to develop (M. Anderson, 2017). In transformational leadership, the educational leader should lead differently and involve the entire staff to ensure decisions are supported and successful (M. Anderson, 2017). By using the transformational leadership theory as a theoretical framework, the views of teachers become part of the decision-making process on each campus.

Literature Review

By examining published literature, gaps in literature may become evident and the gaps can be synthesized (Hart, 2018; Machi & McEvoy, 2017). The literature used in the review focuses on handguns, violence in schools, ways to reduce school violence, and the use of handguns in schools to increase safety and reduce the chance of a mass shooting (Arnold, 2015; Goff, 2019; Keehn & Boyles, 2015). Within the focus area, the following topics emerged: legislation, the duty of school employees to protect K–12 students, and past failures to protect students during shootings. Other identified topics are why schools are targets, the causes of school shootings, and how shootings can be deterred. Additional literature topics include being prepared for an emergency event, proposed measures to secure a campus, reasons not to provide guns to teachers, and alternatives to giving teachers handguns. Within each of the listed topics, several subtopics complete the evaluation of available literature.

Legislation

The earliest instances of gun legislation and gun rights stem from America's roots as a British territory (Arnold, 2015). The Glorious Revolution of 1689 in England was largely about Protestant citizens' rights to bear arms while Protestants were being denied the right by the British Catholic monarch (Arnold, 2015). In the United States, the rights of the citizenry to own guns is more prolific when compared to other industrialized countries (Arnold, 2015; Payton et al., 2017). Gun rights and gun control are at the center of the school safety debate as the issues pertain to mass shootings (Knopf, 2018).

Second Amendment. The United States Constitution affords Americans many rights, one of which is the right to own guns as part of the Second Amendment (Arnold, 2015; Losinski et al., 2014). In a data analysis qualitative review, Arnold (2015) stated a notable case involving Second Amendment rights to reach the Supreme Court was the 2008 case of *District of Columbia v. Heller*. In a 5–4 decision, the Supreme Court made a clear statement: Americans' right to own guns shall not be infringed upon (Arnold, 2015). Most Americans have the right to own guns, which means disarming citizens as a way to keep students enrolled in Grades K–12 safe at school is not a viable option (Losinski et al., 2014).

Because gun ownership is part of the culture of the United States, removing guns from law-abiding Americans may be impossible (Becerra, 2018; Coker, Bush, Follingstad, & Brancato, 2017). In a cohort study of over 3,000 seniors in Kentucky, Coker et al. (2017) discovered 65% of participants had access to at least one gun owned legally by someone in the home. Denying access to guns and limiting where guns are permitted have been attempted by federal and state legislation with little to no effect on the rates of gun violence (Becerra, 2018).

Gun control. Becerra (2018) analyzed the gun control policies of Arizona and California and the amount of gun violence which occurred in each of the two states. Becerra (2018) found a correlation in increased gun control laws and mass shootings. California, which ranks first with the most expansive gun control ranks first in the number of mass shootings (Becerra, 2018). Gun control laws alone may not solve the epidemic of mass shootings in the United States (Becerra, 2018; Gereluk et al., 2015). Simply taking guns out of the hands of law-abiding Americans does little to curb the level of gun violence (Becerra, 2018).

Zero-tolerance policies. Zero-tolerance policies are in place at schools to ensure the safety of K–12 students (Losinski et al., 2014; Weiler & Armenta, 2014). Research revealed the zero-tolerance policies have not led to safer schools since introduced in the 1990s (Losinski et al., 2014; Weiler & Armenta, 2014). The intent of the zero-tolerance policies, which were first used in the early 1980s when customs agents used a similar policy for combatting drugs, is to make all offenses punishable by the same harsh consequences to deter any violations (Losinski et al., 2014). Banning citizens from taking guns into schools and having zero tolerance for weapons violations have not led to a reduction in the gun violence occurring in schools (Rogers et al., 2018). People have argued all guns not used by law enforcement or the military should be confiscated in the United States and adding more guns to a school is illogical (Rogers et al., 2018). On occasion, cases involving the zero-tolerance policies have reached the Supreme Court for decision (Arnold, 2015).

Gun-free zone. Many argue the best way to keep K–12 students safe at schools would be to remove all guns from the school property, which would aid in stopping gun violence at schools (Gereluk et al., 2015; Oltman & Surface, 2017). The Gun-Free Schools Act of 1994

made carrying or discharging a gun at a public school in the United States a criminal offense (Oltman & Surface, 2017). In a data analysis of how education laws impact new teachers, Oltman and Surface (2017) determined 141 students were killed in gun-free zones in mass murder events involving more than one person from 1999 to 2016.

Gun-free zones have been challenged since the 2008 *Heller* decision (Arnold, 2015). The 1994 Gun-Free Schools Act has been upheld when challenged in federal court (Arnold, 2015). The law has been altered or adapted to fit the needs of states since the law's inception (Arnold, 2015). Many states have added exceptions to the 1,000-foot radius around a school for residents living next to schools, and a few states allow concealed gun carriers certain access to schools (Arnold, 2015). Increased security in schools after each mass killing has been a popular response (Gereluk et al., 2015). Responding in the aftermath of an attack has done little to reduce the frequency of mass school shootings in the United States (Gereluk et al., 2015).

Duty to Protect

Teachers in the United States are charged with educating students through 12th grade (Rajan & Branas, 2018). Teachers are essential to the safe care of students while at public schools (Rajan & Branas, 2018; Rogers et al., 2018). Teachers make sure K–12 students behave, are at the right place, and interact with others in a respectful and responsible manner (Rogers et al., 2018). Whenever a student is being harmed at school, teachers are held responsible for stopping the offense in an effective way (Rogers et al., 2018). Before asking teachers to carry handguns to protect K–12 students and shoot perpetrators, policymakers should consider other measures which may work (Rogers et al., 2018).

Standard of care. Teachers are grouped with doctors, nurses, and counselors as professions which regularly care for the needs of children (Gereluk et al., 2015; Losinski et al., 2015). Teachers are responsible for providing a standard of care for K–12 students (Gereluk et al., 2015; Losinski et al., 2015). After the tragedy of a school shooting, some families of injured or killed K–12 students have sued the school district seeking compensation for failing to protect the children (Gereluk et al., 2015). Under the common principle of loco parentis, schools and the staff take on the role of parent when a legal parent or guardian is not present (Gereluk et al., 2015). Schools are legally liable for keeping enrolled students, who are minors, safe from harm while in attendance (Gereluk et al., 2015).

Student safety. When asked about how safe secondary students perceived schools to be following the deadly attacks at Sandy Hook Elementary School in Newtown, Connecticut, 84% said the shooting had little to no impact on how each perceived school or school safety (Fisher, Nation, Nixon, & McIlroy, 2017). Fisher et al.'s (2017) results highlighted a trend in the United States of introducing legislation and calling for change immediately after a tragedy, followed by a reduction in activism by opponents of gun access laws. If people were directly affected by the shootings, real and lasting changes may be initiated (Gereluk et al., 2015). The trend continued following another mass shooting in the United States at a south Florida high school in 2018 (Rogers et al., 2018).

In fewer than 100 days of school in 2018, 18 K–12 students were injured or killed at schools in the United States due to gun violence (Rogers et al., 2018). After the deadly shooting at Marjory Stoneman Douglas High School in Parkland, Florida, older, secondary students started to demand changes (Rogers et al., 2018). People argue teachers could protect K–12

students by carrying concealed handguns (Arnold, 2015). Rogers et al. (2018) suggested putting guns in the hands of teachers is unethical and counterproductive. During the 2018 shooting at Marjory Douglas, two teachers moved between the assailant and students to protect the students from being injured or hurt by the shooter (Rogers et al., 2018).

Teacher safety. Teachers should not be expected to self-sacrifice to protect the students of a school (Crews et al., 2013). Protecting K–12 students is a duty of teachers, and the standard of care should have preestablished limits where teachers are not made to choose to protect students or self-preserve (Crews et al., 2013; Minshew, 2018). President Trump said teachers should be trusted with concealed handguns in American schools because teachers love the students and can protect the students (Minshew, 2018). Colorado and Michigan have enacted policies where teachers are allowed to carry handguns and protect the school staff and K–12 students in the event of a mass shooting (Crews et al., 2013).

Failure to Protect

K–12 students are being hurt or killed in American schools, and all previous measures to reduce or end the trend of violence have failed or been ineffective (Coker et al., 2017). Since 2013, gun-related research on violent deaths caused by the use of firearms has increased as funding has increased (Coker et al., 2017). The results of the new research may lead to suggestions and planning to make meaningful strides in protecting American children while at school (Coker et al., 2017). Some individuals want to reduce the number of weapons and increase restrictions to access to handguns, while others support making schools safer by increasing security in the form of responsible adults protecting the school with concealed handguns (Arnold, 2015; Crawford & Burns, 2015; Knopf, 2018).

Inaction to stop shootings. People who want more restrictive gun laws and people who want to add handguns at schools are both striving to increase school safety (Becerra, 2018). The two groups continue to debate the most effective way to stop shooters (Becerra, 2018). The inaction of American leadership to make meaningful and lasting strides demonstrates the divisiveness in Washington, DC (Becerra, 2018). Research on a topic could guide the discussions, but in the case of research involving gun violence, the research has not happened (Rajan & Branas, 2018).

Unable to research completely. Gun violence has not been completely researched in the United States due to a lack of funding and grants (Rajan & Branas, 2018). In 1996, Congress passed a large spending bill known as Omnibus (Rogers et al., 2018). An amendment dubbed the Dickey Amendment was attached to the legislation (Rogers et al., 2018). The passage of the Dickey Amendment blocked access of public health agencies and academic scholars to necessary gun violence-related information and funding necessary to conduct research (Rogers et al., 2018). In 2013, following the tragedy at Sandy Hook Elementary where many students and teachers were killed, President Obama lifted the ban on research and funding (Coker et al., 2017). Since the restrictions on research surrounding guns and gun violence were lifted, research is being conducted (Coker et al., 2017).

Expense. Measures to properly train and issue handguns to teachers are underway, with an associated expense (Crews et al., 2013; Weiler et al., 2018). To properly train one teacher and issue a handgun at a rate of one per building in a school district with 12 buildings would cost \$93,565 the first year and \$61,095 each subsequent year (Weiler et al., 2018). The costs are not isolated to training and issuing a handgun because the school district should consider the

increased costs for accident and casualty insurance associated with issuing concealed handguns to teachers (Weiler et al., 2018). In a hypothetical scenario, a state could enhance security to schools at an annual cost of \$77.7 million, which would increase armed security and support minor alternatives such as duress systems and access control on primary doors (Crews et al., 2013). Minor changes to a school, such as adding specific drills, telephones in classrooms, or silent duress signal in classes, may increase safety at a lower cost (Bonanno & Levenson, 2014).

Response time. When an active shooter has entered a building, the shooter causes harm until meeting resistance (Arnold, 2015). In 2007, the Virginia Tech shooter killed at will until officers were able to enter the building (Arnold, 2015). Police records indicated the shooter committed suicide one minute after police entered the building where the assailant had murdered 32 people (Arnold, 2015). Police entered Sandy Hook Elementary in 2012, and within one minute of arriving on the scene, the shooter committed suicide and ended a deadly killing spree, which took the lives of 28 people, most of whom were young children (Arnold, 2015).

Decreasing response time is critical, as shown in the Arnold (2015) article. In emergency situations, decreasing the time of resistance can save dozens of lives or stop the killing immediately, as seen in many instances (Webb & Levels, 2014). If the resistance is immediate, a gunman may not enter the building at all or may meet resistance before any life is lost (Webb & Levels, 2014).

Why Schools Are a Target

School shootings have occurred in the United States since the mid-19th century and are not a new phenomenon (Paradice, 2017). The shootings have changed from domestic disturbance in nature to mass murder (Ash & Saunders, 2018). In January 1979, a 16-year-old girl entered

Cleveland Elementary School in San Diego, California, with a hunting rifle and killed two people and injured eight others in the first rampage shooting (Ash & Saunders, 2018). Americans have since struggled to understand why schools are chosen for acts of violence (Ash & Saunders, 2018). What changed in 1979 was not a shooting at a school but a rampage killing with no ties to people or revenge motivation associated with the selection of the intended targets (Ash & Saunders, 2018).

Ethics. Many schools are not a place where ethics are instantiated by others and taught alongside morality and character (Keehn & Boyles, 2015). School curriculum could be used to teach students right from wrong and instill morals and ethics (Becerra, 2018). Keehn and Boyles (2015) argued violence is not on the rise in the United States, and Americans are by nature more violent than people in many other industrialized nations.

Impact of increased security. Adolescents are kind and impressionable by nature and are willing to learn from others (K. A. Anderson, 2018). In a quantitative review of 471 middle schools, K. A. Anderson (2018) determined, if guided and taught purposefully, middle school students are able to develop appropriately. Anderson indicated the security measures intended to make schools safer have had an adverse effect on students and individual development. Shapiro (2015) found a correlation to increased school security and a reduction in trust and character development within the same schools.

Bullying. Bullying has grown into a serious problem in the United States, especially in schools where bullying has negatively impacted the mental health of K–12 students (Gereluk et al., 2015). Students who have been victims of bullying at least one time are more likely to carry a weapon to school for protection or retaliation (Pham, Schapiro, John, & Adesman, 2017). Over

600 parents of secondary public school students were asked about perceptions of gun violence (Payton et al., 2017). Parents indicated bullying is the second most likely cause of gun violence (Payton et al., 2017). Inadequate parenting practices were seen as a more likely cause of school shootings and gun violence (Payton et al., 2017). The parents indicated a lack of mental health services and easy access to firearms as significant potential causes of gun violence at school (Payton et al., 2017). Some school shooters have turned to violence as a result of bullying, but for most shooters, other precipitating factors caused the violence (Ash & Saunders, 2018).

The Causes

A plethora of reasons can be found as to why a shooter enters a school and murders K–12 students and teachers (Gereluk et al., 2015). Each situation is unique, and the events cannot be grouped and categorized into a neat and organized set of causes (Bonanno & Levenson, 2014). Some commonalities are apparent among the assailants who have attacked schools (Bonanno & Levenson, 2014). To better understand what caused many of the shooters to kill at school, the research should move beyond a simple bullying excuse (Pham et al., 2017). Some causes of shootings are access to guns, the poor mental health of the shooter, and a loss of identity, which is especially true among White male students (Keehn & Boyles, 2015; Losinski et al., 2015; Paradice, 2017; Payton et al., 2017). Other causes of school shootings are the use of social media and the media's effect on the shooter, copycat gun violence, and school shootings in popular culture (Ash & Saunders, 2018; O'Dea, 2015; Shuffelton, 2015).

Access to guns. For every 100 Americans, just over 88 guns are available, which is almost one gun for every person in the United States (Keehn & Boyles, 2015). The Department of Public Health Education placed the number of firearms in the United States at 317 million

(Payton et al., 2017). Firearms in the United States have been readily available and vastly unregulated by the government (Payton et al., 2017). In 2015, a total of 2,787 children died as a result of being shot by guns, and 59% of the deaths were murders (Payton et al., 2017).

Mental health concerns. A stigma on mental health and caring for the mentally ill is prevalent in the United States (Losinski et al., 2015; Paradice, 2017). In a quantitative survey of 173 new teachers, the teachers were hesitant to work with K–12 students suffering from mental illness (Losinski et al., 2015). Over 75% of participants knew individuals who had mental health concerns, and still, the new teachers were uncomfortable teaching a child with a mental illness (Losinski et al., 2015). The discrimination exists despite efforts in the United States since the early 1990s to not ostracize the mentally ill (Losinski et al., 2015).

Mental illness has been the principal reason in 8% of school shootings (Paradice, 2017). In a majority of shootings, the assailant was not acting out because of a mental health-related problem or mental health failure (Keehn & Boyles, 2015). In a quantitative data review of 343 shooting events in U.S. schools from 1840 to 2015, mental illness was not a prevailing reason for the shootings (Paradice, 2017). In elementary shootings where the shooter has some mental health issues, the shooter was usually an adult (Paradice, 2017). A teenager was typically the shooter at secondary schools when the shooter struggled with mental health-related issues (Paradice, 2017). Teachers have many roles on a daily basis, which may lead a teacher to miss the warning signs of mental illness in K–12 students (Paradice, 2017).

Parents have cited mental health as a major cause of mass rampage shootings (Payton et al., 2017). Over 50% of parents interviewed stated mental health was a primary cause of shootings (Payton et al., 2017). Available data indicated fewer than 10% of shootings at schools

were a result of a mental health issue (Paradice, 2017). Mental health should be addressed as part of a comprehensive safety solution (Rogers et al., 2018), but the issue has not been as prevalent as other causes of school shootings.

Loss of identity. Young men in the United States struggle with identity (Shuffelton, 2015). When a man's honor is challenged, the man has historically turned to violence to defend a loss of honor or reputation (Shuffelton, 2015). The duel is an example of the phenomenon (Shuffelton, 2015). Young ladies have historically honored chastity and fidelity to a husband (Shuffelton, 2015). The identity roles may be a primary reason young men have been the perpetrators in almost all rampage killings (Shuffelton, 2015). No individual group has struggled with identity more than the White male who has turned to killing to avenge the loss of masculine identity (O'Dea, 2015; Shuffelton, 2015).

