

TEACHERS' PERCEPTIONS OF SAFETY REGARDING SCHOOL SHOOTINGS

by

MEGAN OLIVE

B.A. University of Central Florida 2016

A thesis submitted in partial fulfillment of the requirements
for the degree of Master of Arts
in the Department of Sociology
in the College of Sciences
at the University of Central Florida
Orlando, Florida

Summer Term
2019

Major Professor: Amy M. Donley

© 2019 Megan Olive

ABSTRACT

As a result of high media attention surrounding school shootings in recent years, it may appear that American public schools are becoming dangerous places (Schildkraut & Elsass, 2016; Elsass, Schildkraut, & Stafford, 2016; Toppo, 2013). Though schools remain to be one of the safest locations for children, various safety measures are discussed and implemented in schools to combat this perceived problem and ensure the safety of school campuses. Discussions of best safety practices spikes directly following a school shooting event from relevant parties, such as school administration, law enforcement agencies, parents, and students, (Crawford & Burns, 2015; Chrusciel, Wolfe, Hansen, Rojek, & Kaminski, 2014) but little existing literature focuses on teachers, more specifically how safe teachers perceive schools to be with regard to gun violence and school shootings. This study seeks to build upon the small body of literature that currently exists on teachers' perceptions of safety and hopes to introduce new opportunities for research in the future.

This study is comprised of 212 teachers throughout Central Florida. The results of this research show that while teachers overall feel very safe teaching at their schools, there are areas they believe can be improved upon. Of the safety measures used to prevent and reduce gun violence at schools, program-based safety measures and School Resource Officers make these teachers feel the safest. These perceptions of safety do not vary from one Central Florida county to the next, as most teachers are largely in agreement as to what measures make them feel safe. It was also revealed that most teachers in the sample are also unsupportive of legislation that would allow classroom teachers to carry firearms on school campuses.

ACKNOWLEDGEMENTS

I would like to extend the utmost appreciation and thankfulness to my thesis committee chair, Dr. Amy M. Donley. Your guidance, support, and belief in me and this study at many times were some of the only things that pulled me through the difficult data collection desert I often wandered through. Your mentorship has given me a love for applied research and your friendship has helped me to believe in my own potential. You've seen my academic journey from being a shy, undergrad who sat in the back of the class and didn't speak to where I am today. You're an incredible leader and I hope that we continue to work together in the future.

I would also like to thank Dr. Libby Mustaine and Dr. Amy Reckdenwald for your support and feedback throughout this project. The unique insights you each brought to this study have helped to make me a more critical researcher and a stronger writer. I must also thank Dr. Jacklyn Schildkraut for the wealth of knowledge and information you have so graciously supplied me with through every step of this process. Truly, from the bottom of my heart, thank you all.

Lastly, to every single person that played even just the smallest role in getting the survey distributed, from my loving family, supportive friends and classmates, Seminole Uniserv, and the many people I interacted with on Facebook, I quite literally could not have done this without you. By a simple share, tag of a friend, or even just allowing me to join and post in your group, together WE made this research happen and I hope that WE can use it to help some people.

TABLE OF CONTENTS

LIST OF FIGURES.....	vii
LIST OF TABLES.....	viii
CHAPTER ONE: INTRODUCTION.....	1
CHAPTER TWO: LITERATURE REVIEW.....	4
Media Portrayal of a “School Shooting Epidemic”.....	5
Safety Measures.....	7
Physical Safety Measures.....	7
Personnel-based Safety Measures.....	9
Program-based, Preventative Safety Measures.....	13
Perceptions of Safety.....	18
The Current Study.....	21
CHAPTER THREE: THEORETICAL FRAMEWORK.....	23
CHAPTER FOUR: METHODOLOGY.....	27
Sample.....	27
Measures.....	29

Analytic Strategy.....	33
CHAPTER FIVE: FINDINGS.....	35
CHAPTER SIX: DISCUSSION AND CONCLUSION.....	52
Discussion.....	52
Conclusion.....	55
Limitations.....	55
Policy Implications.....	56
APPENDIX A: WHAT CONTRIBUTES TO FEELING LESS THAN 100% SAFE.....	60
APPENDIX B: ADDITIONAL THOUGHTS AND COMMENTS.....	66
APPENDIX C: SURVEY INSTRUMENT FOR THE CURRENT STUDY.....	72
APPENDIX D: IRB EXEMPT DETERMINATION LETTER.....	84
REFERENCES.....	86

LIST OF FIGURES

Figure 1. Frequency Distribution of Average Days Felt Safe on School Campus.....44

LIST OF TABLES

Table 1. Sample Demographics.....	36
Table 2. Variable Descriptive Statistics- Physical Safety Measures Index.....	38
Table 3. Variable Descriptive Statistics- Personnel-Based Safety Measures Index.....	39
Table 4. Variable Descriptive Statistics- Program-Based, Preventative Safety Measures Index..	40
Table 5. OLS Regression Results for Safety Measures Scale.....	43
Table 6. What Contributes to Feeling Less Than 100% Safe?.....	45
Table 7. In Your Opinion, How Are the Relationships with Teachers And The Following Parties?.....	46
Table 8. Frequency Statistics on Teacher Support for Gun Legislation.....	47
Table 9. ANOVA for Physical Safety Measures Across Central Florida Counties.....	49
Table 10. ANOVA for Personnel Safety Measures Across Central Florida Counties.....	49
Table 11. ANOVA for Program Safety Measures Across Central Florida Counties.....	50
Table 12. Additional Thoughts and Comments.....	44

CHAPTER ONE: INTRODUCTION

Media attention surrounding high-profile school shootings and their frequency creates the image that there is a current school safety crisis within the United States (U.S.) (Schildkraut & Elsass, 2016; Elsass, Schildkraut, & Stafford, 2016). Despite research indicating that deaths on school campuses are not as common as the media reports would suggest, numerous safety measures, at varying levels of efficacy, have been implemented in school systems around the country (Agnich, 2015; Astor, Meyer, Benbenishty, Marachi, & Rosemund, 2005; Burns & Crawford, 1999; Chapin & Coleman, 2006; Crawford & Burns, 2015; Elsass et al., 2016; Fisher, Nation, Nixon, & McIlroy, 2017). While some of these measures are thought to be more effective than others at increasing the level of safety in schools, many are utilized simply to create the guise of safe schools outwardly to the public (Burns & Crawford, 1999). Even though schools are still generally safe places, after a school shooting occurs, the topic of safety resurges among legislators, law enforcement personnel, school administration, and parents to determine the best practices for ensuring the safety of schools (Crawford & Burns, 2015; Chrusciel, Wolfe, Hansen, Rojek, & Kaminski, 2014). Often left out of this conversation are the perceptions of teachers in these schools who would be directly affected by such safety practices. It is important to examine the perceptions of safety among teachers because they spend a considerable amount of time, including one-on-one time, with students in the school setting. Looking at their levels of perceived safety and the levels of fear among teachers add an insightful indication of the current school climate.

This study is unique because it analyzes perceptions of the safety of teachers. The gap in the existing literature presents itself by excluding teachers from the narrative of school safety. Several studies have examined how safe the students (Connell, 2018; Chapin & Coleman, 2006), school administrators (Cuellar, 2018; Diliberti, Jackson, Kemp, & Hansen, 2017), and law enforcement officials (Chrusciel et al., 2014) all perceive schools to be. However, little empirical research exists that examines how safe teachers perceive their workplaces to be. The existing literature on law enforcement personnel in the school system largely neglects those employed by the school districts and the previous research conducted with school administration is limited. Administrators have duties outside of the scope of teaching and thus spend less time during their workdays interacting with students than do teachers. Examining teachers' perceptions of safety is important because, due to the amount of time they spend with students, their sense of the school climate is potentially more reliable than that of school administrators. The present study addresses the gaps in the literature by examining the beliefs and opinions of teachers about school safety. The perceptions of safety held by the teachers within school systems are necessary to understand as many times, the onus is placed on the teachers to establish and maintain the level of safety and to protect the students in the event of an active shooter situation.

This research addresses four core questions: (1) what safety measures (physical, personnel-based, and program-based, preventative) that are utilized by the school system contribute to their perceptions of safety? (2) to what extent do teachers generally feel safe coming to work? (3) how supportive are teachers of legislation allowing them to carry firearms on school campuses? and (4) do perceived levels of safety vary by Central Florida counties? This research is imperative for us to understand in greater depth the social problem of school

shootings and the effect they have on educators. Research on school safety shows that teachers' experiences are largely ignored (Finley, 2003) and decisions regarding safety policies on their behalf are made without input from them (Fisher et al., 2017). Shootings in schools have occurred since the beginning of formal education (Rocque, 2012) and there is no sign of them stopping. This research is of extreme importance now to understand what safety measures in the school system contribute to feelings of safety felt by teachers. Teachers who feel safe may be better equipped to respond quickly and calmly, thus preventing potential loss of life.

CHAPTER TWO: LITERATURE REVIEW

School shootings are a very specific type of mass shooting. Before exploring teachers' perceptions of safety with regard to school shootings, both terms "school shooting" and "mass shooting" need to be defined and contextualized. While a seemingly simple task, the definitions of both terms have been the subjects of much debate over what qualifies and what does not.

Schildkraut and Elsass (2016) define a mass shooting as:

An incident of targeted violence carried out by one or more shooters at one or more public or populated locations. Multiple victims (both injuries and fatalities) are associated with the attack, and both victims and location(s) are chosen either at random or for their symbolic value. The event occurs within a single 24-hour period, though most attacks typically last for only a few minutes. The motivation of the shooting must not correlate with gang violence or targeted militant or terroristic activity (p. 28).

The definition of the term "school shooting" is a bit more nuanced, with greater emphasis placed on the location of the attack, the relationship of the shooter to the victims, and possible explanations and symbolic significance of the attack itself. Newman, Fox, Harding, Mehta, and Roth (2004) offer a generally accepted definition of school shootings as, "events that take place on a school-related public stage before an audience; involve multiple victims, some of whom are shot simply for their symbolic significance or at random; and involve one or more shooters who are students or former students of the school," (p. 50; see also Fox & Harding, 2005). A school-related public stage refers to a location where a child or adolescent would otherwise not be if it weren't for their relationship as a student to their school. This includes inside a school building

or on campus grounds (Everytown for Gun Safety, 2014), but also traveling to or from school and school-sponsored events (CDC, 2014; Anderson et al., 2001).

Media Portrayal of a “School Shooting Epidemic”

Despite claims that there is a school shooting epidemic or that the occurrence of these crimes has drastically spiked in recent years, these incidents have had permanence in U.S. history since the dawn of formal education (Rocque, 2012). Although there was a minor spike of school shootings during the mid-1990s, the last several decades have remained fairly steady with regard to the frequency of these events and the number of victims overall (Fox & DeLateur, 2014; Burns & Crawford, 1999; Carlton, 2017; Elsass et al. 2016; Muschert & Ragnedda, 2010; Newman, 2006; Schildkraut, Elsass, & Stafford, 2015). What has changed drastically though is the way in which news is reported and information is disseminated related to these events.

The shooting at Columbine High School in Littleton, Colorado on April 20, 1999 changed the way school shootings were perceived by society (Altheide, 2009; Burns & Crawford, 1999) and was the catalyst for the implementation of new journalistic practices (Schildkraut & Elsass, 2016). News outlets became aggressive in their seemingly never-ending coverage of these attacks and started relying heavily on the ability to sensationalize one of the most statistically unlikely crimes for the sake of increasing station viewership (Heath & Gilbert, 1996; Gruenwald, Pizarro, & Chermak 2009; Maguire, Weatherby, & Mathers, 2002; Barak, 1994; Elsass et al., 2016; Hagman, 2017). The invention and rapid growth of social media and the constant availability of news via portable technology, such as the smartphone, have further exacerbated the misconception that we are experiencing a school shooting epidemic (Heath &

Gilbert, 1996; Schildkraut & Elsass, 2016, p. 52). School shootings receive a disproportionate amount of media attention, focusing mainly on the most tragic or severe crimes within the allotted time available to them, and in effect create the illusion that mass shootings happen more frequently than they actually do (Barak, 1994; Maguire et al., 2002; Duwe, 2000; Best, 1987; Schildkraut et al., 2015; Elsass, Schildkraut, & Stafford, 2014).

Previous research has suggested that there has been an increase in the public's fear of crime due to modern media coverage of mass murder (Duwe, 2000; Burns & Crawford, 1999; Elsass et al., 2016; Fisher et al., 2017; Warr & Stafford, 1983). Schildkraut et al. (2015) conducted a study of college students with regards to reactions on school shootings in the context of moral panics. They found that students who were more fearful of a shooting taking place had an increased perception of these events occurring more frequently than they do. The sample also believed in the existence of a moral panic regarding school shootings. Roughly 95% of the population learns of crimes in their communities and nationwide through the media (Schildkraut & Elsass, 2016), suggesting that this moral panic created over school shootings extends greatly into society. When met with this situation, policymakers are tasked with the responsibility to respond to the concerns of parents who demand their children stay safe in their schools. Elected representatives respond to this pressure either by enforcing preexisting laws or passing new ones (Lawrence & Birkland, 2004). Often, policymakers choose the latter, yet this decision is not one rooted in academic research and theory to determine the best practices.

Safety Measures

Generally, the methods used in addressing the concerns of parents require the installation of security measures that are more stringent and apparent (Crepeau-Hobson, Filaccio, & Gottfried, 2005). This is attempted through many different strategies including physical safety measures, personnel-based safety measures, and program-based, preventative safety measures. Educational institutions across the county, both public and private, began outfitting a variety of safety measures in schools to prevent shootings or reduce lethality in the event that one was not prevented. At varying levels of efficacy and support, many different kinds of safety measures are continuing to be incorporated in schools today.

Physical Safety Measures

Physical safety measures are defined as visible, tangible objects installed throughout the schools or in individual classrooms that contribute to a safer school environment. Common physical safety measures in schools are surveillance cameras, intercoms, lock systems on doors, metal detectors, regular locker and personal belongings checks, badge or identification card requirements, visitor sign-in, telephones in the classrooms, a camera/buzzer system at the front entrance of the school, panic buttons or other forms of duress alarms, and hotlines for reporting incidents (Carlton, 2017; Chrusciel et al., 2014, Connell, 2018; Crepeau-Hobson et al., 2005; Crews, Crews, & Burton, 2013; Crawford & Burns, 2015; Dixon, 2014; Duplechain & Morris, 2014; Finley, 2003; Kingshott, 2012; Garcia, 2003).

More recently, the trend gaining a considerable amount of popularity is the bulletproofing of ordinary objects. Common classroom items such as whiteboards and notebooks have been made bulletproof, along with a variety of other objects. Bulletproof whiteboards are reported to withstand the bullet from a shotgun at a foot away, dually performing the functions of an educational tool and a shield from an active shooter (Cloud, 2014; Stein & Cherkis, 2014; Frankel, 2014). Backpacks and clothing are also being marketed and sold to parents and children as bulletproof items (Cloud, 2014; Bidgood, 2014; Dewey, 2012). Bulletproof blankets, made from a material similar to Kevlar, are to be worn similarly to a backpack and should effectively protect students from gunfire and falling debris in an active shooter situation (Associated Press, 2014).

Since the shooting at Sandy Hook Elementary School on December 14, 2012 in Newtown, Connecticut, environmental criminology has been a topic of great consideration. In relation to school shootings, environmental criminology examines the architectural designs and environmental layout of the buildings to potentially reduce the likelihood of a shooting occurring on campus (Schildkraut & Elsass, 2016; Crews et al., 2013). To use the new Sandy Hook Elementary School campus as an example of specific designs that have the potential to reduce the frequency and lethality of shootings, the school used the surrounding land itself as a barrier. There is only one road in and out of the forest-surrounded school, which is bordered by wetlands. The building curves around the parking lot for easy visibility of anyone arriving at or leaving the campus. The classroom doors have locks that can be engaged from the inside of the classroom and windows with impact-resistant glass, far enough away from the doorknob. This prevents a shooter from potentially breaking the window, unlocking the door themselves, and acquiring

access into the room. All the classrooms are also organized into three independent wings, allowing for easy quarantine in an active shooter situation (Peterson, 2014).