A more severe and disturbing reality was presented by O'Dea (2015) in a narrative qualitative review of school shootings. The loss of identity was first noted by a media expert in 1974 when Marshall McLuhan warned of a mass loss of identity and individualism in the United States (O'Dea, 2015). McLuhan believed the negative effects of being surrounded by electronics and instant gratification through constant 24/7 news coverage would eventually lead to increased violence in a postmodern world (O'Dea, 2015). The foretelling catastrophic results of constant media in contemporary America has led to an epidemic and a loss of humanity as each person has lost individual identity (O'Dea, 2015; Shuffelton, 2015).

Media or media-induced. The instant glorification of shooters by news media rushing to be the first to cover a story has led to an increase in violence (O'Dea, 2015). Too often the killer has been the main subject of the story until the victims' names were released days after the

tragedy (O'Dea, 2015). Glorifying the shooter and making the shooter the focus of news stories after an attack contributed to further violence (O'Dea, 2015; Weiler et al., 2018). In 1974, McLuhan first foretold of a correlation of an increase in violent behavior caused by 24-hour media coverage (O'Dea, 2015).

Because of instant news media coverage, the murderers of Columbine, Virginia Tech, Sandy Hook, and Marjory Stoneman Douglas are famous (Weiler et al., 2018). As with others in the television broadcasting business, cable news stations have been rated on viewership, which has led to each station trying to be first to cover a story (O'Dea, 2015). Responsible news coverage may lead to a reduction of mass casualty events in America (O'Dea, 2015).

Social media. The invention and increasing popularity of social media have rapidly increased the loss of individuality and identity, which McLuhan warned would lead to an increase in violence (O'Dea, 2015). Americans have spent a great amount of time on social media and rarely have time for solitude (O'Dea, 2015). The use of social media has not been all negative (Egnoto, Griffin, Svetieva, & Winslow, 2016). Social media can be used to communicate with all people involved during an emergency event such as a mass shooting (Egnoto et al., 2016). Social media's ability to link people together instantaneously has had both positive and negative effects (O'Dea, 2015).

Copycats. Besides desensitizing people, the constant use of media and social media has had another unintended consequence: teens looking up to a shooter and copying the shooter's actions in what is called copycat killings (O'Dea, 2015). Many shooters replicate previous assailants (O'Dea, 2015). Adolescents and teenagers are by nature more impressionable and are more susceptible to participate in copycat-style violence (O'Dea, 2015). Talking about the events

with students without glorifying the killers may be an important step to preparing for an attack and to more thoroughly understand the causes of the attack (Ash & Saunders, 2018).

Popular culture and school shootings. Since the 1990s, school shooting events have become popular in music, movies, and literature (Ash & Saunders, 2018). Ash and Saunders (2018) completed an analysis of contemporary music, movies, and literature dealing with mass rampage killings at schools in America from 2000 to 2016. The authors focused entirely on bullying as the cause for the rampage shootings at schools, which has been the cultural script since the shooting in Littleton, Colorado, at Columbine High School in 1999 (Ash & Saunders, 2018). Alternate and more prevalent reasons for shootings are available, but the reasons for the shootings have not fit the popular cultural narrative (Ash & Saunders, 2018). Based on what has been shared by the media and over social media, parents state bullying is a primary reason K–12 students attack schools with guns and murder classmates (Payton et al., 2017).

How a Shooting Can Be Deterred

The literature on deterring a shooting is centered on identifying the characteristics of a typical shooter, hardening the target, adding an SRO, and building relationships with K–12 students (K. A. Anderson, 2018; Goff, 2019). Creating a culture within the school built on respect and building connections is essential to deterring violence (Goff, 2019; Shuffelton, 2015). Reviewing the literature on deterring a rampage shooting revealed many common themes shared by many different sources.

The typical shooter. One notable similarity of school shooters is the perceived peculiarity of the shooters (Shuffelton, 2015). The peculiarity was often unnoticed until after the incident when people reflected on what each may have done differently to prevent the tragedy

(Shuffelton, 2015). Identifying the characteristics and traits of the typical shooter may appear to be profiling or discrimination (Shuffelton, 2015). An understanding of who the typical shooter is can be an important part of stopping future shootings (Bonanno & Levenson, 2014). Some characteristic commonalities in school shootings from 1974 through 2000 have been indicated by literature (Bonanno & Levenson, 2014): all shooters were male, 95% were students enrolled in the school, and 5% were previous students (Bonanno & Levenson, 2014).

K–12 students and former students committed the attacks and targeted other K–12 students or teachers (Warnick, Kim, & Robinson, 2015). The attackers tended to work alone (Bonanno & Levenson, 2014). In 81% of the attacks, the attacker planned and attacked the school alone; in 11% of the attacks, the attacker planned with at least one other person but attacked alone; and in 8% of the attacks, the attacker worked with and attacked with another person (Bonanno & Levenson, 2014). The shooter used a handgun in 61% of the attacks and killed at least one person in 73% of the instances, and 59% occurred while students were in school during the school day (Bonanno & Levenson, 2014). Most of the shooters were White males from suburban or rural areas and were socially awkward (Warnick et al., 2015).

Warnick et al. (2015) found few commonalities between the shootings. The assailant had access to guns and wanted to use the guns at a school (Warnick et al., 2015). In most cases, no intended target was identified (Bonanno & Levenson, 2014). When a target was identified, the target was a teacher or administrator 54% of the time, and others who were not targeted were injured or killed 57% of the time (Bonanno & Levenson, 2014).

In 54% of attacks, the shooter was taken into custody at the school by law enforcement or detained by school staff (Paradice, 2017). Ideally, the school can identify the shooter before a

tragedy and get needed counseling in order to prevent another mass shooting and loss of life (Paradice, 2017). Another option to increase safety and stop shooters is making access to the campus more difficult (Arnold, 2015).

Hardened target. To harden a target means to make the building or area more difficult for an attacker to enter, have access to people, and continue attacking without resistance (Arnold, 2015). Options are available to accomplish the hardening of a school, the most common of which are an SRO, better access control, locks on doors, cameras, and metal detectors (Perumean-Chaney & Sutton, 2012). School violence is declining nationally, while the frequency of school shootings is steadily rising in Texas (Perumean-Chaney & Sutton, 2012). Finding a way to reduce violence in schools is of utmost importance; one solution may be an SRO who would be assigned to the school (K. A. Anderson, 2018).

School resource officers. Armed SROs have become more common in schools (K. A. Anderson, 2018; Crews et al., 2013). One way schools become hardened targets is by adding police officers who are highly trained (K. A. Anderson, 2018). Significant costs in salary, training, and equipment are associated with adding an SRO (Crews et al., 2013). The presence of law enforcement in schools has had a counterproductive effect by increasing student stress and has not indicated a lower occurrence of violence on the campus (Crews et al., 2013). The negative effects of an SRO have been more significant in minority students (K. A. Anderson, 2018). The most notable reason for the distrust of SROs is a lack of relationship between K–12 students and the officers (Keehn & Boyles, 2015).

Building relationships. Teachers are able to build meaningful relationships with K–12 students (Somers et al., 2017). To prevent tragedy, lawmakers have started passing legislation

allowing teachers to carry handguns on campus (Warnick et al., 2015). Strong relationships with K–12 students are a vital part of preventing and recovering from school shootings (Goff, 2019). K–12 students who relationships with adults at school perceive a sense of increased safety and are generally happier at school (Goff, 2019). Transformational leaders are more readily available to listen to the needs of others and work collectively to solve issues in a meaningful manner (M. Anderson, 2017).

Be Prepared

As with any emergency situation, being prepared is important. No one ever knows when an emergency may occur (Goff, 2019). Having a plan, training, and practicing are important to the successful reaction and recovery should an emergency situation arise (Goff, 2019). Once the plan is created, periodic analysis and changes are necessary to ensure the plan stays relevant (Goff, 2019). Another way to prepare for an event is to discuss prior active shooter events with teachers and K–12 students in an informative manner (Knopf, 2018). The instruction may lead to student and teacher questions which need to be answered before an emergency occurs (Knopf, 2018).

Emergency plan. Planning in advance for an emergency and having an emergency plan are important (Goff, 2019). The plan should be comprehensive and include roles for specific people in the organization (Goff, 2019). A school may create a team comprising district and community leaders to plan for the various types of crises which may render a school incapable of continuing the instruction (Goff, 2019). Working with outside agencies establishes responsibilities and roles prior to a catastrophic event (Brown, 2018).

Training and preparation. Teachers spend time each year training to keep students safe during an emergency (Fisher et al., 2017). Professional development for safety and emergency situations has increased since the 1999 Columbine High School shooting (Fisher et al., 2017). Teachers are tasked with implementing safety procedures created by the school and district administration (Webb & Levels, 2014). When asked how to keep schools safe, teachers stated training was the primary means, whether a concealed handgun was issued to teachers or not (Weiler & Armenta, 2014).

The aftermath of a school shooting in which two students killed a teacher and four classmates was explained in a lived experience study (Brown, 2018). Brown (2018), the principal of the school, had previous training in dealing with natural disasters but was ill-equipped to make decisions during the shooting. Although not ready for the emergency, Brown was able to direct the school's medical staff to stop bleeding and was even able to psychologically deal with the situation from the natural disaster training. The amount of trauma the staff experienced following the shooting was pronounced and left the principal as the primary counselor for the teaching staff (Brown, 2018). The response may have been more focused and the recovery more streamlined if training and preparations were done prior to the attack and not as a result of an emergency situation (Brown, 2018; Goff, 2019).

Proposed Measures

In Texas, college students are allowed to carry handguns on campus as a deterrent to stop a shooter who may want to cause harm on a campus (Beggan, 2019). The Texas Legislature added laws increasing the use of handguns at K–12 public schools as a means to stop the killing of students (Killin-Guadarrama, 2018). Under the Texas teacher concealed carry law, the district

school board can adopt the measure locally and the teacher undergoes thorough training to be proficient with an assigned handgun (Killin-Guadarrama, 2018).

Staff stopping violence. Teachers care about and often are able to listen to K–12 students and help the adolescents work through problems without having to turn to violence (Bonanno & Levenson, 2014; Keehn & Boyles, 2015). K–12 students misbehave at school, and teachers have to intervene to keep students safe (Bonanno & Levenson, 2014). In a school with an appropriate climate, the teachers respect the students and the students respect the teachers (Bonanno & Levenson, 2014). Over one third of school shooters have surrendered to teachers and not to law enforcement after the killing spree ended (Bonanno & Levenson, 2014). Some K–12 students surrendered to teachers because the shooters knew and respected the teachers and listened to the teachers when asked to stop and surrender (Bonanno & Levenson, 2014).

National Rifle Association plan. The National Rifle Association's plan to solve the school shooting epidemic, first proposed by the organization in 2012, is to issue handguns to capable and trained classroom teachers (Buck et al., 2013). No research is available to determine if the plan is sound (Buck et al., 2013). Until research is completed, issuing handguns to responsible and trained teachers may increase the problems of school shootings in the United States (Buck et al., 2013). On average, police response time to a school shooting is nine minutes, gunmen take substantially less time to attack and injure or kill students and staff at K–12 schools (Arnold, 2015).

Proponents of the plan have argued teachers are trustworthy and morally sound individuals who care for students and are available much faster than an SRO or outside police agency should an attack occur (Arnold, 2015; Crews et al., 2013). Community members in areas

where teachers are already carrying handguns are much more comfortable if the teacher is former military or former law enforcement (Crews et al., 2013). Schools can be safer by redesigning the buildings to limit access, locating private spaces such as restrooms in better places, installing automatic locking doors, installing metal detectors, or by installing additional cameras (Crews et al., 2013).

Teachers with guns. The literature established a need for increased safety in schools (Losinski et al., 2015; Paradice, 2017; Shuffelton, 2015). Teachers have attempted to protect and have relationships with K–12 students built on trust and mutual respect (Rajan & Branas, 2018; Rogers et al., 2018). In a lived experience study, Baxter (2019) explained the transition from being an unarmed school administrator to a school administrator with a concealed handgun. The difference was continuously analyzing situations for a potential threat, even when none existed (Baxter, 2019).

The week-long training, which included Baxter (2019) and 22 teachers, was designed to prepare recipients for the State of Ohio Peace Officer Training Exam. One requirement to carry a concealed handgun in schools in Ohio is to pass the Peace Officer Exam (Baxter, 2019). The decision to carry a handgun was optional, but Baxter decided to carry because the task was too important to allow someone else to undertake the responsibility (Baxter, 2019; Crews et al., 2013). Baxter perceived a greater sense of safety carrying a concealed handgun at school over someone else carrying who may not be completely trustworthy.

Secretary of Education Betsy DeVos answered questions about guns in schools during a U.S. Senate confirmation hearing in 2017 (Oltman & Surface, 2017). DeVos was not for or against the use of guns to protect schools, indicating the decision belongs to the state and not the

federal government (Oltman & Surface, 2017). As more states such as Colorado and Michigan enact laws which allow school officials, including teachers, to carry loaded guns, the federal government has not attempted to dissuade or alter the legislation (Crews et al., 2013; Oltman & Surface, 2017). If a shooter enters a school where handguns are not carried by teachers and no SRO is present, the only options for teachers are to hide with students, run from the danger, or shield students from the bullets (Oltman & Surface, 2017). Research indicates teachers want to preserve the lives of self and students (Egnoto et al., 2016).

Self-preservation. On February 14, 2018, two teachers at Marjory Stoneman Douglas High School in Parkland, Florida, moved between the shooter and students to protect the students (Clabough, 2018). Both teachers died from the injuries sustained during the shooting (Clabough, 2018). The teachers had been instructed to hide with the students to keep safe. The teachers did not have the choice to stop the shooter from a mass shooting while keeping students safe (Oltman & Surface, 2017).

In a qualitative case study conducted in Texas, Egnoto et al. (2016) determined people want to self-preserve, even while helping others in an emergency situation. Hiding and waiting for help is not a natural reaction to an active shooter, and K–12 teachers want to go to the threat and either help students or stop the threat (Egnoto et al., 2016). Teachers should be trained to use handguns responsibly and protect K–12 students during an active shooter event (Rogers et al., 2018).

Reasons Not to Arm Teachers With Guns

Not all teachers should be asked to carry a concealed handgun. Some teachers should not be allowed to carry guns while at school (Paradice, 2017). Teachers may be against the use of

guns and not be willing to use the gun in an emergency situation or may not perform effectively while under stress (Weiler & Armenta, 2014). Of 19 Colorado superintendents interviewed, 14 worried about a school shooting but would have worried more about teachers reacting to the shootings (Weiler & Armenta, 2014). The school administrators feared the reaction of teachers to students when students do not listen or are rude to the teacher (Weiler & Armenta, 2014). Three concerns arise in the literature when considering the measure to issue handguns to teachers: an accidental shooting, the increased risk of a shooting by introducing more handguns into an environment, and the negative effects to student trust and learning caused by the knowledge some teachers are carrying handguns in the school (Paradice, 2017; Rogers et al., 2018).

Accidental shootings. The primary concern of administrators and teachers for adding handguns, even if handled by well-trained and responsible teachers, is an accidental shooting (Paradice, 2017). From 1840 to 2015, a total of 558 people were injured by being shot at schools in the United States, and 420 people were killed (Paradice, 2017). Victims who were injured or killed were accidentally shot only 78 times, or 8% of the time (Paradice, 2017). The argument is, by introducing more handguns to the school environment, accidental shootings may increase in equal proportion to the increase in handguns in the school (Buck et al., 2013). As districts and school leaders select which teachers may carry concealed handguns at school, the temperament and personality of the teacher should be assessed and periodically evaluated (Webb & Levels, 2014).

Increased risk. An individual with a weapon is at an increased risk of being a victim (Rogers et al., 2018). If the teacher fails to keep students safe or loses the handgun, the teacher may face expensive litigation for negligence (Rogers et al., 2018). In a qualitative summary of

the various problems presented by issuing handguns to teachers, Rogers et al. (2018) determined the increased risk to the teacher and to the students did not merit the potential benefits, which are still under researched. The potential for harm increases when adding guns to schools (Rajan & Branas, 2018).

When the teachers and staff began carrying concealed handguns in an Ohio school district, a primary concern of the individuals carrying concealed handguns was being identified as a handgun carrier (Baxter, 2019). If an intruder knows who has handguns, the individuals become the first targets in an active shooter situation (Baxter, 2019). Baxter (2019) was uncertain if issuing guns at the school may lead to a positive impact on student and staff safety. The increased awareness of the concealed handgun made Baxter concerned about a potential threat at all times. The added awareness is similar to what students experience when guns are present at school: a continued heightened sense of awareness, which leads to an increase in student anxiety and stress (Rajan & Branas, 2018).

Negative impact on student trust and learning. When a school increases security, including issuing handguns to grade school teachers, students may be negatively impacted in trust and in learning, and little to no evidence exists indicating the measures actually reduce violence at schools (Crawford & Burns, 2015; Rajan & Branas, 2018). One quantitative survey was conducted with 758 high schools and 901 K–8 schools to determine the impact of guns on education (Crawford & Burns, 2015). The findings indicated the risks to student learning may outweigh the slight reduction in weapons infractions on elementary and middle school campuses and no reduction of weapons violations at the high school level (Crawford & Burns, 2015).

Minority students perceive a sense of being targeted by many of the measures used to harden a school and protect from a shooting (Crawford & Burns, 2015). Training in ethnic diversity may be necessary to alleviate the concerns of discrimination or prejudice before implementing a plan to issue handguns to teachers (Crawford & Burns, 2015). A side effect of guns in the school environment is known as a weapons effect (Buck et al., 2013). A weapons effect occurs by creating an aggressive climate by introducing more guns (Buck et al., 2013). The effect of the handguns on K–12 students makes trusting the adults hard and makes the students fearful of an imminent attack on the school by constantly being hyper-vigilant (Crawford & Burns, 2015; Rajan & Branas, 2018).

More research is needed to properly form a decision on the full impact of increased safety measures on K–12 students (Rajan & Branas, 2018). In a phenomenological editorial review, best practice was determined to be a continued research of safety measures from the two competing political forces in order to make the best decisions for K–12 students in the future (Rajan & Branas, 2018). The plan may be more effective when including many different safety measures and not just one solution intended to work for K–12 students and in various situations (Rajan & Branas, 2018).

Alternatives

The options other than teachers carrying concealed handguns to increase K–12 school safety and keep teachers focused on teaching students should be explored (Rogers et al., 2018). Some options include identifying potential shooters, building relationships with students, and creating a mutually respectful climate and a culture built on celebrating differences while getting anyone help who is suffering from a mental health concern. The safety measures may work alone

or in conjunction with an armed SRO or a teacher with a concealed handgun (Losinski et al., 2015). By pairing solutions where the focus is on relationships and increasing campus security, K–12 students and teachers may become significantly safer (Losinski et al., 2015).

Alternative ways to harden schools, such as having only one access point and updated camera systems, may reduce the frequency of violent attacks in schools (Crews et al., 2013). The costs are relatively the same to hire an armed officer with the job of protecting the campus as issuing handguns to teachers (Buck et al., 2013). If the officers take time to get to know the students at the school, then the preferred method of safeguarding a campus may be trained and armed security personnel such as an SRO (Buck et al., 2013). School districts may have to compare prices and choose to implement a system where teachers carry guns to protect K–12 students or buy the necessary classroom educational materials needed to adequately teach the students (Minshew, 2018).

Gap in Literature

A lack of literature in a particular field is known as a gap in the literature which indicates a need for more research and literature (Hart, 2018). The lack of literature regarding school safety and gun violence in schools indicates a gap in the literature. Literature is available regarding legislation, teachers' duty to protect K–12 students, and the many failures to protect students in past emergencies (Gereluk et al., 2015; Rajan & Branas, 2018). Literature is available pertaining to why schools are targeted, many of the causes for shootings, and ways shootings can be deterred (Keehn & Boyles, 2015; Losinski et al., 2015). Literature is available in the areas of being prepared in the event of an emergency, the proposed plan to issue handguns to teachers, why allowing teachers to carry guns is not ideal, and alternatives to issuing handguns to teachers

at school (Goff, 2019; Rogers et al., 2018). Research needs to be conducted regarding teacher perceptions on school safety with the increased presence of handguns issued to other teachers (Winston, 2016).

In Texas, measures have been adopted allowing districts to issue handguns to K–12 teachers (Killin-Guadarrama, 2018). Teachers know and care for students at the schools and should not rush to use the handguns against students (Bonanno & Levenson, 2014; Killin-Guadarrama, 2018). Teacher perceptions should be considered prior to the implementation of laws allowing concealed handguns in schools (K. A. Anderson, 2018).

Chapter Summary

Student safety is important to K–12 teachers (Goff, 2019). The issue has been at the center of new legislation allowing school districts in Texas to issue handguns to teachers (Killin-Guadarrama, 2018). Teachers may perceive an increase in safety with armed teachers ready to act as a first line of defense to a would-be attacker (Arnold, 2015). Teachers may determine the increased focus on arming staff causes a distraction to learning (Rogers et al., 2018). Reducing the response time is crucial, but adding guns could create a prison-type environment which makes learning a secondary concern of teachers carrying handguns (Rogers et al., 2018).

Lawmakers have an opportunity to make teacher-informed decisions backed by teacher perceptions and not a reaction to the next tragedy (Winston, 2016). Options are available to increase security in schools, including increasing counseling services to address the mental health concerns of students (Crawford & Burns, 2015; Knopf, 2018). Other measures, such as increasing the presence of SROs or asking trained teachers to carry concealed handguns, are intended to harden a school campus to deter an attack (Arnold, 2015; Becerra, 2018).

A gap in the available literature exists pertaining to the perceptions of teachers regarding school safety when teachers are allowed to carry concealed handguns on campus. An abundant amount of literature is available on the perceptions of school administrators and parents (Baxter, 2019; Weiler & Armenta, 2014). Teacher perceptions are an important factor when deciding how best to protect schools and students (Winston, 2016).

In the next chapter, the methodology is explained in detail. The methodology chapter includes sections on research rationale and design, the role of the researcher, research procedures, data analysis, reliability and validity, and ethical procedures. The research results add to the knowledge base and fill the existing gap in the literature.

Chapter 3: Methodology

The purpose of the qualitative exploratory multisite instrumental case study was to ascertain whether public school teachers in three similarly sized Texas high schools perceived an increase or reduction in safety if other teachers assigned to the same schools were allowed to carry concealed handguns. Another purpose was to establish what training the participating teachers require of teachers selected to carry concealed handguns. Each school has between 325 and 475 students. The schools were located in Texas and had at least one SRO assigned to each school district.

In June 2013, following the 2012 attack on Sandy Hook Elementary in Newtown, Connecticut, which resulted in the death of 20 children and six teachers, the 83rd Texas Legislature passed the Protection of Texas Children Act (Killin-Guadarrama, 2018; Texas Legislation, 2013). The statewide legislation allowed K–12 school teachers in Texas to carry concealed handguns as school marshals if the employing school district opted to adopt the measure. According to the Texas Commission on Law Enforcement (2019), a school marshal is an employee of the school, attended the 80-hour training course, passed a psychological examination, and is a state concealed weapons carrier. The decision for teachers to carry concealed handguns has been left up to each local school board, but if a school district opts into the marshal plan over the guardian plan, handguns have to be left in locked safes unless the campus is being actively attacked (Killin-Guadarrama, 2018).

The study focused on both the school marshal plan created in 2013 by legislation from the state and the newer guardian plan created by Texas Governor Greg Abbott in 2018 as a result of the school shooting at Santa Fe High School in Santa Fe, Texas (Samuels, 2018). Both plans

allow teachers to carry concealed handguns while at school (Samuels, 2018; Texas School Safety, 2018). The newer plan, according to Samuels (2018), is not associated with any state legislation, did not receive state funding, and removed most of the oversight of the school marshal plan. The guardian plan has cost the school district much less, about \$2,000 annually for 16 hours of training, compared to \$30,000 for the 80 hours of training required under the more structured school marshal plan (Texas School Safety, 2018).

The study compared teacher perceptions about school safety at three similarly sized high schools in Texas which each employ different policies and practices regarding teachers carrying concealed handguns as a school safety measure. These different policies include prohibiting teachers from carrying concealed handguns, allowing teachers to carry handguns, and asking teachers to carry guns but not having any teachers perform the role of school marshal or guardian. By answering the following research questions, the teacher perceptions at the three schools were better understood.

Research Question 1: What were teachers' attitudes about teachers with concealed handguns at school?

Research Question 2: For those teachers who reported feeling safer with colleagues who had a concealed weapon, what specific experiences influenced the perception of safety? Research Question 3: According to teachers, what training was needed to serve as a school guardian?

The appropriate research methodology was a multisite instrumental case study of an exploratory nature (Marshall & Rossman, 2014; Salkind, 2010). The focus was the perceptions of school safety by teachers at three schools in Texas, one with the policy with teachers carrying

concealed handguns, one without the policy, and one with the policy but not implementing the concealed-carry procedure with teachers (Creswell, 2014). The research was conducted at the participating high school campuses where a representative sample of the certified teaching staff answered face-to-face interview questions about school safety and about teachers carrying concealed handguns. The participating teachers were a representative sample of all teachers at each campus based on the demographics of the school.

A certified teacher in Texas possesses a bachelor's degree, attended an education preparation program, passed the state exams, and passed a fingerprint background check (Carmichael, 2018). General school safety commonly involves access control of a campus, procedures to limit instances of violence or the threat of violence, and active monitoring of the behavior of individuals on the campus whether the occupants are students, teachers, or visitors (National Center for Education Statistics, 2018).

From each interview, scripted notes were transcribed and then coded based on commonalities before analysis to determine which information from the interview participants overlapped (Flick, 2018). The 28 interview questions (Appendix B) were open-ended, participants were able to answer according to the teacher's perspective. Each participating teacher was given one hour to answer the open-ended questions.

Research Design and Rationale

Knowing how teachers perceive the level of safety in schools and why each perceives an increase or a decrease is important to developing meaningful and adequate school safety legislation, school district policy, and school procedures. The research was needed due to a lack of existing research on the topic and the continued push for effective school safety laws,

particularly those involving the addition of concealed handguns. By determining the perspectives of certified school teachers, state lawmakers and local school boards in Texas are better able to make meaningful decisions. Grounded theory and phenomenology research designs were considered for the study but were not selected due to the need for preliminary qualitative data on the topic (Creswell, 2014).

Literature was lacking associated with teachers carrying concealed weapons at school and how other teachers perceive the policy from a safety and security standpoint. The overall safety of the teachers and students on a campus may be seen as better or worse by adding handguns for teacher use. An advanced search in the ProQuest database for the terms *teacher*, *guns*, and *safety* yielded only four peer-reviewed results for the past three years; all other results were off-topic or were not peer-reviewed. Due to the lack of research available, an exploratory case study research design was most suitable for the study (Timmons & Cairns, 2009). In the exploratory approach, open-ended questions are asked of the sample to better understand the participants' points of view. In an exploratory interview, the person conducting the research does not determine what words or information is precoded; instead, the transcribed interview notes are used to identify commonalities and differences between participants and locations (Flick, 2018).

By gathering qualitative interview data from 15 teachers, five teachers from each of three similarly sized high schools in Texas, the research uncovered valid and reliable answers to the research questions. The high schools are located in Texas and have an enrollment of between 325 and 475 students each, which gives these schools the same 3A classification by the state's University Interscholastic League categorical system. In Texas, schools are classified by

enrollment from 1A to 6A, with 1A being the smallest and 6A the largest; 3A schools have an enrollment between 225 and 504 students (University Interscholastic League, 2018).

The participating school districts employ at least one SRO in each school district and have comparable sized high schools. Each of the schools has a school district board policy indicating whether teachers carrying a concealed handgun is a possibility and whether the superintendent or school board has the authority to select the individuals to carry the handguns. Of the three schools, one does not allow the superintendent to authorize teachers to carry a concealed handgun, one is allowed to have teachers carry concealed handguns but chooses not to, while the third allows teachers selected by the superintendent to carry concealed handguns (Alvarado, 2018). A benefit of exploratory research is evaluating information gained in the participants' environment; the information is not attainable outside of the environment due to lack of research or the varying viewpoints of people outside of an environment (Robson, 2002). By conducting a face-to-face interview with each participant at the respective school, the participant was comfortable and likely shared more freely as the interview was in a familiar location.

Data from questionnaires, interviews, and a document analysis of board policy shaped themes to be analyzed. To triangulate the data and increase the validity and reliability of the results, data from the three collection techniques were coded and compared (Creswell, 2014; Marshall & Rossman, 2014). The methods for gathering the research data, the demographic questionnaire, the face-to-face interview, and policy analysis formed the basis for further study and research. Topics covered were school safety, teachers carrying handguns, and appropriate legislation to increase school safety. By formulating open-ended interview questions beforehand,

participant responses were not influenced by preconceived notions or expectations. The information gathered could be used in subsequent research on the same or similar topic.

The primary advantage of the qualitative research design involving the open-ended interview questions and the document analysis is the development of a hypothesis for future quantitative or mixed-methods research (Merriam, 1998; Teegavarapu, Summers, & Mocko, 2008). The benefits of conducting the research with the qualitative design were threefold. First, the research was lacking and would be expanded for future analysis and use. Next, the findings may inform school board members and superintendents for consideration in utilizing either the more structured marshal plan or the more convenient guardian plan to increase safety. Last, Texas legislators may be more informed of teacher perception before passing any future legislation authorizing concealed handgun use for safety in Texas schools.

Role of the Researcher

The views regarding school safety and whether allowing teachers to carry handguns increases or decreases the participants' perceptions of overall school safety were gathered during one-hour face-to-face interviews at three Texas high schools. The qualitative data gathered from the teacher questionnaires, face-to-face interviews, and school district policy document comparison were collected and analyzed. Participating teachers were not employed by anyone conducting the research and were in no way influenced by or known to anyone conducting the research. All employment appraisals and evaluations of the participants were conducted by school administrators who had no input into the research.

Certified teachers at three high schools were asked to answer the seven-question demographic questionnaire (Appendix C). The data from the questionnaires identified participant

gender, highest degree attained, age, race, years employed as a teacher, years employed at the school district, and whether any of the participant's children attend the high school where the participant is employed. A sample was selected from the completed certified teacher demographic questionnaires, which was based on the TEA's 2018–2019 TAPR. The annual state report lists the averages for each campus in gender, degree, age, race, years employed as a teacher, and years employed at the school (TEA, 2019). No one involved in collecting data for the research had ever met any of the teachers included in the sample. To increase the reliability and validity of the results, contact was limited to only answering questions about the case study and conducting the interview at the schools; no other interaction with participants occurred. Besides collecting data from the questionnaire (Appendix C) and interview (Appendix B), a document analysis of the policies at each of the three participating school districts further determined any similarities or differences between the policies. To ensure the data were in no way altered or subjected to unequal comparison to the other two participating districts, no one involved in collecting data had contact with the school board members at the participating school districts until after the analysis of the school board policy pertaining to carrying concealed handguns on campus for safety was completed.

Isolating the control variables, or dependent variables, and managing other variables, or the independent variables, was important and could not be overlooked. To ensure the variables in the research did not undermine the reliability of the data or the validity of the interpretations, meticulous procedures were followed throughout the process of gathering data (Merriam, 1998). All data were recorded and scripted immediately after the subject interaction. By completing the scripting immediately, there was less possibility of researcher bias.

The variables in question—how teachers perceive school safety by allowing other teachers to carry concealed handguns, why some teachers perceive an increase in safety with the addition of concealed guns, and what prequalification a teacher should have before having a concealed handgun—were isolated and tested independently (Merriam, 1998). The school location, the school policies, and the school culture were independent variables of the study. By completing the study at three locations, the research may have yielded useful data to a particular school site by comparing the results of the different sites. The methods used remained constant to ensure the results were not impacted by the selection criteria or the methods. Being a certified teacher, being employed in a Texas high school, being an accurate sample representation of the school were the selection criteria and remained constant throughout the research. The methods which remained constant were none of the participant's children attended the high school, the interview questions, the manner of asking questions, audio recording the interview, and the person asking the questions.

By maintaining the same selection criteria and methods, the research reliability and validity were not compromised or undermined. A limitation in isolating the methods used in the qualitative research was the answers given during the interview questioning (Merriam, 1998); if answers were detailed and in-depth for some participants and not for others, a new method was introduced. All interview questions were answered in under one hour to eliminate an overrepresentation of the more detailed participants. When asked the face-to-face interview questions, each participant was in a classroom or conference room located on the high school campus. If an answer to a question was lacking detail, the participant was asked to expand the response until enough detail was provided to ensure an equal representation of the response.

Research Procedures

Exploratory multisite case studies are extremely structured with tightly controlled conditions to ensure reliability and validity (Merriam, 1998). Without controlled measures, the results are unable to be used for publication or future research (Merriam, 1998). Creating a sample which represented the population increased the research believability, which in turn made the results more useful. Next, the instrumentation for the questionnaire and interview was modified to best support the research questions. The data were collected in the same manner for all participants at all three locations. Finally, the data were prepared for analysis by being scripted and input into NVivo 12 qualitative software, which was used to sort and code the qualitative data. Following preestablished research procedures ensured the research was complete and accurate.

Population and Sample Selection

The first school district is located in a rural south Texas community and has one high school which employs 35 teachers and has 454 students (TEA, 2019). The high school, School A, could have marshals or guardians, but the school district does not openly use either. The superintendent of the school district granted permission to conduct interviews at the high school (Appendix D). From the demographic questionnaire, a sample of five teachers was included in the interview portion of the study. These five teachers most closely represented the age, gender, education, and tenure of the staff at School A.

The next participating district is located in a rural Central Texas town and has one high school which employs 38 teachers and has 447 students (TEA, 2019). Five teachers from the high school were included in the sample and were selected to be involved in the interview. At the

Central Texas school district, the superintendent is not allowed to select teachers for either the marshal or guardian school safety program; the high school does not have any teachers carrying concealed handguns. The superintendent granted permission for research to be conducted at the high school (Appendix E). Five teachers made up the sample at the Central Texas high school and represented the age, gender, education, and tenure of the staff at School B.