Personnel-Based Safety Measures

Personnel-based safety measures include those which by increasing the presence of certain individuals, the safety of the schools is expected to also increase. Previous literature places emphasis on the inclusion of law enforcement officers in the school, armed security guards, and unarmed security guards (Beger, 2002; Chrusciel et al., 2014; Crawford and Burns, 2015; Jennings, Khey, Maskaly, & Donner, 2011; Schildkraut & Elsass, 2016). Either working for a local municipality or county-level agency, school resource officers (SROs) are the fastest-growing segment of law enforcement stationed in schools (Beger, 2002). A month after the shooting at Sandy Hook Elementary School, President Obama signed executive orders on the topic of school safety which includes: the United States Departments of Justice and Homeland Security to provide continuing training and security assessments for law enforcement, first responders, and school officials on active shooter situations, the United States Departments of Education, Justice, Homeland Security, and Health and Human Services to develop model emergency management planning guides to help schools prepare for school shootings, and the United States Department of Justice to make Community Oriented Policing Services (COPS) Hiring Grants available to fund SROs (Katsiyannis, Whitford, & Parks Ennis, 2018). Consequently, a national push began to station SROs in every school (Chrusciel et al., 2014). Following the tragedy at Marjory Stoneman Douglas High School in Parkland, Florida on

February 14, 2018, Florida Governor, Rick Scott, allocated \$450 million in funding to incorporate a police presence of at least one per every 1,000 students in every public school by the end of school year 2018-2019 (Blad, 2018). The duties of SROs include tasks such as security, arrest, and investigation of students involved in criminal activity, as well as less traditional roles like a mentor, counselor, and teacher (Beger, 2002; Chrusciel et al., 2014).

In addition to the placement of SROs in the nation's school systems, armed security is another personnel-based safety measure present in the discourse. While some districts hire conventional armed security personnel through firms and companies specializing in that type of guardianship, less conventional forms of armed security are being proposed as well. The National School Shield Program is a program proposed by the National Rifle Association (NRA), with two key elements specific to the program being the development of a model security plan and the use of community volunteers as armed security (Crews et al., 2013; Chrusciel et al., 2014). Resorting to community volunteers as armed security for schools could potentially be extremely problematic due to the potential for unqualified, ill-intentioned, or overzealous volunteers to endanger students. Volunteers may not be subjected to the same national-level background checks as are law enforcement and those employed by the school, thus exponentially increasing the potential for injuries and/or deaths to occur (Crews et al., 2013). More recently, military veterans and retired law enforcement officers are also being looked at to provide the same security as those community volunteers in the NRA's proposed National School Shield Program (Munoz, 2018). The Sarasota County Sheriff explains that those individuals would be hired by the school district, trained by their local law enforcement agency, and tasked with the responsibility of supplementing the security provided by SROs (Munoz,

2018). While a program such as this was only a recommendation made by the Sarasota County Sheriff, such a program would pose similar threats to safety and security as the National School Shield Program.

President Donald Trump has also urged states to allow schools to arm teachers in addition to the presence of formally trained SROs (Blad, 2018; see also Agnich, 2015). Following the shooting at Sandy Hook Elementary School, eight states passed legislation to arm school administrators including Alabama, Arkansas, Georgia, Kansas, Oklahoma, South Dakota, and Texas (see also Kyle et al., 2017). Eight other states have proposed similar legislation including Arizona, Colorado, Maine, Missouri, South Carolina, Virginia, Tennessee, and Utah (Chrusciel et al., 2014). Florida Governor, Rick Scott, on March 9, 2018 signed into law the bill SB 7026, also known as the Marjory Stoneman Douglas High School Safety Act. While the purpose of this bill included several components, such as raising the age of which Florida residents can purchase rifles from 18 years old to 21 years old and the requirement of a three-day waiting period on purchasing “long guns,” the bill also gave the ability for educators to carry handguns on their school campuses (ABC News Staff, 2018). Should the educator decide to carry a handgun, first they would need to complete 144 hours of law enforcement training on firearms and the district in which they work would have needed to opt-in to the program (ABC News Staff, 2018). The specific provision enabling teachers to carry firearms on school grounds is named the Coach Aaron Feis Guardian Program, after a coach who lost his life in the shooting at Marjory Stoneman Douglas High School. Teachers who exclusively perform classroom duties were originally excluded from eligibility into this program, but a 2019 revision extends the eligibility to classroom teachers as well (Postal, 2019). Teachers who perform additional duties, such as

coaching, club leadership, and also school administration and cafeteria staff would be able to participate granted they pass all necessary criteria (Grinberg, Jones, & Sung, 2018).

Research conducted by Chrusciel and colleagues (2014) found that the law enforcement executives and school principals surveyed were not supportive of arming teachers in an effort to improve school safety. Only 12% of the 228 law enforcement personnel surveyed and only 4% of the 1,086 school principals surveyed believed that armed teachers would prevent a school shooting from happening. Most law enforcement officials and school principals agree that arming school teachers would not have a beneficial impact on school safety. Law enforcement executives and school principals were also in agreement that arming school administrators would not be an effective method for achieving and maintaining school safety (Chrusciel et al., 2014). Kyle, Schafer, Burrell, and Giblin (2017) also found that faculty and staff are generally unsupportive of policies that allowed teachers, faculty, and staff to carry concealed firearms and other weapons on campus. Dixon (2014) interviewed K-12 teachers in a Midwest city regarding safety and preparedness on school grounds shortly following the shooting at Sandy Hook Elementary School. Of the several themes that surfaced, the possession of firearms on campuses was explored. Dixon (2014) found that several teachers interviewed were comfortable with the idea of having armed guards at the school in an effort to make the school safer, but were uncomfortable with the idea of being requested or required to carry guns themselves (n= 10). The bulk of research done on the topic of armed educators indicate that most teachers do not want teachers, staff, or administrators carrying guns overall (Crews et al., 2013). The argument for allowing teachers to carry firearms on school campuses is made under the assumption that by allowing a greater number of law-abiding citizens to readily have access to a firearm, the

likelihood of an individual using lethal force to stop an assailant is increased, thus protecting potential victims (Haider-Markel & Joslyn, 2001). Despite this, faculty and staff are much more supportive of non-weapons policies for campus safety, including information sharing and enhanced restrictions on who can enroll and remain on the school campus (Kyle et al., 2017).

Program-based, Preventative Safety Measures

Program-based, preventative safety measures are programs or specific social interactions aimed at preventing a school shooting before it happens or limiting the lethality of a school shooting in progress. Examples of program-based, preventative safety measures include anti-bullying programs (Astor et al., 2005; Kingshott, 2012), violence mapping and proactivity (Astor et al., 2005), zero-tolerance policies (Beger, 2002; Fox & Harding, 2005), increased lockdown and emergency preparedness drills (Beger, 2002; Cummings, 2018), mental and behavioral health services (Blad, 2018; Chrusciel et al., 2014; Crepeau-Hobson et al., 2005; Interdisciplinary Group on Preventing School and Community Violence, 2013), community prevention training (Chrusciel et al., 2014), crisis planning and management (Crawford & Burns, 2015; Crepeau-Hobson et al., 2005; Kingshott, 2012), and improved relationships among staff members and with students (Dixon, 2014; Duplechain & Morris, 2014; Fisher, Viano, Curran, Pearman, & Gardella, 2018; Gaughan, Cerio, & Myers, 2001; Gregory, Cornell, & Fan, 2012; Hagman, 2017; Interdisciplinary Group on Preventing School and Community Violence, 2013; Kupchik, Brent, & Mowen, 2015).

Anti-bullying programs are inclusive programs operated by establishing explicit rules against bullying, both positive and negative reinforcement accordingly based on behavior, parent awareness and involvement in the program, regular class meetings with discussions on norms against bullying, and greater supervision of non-classroom areas, such as the playground (Astor et al., 2005; Kingshott, 2012). Bullying is often identified as a contributing factor to creating a school shooter by feelings of isolation and ostracization (Agnich, 2015), so a program to end bullying is a preventative measure to curtail the likelihood of such happening (Borum, Cornell, Modzeleski, & Jimerson, 2010). Astor and colleagues (2005) also discuss the topic of violence mapping as a way to reduce criminal opportunities on school campuses. Focus groups conducted at a high school with approximately 1,000 students were instructed to indicate locations in their schools where they felt unsafe. Upperclassmen noted that outside the school and in the parking lot across from the school's gymnasium were the most unsafe locations on campus.

Lowerclassmen named the cafeteria (before, during, and after lunch) along with the hallways during transition periods to be the most violent and unsafe. To address these fears of the students, faculty and staff were instructed to increase their presence in these specific locations and to greet as many students as they could by name. This method of increasing the perceived safety of students sent a more positive message to the student body, while still providing security similar to that of a security guard (Astor et al., 2005). Though teachers perform many roles at school, likening them to security guards can perhaps detract them from their instructional priorities.

Zero-tolerance policies were also introduced to provide a safer school environment for those not suspected of any wrong-doing. Beger (2002) states how zero-tolerance policies are an ineffective measure for ensuring student safety and inadvertently encroaches on a student's right

to privacy. Fox and Harding (2005) explain that while zero-tolerance policies have been implemented across the U.S., they are in direct opposition to the culture of the American Public School system by the denial of second chances to students in violation of the policy and could potentially blind administrators and teachers to an emotional disturbance that a student could be experiencing. Beger (2002) also addresses the addition of lockdown drills and “SWAT team” rehearsals in recent years as a response to school shootings. Lockdowns involve locking all doors, moving out of sight from a potential shooter, and remaining quiet for the duration of the lockdown as not to be heard (Cummings, 2018). Forty states in the U.S. require schools to perform exercises or emergency preparedness drills to test their emergency plans. Cummings (2018) emphasizes the importance that the drills be taught using “scenario-based” pieces of training that are updated on a regular basis. Scenario-based training is important to teach so that staff has the ability to make judgement calls on whether to follow the drill or deviate from the plan established when their environment suggests that following the plan could be more dangerous (Cummings, 2018).

Mental and behavioral health services are receiving increased attention as a program-based preventative safety measure. Crepeau-Hobson et al. (2005) discovered that most schools increased the number of mental health services after the shootings at Columbine High School. The adoption of a crisis plan alone had increased by 20%. Research also suggests that structured programs, such as social skills training and family therapy, are more effective than individual counseling in reducing violence among youth (Crepeau-Hobson et al., 2005). The Interdisciplinary Group on Preventing School and Community Violence (2013) states that along

with mental health supports, threat assessment teams are also necessary to have in schools and communities, more broadly, so that individuals seeking help can get the care that they need.

Crisis intervention planning is a preventative safety measure that is “used to offer immediate, short-term help to individuals who experience an event that produces emotional, mental, physical, and behavioral reactions to a crisis,” (Kingshott, 2012, p.49). Generally, school districts should develop crisis plans taking into account the particular diversity within the community being served since it helps individuals return to their level of functioning before the traumatic event occurred or works to develop new coping mechanisms in dealing with a crisis.

Arguably the most important and effective of the program-based, preventative safety measures at increasing perceived levels of safety are social interactions that increase the connectedness of staff members to each other and to students, leading to overall improved relationships within the school system. Gaughan et al. (2001) state that better relationships between teachers and students are one way to stop lethal violence in schools. In a study of students in grades 7-12, upon asking what measures could potentially prevent school shootings, approximately 20% of the respondents indicated that teachers should care more about the student population, 12% of respondents thought teachers should listen more to their students, and 8% suggested that teachers and school staff should intervene if they notice problems developing with their students. Largely, students desired to be listened to, understood, and supported in their class environment. Students also thought that teachers should take a more active role in their lives away from just the classroom. Student’s indicated that if they were to tell an adult at school an overheard conversation regarding a potential threat or possible school shooter attack, 80% would

tell their teacher and 29% would tell their coach (Gaughan et al., 2001). This help-seeking behavior exhibits strong trust between teachers and students and encourages a sense of connectedness. A sense of connectedness can come from communities where the individuals are involved in community activities and care about the welfare of each other (Interdisciplinary Group on Preventing School and Community Violence, 2013). About 20% of students have heard rumors that another student plans to shoot someone and another 20% have overheard another student talking specifically about shooting a fellow student at school (Gaughan et al., 2001). These overheard conversations are referred to as leakage. Schools would be safer places if they exhibited a positive school climate, where students felt comfortable keeping an open line of communication with teachers, reporting suspicious behavior and knowing they would be supported (Kupchik et al., 2015). A positive school climate extends further to the relationships among teachers themselves. Dixon (2014) explains that one of the attributes teachers in her study mentioned that contributed to them feeling safer at school, in their workplaces, was the supportive staff environment, referred to here as a “school family,” and what Hagman (2017) refers to as “connectedness of staff.” Positive interpersonal relationships are the key to fostering feelings of safety in schools (Fisher et al., 2018)

Astor and colleagues (2005) outline the qualities that a successful program intended to prevent school-based violence must have. These seven qualities are:

- 1) they raise awareness and responsibility of students, teachers, and parents regarding the types of violence in their schools,
- 2) they create clear guidelines and rules for the entire school,
- 3) they target various social systems in the school and clearly communicate to the entire school community procedures to be followed before, during, and after violent events,
- 4) they focus on getting school staff, students, and parents involved in the program,
- 5) the interventions fit easily into

the normal flow and mission of the school, 6) they use faculty, staff, and parents in the school setting to plan, implement, and sustain the program, and 7) they increase monitoring and supervision in non-classroom areas (p. 28).

Research-based support programs with the goal of reducing violence and increasing safety should be operated following a three-tier approach. First, they should operate at the universal level, or school-wide for all students' engagement. Secondly, the programs should operate at the targeted level, for at-risk students. Lastly, they should operate on the intensive level for students especially in need and at the highest risk (Interdisciplinary Group on Preventing School and Community Violence, 2013).

Perceptions of Safety

Snell, Bailey, Carona, and Mebane (2002) examined school administrators from middle schools and high schools in Texas and discovered that over 80% had changed their school security policies following the shooting at Columbine High School. The changes in policy were a direct result of a decreased perception of safety among students in U.S. schools. When safety measures are employed to combat a perceived decrease in a sense of safety of the students, often several measures simultaneously, the perception of safety felt among teachers in the school system is consequently affected at varying levels.

In research of law enforcement executives and school principals conducted by Chrusciel et al. (2014), both groups felt that SROs were the most effective method of maintaining school safety (91% and 75.6% respectively). The next safety measure perceived to be most effective was "other" (8.3% and 30% respectively), followed by arming teachers (0.7% and 0.2%

respectively). “Other” in the context of this study refers to physical safety measures, mental health services, collaborative effort and improved communication between law enforcement and schools, and community prevention training. The number of security guards in schools has been associated with a positive relationship to school crime, indicating that the more guards are present on school campuses, the more that crime occurs (Jennings et al., 2011). These findings are consistent with the findings of Crawford and Burns (2016). In this study, it was found that armed security presence was associated with an increase in reports of serious violence for both minority and predominantly white schools. The only reported case of a decrease in violence with the presence of an armed guard was if that armed guard carried oleoresin capsicum (OC) spray, better known as pepper spray.