The third high school is located in a rural North Texas town and employs 28 teachers and has 307 students (TEA, 2019). At the North Texas school district, the school board policy allows teachers, if selected by the superintendent, to carry concealed handguns as a safety precaution. Five teachers were selected from the school population to participate in face-to-face interviews. The superintendent of the North Texas school district authorized the research at the high school (Appendix F). The five sample teachers most closely represented the age, gender, education, and tenure of the staff at the high school.

The sample selected included five teachers from each of three schools, for 15 teachers total. Each of the participants answered 28 face-to-face interview questions (Appendix B) in a one-hour interview. The verbal and nonverbal information gained from each participant was utilized during the analysis, which was why the face-to-face method was utilized. By transcribing nonverbal observations, the data included the important nonverbal communication factors like pace, pausing, hesitation, pitch, inflection, and body language (Weinbaum & Onwuegbuzie, 2016). Each participant was an adult, and a signed informed consent (Appendix G) was obtained prior to distributing the questionnaires and conducting the interviews.

To obtain informed consent from the teachers, the school district superintendent first gave consent to conduct the interviews (Appendices D–F). Initial contact with teachers at each

school was made through e-mail. Each certified teacher received the informed consent document (Appendix G) with all research parameters via school district e-mail; the e-mail contained instructions on completing the informed consent document, including how to return the document. The purpose of the seven-question demographic questionnaire (Appendix C) was to gain an accurate representative sample of five teachers from each of three Texas high schools.

To limit the variables included, each of the teachers selected for the sample qualified for the interview based on demographic information from the questionnaire (Appendix C). As an example, if a participant was a 20-year-old White female and a first-year teacher, and the average campus teacher had more than 10 years as a teacher, the teacher would be unlikely to be selected due to the low number of years as a teacher. The questionnaire asked each participant about Hispanic or Latino origins, which was important because the state of Texas includes the information on the TAPR.

Instrumentation

To complete the qualitative exploratory multisite case study, permission was sought and granted to utilize a previously used instrument. The instrument was modified and adapted to collect responses suitable to the research. The questionnaire was first used by Winston (2016) in research on school safety and teacher perceptions regarding adding more safety measures. The modified instrument (Appendix C) was e-mailed to all certified teachers who completed the informed consent form at the three Texas high school. Winston granted permission (Appendix A) to use the instrument, change the instrument as needed, and post the instrument in an appendix. The seven-question demographic questionnaire was used as a guide in the selection of a representative sample for each school. The representative sample was selected based on the

campus demographics as reported on the TAPR. If more than five teachers met the average demographics at the school, then the interviewer selected the five teachers who most closely represented the average based on a stratified random selection.

The categorical questions in the teacher questionnaire (Appendix C) were gender, highest education attained, age, race, years as a teacher, years teaching in the district, and whether the teacher had a child attending the school district or the high school. The instrument was vital to determining which teachers would be an accurate sample of the teacher population of the high school. By comparing the results of the questionnaire to the TEA report known as the 2018–2019 TAPR, which lists the demographic data for the students and teachers of the school, the interviewer selected a representative sample. The sample was an accurate representation of all teachers at the school and represented the entire teacher population of the school for the individual exploratory-based interview session.

Massey-Jones (2013) used a detailed instrument to conduct research on teacher perceptions of school safety. The adapted instrument (Appendix B) was used to guide the one-hour teacher interviews with five teachers at each of the three participating high schools.

Massey-Jones granted permission (Appendix H) to use the instrument, adapt the same instrument as needed, and post the instrument in an appendix.

The interview questions were aligned to one or more of the three research questions included in the study. The interviewer asked each teacher open-ended interview questions (Appendix B) to determine teacher perceptions of safety on the campus, why some teachers perceive an increase in safety when other teachers are carrying concealed handguns, and what qualifications a teacher should possess in order to carry a handgun. Some of the 28 open-ended

interview questions addressed more than one of the three research questions. The interview questions were distributed in a manner which ensured each of the three research questions had multiple interview questions (Table 1). Thirteen questions were focused on Research Question 1, 11 on Research Question 2, and 10 on Research Question 3. Many of the questions overlapped, and some participant responses answered more than one research question.

Table 1

Alignment of Interview Questions to Research Questions

Research question	Interview questions		
Research Question 1	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 13, 27, 28		
Research Question 2	2, 9, 12, 13, 17, 20, 21, 23, 24, 27, 28		
Research Question 3	11, 14, 15, 16, 18, 19, 20, 22, 25, 26		

Note: Each interview question addressed at least one research question; some interview questions addressed more than one research question.

Data Collection

To obtain consent to begin the study, the interviewer contacted the district information office or human resource office at each of the three Texas school districts. Teachers at the three school districts received the consent form (Appendix G) to complete and return through school e-mail. A copy of the signed informed consent was kept with all other research data throughout the study. A digital copy of the signed form will be kept on a removable storage device for reference in a locked file cabinet at the school for a minimum of three years.

Data from the questionnaires and interviews were collected by the interviewer from all participating teachers and those selected for the sample based on questionnaire information. Any

collected data were transported by the interviewer and immediately locked in a secure file cabinet at the school with no access to anyone other than the interviewer. A cross-section of the teacher population based on teaching experience and demographics ensured adequate representation of the teacher population of each school, including gender, race, years of experience, and age. Each of the demographic categories is reported to the state of Texas each year and was based on the TAPR from the 2018–2019 school year (TEA, 2019).

The questionnaire (Appendix C) was sent to every certified teacher at each of the three high schools participating in the study through the school district e-mail service. The results of the questionnaire were collected by the interviewer through return service e-mail and then sorted based on the population data, the sample was a representation of the overall population. The interviewer selected five teachers from each location to participate in face-to-face interviews. If more than five teachers met the qualifying criteria, the interviewer selected a stratified random sample from the teachers who qualified for the representative sample. A stratified random sample was necessary to reduce the number of participants to the five who were interviewed at each school. To identify the five from the larger group, the entire representative sample for each site was listed alphabetically by last name, and every other teacher was selected until five were selected for the sample (Flick, 2018). Due to the possibility of attrition, the range for each school was four to five teachers, with five being the target and four being acceptable.

During each participant's face-to-face interview, the modified 28-question instrument (Appendix B) was utilized to guide the audio-recorded interaction. The participant interviews were recorded using an audio recorder with a removable SD card. The interviewer was responsible for maintaining the security of the recorded interview data until the audio recordings

were transcribed. The SD cards containing the recordings will be kept locked in a file cabinet at the school for three years, at which time each will be destroyed. Once transcribed, the recordings on the SD card and a copy of the transcripts were kept in the secured and locked file cabinet.

Interviews with each of the five participants at each school were conducted in a classroom or conference room. At the end of each face-to-face interview, the interviewer saved the audio file and organized all scripted notes before the next participant interview. The audio-recorded information collected from the interviews added useful insights during the data analysis phase of the study. Useful data often are not collected during interviews as the interviewer is unable to script all information while the participant is answering questions (Weinbaum & Onwuegbuzie, 2016). The process was repeated at each of the three high schools until all 15 interviews were conducted. All information collected in notes and recordings was transported by the interviewer and secured in a locked file cabinet at the school.

Data Preparation

The data from the scripted notes and audio-recorded interviews with the 15 teachers at the three Texas high schools were transcribed and input into NVivo 12 software for coding and sorting purposes. NVivo 12 is a qualitative data analysis program used to ensure the text-rich qualitative data are transcribed and analyzed more efficiently and thoroughly. By inputting the transcribed information from the interviews into NVivo, the interviewer was better able to identify nodes, themes, and trends. Once input into the software system, the data were re-sorted for further analysis in NVivo. Relationships in the data became evident, and these relationships became the general nodes and the specific themes of the research study.

Each of the 15 participants was entered into the NVivo system by using nonidentifying information. The first school was listed as A, the second school as B, and the third school as C in the NVivo 12 system. Each participant at each campus was assigned a school letter and number, which was considered the participant number for all analysis purposes. For example, Participant B3 was from School B and the third participant on campus to complete the informed consent. For documentation purposes, the signed consent forms were marked with the participant number to ensure transparency in attaining consent.

Data Analysis

All information was transcribed to enable the data to be coded according to the individual answers given by each of the 15 participants (Creswell, 2014). The analysis of the data was conducted at the completion of all interviews in order to ensure the research was not swayed by researcher bias (Marshall & Rossman, 2014). The audio recordings were beneficial during the analysis phase, as the recordings were reexamined to ensure completeness and accuracy (Thomas, Nelson, & Silverman, 2011). By reviewing teacher perceptions at three schools in Texas, the research identified and explored trends in the data which demonstrated teacher perceptions of allowing other teachers to carry concealed handguns as a means to increase safety in Texas public schools. The analysis of each node and then theme identified common trends which could then lead to further research topics and studies.

The chosen qualitative data analysis software is NVivo 12 Plus. The software identifies emergent trends in the data, which ensures accuracy during the coding phase of data analysis (Sotiriadou, Brouwers, & Le, 2014). During analysis, some trends emerged which demonstrated how the entire sample perceived particular aspects of specific interview questions or the more

general research questions. These themes were vital to determining if the sample significantly perceived concealed handguns in a particular way, why some participants perceived the situation a certain way while others did not, and if any prequalifications or training should be completed for those selected to carry concealed handguns.

The audio recordings were transcribed using NVivo software. The software was utilized to transcribe the roughly 12 hours of interview data more accurately and quickly than a traditional transcription service. The transcribed interview data then became the principal case study data. The data were analyzed and run through NVivo software. The software facilitated theory building by identifying similarities in the data sets (Welsh, 2002). The information was analyzed and grouped in a manner which enabled nodes, themes, and trends to emerge among the teachers at a school and among the teachers collectively. After the interviews were transcribed and the data grouped, the results were methodically and carefully coded to enable the commonalities to be compared in the analysis.

The data were handled securely while the analysis phase was conducted ensuring there were no errors in the process. In qualitative research, the interview notes and transcripts are valuable data sources which can be compromised if not handled carefully (Flick, 2018). Besides the transcribed interviews, the questionnaire results and e-mails were entered into the software. NVivo offered insight into commonalities in the data and provided useful color graphs which could be used to depict the data within the summary of findings.

To keep the data analysis objective and free of researcher bias, the data were input into NVivo software, then the software compared the tens of thousands of text data to determine the themes and commonalities (Sotiriadou et al., 2014). Utilizing the case study process ensured the

results followed the method and framework completely. The case study process used the following six steps, and repeated as necessary until completed: plan, design, prepare, collect, analyze, and share (Baškarada, 2014). Keeping all information in one location for categorization and coding was vital to correctly identifying the commonalities in the data and making valid conclusions from the nodes.

Reliability and Validity

To increase the validity and reliability of the study, the results were triangulated using data gathered from the demographic questionnaire, the face-to-face interviews, and the document analysis. The document analysis provided useful details of the school board policies which govern each of the three school districts. By examining the documents and adding the information to the analysis, the validity of the results was increased. Without the document analysis, knowing if the interview data mirrored the district policy or if teachers communicate different beliefs than those of the school board would not be possible. Any trends were identified as themes in the NVivo 12 software system. Similarities in the data were then identified from participant answers to the interview questions and how each answer related to the three research questions.

In a qualitative research study, the reliability is centered on providing the data in an organized and believable manner (Golafshani, 2003). By keeping transcripts of all interview notes organized and complete, the reliability increased as the nodes were analyzed and themes emerged. The validity of the qualitative study increased when the same methodology and framework were maintained throughout the research process (Golafshani, 2003). To increase the validity of the study, Creswell, Marshall, and Rossman were referenced regularly to ensure the

methodology and framework were consistently maintained throughout the data collection and analysis portions of the study.

Besides triangulation, another way of increasing the credibility of research is to conduct member checks (Birt et al., 2016). Member checks can greatly increase the credibility of research by giving respondents an opportunity to clarify any misinformation or misunderstandings (Birt et al., 2016). Follow-up meetings with each of the 15 participating teachers were held, each participant was able to review the transcript of the interview for any errors or misunderstandings.

Ethical Procedures

Participant confidentiality and anonymity are paramount to ethics in research (Flick, 2018). The primary method for keeping information confidential for the study was a letter and number system used throughout the study. Each of the three schools was identified as A, B, or C. Each participant was numbered starting with 1 in the order the informed consent forms were received. When referred to in the research, each teacher is identified by school and number. The research data were compiled on an external hard drive with password protection; the hard drive, all SD cards with audio, and all notes were locked in a file cabinet located at the interviewer's school district. At no time was anyone other than the interviewer granted unmonitored access to the participant information, the data, or the unreported results of the research. After three years, all of the data will be destroyed and discarded.

By using the convention of confidentiality to ensure complete anonymity of each participant, the participants need not fear any harm for expressing true and unbiased beliefs (Kaiser, 2009). If at any point in the process of interviewing or gathering data participants decided not to continue the interview, the participants were removed from the study. Participant

confidentiality and anonymity were maintained, participants were able to answer questions with the utmost honesty without fear of reprisal or retribution from employers. Teachers' answers contradicted the policies of the employing district and could be seen as inconsistent with the school district's views.

Participants were made aware of possible risks associated with participation in the study before any interview questions were asked. Of the possible risks listed in the informed consent document (Appendix G), one risk was the possibility confidentiality could be breached, lost, or stolen. To ensure a breach of confidentiality did not happen, the interviewer kept all identifiable information separate from the data collected; furthermore, the pseudonyms were utilized for participants whenever the results of the research were published or shared. When not being examined or analyzed, the research data were locked in a file in a locked closet in the interviewer's school district and will be kept for three years. After three years, all data will be destroyed and discarded. By following these procedures, the possibility of participant confidentiality breach was significantly reduced.

Chapter Summary

The research methodology for the multisite qualitative instrumental case study was exploratory. The 15 participants were selected from three similarly sized high schools in Texas to answer questions about school safety and outfitting teachers with concealed handguns as an attempt to make schools safer. Each participant signed an informed consent document prior to participating in the interview. Each participant was a representative sample of the overall population of the certified teaching staff at the respective school. The population demographics for the teachers were based on the TEA 2018–2019 TAPR; the sample was selected based on the

information recorded in the demographic questionnaire (Appendix C). To isolate the dependent variable, all independent variables were constant in the sample. The 15 participants taught in schools of similar size, had no children attending the high school, and had an assigned SRO in the school district.

Permission was granted to utilize existing instrumentation with modifications through the original creators of these instruments (Appendices A & H). The superintendents of the three school districts hosting the research approved the research study as per the signed approval forms located in Appendices D–F. The qualitative analysis software NVivo 12 was utilized to code the scripted notes. The coding was done to find and explore valid themes for the research-based common nodes.

The methodology for the qualitative case study was exploratory. The results and summary of the research can be used as a basis for further research. The results can be used by educational administrators and school boards considering policies which would allow trained teachers or staff to carry concealed weapons. The results are contained in Chapter 4, while the conclusions, implications, and recommendations are included in Chapter 5.

Chapter 4: Research Findings and Data Analysis Results

The Second Amendment to the United States Constitution allows citizens the right to own certain types of guns, including handguns, shotguns, and rifles (Arnold, 2015). More citizens in the United States own guns than in any other industrialized country (Payton et al., 2017). Stopping gun violence in schools has become essential, and there are many different views on how the measure can be best achieved. Some people would like to increase security at public schools by introducing more guns in the hands of trained teachers, while other people would like an increase in gun control legislation limiting the number of guns available in the United States (Goff, 2019; Keehn & Boyles, 2015).

Before developing school safety legislation and K–12 school safety procedures, teachers should be asked about the addition of trained teachers carrying concealed handguns (Winston, 2016). The problem is a lack of existing research on the topic of teacher perceptions of adding concealed weapons to schools and the continued push for effective school safety laws, particularly those involving the addition of concealed handguns (Winston, 2016). By determining the perspectives of school teachers, state lawmakers and local school boards in Texas should be better able to make meaningful decisions which include the perspectives of Texas teachers (Dugyala, 2018; Killin-Guadarrama, 2018).

The purpose of the qualitative exploratory multisite instrumental case study was to ascertain whether public school teachers in three similarly sized Texas high schools perceived an increase or reduction in safety if other teachers assigned to the same schools were allowed to carry concealed handguns. Exploratory interviews were conducted to collect data for the study. The following research questions guided the qualitative multisite case study:

Research Question 1: What were teachers' attitudes about teachers with concealed handguns at school?

Research Question 2: For those teachers who reported feeling safer with colleagues who had a concealed weapon, what specific experiences influenced the perception of safety? Research Question 3: According to teachers, what training was needed to serve as a school guardian?

In Chapter 4, the data gathered by interviewing 15 high school teachers, five from each of three schools, were identified, analyzed, and coded into nodes to identify themes or trends in the transcripts and notes from the interviews. Throughout the chapter, a description of the data collection processes is conveyed. The description is followed by an analysis of the data and the results of the participant interviews. The transformational leadership theory was used as a theoretical framework when data sources were analyzed. An exploration of the validity and reliability of the study completes Chapter 4.

Data Collection

The American College of Education Institutional Review Board (IRB) granted approval (Appendix I) for the qualitative exploratory multisite instrumental case study. The administrators of the three school districts were then contacted to arrange school visits and communicate distribution and collection procedures for the informed consent (Appendix G) and the demographic questionnaire (Appendix C). Each of the three administrators scheduled an interview time within three weeks of contact and offered a quiet conference room in which the face-to-face interview took place. Each of the three site administrators received the informed

consent and demographic questionnaire, and each administrator disseminated both documents to the certified teachers assigned to teach at the high schools.

Data were collected from three high schools in Texas. These schools are referred to as Schools A, B, and C for reporting purposes. School A is located in a Central Texas town and employs 38 teachers and has 447 students (TEA, 2019). School B is located in a South Texas rural community and employs 35 teachers and has 454 students (TEA, 2019). School C is located in a North Texas rural town and employs 28 teachers and has 307 students (TEA, 2019). Certified teachers at each school were asked to complete the demographic questionnaire to identify which certified teachers most closely met the representative qualifications of the teachers at the school.

During the planning phase of the qualitative exploratory multisite instrumental case study, the superintendent of each of the participating school districts granted permission via email to conduct the study at the high school in the district. Each superintendent agreed to the voluntary study and agreed to provide a private space to conduct the teacher interviews (Appendices D–F). Each superintendent then communicated with the high school principal in the respective school district. Each high school principal gave permission for the study.

Once the qualitative exploratory multisite instrumental case study received IRB approval, each high school principal was contacted to receive the informed consent and teacher demographic questionnaire and to schedule an entire day to conduct the five face-to-face interviews for the participants of the representative sample. The entire available sample of certified teachers did not participate in the study. From the available sample, five participants from each school who most closely aligned to the demographics of the assigned school

participated in the interview (Figure 1). These five participants at each of the three schools, 15 participants in total, were selected based on the completed demographic questionnaire and how closely the teachers represented the average campus gender, age, highest degree held, and years of teaching experience as compared with the 2018–2019 TAPR.

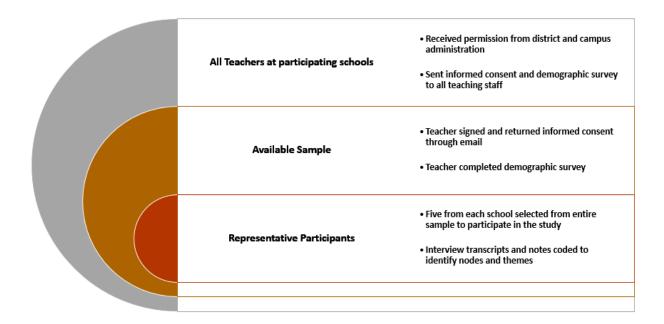


Figure 1. Progression from all teachers to the 15 participants.

Of the 101 certified teachers at the three school districts, 33 teachers returned the completed informed consent and demographic questionnaire, making these teachers part of the available sample for the study. Of the 33 teachers who made up the available sample, five from each school were chosen to participate in the qualitative exploratory multisite instrumental case study (Table 2). School A had the most questionnaires completed, 58%, while School C had a 21% completion rate and School B had the lowest completion rate, 7%.

Table 2

Entire Population, Available Sample, and Representative Sample

School	No. certified teachers	No. in available sample	% population as available sample	No. in representative sample
A	38	22	58.0	5
В	35	5	7.0	5
C	28	6	21.0	5
All	101	33	33.0	15

While collecting data, no significant events influenced or impacted the data or data collection. The only unusual event which occurred during data collection was the unexpected delay in gathering data from one participant at School B. The participant, B3, had to leave without notice and was interviewed the following week in the same manner as all other participants.

The amount of time necessary to collect the face-to-face interviews was significantly less than originally anticipated (Table 3). Each interview was scheduled to take no more than one hour. The actual time of the interviews ranged from 16 minutes 7 seconds for Participant B5 to 36 minutes 30 seconds for Participant B1. Overall, the average face-to-face interview time for the qualitative exploratory multisite instrumental case study was 28 minutes 32 seconds per participant, 31 minutes 22 seconds less than originally planned as the maximum interview time.

Table 3

Interview Times

School A So		School B		School C	School C	
Participant	Time	Participant	Time	Participant	Time	
A2	34:03	B1	36:30	C1	31:09	
A3	33:45	B2	27:13	C2	16:31	
A4	35:17	В3	24:54	C3	31:00	
A9	22:45	B4	24:44	C4	35:39	
A11	34:00	B5	16:07	C6	23:39	
All A participants	31:58	All B participants	25:54	All C participants	27:40	

Data Analysis

Data collection was detailed thoroughly in Chapter 3. To ensure the participants' confidentiality, all documents were kept in a locked cabinet inside a locked office. The signed informed consent documents and SD cards with the audio recordings were kept in a secure file cabinet. At the completion of each interview, the audio recordings were uploaded onto the NVivo transcription service, a secure online platform. A copy of each transcript was saved on a removable storage device which was kept in a secure file cabinet. The printed transcripts were kept in the secure file cabinet in the locked office. As with all data collected from the interviews, the transcripts were saved with the participant identifier and not by participant name.

All research data are to remain secured for three years, then destroyed. To increase accuracy, each participant received the transcript from the interview via e-mail and asked to check the transcript to ensure accurate and complete data. Each of the 15 participants was asked

to reply upon receipt of the transcript and was called at the school to verify the accuracy of the transcript. After confirming the accuracy of all 15 transcripts, the transcripts were uploaded onto NVivo 12 software to identify themes and trends in the data.

The data were analyzed and placed into one of five nodes to answer the three research questions. The nodes were favorable toward allowing teachers to carry concealed handguns, unfavorable toward teachers carrying concealed handguns, undetermined favorability, influences toward feeling safe, and training needed to ensure safety if the handguns were allowed. The 15 participants answered 28 face-to-face questions. The answers to these questions and the interview notes were coded into the nodes to identify specific themes or trends in the data.

Results

Data were analyzed based on the nodes and significant emerging themes (Creswell, 2014). Each of the three research questions was thoroughly examined with the data collected from the face-to-face interviews (Table 4). The 28 face-to-face interview questions explored participant perceptions of safety on a high school campus by allowing trained teachers to carry concealed handguns for safety, what contributed to a feeling of increased safety, and what or how much training should be required to be adequately trained to carry a concealed handgun on a K–12 school campus. Research Questions 1 and 3 were answered by all participants, while Research Question 2 was answered by only the eight participants who indicated favorability toward adding concealed handguns at a school as a means to increase safety (Table 5).

Table 4

Common Themes

Node	Themes	
Favorable view of teachers carrying concealed handguns at school	Deterrent to an attack Decreased response time Increased odds of survival for students and staff	
Unfavorable view of teachers carrying concealed handguns at school	Decreased student and teacher interaction Possibility of student getting the handgun	
Undecided/reasons for both favorable and unfavorable view of teachers carrying concealed handguns at school	Increased school resource officer support Unfamiliarity with guns Increased risk if certain teachers allowed to carry	
Influences toward feeling safe	Trust of campus administrators Positive teacher and student rapport Other safety measure success	
Training needed	Realistic Frequent Live rounds at a range	

Table 5

Number of Research Question Responses

Research question	No. participants who responded	No. participants who did not respond
1	15	0
2	8	7
3	15	0

Research Question 1

The first research question centered on determining teacher attitudes toward trained teachers carrying concealed handguns on campus to increase safety. To determine the overall perceptions, 13 of the 28 face-to-face interview questions asked about safety and how the

introduction of concealed handguns could either increase or decrease the participant's view of safety on the school campus. Overall, the attitudes of the participants favored the addition of trained teachers carrying concealed handguns to increase safety at the three Texas high schools (Figure 2).

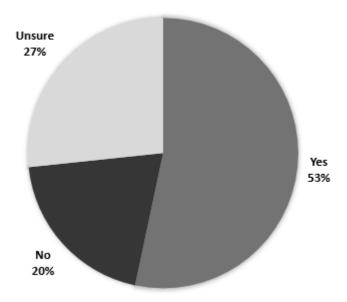


Figure 2. Participant support for training and arming teachers to carry concealed weapons.

Participants were asked about favorable or unfavorable perceptions of the addition of teachers with concealed handguns and why there were mixed reactions. The majority of participants (n = 8) perceived an increase in safety if a teacher were asked to volunteer as a guardian and carry a concealed weapon as a means to stop an attack or an active shooter on campus. A marginal number of participants (n = 3) perceived the addition of handguns would add an unneeded barrier between the staff and students and cause students to be afraid of the faculty at school or worried the students would gain access to a loaded gun from a teacher. Some participants (n = 4) were uncertain if the added safety would justify the possibility of unintended

consequences to the students and how the students interact with the teachers at the campus (Figure 3).

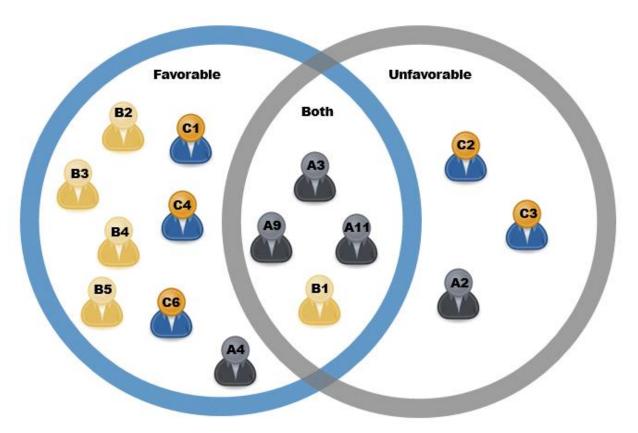


Figure 3. Participant favorability of concealed handguns.

Participants who expressed a favorable opinion. Of the 15 participants, eight viewed the addition of concealed handguns for trained teachers as a favorable way to increase overall safety in K–12 schools. Of all participants, four perceived the addition of the concealed handguns as both favorable and unfavorable for the students and the overall campus. Of the 15 participants, three had a negative view of adding concealed handguns. School B had the most participants who viewed the measure as favorable (n = 4), while School A had only one teacher who was completely comfortable supporting added concealed handguns at the school.

When asked about supporting the addition of concealed handguns, participants who were in favor of the measure had common themes. Participants C1, C6, and B2 mentioned being prepared and using the concealed weapon as a deterrent to a possible attack. In supporting the guardian plan, Participant C1 said, "It can serve as a deterrent if people are aware that faculty and staff members are armed here, it may serve as a deterrent to someone that's going to try and come in and hurt people." Participant B2 stated, "The likelihood of an actual active shooter is not very good. If that does happen, we are going to be ready." When asked about supporting the measure, Participant C6 said, "I think that anything you can do that makes the school a harder target is a good thing."

A theme which emerged from the participants in favor of adding concealed weapons to the schools was the delayed response time of first responders and the additional casualties the delay could cause. Participant B3 shared a concern by stating, "I support [the addition of guardians] wholeheartedly; what's going to happen if first responders can't come?" Participant B4 shared a similar response: "I know the instances happen within minutes, and I feel like it will only take a few seconds for the incident to be shut down pretty quickly."

Another prevailing theme of those participants who viewed the addition of concealed handguns at schools favorably was the increased odds of survival in the event of an attack on the school. Participant A4 suggested added protection for teachers and students:

You don't have anything to defend yourself with. You are kind of out of luck, and I would be supportive if teachers carry concealed handguns because it does increase odds of not only teacher survival but the students' survival as well.

Echoing the concern, Participant B5 said, "I 100% support [teachers carrying concealed handguns], because if someone comes on campus with a weapon, and if people who are on campus don't have guns, what are we to fight with?" Participant C4 mentioned supporting teachers who are trained and confident: "It gives me comfort to know that people who are comfortable and are trained have that option, and that we're not helpless and waiting on someone, a responder to come. We can diminish the amount of casualties."

Participants who expressed an unfavorable opinion. Not all participants agreed with or supported adding concealed handguns in schools; three participants disagreed. Similar to the eight participants who viewed the plan in a favorable manner, the three unfavorable responses yielded common themes. The two themes which emerged were a decrease in interaction between the students and the teachers by making the environment less educational and the possibility of a student gaining access to the handguns. Participant C3 said,

I don't think it's worth it, we'd be constantly compromising student safety by having these firearms around all the time. It would create a gap, that emotional kind of distance and as well as the physical distance that you would have to put around yourself. I think that would potentially lead to more alienation situations, which would make the likelihood of a potential school shooter go up instead of down.

Both Participants A2 and C2 shared concerns similar to those expressed by Participant C3. Participant A2 articulated an unfavorable view toward allowing teachers to carry concealed handguns:

I want kids to be kids, if they see guns, it brings negativity or fear in so they can't always be a kid or it won't bring a welcoming environment. I don't think guns are the only way to keep yourself safe.

Participant C2 went further by explaining how the environment could be negatively impacted by the additional concealed handguns: "I don't like it [the idea of adding concealed handguns], it makes me very nervous and it gives me the vibe of a prison setting more than an educational setting."

Participants who expressed both a favorable and unfavorable opinion. Four participants did not favor a plan to allow certified teachers to carry concealed handguns but understood why the safety measure was being implemented by many schools in Texas. These participants responded both in favor of and against any safety measure involving teachers carrying concealed handguns on campus. The three themes which emerged from the group were increased school resource officer support, unfamiliarity with guns, and an increased risk if certain teachers were allowed to carry loaded handguns.

Increasing the presence of law enforcement on the campus through additional SROs was preferred to issuing a gun to a teacher. Participant A11 said, "[We should] add another resource officer, I think we have one for the entire district." Some participants noted some teachers may be more of a risk than any student or outside threat to the campus. Participant A9 made the point, "I might be worried that there is a greater risk if some people were carrying a weapon."

Previously being around guns may have led some participants to an increased perception of security with the addition of concealed handguns. For those teachers who have not spent any

time around guns, being around the guns may lead to an increased fear of guns at school. The concern was raised by Participant A3:

I understand the safety concern behind it, but I would still feel somewhat uncomfortable. I did not grow up around guns. Me personally, I've never even held a gun in my hand, so I don't think I feel very safe in that situation.

When asked about teachers carrying concealed handguns to increase safety at school, Participant A3 said, "I understand why they're doing it."

One participant, B1, was conflicted. The participant was unable to decide and gave compelling reasons to both support and not support an initiative to train teachers to carry concealed handguns:

I am extremely conflicted. I can certainly logically understand the requirement of immediate response to deadly force. So the only way to have that is if the people who constitute most of your adults, the teachers, are carrying guns. I myself would never carry a gun, and I'm very much a pacifist. So it is scary to me to think that bullets might be flying somewhere.

Research Question 2

The participants who viewed the addition of concealed handguns as a suitable way to increase safety on a secondary school campus may have had specific experiences which influenced the perception of safety. To best determine what these experiences were, 11 face-to-face interview questions were used to measure the responses of the eight participants who supported the addition of concealed handguns. The prevailing theme of all eight participants was

the overwhelming sense of trust toward the campus administrators and feeling as if the measures implemented at the schools were already increasing the overall feeling of safety.

Four of the eight participants who supported the addition of concealed handguns gave specific reasons for feeling safe at school and added information as to what influenced the perception of increased safety. Participant B2 said, "Between 90 and 100% of all teachers get into teaching because they love kids. . . . If somebody comes in here with a weapon, I get to protect students." Participant B5 shared a similar sentiment by saying, "Being ready is important." Participant B5 then stated, "I am safe here because all the teachers know the precautions to take whenever something does occur."

Participant C6 described an environment where the student and teacher interactions added to the increased perception of safety: "I think we've got a good student body and the teachers have a good rapport with them." Finally, trust in the campus administrators led Participant C1 to indicate an increased perception of campus safety: "I just know that our administrators are looking out for us, the teachers in the building are very aware." The underlying theme for the eight participants who favor the implementation of the guardian program or allowing trained teachers to carry concealed handguns was trust. The trust was expressed in regard to the administration of the schools and was expanded to include trust in the other teachers who would be willing to carry the concealed weapon.

Research Question 3

When training was discussed, all 15 participants agreed extensive training and preparation were essential to the success of any program which allows teachers to carry concealed handguns. The type of training and necessary duration varied, but the support for

training was unanimous. All but one participant would support a teacher who previously served in law enforcement carrying a concealed handgun on campus, while 12 of the 15 participants would support a teacher who previously served in the military carrying a concealed handgun acting as a campus guardian (Table 6).

Table 6

Training Needed, Military or Law Enforcement Preference

Participant	Hours of training, type of training needed	Former military preferred	Former law enforcement preferred
A2	Realistic, scenario based	Yes	Yes
A3	Mental health training	No	No
A4	12 hours, shooting at range	Yes	Yes
A9	Unsure	No	Yes
A11	6 hours, target practice	Yes	Yes
B1	16 hours, technique and scenario	Yes	Yes
B2	Intense and specific	Yes	Yes
В3	3 hours a month, shooting	Yes	Yes
B4	2 hours a month, scenario	Yes	Yes
B5	Range training, refresher	Yes	Yes
C1	Self-defense	Yes	Yes
C2	Varies by person	Yes	Yes
C3	Scenario based, monthly	Yes	Yes
C4	Extensive and ongoing	Yes	Yes
C6	40 hours per year	No	Yes

The face-to-face interview consisted of 10 questions to determine the type and frequency of required training teachers selected to carry a concealed handgun should complete (Appendix B). Three themes were evident after analyzing the data for Research Question 3: the training should include realistic scenarios, the training should be conducted frequently, and all training should include shooting live rounds at a certified range. All participants agreed any safety measure which includes carrying a concealed handgun on a campus should include training. Participant A11 stated, "It's not like we are saying, 'We're passing out guns at our professional development, you want one?"