The same is not true for SROs. The presence and number of SROs were negatively and significantly associated with serious school crime, indicating that with a greater SRO presence on school grounds, the likelihood for serious crimes to occur is diminished (Jennings et al., 2011). It is suggested that the reason for this association is that the presence of SROs on school campuses gives students the opportunity to build trusting, positive relationships with police. While the Chrusciel et al. (2014) study of law enforcement executives and school principals named physical safety measures, such as controlled doors, security cameras, and metal detectors, to be somewhat effective at maintaining school safety, empirical research does not corroborate such claims. The physical safety measures typically used in schools are generally ineffective at preventing crime and increasing the feelings of safety at school (Burns & Crawford, 2015). The use of security cameras was associated with increased reports of serious violence at predominantly white high schools at all grade levels (Burns & Crawford, 2016). Sweeps for

contraband were also associated with increased reports of serious violence at white high schools, but a decrease in minority schools at all grade levels and white schools below high school (Crawford & Burns, 2016). Not only are these safety measures largely ineffective at creating the perception of a safe school environment (Burns & Crawford, 2016), they can even be counterproductive, actually making a school feel less safe (Crepeau-Hobson et al., 2005).

Physical strategies at creating a safe school environment are associated with increased violent incidents, physical attacks, and fights in school (Cuellar, 2018). Jennings et al. (2011) found that physical safety measures, specifically metal detectors, may prevent generalized violence in schools, but they have no impact in preventing serious violence. The implementation and practice of critical incident plans or drills are linked to schools having higher levels of serious violence, indicating that the schools in need of these plans are the schools that are utilizing them (Jennings et al., 2011).

Interestingly, in a small sample of ten, Dixon (2014) asked teachers in semi-structured interviews what attributes about the schools they taught in made them feel safe. Answers included locked doors within the schools, a camera and buzzer system at the front door operated by the secretary to give access into the school to visitors, the architectural layout of the school building, checking in at the front office, wearing “hospital-style” identification bracelets, window coverings, having places to hide, like large closets, small school size, being rurally located, and a supportive school staff environment (Dixon, 2014). Nearly all the answers provided were physical safety measures, contrary to the discourse. When teachers were asked what aspects of their schools made them feel unsafe, the teachers answered things such as not

feeling secure outside the classroom or school buildings, the school surroundings, the mental and behavioral health of the students, potentially long police response time due to the rural location, other staff not understanding or following safety procedures, and lastly how because the doors inside the school are locked, if an attack were to happen while the class was outside, it would be difficult to get to safety in time (Dixon, 2014). These school characteristics made the teachers feel unsafe perhaps due to the lack of safety measures they currently had addressing them. If the school was outfitted with some form of a personnel-based safety measure and/or program-based safety measures, their perceptions of overall safety at the schools they teach in could be impacted.

The Current Study

Policy responses to highly mediatized school shootings, such as Columbine High School, Sandy Hook Elementary School, and Marjory Stoneman Douglas High School, have been largely driven by the end goal of making schools safer. However, research indicates that a perceived lack of safety is seemingly not internalized by students (Fisher et al., 2017). This finding suggests that the fear of adults, including government officials, school administrators, and parents, is the crux on which safety measures are being introduced and implemented in school systems (Snell et al., 2002). Teachers have been largely left out of the conversation on safety measures implemented in the schools and the perceived level of safety felt in their workplaces. The opinions of teachers are highly important when discussing school safety because teachers have a particular insight into the climate of the school that other adults on campus, such as those

in administration, might not have (Finley, 2003). The amount of time the teachers spend interacting with their students in a close setting can give them a unique and organic perspective that could directly affect their perceptions of safety.

This study takes place throughout counties in Central Florida. These counties are some of the highest in population and student enrollment in the state of Florida. High student enrollment suggests a greater number of faculty and staff in the district, implying the potential to gain a wealth of knowledge regarding this topic. The location of this study is of particular interest because of the region's proximity to multiple highly mediatized mass shootings in recent years, one taking place at a nightclub and the other at a high school. These attacks were both the second and ninth most lethal shootings in documented U.S. history, respectively (CNN, 2018). A study by Gregory et al. (2012) found that a serious incident involving just one teacher would likely have an impact on other teachers though they were not directly involved. Perceptions of safety have the potential to be shaped by even a few high-profile events because it can raise concerns about the personal risk of victimization (Gregory et al., 2012; Elsass et al., 2016).

Exploring teachers' perceptions of safety is necessary since they are the individuals tasked with the responsibility to provide an education and learning opportunities to students. When teachers feel safe in their environments, their abilities to effectively educate students could be greater, thus increasing learning outcomes in Central Florida.

CHAPTER THREE: THEORETICAL FRAMEWORK

Researchers have examined perceptions of safety as the perceived risk of victimization using several different theoretical perspectives. This study suggests that the explanation for the perceived level of safety of teachers in their schools can be explained using Schildkraut and Elsass's (2016) adapted version of Cohen and Felson's (1979) routine activity theory. Routine activity theory explains that at the convergence of a motivated offender and suitable target, with the absence of a capable guardian, crime is likely to occur. If a capable guardian is present or any one of the two remaining components is missing, crime is significantly less likely to occur. Theoretically, if a crime is less likely to occur, those who the crime might affect should feel safer in their environments. If a crime is more likely to occur, those who the crime might affect should feel less safe in their environments.

In their book *Mass Shootings: Media, Myths, and Realities* (2016), Schildkraut and Elsass use routine activity theory to explain the likelihood of a mass shooting occurring. Understanding the likelihood of a school shooting occurring is important because that is a reliable indicator of the level of safety felt by faculty and staff at school. If there is a high likelihood of a shooting taking place at the school, it can be inferred that the perception of safety felt among teachers would be quite low. If the likelihood of a shooting to take place on school grounds is low, a reasonable assumption can be made that teachers would perceive their workplaces to feel safer.

Addressing each component individually, capable guardianship in the context of a school shooting includes individuals, objects, and devices designed to prevent a shooting from taking place – for example, SROs, guards (armed or unarmed), alarms systems, dogs, security cameras, and metal detectors among others (p. 117). In the context of this study, guardianship would be provided by both the physical and personnel-based safety measures previously discussed. If a mass shooting were to occur, increasing capable guardianship would require providing protection and oversight of the target(s) as the guardians would act as a control or deterrent to the offender. By successfully fulfilling these two roles, capable guardians reduce the likelihood of an attack occurring. Schildkraut and Elsass (2016) stress the point that it is strictly capable guardianship, grounded in empirical research, which can reduce the likelihood of a crime being committed at the convergence of a motivated offender and suitable target. Not all guardianship is deemed capable and increasing general guardianship is not enough to reduce the likelihood of a crime occurring (p. 117). In the context of this study, the adoption of increased safety measures is simply not enough to make teachers feel safe in their schools. The physical and personnel-based safety measures must be capable, meaning they must be designed and developed through research methodologies. Failure to do so will result in an unimproved or decreased level of security, and thus an unchanged or reduced perception of safety (p. 118).

Another component of routine activity theory is a suitable target. A suitable target combined with a motivated offender creates a higher likelihood of crime occurring if there is a lack of capable guardianship (Cohen & Felson, 1979). Reducing the suitability of a potential target is another strategy for preventing school shootings or minimizing the loss of life when one occurs. Common ways to reduce target suitability focus on restricting a shooter's access to

possible victims using concepts such as environmental criminology, whereby the architectural design of the school is formulated for the purpose of safety (Schildkraut & Elsass, 2016, p. 128), and promoting better interpersonal relationships within the school. A bonded, unified atmosphere between students, faculty, and staff lends itself to higher levels of safety within the school (Fisher et al., 2018) and reduces the suitability of targets.

Potential shooters can be motivated to attack for a variety of reasons, some which will never be known. To further extrapolate Cohen and Felson's (1979) routine activities, since criminal opportunity is produced at the convergence of a motivated offender and a suitable target while in the absence of a capable guardian, if motivating the offender can be prevented or at least identification of a potential offender occurs before the attack takes place, an attack can potentially be thwarted. Wike and Fraser (2009) identify six preventative strategies for early identification of potential attackers. Those strategies include strengthening school attachment, reducing school aggression, encouraging student communication, establishing resources for troubled students, strengthening security measures, and increasing communication within schools and with agencies outside of school (Wike & Fraser, 2009). These strategies include several of the program-based, preventative safety measures explored in the literature. If a motivated offender can be apprehended before the attack, there will be a reduction in criminal opportunity as a result. In the context of this study, if there are programs in school that aim to reduce violent behavior, strengthen school attachment, and provide resources for students in need, the likelihood that a potential offender would be motivated to commit such a crime would be reduced. If there are more programs available that reduce the likelihood of someone being

motivated to commit this crime, it can be inferred that teachers would feel safer in that environment.

Operating on the principle on routine activity theory, if the likelihood of a crime occurring can be predicted, the level of perceived safety can too be predicted. Using this theoretical framework, the present study seeks to address four core questions: (1) what safety measures (physical, personnel-based, and program-based, preventative) that are utilized by the school system contribute to their perceptions of safety? (2) to what extent do teachers generally feel safe coming to work? (3) how supportive are teachers of legislation allowing them to carry firearms on school campuses? and 4) Do perceived levels of safety vary by Central Florida county? Based on the current literature, I expect that physical and personnel-based safety measures of safety are less impactful on teachers' perceptions of safety in Central Florida than the program-based safety measures. Such measures create the illusion of safety, but in excess have the opposite effect, creating a more fearful or less safe environment (Beger, 2002; Crepeau-Hobson et al., 2005). I anticipate that teachers generally feel safe coming to work, based on the findings of Dixon (2014). I also predict that teachers will be less supportive of legislation that would allow for them to carry firearms on school campuses. Teachers will feel that having guns in schools that do not belong law enforcement or armed guards will make schools less safe (Dixon, 2014) and only contribute to a prison-like environment (Beger, 2002; Crews et al., 2013). Finally, I anticipate that the perceived level of safety in Central Florida counties may slightly vary based on the demographics of each county and simply because while one set of safety measures may be used in a county, the neighboring county could have entirely different procedures.

CHAPTER FOUR: METHODOLOGY

Sample

The current study utilizes primary data collected exclusively for the purposes of this study. The sample was acquired in three stages: 1) contacting the school districts individually, 2) contacting the teachers' unions for each school district individually, and 3) posting the link to the survey on Qualtrics on various social media pages. The first stage of attempting to build a sample for this study involved emailing the research departments in each school district expressing the desire to conduct research within their district and requesting an application to do so. These applications required submitting an explanation of the research to be conducted, proof of IRB approval, a copy of the survey manuscript, and my credentials to be conducting this research. All of these documents were sent in a request for the research application via email to the Lake County School District, the Orange County School District, the Osceola County School District, and the Seminole County School District. The application currently remains under review with the Lake County School District. The Orange County School District determined they wanted the application for research revised and resubmitted, which included omitting many important questions that were included within the survey. For this reason, I decided to not proceed with the application with the Orange County School District. For both Osceola County School District and Seminole County School District, the request for research application was denied.

Due to the lack of success partnering with the individual school districts, the second stage of the methodology was employed. This involved emailing the teachers' unions for each school district, requesting their partnership in distributing the link to the online survey to their membership. The Lake County Education Association and the Osceola County Education Association remained non-responsive to the attempts at contacting them. The Orange County Classroom Teachers Association declined to partner with me on this project due to an already heavy load of survey priorities within their agency; however, Seminole Uniserv, the teachers' union for Seminole County, agreed to partner with me and distribute the survey to their membership. While initially the effort showed signs of success, due to a low response rate of just two percent (n=63), a third methodology had to be employed.

The third and most successful method of survey distribution was through convenience and snowball sampling. This included posting the Qualtrics link to the survey online to several Reddit pages (n=9) and many Facebook community group pages (n=76). The survey link was also posted on my personal Facebook page, which my friends and family shared with their Facebook friends as well. It was stressed to respondents that their participation was completely voluntary and anonymous. No financial incentive was offered for teachers' participation in this study. It was required that all respondents be at least 18 years old and currently employed by either the Lake, Orange, Osceola, or Seminole County school system in various capacities (teacher, staff, coach, and extracurricular sponsor for clubs/meetings). As a result of the two methodologies that were successful, the total sample size for this study is 212 respondents.

Measures

For this study, the survey administered to potential respondents begins with screening questions 1) verifying that they are adults at least 18 years or older and 2) currently employed by either the Lake, Orange, Osceola, or Seminole County School Districts. If respondents answer no (coded as 0) to either of those questions, the survey is terminated, and they are unable to participate. If respondents indicate they are within the sampling frame and answer yes to both questions (coded as 1), the survey continues further.

The dependent variables in this study are perceptions of safety and support for proposed legislation regarding teachers carrying firearms on school campuses. To measure these dependent variables, first, respondents were presented with the various safety measures instructed to select the most appropriate number 0-10 (0 being not safe at all and 10 being extremely safe) that represents how the physical, personnel-based, and program-based safety measures in their schools either currently make them feel or would make them feel if they were to be implemented. A list of these various safety measures, present in the existing literature, was presented for each category of safety measures.

The physical safety measures examined in this study include: metal detectors, surveillance cameras, single or limited entry points, the use of clear or bulletproof backpacks, door locks on classroom doors that can be secured from the interior with a key, door locks that can be secured from the interior without a key, a school-wide alarm system to alert if there is an intruder, required guest sign-in at the front desk/office, a visitor entry system (e.g. a buzzer, intercom, vestibule entry, etc.), and required, visible ID cards or badges. The personnel-based

safety measures examined in this study include school resource officers, armed security guards, unarmed security guards, veterans, and retired members of law enforcement. The availability of program-based, preventative measures of safety is also associated with increased perceptions of safety (Interdisciplinary Group on Preventing School and Community Violence, 2013). The preventative safety measures examined were 1) mental health services and the availability of mental health professionals on school campuses, 2) community prevention training, such as social skills training and community involvement in school activities, 3) violence prevention training, such as the implementation of a school crisis plan, 4) anti-bullying programs, and 5) threat assessment and threat management.

Additionally, statements regarding feelings of safety were included in a matrix with answer options according to the Likert scale, indicating various levels of agreement (strongly disagree= 1, disagree= 2, neither agree nor disagree= 3, agree= 4, and strongly agree= 5). The following statements are included in this matrix: 1) I feel safe at my school. 2) I feel safe in my classroom. 3) I feel safe in the hallways. 4) I feel safe outside on the school grounds. and 5) Overall I feel that this school is a safe school. Taking this line of questioning further, respondents were asked out of the five days in a workweek, how many of those days do they generally feel safe. Reflecting on days or occasions when they have not felt 100% safe, respondents were then asked the open-ended question to explain what it was about those days or occasions that made them feel less safe. Asking questions such as this provides a bit more insight into the details that compose teachers' perceived level of safety at school.

Participants were also asked questions regarding their support for proposed legislation that would allow qualifying teachers to carry firearms on school campuses. The questions for this variable were borrowed from a nationally published survey from the Elon University Poll in partnership with the Raleigh News and Observer. A representative survey of public school teachers, grades K-12, was conducted in North Carolina between February 28th, 2018 and March 5th, 2018. The questions are 1) Do you think allowing teachers to carry guns to school is mostly a good idea or a bad idea? 2) Would you carry a gun to your classroom if you were allowed to do so? 3) How likely do you think it would be for a gun carried by a teacher at your school to accidentally fall into the wrong hands? 4) How would teachers carrying guns to your school affect the overall learning environment? 5) How would your feelings of safety change if teachers in your school were allowed to carry guns? and 6) Generally, do you think arming teachers would lead to an overall decrease or increase in gun-related deaths within American public schools? These questions were included to collect important data, gaining insight on how these decisions at the legislative level would impact each educator individually

The independent variables in this study include the perceived strength of relationships between different parties within the school community. According to Dixon (2014), teachers tend to feel safer in a work environment of strongly bonded colleagues, which resembles what is referred to as a “work family.” To determine the strength of the relationships between teachers and administrators, fellow teachers, and students on campus, respondents were asked to rate the relationships on a scale from excellent, very good, good, fair, to poor. These values were reverse coded (excellent= 5, very good= 4, good= 3, fair= 2, and poor= 1).