Realistic training. Participant A11 insisted the training be realistic and scenario based: [During a shooting] a lot changes, the adrenaline pumping and all that. You've got the shooter, people running around crazy. What if I am far away but I know I can make that shot? Kids are running. What if I hit a kid? They have to be prepared for that.

Making the training as close to real life as possible is something many of the participants mentioned. Participant A3 stated, "I've seen several districts that have gone to a real-life scenario where they've had lockdowns and they've brought in officers."

Frequent training. Being responsible for something as powerful as a handgun around students requires the teacher who carries a concealed handgun to have superb shooting skills and aim (Chen, 2020). Participant B1 stressed the importance of requiring target practice on a weekly basis: "Accuracy is going to be extremely important, I would say at least one hour a week, and that is just shooting." Participant C3 mentioned frequent training and stated the training should be "concentrated, so the time is not wasted." When asked about training requirements,

Participant C4 said, "The initial training must be extensive, and any supplementary training should be ongoing and be done together as a group."

Shooting at a range. Accuracy is paramount in an emergency situation requiring a teacher to fire a handgun and is a skill experienced police officers have struggled with (Chen, 2020). Participant C6 suggested a teacher who is certified to carry a concealed handgun on campus should spend "eight hours at the range just to make sure they stay familiar." Similarly, Participant A4 was worried about a diminished ability over extended breaks: "During the summer, they just have to take half a day just to review procedures. And once a year, they may have to receive actual firearm training or practice out at a certified gun range." When asked specifically about the time a teacher should spend at a gun range, Participant B3 said, "[Guardians need] at least 100 rounds, so that's going to be about two or three hours at the range. They'll be shooting at least once a month, in my eyes."

School Policy

The policies regulating the ability to issue concealed handguns to teachers at each of the three schools were vastly different. At School A, teachers and administrators are not allowed to carry concealed handguns. School B allows teachers and administrators to be trained as guardians and has had many active guardians on the campus. School C does not allow teachers to carry concealed handguns but has begun to allow school administrators to carry concealed handguns while on campus. Each of these policies was reviewed to determine if the results of the interviews aligned with these policies at each of the three schools.

At School A, where no school staff other than the SRO are allowed to carry a loaded weapon, one teacher favored allowing teachers to carry, one was against teachers carrying, and

three teachers were unsure and cited reasons to be both for and against carrying concealed handguns while at school. At School B, which allows trained teachers to carry, four teachers supported the measure, while one was unsure and cited reasons both for and against allowing teachers to carry concealed handguns. At School C, three teachers supported arming other trained teachers at the school, which allows administrators to carry concealed handguns. Two teachers at School C were against the measure to allow teachers to carry concealed handguns while on campus.

Reliability and Validity

To increase the reliability and validity of the study, the results were triangulated using data from the face-to-face interviews, the demographic questionnaire, and the document analysis of district policies. By reviewing data from three sources, data were triangulated, and more organized data were then presented in the findings (Flick, 2018). Accurate face-to-face interview transcriptions and organized notes increased the validity, as did using the same methodology and framework throughout the research process (Flick, 2018).

Similarities in the data were identified and developed into nodes for further analysis. These nodes contained data themes which demonstrated commonalities and comparative data. The analysis of the data occurred within one day following the interviews as a means to reduce the opportunity for researcher bias and to increase the reliability of the results of the analysis (Marshall & Rossman, 2014). The NVivo software was utilized to determine the themes within the nodes of the analyzed data from the interviews and notes.

Another way reliability was increased was through the use of member checks, which were conducted with each of the 15 participants (Flick, 2018). By using member checks, each

participant was able to view the respective transcript prior to the data analysis to ensure accuracy (Birt et al., 2016). Member checks greatly increased the credibility of the research and the data by giving respondents an opportunity to clarify any misinformation or misunderstandings (Birt et al., 2016). The reduction of researcher bias was addressed by having each participant complete the member check (Flick, 2018). The participants did not find any errors in the transcripts, meaning the information was an accurate representation of the participant's views. The notes and policy documents were added to the NVivo 12 software within one day of each face-to-face interview, which allowed the information contained within the data sources to become available in the data coding and the analysis findings.

No alterations were needed to select the research participants. Each participant was selected from the available sample from each of the three research sites. The available sample comprised the certified teachers at all three research sites who returned the demographic questionnaire and informed consent. The demographic questionnaire was then reviewed to determine which of the participants would most closely represent the overall demographics of the research site where each participant was employed as a certified teacher. The five teachers at each school who most closely represented the site were then selected for the one-hour face-to-face interview and became research participants. Each of the three research sites met the minimum requirement of five participants in the available sample.

The data outcomes of each of the demographic questionnaires, interview notes, transcribed interviews, and school policies were verified for accuracy. While analyzing and reporting the data, the accuracy of the information was checked to ensure the information

presented was dependable. The procedures used to conduct the case study may be transferred to another study and may yield valid results.

Chapter Summary

The purpose of the qualitative exploratory multisite instrumental case study was to ascertain whether public school teachers in three similarly sized Texas high schools perceived an increase or reduction in safety if other teachers assigned to the same schools were allowed to carry concealed handguns. The results of the study could be used for future research or to advise policy at a local school district level. Participants of the case study answered 28 questions in a face-to-face interview. Data were collected through a seven-question demographic questionnaire, an audio-recorded face-to-face interview, notes gathered from the interview, and the school district online policy index.

From each of the three research sites, five participants were selected to be included in the study, 15 participants total. The actual participation sample was based on the demographic information from each campus as reported on the demographic questionnaire. By selecting a representation of five teachers from each campus, the credibility of the study was increased. All participants completed the informed consent, demographic questionnaire, face-to-face interview, and a member check of the interview transcript.

Three research questions guided the qualitative exploratory multisite instrumental case study. Nodes were created based on the categorical groupings of the collected data. The five nodes were divided into groups by participants who favored the addition of concealed carry, participants who viewed the addition as unfavorable, participants who were undecided, influences toward feeling safe, and training needed to implement the guardian plan. Eight

teachers favored the introduction of concealed handguns, three were unfavorable toward the introduction of concealed handguns, and four were undecided.

Once analysis began, themes for each of the nodes became evident. For the eight teachers with favorable views, the three themes were deterrence of an attack, decreased response time, and increased odds of survival. The two themes for the three participants who viewed the introduction of concealed handguns as unfavorable were decreased student and teacher interactions and the possibility of a student gaining access to the handgun. For the participants who were undecided, the three themes were additional SROs, unfamiliarity with guns, and the increased risk of certain teachers having guns.

The three themes identified as influences toward feeling safe were trust of campus administrators, positive teacher and student rapport, and other safety measure success on the campus. The three themes for the training needed to properly implement a guardian program were realistic training, frequent training, and the use of live rounds at a range. Each of these themes was identified using the data from the interviews and notes.

The reliability and validity of the case study were maintained by adhering to the methodological plan presented in Chapter 3. Included in Chapter 5 are sections on considerations, conclusions, and recommendations for future implementation of school safety measures to lessen the negative impact on concerned staff. A list of limitations of the study and recommendations for further research are included in Chapter 5.

Chapter 5: Discussion and Conclusion

School districts in the state of Texas are looking for alternative ways to secure campuses and increase the safety for students and staff (Killin-Guadarrama, 2018). One way campuses have increased security is through the introduction of school guardians, certified teachers who carry concealed handguns as a means to protect the campus from a threat (Killin-Guadarrama, 2018). The rate of violence has increased in schools across the country, leaving Texas school administrators reeling to find a viable solution to protect schools (Rogers et al., 2018). One measure being used more frequently in Texas schools is allowing trained certified teachers to carry concealed handguns as a means to add safety for both the students and staff in schools (Killin-Guadarrama, 2018). In Texas each year, more schools are adopting policies allowing teachers or administrators to carry handguns and schools are increasing the presence of SROs on K–12 campuses (Crawford & Burns, 2015).

The purpose of the qualitative exploratory multisite instrumental case study was to ascertain whether public school teachers in three similarly sized Texas high schools perceived an increase or reduction in safety if other teachers assigned to the same schools were allowed to carry concealed handguns. Not all teachers would want to carry handguns in school, and some teachers would not perceive the introduction of handguns, even to trained teachers, as a means to increase campus safety. Knowing other teachers have handguns has increased stress and incited fear in some classroom teachers (Baxter, 2019). Other teachers would welcome the addition of concealed handguns and would perceive an increase in safety for students and staff if the handguns were issued to trained teachers on campus. Knowing teacher perceptions of allowing other teachers to carry concealed handguns could be instrumental in the development of

meaningful school safety legislation, school district policy, and individual K–12 school procedures (Winston, 2016).

The problem is a lack of existing research on the topic of teacher perceptions of adding concealed weapons to schools and the continued push for effective school safety laws, particularly those involving the addition of concealed handguns (Winston, 2016). By reviewing the results of the qualitative exploratory multisite instrumental case study, school leaders in Texas should be better able to make meaningful decisions about the impact of adding concealed handguns by considering teacher perspectives (Dugyala, 2018; Killin-Guadarrama, 2018). Of the 15 participants, eight supported a program where trained teachers could carry concealed handguns, three were against the guardian plan, and four were undecided. The perception of teachers could aid school district leadership and other policymakers when contemplating the addition of trained teachers carrying concealed handguns on school campuses.

The significance of the qualitative exploratory multisite instrumental case study was to determine teacher input in regard to carrying concealed handguns on public high school campuses in Texas. Literature was lacking associated with teachers carrying concealed handguns in school or how other teachers perceive the added measures from a safety and security standpoint (Winston, 2016). As more schools in Texas consider allowing teachers to train and carry concealed handguns, school administrators may determine the findings from the case study useful while making campus safety decisions (Crawford & Burns, 2015).

The literature surrounding teachers carrying concealed handguns is limited (Winston, 2016). The available literature was thoroughly researched and considered in the case study.

There was useful information within the existing literature on protecting students, why some

school administrators are opting to allow teachers to carry concealed handguns, and why some educators are against allowing teachers to carry handguns in schools. The safety of K–12 students is at the center of the decision to introduce more handguns to a campus (Gereluk et al., 2015; Losinski et al., 2015). Many school administrators have chosen to add concealed handguns as a deterrent to an attack and to stop an attack more quickly should one occur (Killin-Guadarrama, 2018). Some school personnel fear a change to the learning-centered atmosphere of a school and hesitate to add handguns to the learning environment, even with good intentions (Paradice, 2017; Rogers et al., 2018).

Some educators argue the laws allowing teachers to carry handguns have created confusion about the different roles of educators and security officers or police (Keehn & Boyles, 2015). Other school staff want a quick response to a threat which could protect K–12 students (Arnold, 2015). Gaps in the literature were identified, and one identified need was an examination of teacher perceptions of other teachers carrying concealed handguns as a means to increase student safety (Hart, 2018; Machi & McEvoy, 2017). The literature reviewed was centered on violence in schools, measures to reduce school violence, and the use of handguns in schools with the intention of increasing safety and reducing the chances of a mass shooting (Arnold, 2015; Goff, 2019; Keehn & Boyles, 2015).

Determining teacher perceptions of school safety by introducing concealed handguns was best fulfilled by utilizing a multisite instrumental case study of an exploratory nature which allowed the reasons behind individual answers to be documented and analyzed (Pham et al., 2017). Audio from a 28-question face-to-face interview with the participants was transcribed along with interview notes uploaded into NVivo 12 for data analysis. The participants were a

representative sample of teachers from three similarly sized high schools in Texas. Once the data were gathered and input into NVivo, the data were distributed by node and analyzed for common themes. The five nodes for the data analysis were teachers with a favorable perception of the guardian plan, teachers with an unfavorable perception of the guardian plan, undecided teachers, influences impacting a feeling of safety, and training. Within the five nodes, 14 themes emerged from the data (Table 4) and yielded research findings based on the three research questions.

The 15 participants were asked 28 questions (Appendix B) in a one-hour audio-recorded exploratory face-to-face interview. Of the 28 questions, each participant was asked 13 specific questions to determine the teacher's perception surrounding the introduction of trained teachers who carry concealed handguns as a means to increase overall campus safety. Of the 15 participants, eight supported the implementation of trained teachers carrying concealed handguns as a method to increase campus safety, three did not support the guardian program, and four were undecided without knowing the specific details of a plan and who would be selected as teachers in the guardian plan. The four undecided participants cited multiple examples of why the guardian plan should be implemented if done with rigid qualification standards and realistic and frequent training.

The eight participants who answered favorably toward allowing trained teachers to carry concealed handguns in school were asked an additional 11 questions. The questions were asked to determine what specific experiences influenced the perception of safety. The themes were a sense of trust toward the campus administrators, feeling as if the safety measures implemented at the schools were already increasing the overall feeling of safety, and a positive rapport between the students and teachers at school.

The third research question measured participant recommendations for training. During the interview, the 15 participants stated the amount, type, and frequency of training a teacher should have to safely act as a school guardian. The 15 participants were asked about prior law enforcement or military experience and if the experience is preferred for a potential school guardian. Of the 15 participants, 14 preferred the guardian have prior law enforcement experience and 12 preferred the guardian have previous military service (Table 6). The themes for training were realistic training, frequent training, and training at a shooting range. During the face-to-face interviews, Participants A4, A9, B1, B3, and C6 cited a need for school guardians to spend additional time at the range, which should include live rounds and accuracy drills.

By examining the findings, interpretations, and conclusions from the study, a better understanding of how each of the 14 themes relates to the implementation of the school guardian program or any other program which includes the addition of concealed handguns. The most important conclusions are related to the theoretical framework and limitations of the research. Finally, the recommendations from the research for policy change and future research and the implications for leadership are examined.

Findings, Interpretations, and Conclusions

The information gathered from the 15 participants in the qualitative exploratory multisite instrumental case study consisted of data from a demographic questionnaire, a face-to-face interview, interview notes, and the school policy at each of three similarly sized schools in Texas. Five distinct nodes emerged from the interview transcripts and notes: teachers who favored a guardian plan, teachers who viewed a guardian plan unfavorably, teachers who were

undecided, specific influences led to a perception of safety, and training needed to implement a guardian plan safely.

Responses from participants in the case study confirmed previous literature surrounding the addition of concealed handguns as a method to increase safety at a K–12 school. Of the 15 participants, 11 noted a delayed response time of first responders as a primary reason to implement a program where trained teachers carry concealed handguns at school. The eight participants who favored the guardian program and three of the undecided participants cited delayed response time as a primary reason for supporting the guardian program. Delayed response times of first responders is an issue for schools but is more prevalent in rural communities (Arnold, 2015).

Another area where the participants supported previous literature centered on the need for constant, realistic, and structured training (Baxter, 2019). All 15 participants cited a need for structured training if a plan were to be implemented at a K–12 school. During the face-to-face interviews, 12 of the participants indicated a need for training at a shooting range to increase familiarity with the handgun a teacher would use if acting as a school guardian. A guardian-teacher needs to be proficient and accurate with a weapon to reduce the chances of an accidental victim from a stray or off-target bullet. Training should be realistic and scenario-based, according to six of the 15 participants. Spending time at a shooting range, learning the weapon, and learning how to increase accuracy is vital to the success of a program where teachers are allowed to carry concealed weapons (Baxter, 2019).

Some responses given by participants in the case study conflicted with the literature on school safety, specifically in the area of confidence in a teacher to use a handgun in an

emergency situation (Paradice, 2017; Rogers et al., 2018). When asked, 53% of the participants supported the addition of concealed handguns as a way to increase safety on campus and indicated confidence in trained school guardians to deter a potential attack from occurring. Educators worry about whether a teacher is competent with a loaded weapon and would like any staff member who is carrying a loaded handgun to undergo the same rigorous training as law enforcement (Rogers et al., 2018). During the face-to-face interview, Participant C2 was the sole participant to mention guardians having law enforcement-type weapons and shooting training in order to become guardians. The participants and the established research were at odds. In the case study, 93% of participants indicated specific and realistic training would be sufficient for guardians and not the law enforcement training mentioned in Rogers et al.'s (2018) report.

Throughout the case study, the transformational leadership theory was utilized as a theoretical framework. By utilizing a consistent theoretical framework, the impact of a new program or procedure was better evaluated (Hart, 2018; Machi & McEvoy, 2017). The transformational leadership theory is centered on forward-thinking ideas and accomplishing shared goals in new ways (M. Anderson, 2017).