Threat assessment was also examined as an independent variable. Respondents were presented with a list of the various kinds of threats and were asked to select all that they have been exposed to as a teacher. These types of threats include: direct threats (stating a specific day, time, or person(s) to whom the event will occur, indirect threats (including vague and ambiguous information), veiled threats (implying violence, but not specifically threatening violence), and conditional threats (warning a violent act will happen unless certain demands are met) (“Types of Threats, n.d.). Also included in this list was whether a student has brought weapons, such as a gun or knife, to school that they were made aware of and also if a student of theirs has appeared withdrawn or isolated from their peers or school activities that would cause for concern.

Another important independent variable to consider is if the teachers participating in this study have been present for a gun violence event in their teaching careers. I asked participants if an instance has occurred that involved a student firing a gun at a school while they were employed there (coded as yes= 1 and no= 0). This is a necessary question to ask because those who have experienced a gun violence event while being a teacher could have a widely different perception of safety as a teacher than one who has not experienced such an event. The last question in this section is if the respondents have anything else they’d like to add as a response to this survey. The question was left open-ended to collect qualitative data that could not be collected simply through more quantitative questioning.

Additionally, demographic variables are also collected as independent variables in this study for the purposes of classification and to examine if differences exist among those classifications. Gender was asked and coded as 1= male, 2= female, 3= other. Race and ethnicity

were asked of the participants with answer options including White, non-Hispanic, Hispanic, black or African American, American Indian or Alaska Native, Asian, Native Hawaiian or Pacific Islander, and other. Respondents were also asked to provide their age. Political ideology was measured, using the same coding used by the researchers of The National Opinion Research Center (NORC) at The University of Chicago on the General Social Survey (GSS). The GSS is a nationally representative survey of non-institutionalized Americans aged 18 and older on a wide variety of topics related to attitudinal, behavior, and demographic data. The coding I used to measure political ideology, the same as the GSS, is on a seven-point scale that ranges from “extremely liberal” to “extremely conservative”. I also used the values for GSS coding to code marital status (1= married, 2= widowed, 3= divorced, 4= separated, and 5= never married). Respondents were then asked to indicate what their positions are at the school they are employed. Provided were the instructions to select all that apply, since many times teachers have more than one role they fulfill. The options to choose from included administration, faculty/teacher, coach, club sponsor/extra-curricular supervisor, and “other” with the ability to write in a role not provided to them. Respondents were then asked what level of school they taught (elementary, middle, high, or “other” school) and finally, what county they are employed in (Lake, Orange, Osceola, or Seminole).

Analytic Strategy

To provide an in-depth analysis of the research questions, a series of statistical models are used to examine which measures of safety used on-campus impact teachers’ perceptions of

safety, to what extent teachers feel safe coming to work, how supportive teachers are of legislation that would allow them to carry firearms, and if these opinions vary from one Central Florida county to another. The sample demographics are first displayed, followed by three scales that were calculated to examine the three categories of safety measures (physical, personnel-based, and program-based). Next, a linear regression model is calculated to explain what demographic factors contribute to varying levels of safety experienced by the presence (or thought) of each category of safety measures being implemented in their school. Next, a frequency table displays how many days out of the workweek respondents indicated that they felt safe coming to work. Of those respondents who indicated any value less than five (days per workweek), they were asked to express what feelings they had or events that may have transpired that left them feeling less than 100% safe. Those answers, categorized by theme, are in the following table. Next, a frequency table is used to display the strength of relationships between teachers and administration, students, and each other. To address the question of whether perceptions of safety varied by Central Florida county, three one-way ANOVAs were calculated to determine if there was any difference in how safe teachers felt by county. Finally, teachers were asked if they had any additional thoughts that they wanted to express. Those answers are coded by theme in the last table.

CHAPTER FIVE: FINDINGS

Table 1 presents the descriptive statistics for the demographic variables analyzed in this study. Based on the most recent data from the 2015-2016 school year, published by the National Center for Education Statistics (2019), most teachers' race/ethnicity is white, non-Hispanic (80%). A similar trend can be observed in the data collected in this study as most of the sample collected was also white, non-Hispanic (83.7%). Teachers who identify as Hispanic make up 9% of the teaching population (National Center for Education Statistics, 2019) and in this study account for 10.5% of the sample. Black teachers are underrepresented in this study, making up 1.1% of the sample, whereas the National Center for Education Statistics (2019) suggests that Black teachers make up 7% of the teaching population. Females in this sample are greatly overrepresented (91.6%), as the population of teachers that are female is 77% (National Center for Education Statistics 2019). The political ideology of respondents in the sample follows a standard bell curve, with the greatest percentage of respondents indicating their beliefs to be "middle of the road" (43.2%). The next most commonly selected ideology was "liberal" (17.5%), followed by "conservative" (12.6%). The majority of respondents indicated that they are currently married (65.6%) and the mean age of the sample is 42.5 years old. While not every question was answered by every respondent, the total sample size is 212 teachers.

Nearly half of respondents (45.3%) indicated that they were teachers at an elementary school, followed by 26.8% stating they taught at a middle school, and 23.2% teach at a high school. The most represented county in the sample where teachers' schools are located was Seminole County (48.9%), followed by Orange County (26.3%), Lake County (20.5%), and

Osceola County only comprising 4.2% of the sample. When asked if they had ever experienced a gun violence event while being a teacher, only 6.3% (n=12) of the sample said yes. Those who answered “yes” also represent teachers who experienced a student committing suicide with a firearm on school campus during their teaching careers.

Table 1. Sample Demographics

	Percentage*
Gender	
Male	7.3
Female	91.6
Other	1.0
Total (n=191)	100.0
Race/Ethnicity	
White, non-Hispanic	83.7
Hispanic	10.5
Black or African American	1.1
Asian	0.5
American Indian or Alaskan Native	1.1
Native Hawaiian or Pacific Islander	0.5
Other	2.6
Total (n=190)	100.0
Political Ideology	
Extremely Liberal	4.4
Somewhat Liberal	9.3
Liberal	17.5
Middle of the Road	43.2
Conservative	12.6
Somewhat Conservative	11.5
Extremely Conservative	1.6
Total (n=183)	100.0
Marital Status	
Married	65.6
Widowed	2.1
Divorced	12.7
Separated	1.1
Never Married	18.5
Total (n=189)	100.0

Table 1. Sample Demographics

	Percentage*
Grade Level Taught	
Elementary	45.3
Middle	26.8
High	23.2
Other	4.7
Total (n=190)	100.0
County	
Lake	20.5
Orange	26.3
Osceola	4.2
Seminole	48.9
Total (n=190)	100
Experienced a Gun Violence Event	
Yes	6.3
No	93.7
Total (n=191)	100
Mean Age	42.5*

*Unless otherwise noted

In Tables 2, 3, and 4, scales were created for each category of safety measures examined in this study. For all three scales, the Cronbach Alpha Coefficient is above the minimum value of .6, indicating that all three scales are considered reliable and reflect the internal consistency of the survey instrument. Included in each table are the descriptive statistics (median, mean, and standard deviation) of each individual measure incorporated in the scale. The means of each measure were summed to reflect a mean value for the entire scale. That mean value is also located in their respective tables.

Table 2 displays the scale created for physical safety measures. Respondents were presented with the ten physical safety measures below and were asked to select a number from zero to ten, zero being not safe at all and ten being extremely safe, on how safe each measure

either does make them feel or would make them feel if it were implemented in their school. The physical measure that had the highest mean was a school-wide alarm system to alert the campus if there was an intruder on school grounds (7.67). The physical measure with the highest standard deviation, reflecting greater variability of responses, was the installation of metal detectors (2.971). Finally, the physical measure with both the lowest median (5) and mean score (4.69) was clear or bulletproof backpacks. These numbers indicate that the physical safety measure presented to the respondents that makes them feel the least safe is the clear or bulletproof backpacks. The Cronbach Alpha Coefficient for this scale is .862, reflecting the high reliability of the instrument.

Table 2. Variable Descriptive Statistics-Physical Safety Measures Index

Measure	Median	Mean	Std. dev.
A school-wide alarm system to alert if there is an intruder	8.00	7.67	2.267
Single or limited entry points to campus	8.00	7.55	2.420
Visitor entry system (e.g. a buzzer, intercom, vestibule entry, etc.)	8.00	7.47	2.427
Required or visible ID cards or badges	8.00	7.21	2.667
Door locks on the classroom door that can be secured from the interior without a key	8.00	7.18	2.686
Required guest sign-in at the front office	8.00	7.09	2.887
Door locks on the classroom door that can be secured from the interior with a key	7.00	6.75	2.614
Surveillance cameras	7.00	6.72	2.523
Metal detectors	7.00	6.06	2.971
Clear or bulletproof backpacks	5.00	4.69	2.936
Scale Descriptive Statistics	-	68.087	17.8329

Note: 0= Do not feel safe at all. 10= Feel extremely safe. Cronbach Alpha Coefficient =.862. Scale Descriptives (Maximum value = 100. Minimum value = 0. Range= 100)

Table 3 displays the scale created for personnel-based safety measures. Respondents were presented with a list of four different safety and security personnel who would be charged with

the duty of limiting and/or eliminating potential threats from school and overall keeping the school a safe place. On the same scale from zero (not safe at all) to ten (extremely safe), respondents were asked how safe each person or group of people either do make them feel or would make them feel if they had a presence on their school campus. Analyzing the mean scores, the measure that provides the greatest sense of safety to teachers and the least sense of safety to teachers is clear. The presence of School Resource Officers (SRO) makes teachers feel the safest at school (mean = 7.80/median = 8). Unarmed security guards either do or would make the teachers feel the least safe (mean = 3.50/median = 3). These are both the highest and lowest mean values, respectively, across all three scales. The personnel-based safety measure with the greatest standard deviation was the volunteer veteran or retired member of law enforcement (3.092), reflecting greater variability of answers. The Cronbach's Alpha Coefficient is .731, indicating that this scale is reliable.

Table 3. Variable Descriptive Statistics-Personnel-Based Safety Measures Index

Measure	Median	Mean	Std. dev.
School Resource Officer (either from a local police or sheriff's department)	8.00	7.80	2.077
Armed security guards (not law enforcement)	6.00	5.47	2.979
A volunteer veteran or retired member of law enforcement (armed)	6.00	5.32	3.092
Unarmed security guards (not law enforcement)	3.00	3.50	2.742
Scale Descriptive Statistics	-	22.063	8.1824

Note: 0= Do not feel safe at all. 10= Feel extremely safe. Cronbach Alpha Coefficient =.731
Scale Descriptives (Maximum value = 40. Minimum value = 0. Range = 40.)

Table 4 shows the scale created for the program-based, preventative safety measures, along with the corresponding descriptive statistics. Using the same scale (0 = not safe at all; 10 = extremely safe), there is not much variability across the medians, means, and standard deviations. These findings show that while one safety measure may edge out another by contributing to a slightly greater feeling of safety, these differences are marginal. The program-based, preventative safety measure with the highest median (8) and mean (7.17) is mental health services and the availability of mental health programs. The safety measure with the greatest standard deviation is an anti-bullying program (2.596). The Cronbach Alpha Coefficient for this scale is .931, reflecting the high reliability of the instrument.

Table 4. Variable Descriptive Statistics-Program-Based, Preventative Safety Measures Index

Measure	Median	Mean	Std. dev.
Mental health services and availability of mental health professionals on school campuses	8.00	7.17	2.455
Threat assessment and threat management	7.00	7.04	2.224
Violence prevention training, such as the implementation of a school crisis plan	7.00	7.02	2.399
Community prevention training, such as social skills training and community involvement in school activities	7.00	6.89	2.407
Anti-bullying programs	7.00	6.39	2.596
Scale Descriptive Statistics	-	34.482	10.7518

Note: 0= Do not feel safe at all. 10= Feel extremely safe. Cronbach Alpha Coefficient =.931
Scale Descriptives (Maximum value = 50. Minimum value = 0. Range = 50.)

Table 5 shows an OLS Linear Regression to examine the relationship between gender, race, political ideology, school level, and presence at a school shooting event on perceived levels of safety through the physical, personnel-based, and program-based safety measures scales. First, dummy variables were created for gender, race, and presence at a school shooting event. To

examine gender, males were coded as 1 and female and “other” were coded as 0. For race, white, non-Hispanic was coded as 1 and all other races in the model were coded as 0. To examine whether respondents had been present for a school shooting event in their teaching career, yes was coded as 1 and no and unsure were coded as 0. Political ideology is measured on a seven-point scale from 1 (extremely liberal) to 7 (extremely conservative). School-level is coded as 1 = Elementary school, 2 = Middle school, 3 = High school, and 4 = other.

The results for the physical safety measures model in Table 5 reveal that the only significant predictor of increased feelings of safety through physical measures is the school level, controlling for all other variables in the model. In this linear regression, school level was coded 1= Elementary School, 2= Middle School, 3= High School, and the answer option that indicated “other” was coded as “missing.” This makes the variable continuous and able to be analyzed in the model. These findings suggest that as grade level increases, the feeling of safety that the teachers experience through physical safety measures on campus decreases. While the standardized coefficient is significant, the impact of the school-level on the perception of safety created by using physical safety measures is quite low.

The personnel-based safety measures model in Table 5 shows that the only significant predictor of increased feelings of safety through the presence of certain personnel is whether the respondent has experienced a school shooting event during their teaching career, controlling for all other variables in the model. This means that those who have experienced a school shooting event at some point during their teaching career do not feel as safe as their counterparts by an increased presence of safety and security personnel. While the standardized coefficient is

significant, the impact of having experienced a school shooting event is very low on the perception of safety created through the presence of specialized personnel.

The program-based, preventative safety measures model in Table 5 was found to be insignificant, with a p-value of .099. Gender, race, political ideology, school level, and their prior presence at a school shooting are not significant predictors of a teacher's level of safety provided through their school having program-based safety measures on campus.

Table 5. OLS Regression Results for Safety Measure Scales

<i>Variables</i>	<i>Physical Safety Measures*</i>	<i>B</i>	<i>Personnel-Based Safety Measures*</i>	<i>B</i>	<i>Program-Based, Preventative Safety Measures</i>	<i>B</i>
<i>Gender</i>	-0.274 (4.940)	-.004	1.837 (2.380)	.060	-.289 (2.933)	-.008
<i>Race</i>	-1.369 (3.964)	-.027	-2.362 (1.778)	-.102	-2.639 (2.271)	-.090
<i>Political Ideology</i>	-.517 (1.004)	-.040	.787 (.463)	.132	-1.174 (.589)	-.155*
<i>School Level</i>	-4.886 (1.683)	-.231*	.314 (.778)	.032	-2.296 (.996)	-.185*
<i>Present for School Shooting Event</i>	-7.367 (5.636)	-.106	-6.287 (2.620)	-.188*	.606 (3.346)	.014
<i>(Constant)</i>	80.895***		18.984***		46.130***	
	<i>R = .275</i>		<i>R = .265</i>		<i>R = .236</i>	
	<i>R² = .075</i>		<i>R² = .070</i>		<i>R² = .055</i>	

* p < .05. ** p < .01. *** p < .001.

Note: Results are reported as unstandardized coefficient with standard error in parentheses. The Program-Based, Preventative Safety Measures Model is not significant.

Figure 1 and Table 6 address the second research question: “To what extent do teachers generally feel safe coming to work?” Figure 1 is a bar graph displaying how many days of the workweek, on average, teachers stated that they feel safe coming to work. Most respondents (72.5%) said that they feel safe 5/5 days, Monday through Friday. While the percentage is much smaller, the next most selected response is 0 days a week (9.3%).

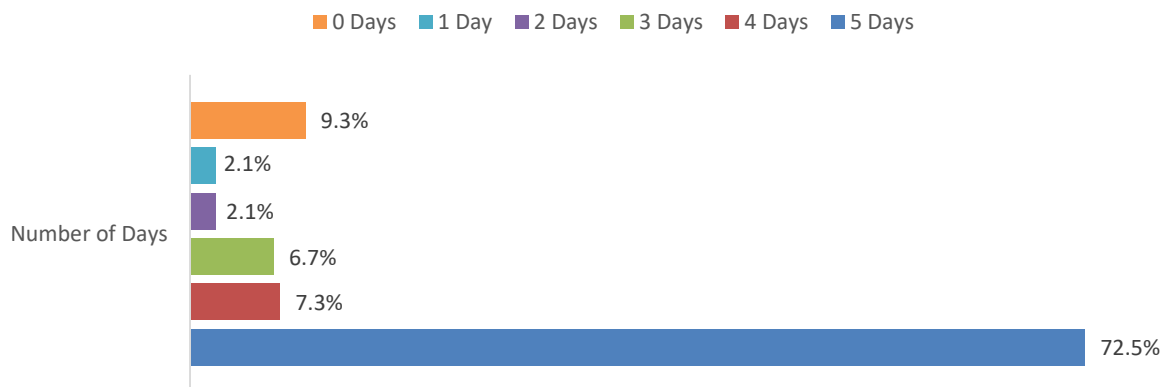


Figure 1. Frequency Distribution of Average Days Felt Safe on School Campus (n=193)

To further investigate what factors contribute to the level of safety teachers feel coming to work, respondents were offered the opportunity to elaborate and write in what details about certain days made them feel less than 100% safe coming to work. Seventy-five teachers provided a response and the prominent themes are located in Table 6 below. The actual responses provided by survey participants are located in Appendix A. The major themes that presented

themselves were 1) student threats and behaviors, 2) the school or classroom’s physical structure, 3) the lack of a School Resource Officer or qualified security, 4) the unpredictability of a shooting event, 5) strangers and parents on campus, 6) the school is located in a bad neighborhood, and 7) students with mental health issues.

Table 6. What contributes to feeling less than 100% safe?

Themes	n
Student threats and behaviors	22
The school or classroom’s physical structure	20
Lack of SRO or qualified security	10
The unpredictability of a shooting event	5
Overall feel safe, but added additional comments	5
Strangers and parents on campus	3
Bad neighborhood	3
Students with mental health issues	2
Additional reasons	4

To assess the strength of relationships within their schools, teachers were asked to rate their relationship with their administration, with fellow teachers, and with students. The scale was from excellent (we get along and at least occasionally see each other outside of work) to poor (open hostility and a complete lack of respect). This scale was five points (5=excellent, 4=very good, 3=good, 2=fair, 1=poor). More than half of all respondents stated their relationship with the administration at their school was at least very good (50.5%). Nearly two-thirds of the sample stated that their relationship with their fellow teachers was at least very good (65%). More than half of the teachers surveyed also stated that their relationship with their students was at least very good (52%). Poor was by far the least selected option in all the categories, with

fellow teachers being the lowest category with poor relationships. Respondents who stated their relationship with fellow teachers were only 2.5%. Teachers were also asked who they would report a student to if that student exhibited concerning or unusual behavior. Due to some teachers naming multiple sources, 262 responses were answered for this question, with the most frequent being that they would report the student to Administration (n=83). The next most commonly entered answers were: Guidance Counselor (n=40), Dean (n=31), a counselor, psychologist or social worker (n=21), the Principal (n=15) or Assistant Principal (n=17). While the number is very small (n=2), it is still worth reporting that some teachers stated that they would not report the behavior because either nothing would be done or negative action would be taken against them, the teacher, for filing such a report.

Table 7. In your opinion, how are the relationships with teachers and the following parties? (n=200)

	Excellent	Very good	Good	Fair	Poor	Total (%)
Administration	19.0	31.5	25.0	17.0	7.5	100
Fellow teachers	22.0	43.0	27.0	5.5	2.5	100
Students*	13.6	38.4	36.4	8.1	3.5	100

*n=198

The univariate analyses of the dependent variable “teacher support for gun legislation” highlight the strong opposition that the sample of teachers feel toward themselves being permitted to carry firearms on school campuses. Table 8 seeks to address the third hypothesis of this study: “How supportive are teachers of legislation allowing them to carry firearms on school

campuses?” Most of the sample (70.9%) believes that arming teachers is a bad idea and nearly three-quarters of them (73.8%) would not carry a gun if they were permitted to do so. Most teachers surveyed (72.8%) believe it to be at least somewhat likely, 44.6% believe it to be very likely, that a gun being carried by a teacher on campus could potentially by accident fall into the wrong hands. Over half of the same (52.3%) feel that if guns were introduced to the classroom through the teachers that it would mostly harm the overall learning environment and 64.1% of the sample feel that it would make the schools a less safe place. Despite the strong opposition of teachers on carrying guns on school grounds, when asked how they felt it would contribute to gun-related deaths in American public schools, nearly one-quarter of the respondents (22.6%) felt that the presence of guns would make no difference, though 44.1% of the sample believe that the presence of guns in American public schools will lead to an increase in gun-related, school deaths.

Table 8. Frequency Statistics on Teacher Support for Gun Legislation

	n	%
Do you think allowing teachers to carry guns to school is mostly a good idea or a bad idea?		
Good idea	28	14.3
Bad idea	139	70.9
Unsure	29	14.8
Total	196	100
Would you carry a gun to your classroom if you were allowed to do so?		
Yes	19	9.7
Maybe	24	12.3
No	144	73.8
Unsure	8	4.1
Total	195	100

Table 8. Frequency Statistics on Teacher Support for Gun Legislation

	n	%
How likely do you think it would be for a gun carried by a teacher at your school to accidentally fall into the wrong hands?		
Very likely	87	44.6
Somewhat likely	55	28.2
Somewhat unlikely	17	8.7
Very unlikely	26	13.3
Unsure	10	5.1
Total	195	100
How would teachers carrying guns to your school effect the overall learning environment?		
Mostly help	9	4.6
Mostly harm	102	52.3
No effect	33	16.9
Unsure	51	26.2
Total	195	100
How would your feelings of safety change if teachers in your school were allowed to carry guns?		
More safe	30	15.4
Less safe	125	64.1
No difference	16	8.2
Unsure	24	12.3
Total	195	100
Generally, do you think arming teachers would lead to an overall decrease or increase in gun-related deaths within American public schools?		
Increase	86	44.1
Decrease	35	17.9
No difference	44	22.6
Unsure	30	15.4
Total	195	100

To address the fourth research question of this study, “Do perceived levels of safety vary by Central Florida county?”, three separate one-way analyses of variance were computed to compare the variance between each safety measure scale created to the variance within the county variable. In Table 9, the mean of the physical safety measures scale was compared to the county variable, consisting of Lake, Orange, Osceola, and Seminole county, to test if there was a mean difference in the perceived levels of safety across the counties. The model is not significant ($p=.758$). This means that the perceived level of safety from physical safety measures does not vary between Central Florida Counties.

Table 9. ANOVA for Physical Safety Measures Across Central Florida Counties

<i>Source</i>	SS	df	MS	F	p
<i>Between</i>	378.182	3	126.061	.394	.758
<i>Within</i>	57920.434	181	320.002		
<i>Total</i>	58298.616	184			

The same process was executed to compare the mean of personnel-based safety measures and the county variable in Table 10. This model is also not significant ($p=.696$). There are no mean differences in the personnel-based safety measures scale, meaning the perceived level of safety influenced by different personnel also does not vary between Central Florida Counties.

Table 10. ANOVA for Personnel Safety Measures Across Central Florida Counties

<i>Source</i>	SS	df	MS	F	p
<i>Between</i>	95.415	3	31.805	.481	.696
<i>Within</i>	12176.862	184	66.179		
<i>Total</i>	12272.277	187			

Lastly, Table 11 displays the final one-way ANOVA, which tested whether the county the teacher lives in has any influence on their perceived level of safety by examining the mean differences in the program-based, preventative safety measures scale. This model is not significant either ($p=.597$). None of the ANOVA models were statistically significant when comparing the perceived level of safety felt by teachers across the counties they teach in. The county the teacher works in has no impact on how safe the teachers are made to feel by the presence of all the safety measures, physical, personnel-based, and program-based, in this study.

Table 11. ANOVA for Program Safety Measures Across Central Florida Counties

<i>Source</i>	SS	df	MS	F	p
<i>Between</i>	214.043	3	71.348	.629	.597
<i>Within</i>	20887.361	184	113.518		
<i>Total</i>	21101.404	187			

None of the three ANOVAs models that were calculated are statistically significant. The reason for this could be because the school districts in Central Florida operate on the county-system, meaning that there is one school district per county. Due to this fact, the school districts are very large and there is major variability within the counties themselves.

Additionally, respondents were given the option to include any other information they deemed useful or necessary at the end of the survey. Thirty-two teachers took this opportunity to share some final thoughts they had. Table 12 below lists the most common topics that were discussed in the responses. The full responses are listed in Appendix B. The most common topics listed in the responses are: 1) thoughts on teachers carrying firearms, 2) experiences they have

had with students possessing weapons on campus, 3) general concerns on school safety, 4) how to handle children/students to prevent violent action, and 5) safety measures they believe would be most successful.

Table 12. Additional thoughts and comments

Topics	n
Thoughts on teachers carrying firearms	11
Experiences they have had with students possessing weapons on campus	9
General concerns on school safety	7
How to handle children/students to prevent violent action	3
Safety measures they believe would be most successful	2

CHAPTER SIX: DISCUSSION AND CONCLUSION

Discussion

The current study extends the literature on perceptions of safety regarding school shootings, but from the perspective of the teachers. Overall, the results of this research meet the expectations set out for this study, though there were points of interest that were not necessarily anticipated. As hypothesized, program-based safety measures made teachers feel safer in their school than personnel-based safety measures, but there is not much of a difference revealed between program-based safety measures and physical safety measures. In fact, teachers seemed quite supportive of physical safety measures. This finding is consistent with that of Dixon (2014), who found teachers in their study predominantly felt safest by the implementation of physical safety measures, such as locked doors and guest sign-in at the front office; yet, my findings contradict that of Cuellar (2018), Burns and Crawford (2015; 2016), and Jennings et al., (2011), which state that physical safety measures are ineffective at preventing crime, increasing feelings of safety, and even lead to an increase in crimes committed on school grounds. Jennings et al. (2011) did find that safety measures, such as metal detectors, may be beneficial at preventing generalized crime, but ineffective at preventing a serious crime, such as a school shooting from being committed. The results of my research suggest that school shootings aren't as big of a concern to teachers as the generalized violence they experience or witness from their students.

Results from the current study support the results of Jennings et al. (2011) who found that the presence of SROs on school campuses is negatively associated with crime on school campuses, whereas the presence of armed guards is positively associated with crime. If we refer back to the theoretical framework, the occurrence of crime is negatively associated with feelings of safety. The more crime that occurs on school grounds, the less safe teachers will feel. If the presence of SROs decreases the amount of crime at school, teachers will feel safer by having SROs on campus. Having armed guards on campus results in more crime being committed (Jennings et al. 2011); therefore, the presence of armed guards on campus should make the teachers feel less safe. The current research found SROs to be the only personnel-based safety measure that was positively associated with feelings of safety, also being indifferent at worst (mean= 7.8, SD= 2.077). Teachers were found to be mostly indifferent to the presence of armed guards, feeling less safe by their presence at worst (mean= 5.74, SD= 2.979).

As hypothesized, teachers generally feel safe coming to work, most stating they felt safe five out of five days of the workweek (72.5%). With such a high percentage of teachers feeling safe every day they come to work, it is suggested that they generally have a positive school climate. These findings broadly support those of Kupchik et al. (2015), who states that in a school with a positive climate, students are more likely to feel comfortable confiding in teachers and reporting suspicious behaviors of other students to them. In the current study, most teachers (52%) reported excellent or very good relationships with their students, indicating that if a student were concerned about the behaviors of another student or if information was being spread around school that could result in others being hurt, students are likely to share that information with a trusted teacher (Gaughan et al. 2001). Teachers also reported excellent or

very good relationships with their school administration (50.5%). This is important, as it demonstrates that teachers are the integral link in the chain of information sharing from students to administration. The administration was the most common answer provided when respondents were asked who they would report concerning behaviors or information to and only two respondents said they would not report. A positive interpersonal and working relationship is crucial in making schools feel safe teachers (Fisher et al. 2018).

The theoretical framework also stresses the necessary component of connectedness as a means to reduce target suitability in routine activity theory. The Interdisciplinary Group on Preventing School and Community Violence (2013) refers to connectedness as a community of individuals that care about the welfare of each other. While Hagman (2017) uses the term connectedness to refer to staff and Dixon (2014) refers to a supportive staff environment as a “school family”, the concept of care can be applied to all parties on school campuses. If there were a greater sense of care and respect for each other, one may be less likely to harm another. If the chance people harming each other decreases, feelings of safety at school should increase.

There is a consensus with the current study and the existing literature that arming school teachers would not have a beneficial impact on school safety (Chrusciel et al. 2014) and therefore would not have a beneficial impact on teachers’ perceptions of that safety. The findings of the current study are consistent with that of Kyle et al. (2017) and Crew et al. (2013), which concluded that teachers are unsupportive of policies that would allow for them to carry guns on school campus and they overall do not want guns to be carried by anyone other than law enforcement at their schools.

Conclusion

Limitations

While the findings of this study are interesting and telling, the results should not be looked at without criticism. Due to the sampling strategy utilized in this study, the results are not representative of the feelings of all teachers in Central Florida. Minor groups and men are underrepresented in the sample. Also, there is not an even distribution in the sample between all the counties surveyed. Osceola county only accounts for 4% of the sample, and while there are no mean differences in perceived levels of safety between the four counties in the study, perhaps those numbers would change if there were the same frequency of responses from each county. Lastly, due to sampling difficulties, the sample is rather small considering the number of teachers throughout Lake (N=5,500) (“Superintendent Office”, 2019), Orange (N=25,000) (“About Us”, 2019), Osceola (N=7,300) (“Employees”, n.d.), and Seminole (N=10,000) (“About Us”, 2019) counties. Future research should utilize a more structured sampling methodology in partnership with the school districts to achieve a greater sample size and more representative sampling.

There are questions that, in hindsight, should have been added to the survey instrument. Some questions that may have been useful information to this study are how many years they have been teaching at their current school and whether they believe that media has constructed a “school shooting epidemic” would have provided some useful insight into this research topic. Future research should include these questions.

Since data collection began in January of 2019, there have been a couple cases of gun violence at schools that may have impact the results of this study. On April 30, 2019, a shooting occurred at the University of North Carolina, Charlotte, in which six people were shot and two people were killed. On May 7, 2019, a shooting occurred at the STEM School Highlands Ranch in which one person was fatally shot and eight people were injured. The answers to the survey questionnaire could be highly variable from the respondents who answered prior to those shootings occurred and after they occurred. The impact of history acts as a threat to validity in this study since there is no way to control for the time that passed with the data that was collected. Additionally, April 20, 2019 marked the 20th anniversary of the Columbine High School shooting. Being reminded of the tragedy that occurred on this date could have also impacted the results of this study from the respondents that participated prior to the anniversary and those who participated after it occurred.