The introduction of firearms to schools is an innovative solution to a problem which can be classified as transformational in nature due to how unorthodox the practice is in mainstream public education (Paradice, 2017). Some other ideas to increase school safety presented by school leaders in Texas are transformational in nature, the most noted of which were increasing SRO presence, making access to a school more difficult, and increasing counseling as a means to better identify students who need emotional support (Killin-Guadarrama, 2018). The data indicated support among staff in reaching the shared goal of increased safety by introducing

concealed handguns through the guardian program with certified teachers acting as the guardians. Transformational leaders typically seek input from the team and may consider the team feedback when making decisions (M. Anderson, 2017).

The results of the case study revealed many conclusions and insights into the three research questions for the case study. The most important conclusions from the study can be understood by examining the findings from the case study. By looking at each of three areas—teachers with concealed weapons, the influences impacting perception of increased safety, and the training a teacher would need to be proficient as a school guardian—the findings from the case study are better understood.

Teachers With Concealed Handguns

Among the participants at the three similarly sized schools in Texas, there was strong support for the addition of a program allowing trained teachers to carry concealed handguns as a means to increase campus safety. Overall, 53% of participants favored the addition of guardians. If certain assurances were added, the number of participants increased by 27%, from 53% to 80% of participants. These additional participants worried about the amount of training, the mental state of the teachers who carry the handguns, and the selection process of the school guardians. Of all 15 participants, 20% indicated a lack of support for the guardian program, even if the teachers underwent mandated psychological evaluation, random urinalysis, and training at least once monthly, which School B had included in the guardian selection process. The additional requirements of psychological examinations, mandated training, and random urinalysis could be included in a guardian plan to ensure the teachers who are carrying concealed

handguns are mentally and physically ready to act as guardians and are not abusing drugs or alcohol.

The support for or against the addition of teachers carrying concealed handguns was aligned with the policies of each district. The aligned views of the teachers with district policy may have been a result of the standing policy regarding concealed carry at each district and teacher conformity to the existing policy. Another possibility was the perceptions of the teachers were part of the larger perception of the community as a whole, which either supported or did not support the addition of concealed handguns on campus. As more staff members are allowed by school policy to be trained as school guardians, support for the guardian program likewise increases among the participating teachers in the district.

In District A, where teacher support for the guardian plan was lowest, at 20%, no school staff except for the SRO is allowed to carry a handgun. In District B, where teachers' support for the plan was highest, at 80%, teachers and administrators are allowed to carry concealed handguns if the staff member is trained and meets all other qualifications. In District C, where support for the guardian plan in the district was 60%, administrators are allowed to carry concealed handguns, but teachers are not allowed.

Influences Impacting Perception of Safety With Concealed Handguns

Many influences impacted the perception of increased safety by allowing trained teachers to carry concealed handguns. Among these influences were familiarity with guns, trust in the school administration, reaction time for other threats or problems, and a strong sense of service to students. Each of these influences led participants to support a program adding concealed handguns at school with trained teachers ready to react to keep the students and staff safe.

Several participants indicated a familiarity with guns and knowing a gun could be used as a tool by a trained teacher to keep others safe. By allowing a trained teacher to carry a concealed handgun, the threat of violence could be reduced at the school. An active shooter could be deterred if the shooter knew teachers were on campus with concealed handguns ready to protect the students and the staff. School shooters typically look for targets who are not prepared or have fewer prevention measures in order to be met with no resistance and to increase the rate of casualties (Crawford & Burns, 2015).

Another influence of participants was trust in the administrators at the school and within the district due to the successful implementation of other safety measures. Participants mentioned unwavering support for the campus administrators and the safety plans the administrators had previously implemented on campus, which 67% noted as leading to increased overall safety. Of the eight participants who indicated support for the guardian program, four perceived the program as an extension of the other safety measures on campus and not as a standalone solution or a universal solution for all schools.

A majority, 73% of participants, favored the implementation of the guardian program because emergency personnel in rural areas take too long when responding to common threats at school like a fight or suspicious person on campus. The typical school shooting is over in less than nine minutes (Arnold, 2015). In the face-to-face interviews, four of the 15 participants indicated administrators and law enforcement have taken longer than a few minutes to respond in previous emergency situations. The role of a school administrator is multifaceted and could lead to the administrator being in a classroom, a meeting, or off campus at any point in a school day (Winston, 2016). Law enforcement officers in rural communities are often many miles from a

school, which could lead to a delayed response if the officer were called by a school in need (Weiler et al., 2018). If teachers could intervene and stop a shooting quicker, 53% of the case study participants perceived an overall safety benefit to the students and staff of the school.

Schools and teachers are legally liable for the safety of students while the students are at school (Gereluk et al., 2015). During the face-to-face interviews, 60% of the teachers noted a need to keep students at the school safe. In the unlikely event of a school shooting, 53% of teachers who participated wanted the addition of school guardians as a means to keep students safe and have a chance at survival, which goes beyond staying quiet, hiding in place, and waiting on help to arrive.

Training

All participants indicated training as an essential aspect of the successful implementation of the guardian plan or any other plan where teachers are authorized to carry concealed handguns while at school. For the training to be meaningful and support the teacher who carries the concealed handgun, the training should be realistic, continuous, and include local law enforcement and first responders in scenario-based activities (Baxter, 2019). Collectively, the participants recommended an average of four hours of training per month, which would include time at a range shooting live ammunition to increase accuracy and familiarity with the weapon the teacher would carry while at school (Table 6).

Limitations

Limitations to the qualitative exploratory multisite instrumental case study were introduced in Chapter 1. One limitation of the study was transferability and the difficulty with duplication due to site selection and participant differences in perception (Flick, 2018).

Participant answers vary when conducting a qualitative study, which leads to differences in the event of the study's duplication (Flick, 2018). The procedures outlined in the methodology could be reproduced with varying results due to the qualitative nature of the study.

Another limitation of the qualitative exploratory multisite instrumental case study was the geographic location. Three similarly sized rural schools in Texas were selected. The sparse population of each community and the size of the schools led to 11 participants citing a delayed response time as a primary reason to support a guardian program. As a method to increase credibility, the study could be duplicated in a more populous area where response times may be much faster than in large rural counties. Handguns are more prevalent in rural counties, which could skew the results of the study. Of the 15 participants, 67% were comfortable holding and using a gun, which could have directly led to the perception of increased safety at school with the introduction of concealed handguns.

Another limitation was the amount of time needed to collect, analyze, and prepare the data. Initially, 10 weeks were allotted to complete the research collection and analysis. The research and analysis took 12 weeks, two weeks longer than planned. The additional time was needed to ensure accurate and complete data analysis and presentation. All information was uploaded into the NVivo 12 software where nodes were identified and data were analyzed by node to determine themes of the case study.

Two additional limitations emerged through the data collection for the qualitative exploratory multisite instrumental case study. The first limitation was a lack of completed and returned demographic questionnaires and informed consent documents at two of the three participation sites. The return rate was much lower than expected, and at one site, only five

participants returned the forms, all five were included in the representative sample for the site. The second limitation was limited responses to the open-ended questions in the face-to-face interviews. Participants were given one hour to complete the 28-question interview, but the average time the participants took to answer the questions and give input was only 28 minutes and 32 seconds.

Recommendations

Future studies should attempt to measure the responses from teachers in urban, larger schools. Teachers in rural school districts often are more comfortable around firearms and could be more favorable toward other teachers carrying concealed handguns than teachers who may not be around guns as frequently. Another recommendation for future research is a quantitative study including many more participants throughout the state.

Of the 15 teachers who participated in the case study, 53% favored the addition of other trained teachers carrying concealed handguns and noted reasons for the perceived increase of safety and what training was needed to safely initiate the program. A next step should be a larger scaled research project where hundreds or thousands of teachers in Texas are asked about favorability toward the same policies. The quantitative study would better determine how many teachers and what percentage of teachers across the state favor or do not favor a program where teachers carry concealed handguns at school. The results of a quantitative study would not measure the underlying reasons a teacher favors or does not favor additional handguns at school, and would not measure reasons for favorability of a guardian program due to the statistical nature of the research (Hart, 2018). Another recommendation is further research in other states to determine if the findings from the study are impacted by location.

In rural school districts in Texas, where the response times of law enforcement are often delayed, leaders should consider implementing a policy allowing trained teachers to carry concealed handguns (Walker & Sampson, 2018). The additional safety measure could increase campus safety for students and staff if the teachers who act as guardians undergo a stringent selection and training process before being allowed to carry concealed handguns on campus. The schools should mandate a minimum of four hours of monthly training, including time at a shooting range to ensure preparedness to act in an emergency and increase accuracy with the firearm.

Local law enforcement and first responders should work with the school guardians to ensure training as a team. The cooperative training would allow for a safe response to a threat instead of increasing the chances of a student, teacher, or first responder becoming an unintended victim of an untrained and unprepared school guardian. If implemented with fidelity and strict standards, the guardian plan would be favored by 80% of the teachers who participated in the case study.

Finally, state legislators in Texas could reference the results of the case study when enacting or funding laws impacting school safety and the use of concealed handguns by trained teaching staff. As more school districts implement the guardian plan as a method to increase school safety over the more regulated and expensive marshal plan, lawmakers could take notice of why school districts are opting out of the more expensive and mandate-filled marshal plan for the more practical guardian plan (Killin-Guadarrama, 2018). Increased school safety can be accomplished by many methods, one of which is the implementation of a guardian program, which is increasing in use in Texas (Killin-Guadarrama, 2018). Texas legislators should consider

increasing the funding associated with the guardian program, enabling lower income schools, with lower property values, the ability to afford the school safety plan.

Implications for Leadership

Keeping schools safe from violent attacks is a concern for many educators, community leaders, and lawmakers (Fisher et al., 2017). Allowing teachers to carry concealed handguns is a new idea, which can seem extreme to those who would rather keep schools gun-free zones (Arnold, 2015). The results of the qualitative exploratory multisite instrumental case study demonstrate support for a guardian program from 53% of participating teachers at three similarly sized Texas high schools. The support for the guardian program increases to 80% of teacher participants if strict guidelines for selection and training are guaranteed. District and school leaders should consider adopting all or part of the guardian plan, which would allow trained teachers to carry concealed handguns while on campus to deter or react to violence. State lawmakers should allocate additional school safety funding to school districts for any safety measure, including implementation of the guardian plan.

Implementation of the program is transformational and is unlike many other safety measures at schools (M. Anderson, 2017). With zero-tolerance laws, violators who bring a gun on campus are held to harsh fines and penalties (Arnold, 2015). The penalties and zero tolerance are in place to deter violators and are intended to keep campuses safe (Oltman & Surface, 2017). Instead, the guardian plan allows trained teachers to carry concealed handguns on school campuses, which could deter violence, meet potential violence with force, and allow the threat to be neutralized much quicker.

Part of a teacher's duties is the care and safety of students (Fisher et al., 2017). Allowing teachers to extend the care for students by training teachers to carry a concealed handgun to use in an emergency is favored over a policy encouraging teachers and students to barricade themselves in a classroom or closet and wait for help to arrive (Oltman & Surface, 2017). Teachers are trustworthy and honorable members of most communities, and as such are already trusted with student safety (Winston, 2016). By adding the guardian program, teachers are given another tool to keep students and other teachers safe, while increasing the odds of survival.

Transformational school leaders in Texas have already begun adapting school policies to include the addition of trained K–12 school teachers acting as school guardians and carrying concealed handguns to use in the unlikely event of an emergency (Killin-Guadarrama, 2018). Attacks on schools are not new, but the attacks have increased in frequency and deadliness (Arnold, 2015; Rogers et al., 2018). The shared goal of increasing overall campus safety and deterring a violent attack is achieved through a combination of many procedures (Oltman & Surface, 2017). According to 53% of the participants of the case study, one method to increase the safety of a campus is allowing trained teachers to carry concealed handguns while at school. Transformational leaders understand the need to be forward-thinking when offering a solution to the growing epidemic of shootings at school campuses in the United States (M. Anderson, 2017).

Conclusion

An increasing number of school districts in Texas are allowing trained teachers to carry concealed handguns as a means to increase safety at schools in a program called the guardian plan (Killin-Guadarrama, 2018). In the qualitative exploratory multisite instrumental case study, eight out of 15 teacher participants indicated favorability toward the program. The participants in

favor of a guardian program cited reduced response time, a deterrent to violence, and increased chances of survival as the primary reasons for support.

The three teacher participants who were unfavorable toward the implementation of a program allowing trained teachers to carry concealed handguns cited the possibility of decreased interaction between teachers and students and the possibility of a student gaining access to one of the concealed handguns as primary reasons for opposition. The concerns of the participants were valid and should be addressed at the individual district or school level during the implementation of a guardian program. With care, the concerns shared by the group can be reduced or alleviated and the environment at a guardian school would remain interactive and provisions could be introduced to keep all handguns secure and out of students' hands.

The four participants who were undecided about supporting a guardian program had three primary reasons for wavering. The participants would prefer to increase the presence of law enforcement on each campus through the SRO program, indicated a lack of familiarity with guns to support having more on campus, and were concerned certain teachers who had demonstrated a lack of professional judgment in other matters would be allowed to carry concealed handguns. The concerns shared by the group were understandable and would cause many to take pause before the inception of a guardian program. Each of these themes should be considered by a school district before implementing a guardian plan to alleviate the concerns of some teachers on campus.

Training time and accuracy are essential to the success of any program allowing teachers to carry concealed handguns. Each teacher who is carrying a handgun should be familiar with the weapon, work together as a team with other guardians, and have an accurate aim. The guardian

should undergo continuous psychological evaluation where any lapse in professional judgment would immediately suspend the teacher's ability to carry a concealed weapon on campus. Lastly, guardians should agree to random urinalysis exams as a way to ensure teachers who are acting as guardians are not abusing alcohol or using unprescribed drugs while at work.

Throughout the case study, all 15 participants mentioned student safety as the most important factor at school, followed by nine participants noting a need to be prepared to do anything to keep students from being harmed while at school. Shootings are not common but are increasing in frequency in the United States (Rogers et al., 2018). For teachers to keep students, other teachers, and themselves safe, school leaders should consider a plan which allows trained teachers to act as guardians and carry concealed handguns. The results of the study demonstrate the favorability of allowing teachers to act as school guardians in rural Texas schools.

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Appendix A: Permission to Utilize Winston's Instrument for Research

The modified instrument is listed as Appendix C in this dissertation.

Below is the email communication granting permission.



Brandon Enos

brandonenos@goliadisd.org>

Permission to utilize your dissertation instrumentation

2 messages

Brandon Enos

 diadisd.org>

Tue, Apr 30, 2019 at 2:29

PM

To: swinston@satsumaschools.com

Dr. Winston,

I am a doctoral candidate at American College of Education completing my dissertation. I am writing to ask permission to use your guided protocol listed as Appendix A in your dissertation "Equipping Teachers with Firearms to Promote Safety in U.S. Public High Schools" in my research study. I am doing a qualitative multi-site case study on teacher perceptions of arming other teachers at three Texas high schools. My research is being supervised by my dissertation chair Dr. Bretti.

I plan on adapting the questions to fit into my chosen research methodology and would like permission to use much of your published instrumentation. The adaptations to the instrument will serve to further my original research in this field. I will meet with participants face-to-face in order to gather their verbal and non-verbal responses.

In addition to using the instrument for research, I also seek your permission to reproduce it in my own dissertation appendix. The dissertation will be published with the American College of Education and deposited in the ProQuest Dissertations & Theses database.

I would like to use and reproduce your instrument under the following conditions:

- ·I will use the instrument only for my research study and will not sell it.
- ·I will include a statement of attribution and copyright on all copies of the instrument.
- ·If you request, I will send a copy of my completed research study to you upon completion of the study.

If you are agreeable to these terms and conditions, please indicate so by replying to me through e-mail at <u>brandonenos@goliadisd.org</u>.

Sincerely, Brandon Enos 405-249-2059

Sherman Winston <swinston@satsumaschools.com>

Tue, Apr 30, 2019 at 2:40 PM

To: Brandon Enos

brandonenos@goliadisd.org>

Brandon,

You have my permission to use the guided protocol instrumentation (Appendix A) from my dissertation. If you need any other assistance, please feel free to reach out. When you have completed your research study, please forward a copy of your findings to me when you complete the study. Good Luck!!!

R,
Dr.Sherman L. Winston
MSG(Retired), U.S. Army
JROTC Senior Army Instructor
Varsity Girls Head Basketball Coach
Satsuma High School
1 Gator Circle, Satsuma AL 36572
swinston@satsumaschools.com

Work: (251) 380-8190 Cell: (251) 391-7881 Fax: (251) 380-8191

Appendix B: Interview Questions

- 1. Do you consider your school to be safe or unsafe and why?
- 2. Have you had violent student behavior at your school? If so, has it changed your perception of school safety? Explain.
- Describe any conversations you have had with other people at school about:
- 3. Theft at your school?
- 4. A student being shot?
- 5. A student who brought a pocket knife to school intending to use it?
- 6. Student fighting at school?
- 7. A child not going home and parent concern about kidnapping?
- 8. The inability to contact the office in an emergency?
- 9. To what extent does the media's portrayal of school shootings, if at all, impact how you feel about safety on your campus?
- 10. What do you think is not safe or not secure about your school?
- 11. What do you think increases safety on your campus?
- 12. In your opinion, are the interaction of your students with the school resource officer or police officers on your campus positive and productive or not and why?
- 13. Would you perceive an increase or decrease in school safety if teachers who have received the required training and license were authorized to carry concealed guns on campus?
- 14. Describe how you may feel if teachers carried a gun on your campus?
- 15. Describe how you think teachers would cope with the possibly of having to use a gun to confront an intruder on your campus who has a weapon?