Policy Implications

This paper examined the relationship between the perceived level of safety felt by teachers and their support for gun-related legislation in schools against various forms of safety measures implemented in the school system, their presence for at a school shooting event during their teaching career, and demographic variables. The results of this study reinforce that teachers generally feel safe at school, suggesting that reports of schools turning into dangerous environments remain unsupported (Toppo, 2013). This study also highlights which safety

measures being employed in the school system are most successful at making teachers feel safe. It is important to note that this does not mean which measures are objectively the most successful at creating safer environments. The physical safety measures examined in this study have nearly the same success at making teachers feel safe at school as do the program-based safety measures. The personnel-based safety measures analyzed in the data are much more variable than their other two counterparts. Apart from School Resource Officers, most teachers feel indifferent or less safe from the presence of security personnel that is not law enforcement. More research needs to be done on this topic to determine if the presence of any security personnel that is not law enforcement on school campuses has a harmful effect on the overall learning environment.

The qualitative data collected in this study suggests that the driving force behind teachers feeling unsafe at school is not specifically related to the possibility of a school shooting, but rather student behavior more generally. Disrespectful behavior, fighting at school, and the students bringing weapons in their backpacks were common concerns expressed by teachers, which would explain the increased sense of safety felt from having physical safety measures on campus, such as metal detectors. It appears that teachers may be more concerned with generalized violence in schools, rather than school shootings, supporting the findings of Jennings et al. (2011).

One of the most popular complaints of the teachers in this study was that the physical structure of their schools or how their classroom was situated made them feel the most unsafe. With a growing body of research surrounding environmental criminology, that which explains how immediate environments affect behavior and why some environments contribute to criminal

behavior (Wortley and Mazerolle, 2008), more school districts should seek how to improve the physical environment of the school in order to increase the feelings of safety within the school. Rather than hiring guards, which detract from the sense of a safe school environment, school districts could perhaps make data-driven decisions to improve or remodel their school buildings. In doing so, they could 1) potentially reduce the likelihood of crime occurring or limiting the injury or lethality caused by violent events and 2) improve the overall sense of safety felt by the teachers at school, which could trickle down to the students feeling safer as well. The funding in public schools is not an unlimited resource. For this reason, making data driven decisions is a necessity. Using empirical research methods, the question of how to make schools feel safe can be answered in the most efficient, cost-effective way possible.

Some of the most time-sensitive and pertinent results from this study regard teachers' feelings toward being allowed to carry firearms on school campuses. Overwhelming, it was found to be an unpopular policy among teachers in all four counties. Most teachers in this study believe that it would not only be a bad idea, but that it would harm the school environment and introduces the possibility for more violence to occur, if a student should accidentally possess a teacher's approved firearm. Twenty-five out of the sixty-seven Florida school districts are in favor of this legislation (Postal, 2019). Officials from each school board in this study (Lake, Orange, Osceola, and Seminole) have recently discussed whether their counties would be participating in the 2019 bill that gives their classroom teachers the option to carry a firearm, granted they meet the qualifications. Orange County and Seminole County have all been very clear that their school districts will not be participating in this program, stating that the SROs on campus are the only ones who should be carrying firearms and more officers have been hired to

address safety concerns (Postal, 2019). The Osceola County School Board currently relies on school resource officers to patrol campuses, yet they haven't decided if they would be adopting the 2019 bill of the Guardian Law that would allow for teachers to carry firearms (Postal, 2019). The Lake County School Board currently allows for armed volunteer veterans and retired law enforcement members to patrol campuses and they have yet to decide if they will be extending that to their classroom teachers also (Postal, 2019). To the counties who have yet to decide whether their districts will be participating, I urge them to make informed, data-driven decisions. Consulting with teachers would be incredibly beneficial in this capacity, as this study shows that while only 9.7% of teachers would bring their gun to school, 64.1% of teachers would feel less safe if they or their colleagues carried firearms on campus.

While the idea for teachers to carry guns on campus may have been born from good intentions, this study shows that measures such as a capable and qualified school resource officers and safer school structures either do make or would make teachers feel safer at their schools. Continual research must be conducted on school safety and the measures that influence it as the topic becomes more nuanced every day. Studying teachers' perceptions of safety will provide a more well-rounded starting point, since administrators, students, and now teachers have been given a voice to express the issues that matter most to them.

APPENDIX A: WHAT CONTRIBUTES TO FEELING LESS THAN 100%

SAFE

What contributes to feeling less than 100% safe?

Themes	Statements
Student threats and behaviors	“Student behaviors.”
	“Kids that are "those kids" that I think could one day do something when I try to get them to do something they don't want to do (put phone away, take earbuds out, etc.) pull a gun or knife on me if they're pushed too far. I teach in inner city Orlando so many of these kids are known gang members and I'm sure associate with people that have done this in other situations.”
	“Student threats and students that could “lose it” and have access to guns at home.”
	“Social media threats.”
	“When a situation arises that causes chaos.”
	“I work in a rough area with kids that have access to guns. They also have no respect for teachers or rules.”
	“The amount of fights taking place.”
	“Student behavior is out of control. I’ve been threatened many times and the student was not removed from my class, causing me constant chest pains.”
	“Students who have been arrested for violent acts are put back into the school and regular classroom. They often do not have respect for administrators, teachers or other students. They accept no responsibility or feel they will suffer any real consequences (they are back at school; why wouldn't they feel they can get away with anything.) It is only a matter of time before one of them finally snaps at school and causes more harm. Also, even though we have a closed campus, if someone wanted to get in, a six-foot fence is not going to stop them.”
	“Student conflict.”
	“Student behaviors and fighting on campus.”
	“The only time I ever feel unsafe is if a fight breaks out in my classroom. (rare but happened last day of our school year last year.)”
	“The entire fact that students don't respect anyone.”
	“Students within my class having an outburst.”
	“I had a student bring a BB gun into my class. He took it out and pointed it at a girl's head. I will never feel 100 percent safe until we have metal detectors and clear backpacks.”
	“A person wanting to harm others can almost always find loopholes, or ways around the security.”
	“Student behavior.”
	“Fights, lack of discipline in school, kids getting away with behavior due to fear of parents.”

What contributes to feeling less than 100% safe?

Themes	Statements
	<p>“Children’s behaviors that are alarming. When I bring students to the office who were being threatening towards others and nothing is done about it. Or they go to the office and come back with prizes, candy, and treats. Then they want to go back and continue that behavior.”</p> <p>“There are so many crazy people in the world now. There are so many parents and students who do not respect teachers and school personnel. So many people now are not flexible and understanding to how things should be done or why things are done certain ways. There are so many people who think rules don't apply to them and want everything their way!”</p> <p>“Behavior of students and how they are handled or not handled.”</p> <p>“Not all doors are always locked which allows people to walk into the school. Students have no consequences and are violent with students and teachers. I’m very short and work with big kids who are far tougher than I ever thought of being. Also far more violent.”</p>
<p>The school or classroom’s physical structure</p>	<p>“Portables are very thin-walled and have large windows. They can be accessed without having to go through the front office.”</p> <p>“Very open school. It’s easy for something to happen if wanted. One building is secure and the other one is not.”</p> <p>“Most of the time I feel safe, but we have a giant 8-foot window in our classroom that if anyone ever came in, it would really limit our hiding ability and makes us a target because of the visual opportunities it provides.”</p> <p>“It is too easy for someone to just walk on campus!”</p> <p>“Campus is open with back gates easily accessible all day by anyone. No metal detectors so kids just bring weapons in backpacks. No inside locking doors. We are out in a portable which is very open and exposed on the property. Too many windows all around portable on ground level so if they shoot through all the windows everyone would just be dead, nowhere to hide at all.”</p> <p>“Open campus. Outside hallways.”</p> <p>“We have an open campus surrounded by a chain fence. We must travel outside the classroom to get to lunch, specials, media, etc. I would feel much safer if all were housed in a single building. Some of the newer schools are now single buildings.”</p> <p>“Open campus. The school board does not allow for enough security officials on campus roaming hallway all times. Students are constantly wandering during class time.”</p> <p>“Inability to block windows and doors in classroom quick enough. I teach young students and they aren't strong enough or calm enough to move furniture so I'm on my own. The county not taking initiative to</p>

What contributes to feeling less than 100% safe?

Themes	Statements
	<p>provide door locking mechanisms to secure classroom. Teachers should not be coming up with these ideas as a last resort on their own due to lack of county initiative. (Teachers ended up asking local fire departments for old hose to secure scissor hinges on doors - county has only suggested we have the students help block doors with furniture.) My building does not have surveillance cameras. Lack of information during lock down - we need a better communication system during the event to calm everyone during non-immediate threat lock downs. Even with single point of entry, ID badges, and parent sign-in, we still have signed in parents wandering about campus at times. Teachers must be given keys to unlock exterior campus gates. If we run, we are trapped on campus waiting for someone with a key to unlock gates so we can escape.”</p>
	<p>“Due to the age of our facility, we sometimes become aware of doors that are less secure/have broken locks and latches. Knowing about this leads to feeling less safe at school. Witnessing the same safety procedures in actual practice doesn’t bring a sense of security. For example, the single point of entry with a buzzer. Anyone would be buzzed through the door. I’m not sure our office staff has any training in regard to observing and responding to threats that may come through the front door. Our school is also a huge open campus that is surrounded only by a chain link fence. Anyone can get in whenever they want if they wanted.”</p>
	<p>“We do not have doors that stay locked, which is unsafe. Also, my classroom is connected to another room, and I never know if that rooms is locked at any given time.”</p>
	<p>“My school’s poor response to minor emergencies. The lack of a consistent way to communicate an emergency (broken emergency buzzers, no one answers phones in offices) People can just walk onto our campus and not be stopped. It happens all the time.”</p>
	<p>“Doors that stay open, open campus, no keys to lock doors from inside, no metal detectors, only one police officer, playground at front of school, no real control of behaviors, no enforcement of rules.”</p>
	<p>“Access point gates being left open and people walking onto campus.”</p>
	<p>“My classroom runs alongside the car rider drop off and pick up area. Anything ‘could’ happen.”</p>
	<p>“Access to the interior of the campus at morning arrival and dismissal.”</p>
	<p>“Unlocked entry doors and open access at rear of school.”</p>
	<p>“Being outside on the playground or in the halls.”</p>
	<p>“Walking to the portables which are less protected.”</p>

What contributes to feeling less than 100% safe?

Themes	Statements
	“Recess in open areas.”
Lack of SRO or qualified security	“No resource officers.”
	“Non-campus security and the cop on my campus does absolutely nothing but gossip and ride on his bike.”
	“Resource officers not visible at all times on larger campuses. They are often in an office tucked away.”
	“Lack of security. Lack of adult control. Students ALWAYS out of classes in the halls or outside of buildings for no reason.”
	“There is an unmonitored entry at our school.”
	“SRO is not present or is socializing and not focused on monitoring students during passing periods.”
	“When we have large amounts of visitors on campus for award ceremonies, open house, meet the teacher, etc. Security is not as diligent.”
	“Untrained teachers and staff. Lack of protection from threats. No armed presence at most times.”
	“Lack of supervision. The supervision that does exist is not actually engaging with the students, administrators stand in their assigned spots on the phones, they have no idea what is going on with the kids and are not trying to engage with kids who are sitting alone, or even looking to see if kids are being bullied. This is where safety should start from. Also, when fixing locks on doors is not a priority and your “security” people who are unarmed and supposed to monitor the campus were only hired because they are the basketball coaches does not help me feel safe.”
	“Lack of security.”
The unpredictability of a shooting event	“It's not the school that makes me feel unsafe, it's the fact that something could go wrong in an instant and there's not really any foolproof way to prevent that.”
	“Shootings can happen anywhere at any time. It's always in the back of my mind.”
	“Whenever we practice Code Red drills, it's a reminder to teachers, students, parents, staff, and administrators that we enter a building in which there is no guarantee we will leave alive at the end of the day, at a higher percentage than other buildings in the private and public sectors.”
	“There have been a few real lock downs due to people outside of the school being a potential threat.”
	“There's always the unknown. I can and will do everything it takes to keep my students safe. Every tragic event is different in some way. You can only plan so much for the unexpected.”

What contributes to feeling less than 100% safe?

Themes	Statements
Overall feel safe, but added additional comments	“I feel safe. I work in a high school and feel safe. Schools remain one of the safest places for kids to be despite the horrible tragedies of the school shootings we are all familiar with. When I listen to the media, I could slip into feelings of being unsafe.”
	“School is generally safe.”
	“When the news media talk about threats, kids then emulate their friends. This week everything was checked, teachers were cautious.”
	“I feel safe at school.”
	“I rarely feel unsafe on my campus. I do see increased tensions around holidays from students that makes the campus tense, but I do not feel unsafe.”
Strangers and parents on campus	“Strange person on campus, no ID.”
	“Sometimes parents can be threatening, but I’ve also been threatened many times.”
	“Suspicious people on campus.”
Bad neighborhood	“The area the school is in. The area the students come to school from where guns are easily accessible.”
	“When we hear helicopters in our area, usually means there is a crime not far away unfortunately due to the area we are located.”
	“Security measures. No closet to hide in. Bad neighborhood.”
Students with mental health issues	“Mental Health of students and lack of resources to help them.”
	“Students with mental health issues.”
Additional reasons	“Knowledge of the current system.”
	“The administration puts dangerous students back into our classrooms knowing something will happen.”
	“Overwhelming teacher to student ratio in my classroom (1:34).”
	“False sense of safety.”

APPENDIX B: ADDITIONAL THOUGHTS AND COMMENTS

Additional thoughts and comments

Themes	Statements
Thoughts on teachers carrying firearms	<p>“Even if teachers carried guns, the likelihood that a teacher would be in the right place to shoot the attacker is probably not likely. I cannot imagine a teacher leaving the safety of a classroom to go seek out an active shooter. That is basically committing suicide as the teacher is most likely not trained in law enforcement tactics.”</p>
	<p>“The whole idea of arming teachers is, simply put and in as vulgar terms as possible, balls-in-mouth stupid stupid stupid. First off, which teachers get to carry the guns? All of them? Have you met teachers? Some of these people are genuinely certifiable, and some of those certifiable are some of the best teachers out there. If you're going to deny some of the teachers the right to arm themselves voluntarily (or mandatorily), then how will the state handle the lawsuits in the courts that will challenge such denials on the basis of the 2nd Amendment? Finally, teachers mentally have the mentality of protecting students. Look at the teachers who were killed in these shootings. They weren't fleeing. They weren't challenging the gunman. They were shielding their kids. Assume you now have a gun in the hands of a teacher. Absent some kind of legal enforcement or military background, could such a person pull the trigger at the critical moment and kill another person, regardless of the threat to themselves and others? Second, if you think for one moment that a kid from 5 to 18 will never get their hands on a gun in a classroom, regardless of how much training or how much care a teacher has taken, then you are just flat out delusional and as certifiable as some of the crazier teachers in public schools. I can't even find my damned stapler half the time because someone borrowed it to do X, Y, and Z with it. Third, the dynamic between student and teacher will instantly change. The teacher-student relationship is and always has been a power relationship. Much of the learning atmosphere I create in my room is based on mutual trust and respect. That trust and respect is based on the relationship I build with my students and the expectations I set for them. Now add a weapon. Whatever trust or respect I attempt to build will always be overshadowed.”</p>
	<p>“I went to Marjory Stoneman Douglas HS. Not all of us are against guns.”</p>
	<p>“Arming teachers is a problem waiting to happen. Gun access would increase the likelihood of disaster.”</p>
	<p>“I think tension would be astronomical if teachers were armed and increase the likelihood of increased violence in the classroom and</p>

Additional thoughts and comments

Themes	Statements
	around campus. I'd prefer the professionals carry the weapons and I keep calm and carry on teaching.”
	“Teachers should be trained and certified in order to be able to bring a weapon to school for protection, but they should be allowed. The kids are our responsibility when they come to us. This is the best way to guarantee their safety.”
	“Take time to stay current with any trainings offered on active threats/killers. Step out of the mindset of this is how we've always done it and have an open mind to new ways of staying safe.”
	“I really think arming teachers is a bad idea. We had a teacher fired this year because he pushed a student. I have a concealed permit, and I'm not opposed to guns. My school has teachers who are not mentally stable, or who have anger issues. Giving them a gun is terrifying to me.”
	“I was in Israel working at a school as a sub, an armed teacher stopped the armed assailant.”
	“Our students bringing weapons to school is only one threat, especially at the higher grades. The threat can easily come from a person outside of school and a buzzer does have some importance, but a person can easily hide the weapon and come in through the buzzer system. Years ago, I taught at a high school and metal detectors were installed in the school. There were a few occasions where students attempted to carry weapons inside of school and they were exposed due to the metal detectors. My current school has a full-time police officer (armed) and that gives me a lot of security. Teachers have no business carrying weapons, ever. Teachers are there to enhance learning, to be role models for all students, to create positive relationships with students, to impact the lives of students in ways beyond the gaining knowledge, and to educate students to become good citizens of their community. The presence of guns in a classroom creates too many variables and concerns. Some teachers may have personal or psychological challenges where they themselves become a threat to the safety of students and others. Teachers are not police officers and should not be treated as so. As a teacher, I feel safe with our police officer but would resign from teaching altogether if teachers were given training and instruction to carry guns in schools. The constant training that law enforcement receives to carry guns is extensive and continuous and could not be easily replicated with teachers. We (teachers) choose education for the children and the subjects we love, not to be part-time police officers. I do not trust my

Additional thoughts and comments

Themes	Statements
	<p>colleagues carrying weapons just as I would not feel safe seeing any other person carrying a weapon in school who is not the police.</p> <p>“The idea of arming teachers is a horrible idea. As a 17-year veteran of the Armed Services and a 15-year veteran educator in orange county I can confidently say that this would be a disaster waiting to happen. I have multiple reasons why I believe this but will offer my most concerning. Engaging an active shooter in close quarters combat amongst civilians is not for amateurs and the amount of training required to make one proficient is woefully short of any proposed plan I have seen. Special Forces within the military, the most highly trained of all of us experience surprisingly high rates of fratricide in these scenarios. If the school districts and states want to harden schools as targets arming teachers is not the way to go.”</p>
<p>Experiences they have had with students possessing weapons on campus</p>	<p>“We did have a student bring a gun on campus. The situation wasn’t handled appropriately, and the admin was fired. No one was injured.”</p> <p>“A student committed suicide with a gun. My concern is that the gun was on campus with no knowledge. In other incidents, students have had weapons on campus and teachers are not informed. Administration keeps it secret and doesn’t put campus on lockdown. We hear things from the students more than the admin team.”</p> <p>“My first year in the district a student had purchased a pipe bomb from another student, and it was present in my classroom in his backpack.”</p> <p>“I teach in an elementary school in the hood. We have had kids say they have weapons, but never have actually had it. I’ve taught at two other low-income schools in the area. At both of those schools, kids have come with guns to schools. Luckily being little, they were unable to load & use them.”</p> <p>“The SWAT team did turn up one day to investigate a reported (false) gun incident. What I didn't like was that the school went into a Code Yellow. Teachers weren't aware of the situation, but students on their phones were filming the SWAT team's movements from a high up window and sending that information around the school. As a classroom teacher I was given firsthand information and police movements as they fanned out around the campus, guns at the ready, thanks to the minute by minute updates</p>

Additional thoughts and comments

Themes	Statements
	<p>by my students. This I thought was UNSAFE for the police as anyone of the students could be in league with a real shooter.”</p> <p>“A student committed suicide with a gun in one of the restrooms.”</p> <p>“A student committed suicide.”</p> <p>“Recently we had a credible threat at my middle school. A student or students wrote a threat on the bathroom wall that there were bombs and guns planted throughout the school and something bad was going to happen. The school was evacuated. The organized chaos that ensued was unbelievable. We were outside for a few hours at the back of the school on the track. To watch the fear unfold with the students was almost unbearable. Trying to comfort so many students at once while remaining calm was extremely difficult. It almost broke me. In the meantime, all I could do was imagine all sorts of scenarios. For one, we were sitting ducks walking outside should this be a ploy to get the school to go outside. I heard that the search dogs only went around the rooms and not the backpacks which I didn't understand. It was truly a surreal time and moment that I would never want to repeat. Luckily, nothing was found nor did any event happen. However, I know my students will be traumatized for quite some time which should not have to happen to a child.”</p> <p>“The only gun brought on campus was from a relative of a student. Our SRO handled the situation and disarmed the adult. Having an SRO on campus who is active and competent makes me feel safe.”</p>
<p>General concerns on school safety</p>	<p>“My school administration sucks.”</p> <p>“My job is to teach and keep the children safe. I feel we are doing the best we can. We have drills on a regular basis. But, as we all know, lately no one is safe anywhere. I don't know what more could be done.”</p> <p>“No school is prepared or trained for a shooter. We announce every drill, so no one gets scared. Well scared is good. It saved lives. But no, we have to protect feelings instead of lives. They should allow a deputy with a paintball gun to just go unannounced and show how these schools are not prepared for this.”</p> <p>“Schools are less able to deal with discipline issues because schools are afraid of parents or afraid to hurt someone's feelings. The negative, violent behaviors will only get worse.”</p> <p>“Schools are too big in Florida, especially high schools. Make them smaller and easier to secure.”</p>

Additional thoughts and comments

Themes	Statements
	<p>“Our doors must be locked at all times. My portable has only one doorway and that doesn't feel safe. Our portables are out behind the school buildings and don't feel particularly safe. My own children's school/classes don't lock their doors and my kids say the safety drills are not taken seriously by much of the students, so that makes me uncomfortable as a parent! I also am concerned about the traffic/gridlock at drop off and dismissal times. No way could people escape harm during those important/busy times making the whole school extremely vulnerable then.”</p> <p>“I have worked with a teacher who experienced a shooting on her campus. The student left her room and shot another student. The teacher was still teaching 10 years later. Her behaviors about letting kids out of class changed but that was all.”</p>
<p>How to handle children/students to prevent violent action</p>	<p>“Dangerous students who have made threats in the past should not be placed in a regular ed classroom. By placing them in a regular ed classroom, the administration is placing students, teachers, and staff at risk.”</p> <p>“Arming teachers won't help, we need to arm kids at a young age with guidance, social skills and counseling. They've taken all of that out of schools and added pressure to kids with tests and what-not. Add social media to that and it's a recipe for disaster.”</p> <p>“Kids need to be held responsible for their actions and words. They should not be rewarded for their poor choices and their poor choices should not be ignored and swept under the table. Also, when a teacher comes in concerned about a student to admin and admin doesn't care, that's a problem. We had a situation that a student said he's upset and will fight someone tomorrow because he's tired of being bullied and no one is listening to him aside from his teacher. The teacher went to speak with admin about it. Nothing was done and sure enough this kid started a fight before school the next day as he went after another student who said something mean that morning to him.”</p>
<p>Safety measures they believe would be most successful</p>	<p>“Metal detectors and a single-entry point would be most effective. I am sick of coming to work worried for my life. They can bring whatever they want in their bags and no one knows. It is CRAZY.”</p> <p>“Bring on metal detectors and clear backpacks. It is too easy to hide guns and knives in backpacks. I have been teaching for 22 years. Student behavior gets worse each year.”</p>

APPENDIX C: SURVEY INSTRUMENT FOR THE CURRENT STUDY

Are you at least 18 years old?

- Yes
- No

Are you currently employed by either Lake, Orange, Osceola, or Seminole County Public Schools or School Districts?

- Yes
- No

Many different safety measures are used in schools to eliminate or minimize potential harm to students, faculty, and staff. This section asks you about physical safety measures, or tangible objects you can see used in your school. Below is a list of physical safety measures, some might be in place in your school, others might not. On a scale of 0-10, 0 being not safe at all and 10 being extremely safe, how safe does each measure make you or would make you feel, if it were implemented in your workplace?

Metal detectors

Not safe at all										Extremely safe
0	1	2	3	4	5	6	7	8	9	10
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Surveillance cameras

Not safe at all										Extremely safe
0	1	2	3	4	5	6	7	8	9	10
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Single or limited entry points to campus

Not safe at all										Extremely safe
0	1	2	3	4	5	6	7	8	9	10
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Clear or bulletproof backpacks

Not safe at all										Extremely safe
0	1	2	3	4	5	6	7	8	9	10
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Door locks on classroom doors that can be secured from the interior **with** a key

Not safe at all
0 1 2 3 4 5 6 7 8 9 10
Extremely safe

Door locks on classroom doors that can be secured from the interior **without** a key

Not safe at all
0 1 2 3 4 5 6 7 8 9 10
Extremely safe

A school-wide alarm system to alert if there is an intruder

Not safe at all
0 1 2 3 4 5 6 7 8 9 10
Extremely safe

Required guest sign-in at the front office

Not safe at all
0 1 2 3 4 5 6 7 8 9 10
Extremely safe

Visitor entry system (e.g. a buzzer, intercom, vestibule entry, etc.)

Not safe at all
0 1 2 3 4 5 6 7 8 9 10
Extremely safe

Required, visible ID cards or badges

Not safe at all
0 1 2 3 4 5 6 7 8 9 10
Extremely safe

Which of these items above are currently present at your school? (Check all that apply)

- | | |
|---|---|
| <input type="checkbox"/> Metal detectors | <input type="checkbox"/> Locks on classroom doors that can be secured from the interior without a key |
| <input type="checkbox"/> Surveillance cameras | <input type="checkbox"/> A school-wide alarm system to alert if there is an intruder |

- Single or limited entry points to campus
- Clear or bulletproof backpacks
- Locks on classroom doors that can be secured from the interior with a key
- Required guest sign-in at the front office
- Visitor entry system (e.g. a buzzer, intercom, vestibule entry, etc.)
- Required, visible ID cards or badges

Next, I'll be asking about personnel-based safety measures, in other words people who were specifically hired to have an effect on school safety. Just as the last section, some may already be in place at your school and some may not be. On a scale from 0-10, 0 being not safe at all and 10 being extremely safe, how safe does each measure either make you feel or would make you feel, if it were implemented in your workplace?

School Resource Officer (either from a local police or sheriff's department)

Not safe at all										Extremely safe
0	1	2	3	4	5	6	7	8	9	10
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Armed security guards (not law enforcement)

Not safe at all										Extremely safe
0	1	2	3	4	5	6	7	8	9	10
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Unarmed security guards (not law enforcement)

Not safe at all										Extremely safe
0	1	2	3	4	5	6	7	8	9	10
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

A volunteer veteran or retired member of law enforcement (armed)

Not safe at all										Extremely safe
0	1	2	3	4	5	6	7	8	9	10
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Which of these parties are currently working within your school? (Check all that apply)

- School Resource Officer (either from a local police or sheriff's department)

- Armed security guards (not law enforcement)
 - Unarmed security guards (not law enforcement)
 - A volunteer veteran or retired member of law enforcement (armed)
- Program-based, preventative safety measures are programs or specific social interactions aimed at preventing harm or violence to students, faculty, and staff. On a scale from 0-10, 0 being not safe at all and 10 being extremely safe, how safe does each measure make you feel or would make you feel if it were implemented in your workplace?

Mental health services and the availability of mental health professionals on school campuses

Not safe at all										Extremely safe
0	1	2	3	4	5	6	7	8	9	10
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Community prevention training, such as social skills training and community involvement in school activities

Not safe at all										Extremely safe
0	1	2	3	4	5	6	7	8	9	10
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Violence prevention training, such as the implementation of a school crisis plan

Not safe at all										Extremely safe
0	1	2	3	4	5	6	7	8	9	10
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Anti-bullying programs

Not safe at all										Extremely safe
0	1	2	3	4	5	6	7	8	9	10
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Threat assessment and threat management

Not safe at all										Extremely safe
0	1	2	3	4	5	6	7	8	9	10
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Which of these programs exist at your school? (Check all that apply)

- Mental health services
- Community prevention training
- Violence prevention training
- Anti-bullying programs
- Threat assessment and threat management

In your opinion, how are the relationships on your school campus between the following parties (e.g. Excellent means we get along and at least occasionally see each other outside of work. Poor means that there is open hostility and a complete lack of respect)?

	Excellent	Very good	Good	Fair	Poor
Administration and teachers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Teachers themselves	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Teachers and students	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

If a student demonstrates concerning behavior (e.g. making violent threats), who do you report it to? (their title, not their name)

Has a student exhibited any of the following behaviors or otherwise caused you to feel concerned?(Check all that apply)

- Brought weapons (guns, knives, etc.) to school
- Made direct threats to harm people at school (stating a specific day, time, or person(s) to whom the event will occur)
- Made indirect threats to harm people at school (including vague and ambiguous information)
- Made veiled threats (implying violence, but not specifically threatening violence)
- Made conditional threats (warning a violent act will happen unless certain demands are met)
- Appeared unusually withdrawn or isolated from peers and activities
- Other

On March 9, 2018, following the tragedy at Marjory Stoneman Douglas High School (MSDHS), Governor Rick Scott signed into law Senate Bill (SB) 7026. While the bill covers several areas related to firearms, it also gives qualifying teachers in participating districts the opportunity to carry a personal firearm while working on school grounds. The specific provision of the bill which allows for this opportunity is called the Coach Aaron Feis Guardianship Program, named after a coach who lost his life in the shooting at MSDHS. Teachers who exclusively perform classroom duties would be excluded from eligibility into this program; however, teachers who also engage in extracurricular activities, such as coaching, club sponsorship, school administration, and cafeteria staff could qualify for this program, granted they pass all other program criteria.

Do you think allowing teachers to carry guns to school is mostly a good idea or a bad idea?

- Good idea
- Bad idea
- Unsure

Would you carry a gun to your classroom if you were allowed to do so?

- Yes
- Maybe
- No
- Unsure

How likely do you think it would be for a gun carried by a teacher at your school to accidentally fall into the wrong hands?

- Very likely
- Somewhat likely
- Somewhat unlikely
- Very unlikely
- Unsure

How would teachers carrying guns to your school affect the overall learning environment?

- Mostly help
- Mostly harm
- No effect
- Unsure

How would your feelings of safety change if teachers in your school were allowed to carry guns?

- More safe
- Less safe
- No difference
- Unsure

Generally, do you think arming teachers would lead to an overall decrease or increase in gun-related deaths within American public schools?

- Increase
- Decrease
- No difference
- Unsure

Please indicate your level of agreement with the following statements regarding safety in your school.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I feel safe at my school	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel safe in my classroom	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel safe in the hallways	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I feel safe outside on the school grounds	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Overall, I feel that this school is a safe school	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

How many days of the week at school do you generally feel safe?

- 5
- 4
- 3
- 2
- 1
- 0

Reflecting on the days you don't feel particularly safe, what is it about those days that makes you feel less than 100% safe?

Has a school shooting event occurred at your workplace since you've been a teacher?

- Yes
- No
- Unsure

Anything else you would like to add?

Now just some demographic questions for classification purposes and we will be done!

What gender do you identify with?

- Male
- Female
- Other

What is your race/ethnicity?

- White, non-Hispanic
- Hispanic
- Black or African American
- Asian
- American Indian or Alaska Native
- Native Hawaiian or Pacific Islander
- Other

How old are you?

How would you describe your political ideology?

- Extremely liberal
- Somewhat liberal

- Liberal
- Middle of the road
- Conservative
- Somewhat conservative
- Extremely conservative

What is your marital status?

- Married
- Widowed
- Divorced
- Separated
- Never married

What roles do you fulfill at your school? (Check all that apply)

- Administration
- Faculty/Teacher
- Coach
- Club Sponsor/Extra-curricular Supervisor
- Other

What grade level do you teach?