- 16. In hours per month, explain how much training you would expect a teacher on your campus who volunteers to conceal carry a weapon should receive?
- 17. In what ways do you think students at your school may be impacted by teachers carrying a concealed gun on campus?
- 18. Would you feel more or less supportive of a teacher on your campus carrying a concealed weapon if the teacher were prior military or law enforcement and why?
- 19. What policies, procedures, or training does your school have which contributes to making you feel safe?
- 20. Describe the trainings you have received for school safety?
- 21. Did any of those trainings involve first responders?
- 22. What policies, procedures, or trainings are missing which you perceive will make your school safer?
- 23. Describe trainings with first responders.
- 24. Were meetings held after the training to determine if the training went well (debriefing)?
- 25. Do you see or know about first responders walking the school to learn the school's layout?
- 26. Was everyone allowed to give input concerning the training and what needed to be addressed?
- 27. Overall, do you support or disagree with allowing teachers at your school to carry concealed handguns if trained?
- 28. Explain why you support or disagree with allowing teachers at your school to carry concealed handguns if trained.

Appendix C: Questionnaire for Certified Teachers

1.	My gender is A) Male B) Female C) I would rather not say
2.	My highest level of education completed is A) Bachelors B) Masters C) Specialist D) Doctorate
3.	My age is A) 21-30 B) 31-40 C) 41-50 D) 51-60 E) Above 60
4.	I am of Latino or Hispanic origin? A) Yes B) No C) I would rather not answer
5.	My race is A) Asian B) Black C) Native American D) White E) Other
6.	How long have you been a teacher? A) Less than one year B) 1 –3 years C) 4-8 years D) 9 – 14 years

E) 15 or more years

- 7. How long have you worked in your current district?
 - A) Less than one year
 - B) 1 –3 years
 - C) 4-8 years
 - D) 9 14 years
 - E) 15 or more years

Appendix D: South Texas ISD Permission for Research From Superintendent



Brandon Enos

brandonenos@goliadisd.org>

Please approve this research

2 messages

Brandon Enos

 strandonenos@goliadisd.org>

Thu, Jun 6, 2019 at 1:58

DM

To: roconnor@ednaisd.org

Mr. O'Connor,

I know you are busy this time of year. Please take a minute to read my request and respond. Any help you can provide is greatly appreciated.

I would like permission to conduct research at your high school this Fall. For my doctoral degree, I am writing a dissertation on teacher perceptions of school safety by arming their fellow teachers. I am conducting research at three separate 3A high schools in Texas, each with different school board policies. As part of this research, I would ask that the high school certified teaching staff answer a voluntary questionnaire with demographical and background information. From this, I will select five teachers as a representative sample to participate in a one hour face-to-face interview. Before conducting any research, I will have IRB approval and have staff complete the necessary informed consent approval forms.

Thank you for getting back with me regarding this request. Regards,
Brandon Enos
Goliad High School Principal and doctoral candidate
405-249-2059

Robert O'Connor connor@ednaisd.org>

Thu, Jun 6, 2019 at 2:05 PM

To: Brandon Enos

brandonenos@goliadisd.org>

Cc: Robert O'Connor <roconnor@ednaisd.org>, Scott Kana <skana@ednaisd.org>, Madalyn Maresh <MMaresh@ednaisd.org>

I approve this request. Robert A. O'Connor Superintendent-Phone 1-361-782-3573

Appendix E: Central Texas ISD Permission for Research From Superintendent



Brandon Enos

 sandonenos@goliadisd.org>

Request to conduct original research

4 messages

Brandon Enos

 drandonenos@goliadisd.org>

Tue, Apr 30, 2019 at 7:07

PM

To: michelle.smith@lytleisd.org

Mrs. Smith (Superintendent of Lytle ISD),

I am the high school principal in Goliad High and I am a doctoral candidate. I have been working with your leadership team at the transformational leadership conference throughout this year.

I would like permission to conduct research at your high school this Fall. For my doctoral degree, I am writing a dissertation on teacher perceptions of school safety by arming their fellow teachers. I am conducting research at three separate 3A high schools in Texas, each with different school board policies. As part of this research, I would ask that the high school certified teaching staff answer a questionnaire with demographical and background information. From this, I will select five teachers to interview, about 45 minutes each. Before conducting any research I will have IRB approval and have staff complete the necessary informed consent approval forms.

Thank you for getting back with me regarding this request,

Brandon Enos 405-249-2059

Michelle Carroll Smith <michelle.smith@lytleisd.org>

Wed, May 1, 2019 at 6:26

AM

To: Brandon Enos

brandonenos@goliadisd.org>

I am out of the office until Friday. I will talk to my leadership team on Friday and get back to you.

mcs

Sent from my iPhone

> On Apr 30, 2019, at 7:07 PM, Brandon Enos

 strandonenos@goliadisd.org> wrote:

> Mrs. Smith (Superintendent of Lytle ISD),

> I am the high school principal in Goliad High and I am a doctoral candidate. I have been working with your leadership team at the transformational leadership conference throughout this year.

- > I would like permission to conduct research at your high school this Fall. For my doctoral degree, I am writing a dissertation on teacher perceptions of school safety by arming their fellow teachers. I am conducting research at three separate 3A high schools in Texas, each with different school board policies. As part of this research, I would ask that the high school certified teaching staff answer a questionnaire with demographical and background information. From this, I will select five teachers to interview, about 45 minutes each. Before conducting any research I will have IRB approval and have staff complete the necessary informed consent approval forms.
- > Thank you for getting back with me regarding this request,

- > Brandon Enos
- > 405-249-2059

Brandon Enos

 drandonenos@goliadisd.org>

Wed, May 1, 2019 at 6:33 AM

To: Michelle Carroll Smith <michelle.smith@lytleisd.org>

I look forward to discussing this with you. Should you or your team have questions, feel free to call me on my cell (405) 249-2059.

Regards,

Brandon Enos

Sent from my iPhone

- > On Apr 30, 2019, at 7:07 PM, Brandon Enos

 drandonenos@goliadisd.org> wrote:
- > Mrs. Smith (Superintendent of Lytle ISD),
- > I am the high school principal in Goliad High and I am a doctoral candidate. I have been

working with your leadership team at the transformational leadership conference throughout this year.

>

> I would like permission to conduct research at your high school this Fall. For my doctoral degree, I am writing a dissertation on teacher perceptions of school safety by arming their fellow teachers. I am conducting research at three separate 3A high schools in Texas, each with different school board policies. As part of this research, I would ask that the high school certified teaching staff answer a questionnaire with demographical and background information. From this, I will select five teachers to interview, about 45 minutes each. Before conducting any research, I will have IRB approval and have staff complete the necessary informed consent approval forms.

>

> Thank you for getting back with me regarding this request,

>

> Brandon Enos

> 405-249-2059

Michelle Carroll Smith <michelle.smith@lytleisd.org>

Fri, May 3, 2019 at 4:39

PM

To: Brandon Enos

brandonenos@goliadisd.org>

Cc: Jose Garza <jose.garza@lytleisd.org>

By copy of this email I will let Principal Jose Garza know that is has been approved and you will get with him regarding this project. Good luck.

mcs

From: Brandon Enos < brandonenos@goliadisd.org >

Sent: Wednesday, May 1, 2019 6:34 AM

To: Michelle Carroll Smith < michelle.smith@lytleisd.org >

Subject: Re: Request to conduct original research

I look forward to discussing this with you. Should you or your team have questions, feel free to call me on my cell (405) 249-2059.

Regards,

Brandon Enos

On Wed, May 1, 2019 at 6:26 AM Michelle Carroll Smith wrote:

I am out of the office until Friday. I will talk to my leadership team on Friday and get back to you.

mcs

Sent from my iPhone

- > On Apr 30, 2019, at 7:07 PM, Brandon Enos < brandonenos@goliadisd.org > wrote:
- > Mrs. Smith (Superintendent of Lytle ISD),
- > I am the high school principal in Goliad High and I am a doctoral candidate. I have been working with your leadership team at the transformational leadership conference throughout this year.
- > I would like permission to conduct research at your high school this Fall. For my doctoral degree, I am writing a dissertation on teacher perceptions of school safety by arming their fellow teachers. I am conducting research at three separate 3A high schools in Texas, each with different school board policies. As part of this research, I would ask that the high school certified teaching staff answer a questionnaire with demographical and background information. From this, I will select five teachers to interview, about 45 minutes each. Before conducting any research I will have IRB approval and have staff complete the necessary informed consent approval forms.
- > Thank you for getting back with me regarding this request,
- > Brandon Enos

>

> 405-249-2059

Appendix F: North Texas ISD Permission for Research From Superintendent



Brandon Enos

 sandonenos@goliadisd.org>

I need you to approve

3 messages

Brandon Enos

 drandonenos@goliadisd.org>

Thu, Jun 6, 2019 at 11:54

AN

To: kevin.dyes@hollidayisd.net

Mr. Kevin Dyes,

I know you are busy this time of year. Please take a minute to read my request and respond. Any help you can provide is greatly appreciated.

I would like permission to conduct research at your high school this Fall. For my doctoral degree, I am writing a dissertation on teacher perceptions of school safety by arming their fellow teachers. I am conducting research at three separate 3A high schools in Texas, each with different school board policies. As part of this research, I would ask that the high school certified teaching staff answer a voluntary questionnaire with demographical and background information. From this, I will select five teachers as a representative sample to participate in a one hour face-to-face interview. Before conducting any research, I will have IRB approval and have staff complete the necessary informed consent approval forms.

Thank you for getting back with me regarding this request.

Regards, Brandon Enos Goliad High School Principal and doctoral candidate 405-249-2059

Dyes, Kevin <kevin.dyes@hollidayisd.net>
To: Brandon Enos
brandonenos@goliadisd.org>

Thu, Jun 6, 2019 at 12:06 PM

Hi Brandon,

I will be happy to help. I approve of HISD participating in this research.

Regards,

Kevin

--

Kevin L. Dyes Ed.D. Superintendent 940-586-1281

Thu, Jun 6, 2019 at 12:35 PM

Mr. Dyes,

I greatly appreciate you agreeing to me conducting part of my research at Holliday High School. I will be contacting you and your high school principal later this summer with more specific details.

Respectfully, Brandon Enos

Appendix G: Informed Consent Form for Research Participation

Study Title: Teachers with Handguns: A Qualitative Exploratory Multi-Site

Instrumental Case Study

Researcher: Brandon Enos (doctoral candidate)

IRB Study Number: #

I am a student at American College of Education. I am planning to conduct a research study, which I invite you to take part in. This form has important information about the reason for this study, what I will ask you to do if you decide to be in this study, and the way I would like to use information about you if you choose to be in the study.

Why are you doing this study?

You are being asked to participate in a research study about teacher perception of school safety by allowing other school teachers on your campus to carry concealed handguns.

The purpose of the study is to ascertain whether public school teachers in three Texas high schools feel more or less safe if teachers at their respective schools concealed carried handguns.

What will I do if I choose to be in this study?

You will be asked to meet face-to-face and answer questions about school safety, active shooting, ways to be safer in school including the use of guardians or marshals.

Study time: Study participation will take approximately 60 minutes.

Study location: All study procedures will take place at your school or via Skype at a mutually agreeable time.

I would like to record this interview to make sure I remember accurately all the information you provide. I will keep these audio recordings in a locked filing cabinet and they will only be used by me for research purposes in this study. These audio recordings will be used to transcribe the interview and will be destroyed after three years.

I may quote your remarks in presentations or articles resulting from this work. A pseudonym will be used to protect your identity, unless you specifically request to be identified by your true name.

What are the possible risks or discomforts?

Your participation in this study may involve the following emotional or psychological risks:

• You may feel emotional or upset when answering some of the questions. Tell the interviewer at any time if you wish to take a break or stop the interview.

• You may be uncomfortable with some of the questions and topics I will ask about. If you are uncomfortable, you are free to not answer or to skip to the next question.

As with all research, there is a chance confidentiality of the information I collect from you could be breached – I will take steps to minimize this risk, as discussed in more detail below in this form.

What are the possible benefits for me or others?

You are not likely to have any direct benefit from being in this research study. This study is designed to learn more about how teachers feel about the safety of students and their own safety as a result of allowing teachers in their school to carry concealed handguns. The study results may be used to help in future policy, legislation or research.

<u>How will you protect the information you collect about me, and how will information be shared?</u>

Results of this study may be used in publications and presentations. Your study data will be handled as confidentially as possible. If results of this study are published or presented, individual names and other personally identifiable information will not be used.

To minimize the risks to confidentiality, I will keep collected data in a secure location.

I may share the data collected from you for use in future research studies or with other researchers – if I share the data I collect about you, I will remove any information which could identify you before I share it.

If I think you intend to harm yourself or others, I will notify the appropriate people with this information.

Financial Information

Participation in this study will involve no cost to you. You will not be paid for participating in this study.

What are my rights as a research participant?

Participation in this study is voluntary. You do not have to answer any question you do not want to answer. If at any time you would like to stop participating, please tell me. We can take a break, stop and continue at a later date, or stop altogether. You may withdraw from this study at any time, and you will not be penalized in any way for deciding to stop participation.

If you decide to withdraw from this study, I will ask you if the information already collected from you can be used.

Who can I contact if I have questions or concerns about this research study?

If you have questions, you are free to ask them now. If you have questions later, you may contact the researcher at brandon.enos@yahoo.com.

If you have other questions, including questions regarding your rights as a research participant, please contact Dr. Anthony Bretti at (229) 288-8485.

Consent

I have read this form and the research study has been explained to me. I have been given the opportunity to ask questions and my questions have been answered. If I have additional questions, I have been told whom to contact. I agree to participate in the research study described above and will receive a copy of this consent form.

Initial one of the following to indicate your choice:	
(initial) I agree to allow the researcher to use my contact inf this study to contact me about participating in future research studie	9
(initial) I do not agree to allow the researcher to use my conduring this study to contact me about participating in future research	
Participant's Name (printed)	
Participant's Signature	Date

Appendix H: Permission to Utilize Massey-Jones's Instrument for Research

The modified instrument is listed as Appendix B in this dissertation.

Below is the email communication granting permission.



Brandon Enos

 brandonenos@goliadisd.org>

Permission to utilize your dissertation instrumentation 3 messages

Brandon Enos

 brandonenos@goliadisd.org>

Tue, Apr 30, 2019 at 2:12

PM

To: dmasseyjones@comcast.net

Dr. Massey-Jones,

I am a doctoral candidate at American College of Education completing my dissertation. I am writing to ask permission to use your guided protocol listed as Appendix B in your dissertation "Perception of school safety of a local school" in my research study. I am doing a qualitative multi-site case study on teacher perceptions of arming other teachers at three Texas high schools. My research is being supervised by my dissertation chair Dr. Bretti.

I plan on adapting the questions to fit into my chosen research methodology and would like permission to use much of your published instrumentation. The adaptations to the instrument will serve to further my original research in this field. I will meet with participants face-to-face in order to gather their verbal and non-verbal responses.

In addition to using the instrument for research, I also seek your permission to reproduce it in my own dissertation appendix. The dissertation will be published with the American College of Education and deposited in the ProQuest Dissertations & Theses database.

I would like to use and reproduce your instrument under the following conditions:

- ·I will use the instrument only for my research study and will not sell it.
- ·I will include a statement of attribution and copyright on all copies of the instrument.
- ·If you request, I will send a copy of my completed research study to you upon completion of the study.

If you are agreeable to these terms and conditions, please indicate so by replying to me through e-mail at brandonenos@goliadisd.org.

Sincerely, Brandon Enos 405-249-2059

dmasseyjones <dmasseyjones@comcast.net>

Wed, May 1, 2019 at 10:31

PM

To: Brandon Enos

brandonenos@goliadisd.org>

Brandon,

You have my permission to utilize and reproduce the guided protocol listed in appendix B of my dissertation. You also have permission to use my published implementation. If you need any additional information or have questions,, please let me know.

Thank you Dr. Darla Massey Jones Sent from my iPhone

Brandon Enos

 To: dmasseyjones <dmasseyjones@comcast.net>

Thu, May 2, 2019 at 5:31 AM

Thank you!



January 7, 2020

To: Brandon Enos

Anthony Bretti, Dissertation Committee Chair

From: Becky Gerambía

Becky Gerambia

Assistant Chair, Institutional Review Board

Office of Institutional Analytics

Re: IRB Approval

"Perception of Teachers: Is School Safety Increased"

The American College of Education IRB has reviewed your application, proposal, and any related materials. We have determined that your research provides sufficient protection of human subjects.

Your research is therefore approved to proceed. The expiration date for this IRB approval is one year from the date of review completion, January 7, 2021. If you would like to continue your research beyond this point, including data collection and/or analysis of private data, you must submit a renewal request to the IRB.

Our best to you as you continue your studies.