- Elementary School
- Middle School
- High School
- Other

Which county do you teach in?

- Orange County
- Osceola County
- Seminole County
- Lake County

APPENDIX D: IRB EXEMPT DETERMINATION LETTER



UNIVERSITY OF CENTRAL FLORIDA

Institutional Review Board
FWA00000351
IRB00001138
Office of Research
12201 Research Parkway
Orlando, FL 32826-3246

EXEMPTION DETERMINATION

January 16, 2019

Dear Megan Olive:

On 1/16/2019, the IRB determined the following submission to be human subjects research that is exempt from regulation:

Type of Review:	Initial Study, Category #2
Title:	Teachers' Perceptions of Safety Regarding School Shootings
Investigator:	Megan Olive
IRB ID:	STUDY00000019
Funding:	None
Grant ID:	None

This determination applies only to the activities described in the IRB submission and does not apply should any changes be made. If changes are made, and there are questions about whether these changes affect the exempt status of the human research, please contact the IRB. When you have completed your research, please submit a Study Closure request so that IRB records will be accurate.

If you have any questions, please contact the UCF IRB at 407-823-2901 or irb@ucf.edu. Please include your project title and IRB number in all correspondence with this office.

Sincerely,

Kamille Chaparro
Designated Reviewer

REFERENCES

- ABC News Staff. 2018. "Florida Gov. Rick Scott signs controversial gun bill that allows some armed teachers." *ABC News*, March 9. Retrieved May 28, 2018 (<https://abcnews.go.com/US/florida-gov-rick-scott-signs-gun-safety-bill?id=53643085>).
- About Us. (2019). Retrieve June 10, 2019 from https://www.ocps.net/about_us,
- Agnich, Laura E. 2015. "A comparative analysis of attempted and complete school-based mass murder attacks." *American Journal of Criminal Justice* 40: 1-22.
- Altheide, David L. 2009. "The Columbine shooting and the discourse of fear." *American Behavioral Scientist* 52(10): 1354-1370.
- Associated Press. (2014, June 10). "Company creates bulletproof blanket to protect kids in a shooting." *New York Post*. Retrieved from <https://nypost.com/2014/06/10/company-creates-bulletproof-blanket-to-protect-children-from-handguns/>.
- Astor, Ron Avi, Heather Ann Meyer, Rami Benbenishty, Roxana Marachi, and Michelle Rosemond. 2005. "School safety interventions: best practices and programs." *Children and Schools* 17: 17-32.
- Barak, Gregg. 1994. "Media, society, and criminology." In Gregg Barak (Ed.) *Media, process, and the social construction of crime: Studies in newsmaking criminology* pp. 3-45. New York: Garland Publishing, Inc.
- Beger, Randall R. 2002. "Expansion of police power in public schools and the vanishing rights of students." *Social Justice* 29: 119-130.
- Best, Joel. 1987. "Rhetoric in claims-making: constructing the missing children problem." *Social Problems* 34(2): 101-121.
- Blad, Evie. 2018. "After shooting, tension mounts between security quick-fixes and long-term solutions." *Education Week* 37, 23: 1-8.
- Borum, Randy, Dewey G. Cornell, William Modzeleski, and Shane R. Jimerson. 2010. "What can be done about school shootings? A review of the evidence." *Educational Researcher* 39(1): 27-37.

- Burns, Ronald and Charles Crawford. 1999. "School shootings, the media, and public fear: Ingredients for a moral panic." *Crime, Law and Social Change* 32: 147-168.
- Carlton, Mary Poulin. 2017. "Summary of school safety statistics." *National Institute of Justice* 1-9.
- Chapin, John and Grace Coleman. 2006. "Knowledge is power: A theory-based approach to reducing school violence." *Journal of Family Violence* 21: 381-386.
- Chrusciel, Margaret M., Scott Wolfe, J. Andrew Hansen, Jeff J. Rojek, and Robert Kaminski. 2014. "Law enforcement executive and principal perspectives on school safety measures: School resource officers and armed school employees." *Policing: An International Journal of Police Strategies & Management* 38: 24-39.
- Cloud, John. (2014, October 2). "The bulletproof classroom: Armored whiteboards defend against school shootings." *Bloomberg Business*. Retrieved from <https://www.bloomberg.com/news/articles/2014-10-02/hardwires-armored-whiteboards-defend-against-school-shootings>.
- CNN Library. (2013, May 23). Deadliest mass shootings in modern US history fast facts. *CNN*. Retrieved from <https://www.cnn.com/2013/09/16/us/20-deadliest-mass-shootings-in-u-s-history-fast-facts/index.html>.
- Cohen, Lawrence E. and Marcus Felson. 1979. "Social change and crime rate trends: A routine activities approach." *American Sociological Review* 44(4): 588-608.
- Connell, Nadine M. 2018. "Fear of crime at school: Understanding student perceptions of safety as function of historical context." *Youth Violence and Juvenile Justice* 16(2): 124-136.
- Crawford, Charles and Ronald Burns. 2015. "Preventing school violence: assessing armed guardians, school policy, and context." *Policing: An International Journal of Police Strategies and Management* 38(4): 631-647.
- Crawford, Charles and Ronald Burns. 2016. "Reducing school violence: Considering school characteristics and the impacts of law enforcement, school security, and environmental factors." *Policing: An International Journal of Police Strategies and Management* 39(3): 455-477.
- Crepeau-Hobson, M. Franci, MaryLynne Filaccio, and Linda Gottfriend. 2005. "Violence prevention after Columbine: A survey of high school mental health professionals." *Children & Schools* 27(3): 157-165.

- Crews, Gordon A., Angela D. Crews, and Catherine E. Burton. 2013. "The only thing that stops a guy with a bad policy is a guy with a good policy: An examination of the NRA's "National School Shield" proposal." *American Journal of Criminal Justice* 38: 183-199.
- Cuellar, Matthew J. 2018. "School safety strategies and their effects on the occurrence of school-based violence in U.S. high schools: An exploratory study." *Journal of School Violence* 17(1): 28-45.
- Cummings, William. (2018, February 16). "Why active shooter training didn't help in the Florida high school shooting." *USA Today*. Retrieved from <https://www.usatoday.com/story/news/nation/2018/02/16/active-shooter-training-florida/343641002/>.
- Diliberti, Melissa, Michael Jackson, Jana Kemp, and Rachel Hansen. 2017. "Crime, violence, discipline, and safety in U.S. public schools: findings from the school survey on crime and safety: 2015-16." *National Center for Education Statistics, Institute of Education Sciences* 1-5.
- Dixon, Lynette F. 2014. "Teachers' perceptions of safety and preparedness for acts of violence within schools in light of recent school shootings." Dissertation, ProQuest Information and Learning, Ann Arbor, Michigan.
- Duplechain, Rosalind and Robert Morris. 2014. "School violence: reported school shootings and making schools safer." *Education* 135(2): 145-150.
- Duwe, Grant. 2000. "Body-count journalism: The presentation of mass murder in the news media." *Homicide Studies* 4(4): 364-399.
- Elsass, H. Jaymi, Jaclyn Schildkraut, and Mark C. Stafford. 2014. "Breaking news of social problems: Examining media effects and panic over school shootings." *Criminology, Criminal Justice, Law and Society* 15(2): 31-42.
- Elsass, H. Jaymi, Jaclyn Schildkraut, and Mark C. Stafford. 2016. "Studying school shootings: Challenges and considerations for research." *American Journal of Criminal Justice* 41:444-464.
- Finley, Laura L. 2003. "Teachers' perceptions of school safety, safety-based changes, and their resultant impact on school climate: a case study." Dissertation, ProQuest Information and Learning, Ann Arbor, Michigan.

- Fisher, Benjamin W., Maury Nation, Carol T. Nixon, and Sarah McIlroy. 2017. "Students' perceptions of safety at school after Sandy Hook." *Journal of School Violence* 16(4): 349-360.
- Fisher, Benjamin W., Samantha Viano, F. Chris Curran, F. Alvin Pearman, and Joseph H. Gardella. 2018. "Students' feelings of safety, exposure to violence and victimization, and authoritative school climate." *American Journal of Criminal Justice* 43: 6-25.
- Fox, Cybelle and David J. Harding. 2005. "School shootings as organizational deviance." *Sociology of Education* 78(1): 69-97.
- Fox, James Alan and Monica J. DeLateur. 2014. "Mass shootings in America: Moving beyond Newtown." *Homicide Studies* 18(1): 125-145.
- Frankel, Todd C. (2014, October 27). "Can a wave of new inventions stop school shootings?" *Washington Post*. Retrieved from https://www.washingtonpost.com/news/storyline/wp/2014/10/27/in-wake-of-school-shootings-a-flood-of-inventions-and-the-question-is-this-one-the-answer/?utm_term=.c566b0448edd.
- Garcia, Crystal A. 2003. "School safety technology in America: Current use and perceived effectiveness." *Criminal Justice Policy Review* 14(1): 30-54.
- Gaughan, Edward, Jay D. Cerio, Robert A. Myers. 2001. "Lethal violence in schools: A national study." *Alfred University*. Retrieved from https://www.alfred.edu/about/news/studies/_docs/lethal-violence-in-schools.pdf.
- Gregory, Anne, Dewey Cornell, and Xitao Fan. 2012. "Teacher safety and authoritative school climate in high schools." *American Journal of Education* 118: 401-425.
- Grinberg, Emanuella, Athena Jones, and Carolyn Sung. (2018, March 7). "Florida lawmakers pass bill that would allow school staff to carry guns." *CNN*. Retrieved from <https://www.cnn.com/2018/03/07/politics/florida-rick-scott-gun-bill/index.html>.
- Gruenwald, Jeff, Jesenia Pizarro, and Steven M. Chermak. 2009. "Race, gender, and the newsworthiness of homicide incidents." *Journal of Criminal Justice* 37(3): 262-272.
- Hagman, George. 2017. "Helping Newtown: Reopening a school in the aftermath of tragedy." *Clinical Social Work Journal* 45: 168-175.

- Haider-Markel, Donald P. and Mark R. Joslyn. 2001. "Gun policy, opinion, tragedy, and blame attribution: The conditional influence of issue frames." *Journal of Politics* 63(2): 520-543.
- Heath, Linda and Kevin Gilbert. 1996. "Mass media and fear of crime." *American Behavioral Scientist* 39(4): 379-386.
- Interdisciplinary Group on Preventing School and Community Violence. 2013. "December 2012 Connecticut school shooting position statement." *Journal of School Violence* 12(2): 119-133.
- Jennings, Wesley G., David N. Khey, Jon Maskaly, and Christopher M. Donner. 2011. "Evaluating the relationship between law enforcement and school security measures and violent crime in schools." *Journal of Police Crisis Negotiations* 11(2): 109-124.
- Katsiyannis, Antonis, Denise K. Whitford, and Robin Parks Ennis. 2018. "Historical examination of United States intentional mass school shootings in the 20th and 21st centuries: Implications for students, schools, and society." *Journal of Child and Family Studies* 27(8): 2562-2573.
- Kingshott, Brian F. 2012. "Violence in educational establishments: cause, effect, and response." *Criminal Justice Studies* 25(1): 41-65.
- Kupchik, Aaron, John J. Brent, and Thomas J. Mowen. 2015. "The aftermath of Newtown: More of the same." *British Journal of Criminology* 55: 1115-1130.
- Kyle, Michael J., Joseph A. Schafer, George W. Burruss, Matthew J. Giblin. 2017. "Perceptions of campus safety policies: contrasting the views of students with faculty and staff." *American Journal of Criminal Justice* 42: 644-667.
- Lawrence, Regina G. and Thomas A. Birkland. 2004. "Guns, Hollywood, and school safety: defining the school-shooting problem across public arenas." *Social Science Quarterly* 85(5): 1193-1207.
- Maguire, Brendan, Georgie Ann Weatherby, and Richard A. Mathers. 2002. "Network news coverage of school shootings." *The Social Science Journal* 39(3): 465-470.
- Munoz, Carlos R. (2018, February 21). Sarasota sheriff wants veterans and retired officers for school security. *The Herald Tribune*. Retrieved from <https://www.heraldtribune.com/news/20180220/sarasota-sheriff-wants-veterans-and-retired-officers-for-school-security>

- National Center for Education Statistics. "The NCES Fast Facts Tool provides quick answers to many education questions." (n.d.). Retrieved June 10, 2019 from <https://nces.ed.gov/fastfacts/display.asp?id=28>.
- Newman, Katherine S., Cybelle Fox, Wendy Roth, Jal Mehta, and David Harding. 2004. *Rampage: The Social Roots of School Shootings*. New York: Basic Books.
- Osceola County. (n.d.). Retrieved June 14, 2019 from <https://www.osceolaschools.net/employees>.
- Postal, Leslie. (2019, May 03). Central florida districts uninterested in arming teachers. Retrieved June 01, 2019, from <https://www.orlandosentinel.com/news/education/os-ne-arming-teachers-central-florida-20190502-story.html>.
- Peterson, Spencer. (2014, November 10). "At Sandy Hook's new school, striving for invisible security." *Curbed*. Retrieved from <https://www.curbed.com/2014/11/10/10024996/svigals-partners-safety-sandy-hook-design>.
- Rocque, Michael. 2012. "Exploring school rampage shootings: Research, theory, and policy." *The Social Science Journal* 49(3): 304-313.
- Schildkraut, Jaclyn, H. Jaymi Elsass, and Mark C. Stafford. 2015. "Could it happen here? Moral panics, school shootings, and fear of crime among college students." *Crime, Law, and Social Change* 63: 91-110.
- Schildkraut, Jaclyn and H. Jaymi Elsass. 2016. *Mass Shootings: Media, Myths, and Realities*. Santa Barbara, CA: Praeger.
- Schneider, Tod. 2010. "School security technologies." *National Clearinghouse for Educational Facilities*. Retrieved from http://www.ncef.org/pubs/security_technologies.pdf.
- Snell, Clete, Charles Bailey, Anthony Carona, and Dalila Mebane. 2002. "School crime policy changes: The impact of recent highly publicized school crimes." *American Journal of Criminal Justice* 26(2): 269-285.
- Solodev. (n.d.). About Us. Retrieved June 14, 2019 from <https://www.scps.k12.fl.us/district/about-us/>.
- Stein, Sam and Jason Cherkis. (2014, June 16). "With school shootings routine, parents turn to bulletproof backpacks, childhood clothing." *Huffington Post*. Retrieved from https://www.huffingtonpost.com/2014/06/16/school-shootings_n_5497428.html.

Superintendent Office/Biography. (n.d.). Retrieved June 14, 2019 from <https://www.lake.k12.fl.us/Page/54354>.

Toppo, Greg. (2013, November 13). Schools safe as ever despite spate of shootings, scares. Retrieved June 16, 2019 from <https://www.usatoday.com/story/news/nation/2013/11/13/school-violence-security-sandy-hook/3446023/>

Types of Threats. (n.d.). Retrieved April 14, 2019 from <https://ualr.edu/safety/home/emergency-management-plan/threat-assessment-team/types-of-threats/>.

Wike, Traci L. and Mark W. Fraser. 2009. "School shootings: Making sense of the senseless." *Aggression and Violent Behavior* 14(3): 162-169.

Wortley, Richard and Lorraine Mazerolle. 2011. *Environmental Criminology and Crime Analysis*. Retrieved June 14, 2019 from <https://books.google.com/books?hl=en&lr=&id=nqfJrIBguAkC&oi=fnd&pg=PA1&dq=environmental+criminology+crime&ots=jr07u9FEic&sig=ZUERG4V5LOEKvkMMDJ7Gg9v9nYQ#v=onepage&q=environmental%20criminology%20crime&f=false>.