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Walden University

College of Social and Behavioral Sciences

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Kati Oakes Pusey

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Walden University
2020

Abstract

Preservice Teachers' Perceptions of Public School Violent Intruder Drills

by

Kati Oakes Pusey

MPhil, Walden University, 2019

MS, Millersville University, 2008

BA, University of Michigan, 2000

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Psychology

Walden University

November 2020

Abstract

Public schools in the United States are increasingly implementing violent intruder drills in response to school shootings; however, the impact these drills have on the well-being of preservice teachers is not fully understood. A lack of knowledge also exists as to how intruder drills contribute to preservice teachers' motivation to enter the profession. The purpose of this qualitative study was to explore the perceptions of preservice teachers who have participated in violent intruder trainings and drills. Using prospect theory as the framework, the key research questions addressed preservice teachers' perceptions of violent intruder incidents and drills as well as their experiences participating in intruder drills and training related to self-efficacy. Semistructured interviews were conducted with 15 preservice teachers in the student-teaching phase or who had completed that phase of their education program within the preceding 6 months. The resulting data were analyzed using a multistage, inductive process to convert coded segments of participant responses into larger categories and themes. Key findings included that teachers' perceptions change over time with the accumulation of experience and that preservice teachers have the added responsibility to process student emotions subsequent to events and drills. Additionally, participants reported a range of self-confidence, which for some was impacted by the type of training received. Participants desired more opportunities to learn and consistency between schools. The findings contribute to positive social change by informing educational institutions of the experiences of preservice teachers in order to benefit recruitment and instruction related to school safety. Consistent, repeated training on response to violence in schools and access to mental health is recommended.

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Dedication

Although silenced by tragedy, the voices of the victims of school violence must live on as a call to action for the continued preservation of safety on our nation's school campuses. This dissertation is dedicated to those victims, to those who mourn for them, to those brave enough to take a stand against violence, and to those seeking a solution to such heinous threats to the lives of innocent school children and personnel.

To my own children, Adelaide and Paige, I hope this work serves as an inspiration to you to stand bravely in the face of hard work for the benefit of others. For my unyieldingly supportive husband, Scott, without whom completion of this journey could not have been possible, may this success serve as a physical example of my gratitude and love in return.

Acknowledgments

I extend my heartfelt gratitude to my mentor and dissertation chair, Dr. Patti Barrows, for her support and encouragement throughout my entire dissertation journey. She provided me with much needed guidance and expertise, helping me successfully navigate what would otherwise have been an extremely daunting undertaking. Dr. Barrows delivered her valuable insights with patience and wisdom during these unprecedented and rapidly changing social times. For all of her help, I am extremely thankful.

I would also like to acknowledge my second committee member and methods expert, Dr. Rhonda Bohs, and my university research reviewer, Dr. John Astin, whose feedback helped me refine my research skills and final product. The feedback offered by my entire committee helped me grow as a researcher and provided me with the support I needed to develop confidence in my own skills.

Finally, I give thanks to the most important people in my life; the ones who give my life quality and meaning; my family: Scott, Adelaide, and Paige. They blanketed me with love and support throughout my countless hours spent behind the glowing light of a computer screen or in the secluded halls of our local library, inspiring me to forge on, even when exhausted or frustrated, if only for a quicker return to their presence. I thank them for all of the happiness they bring to my life.

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Chapter 1: Introduction to the Study

Maximizing student potential is reliant on effective, quality teachers, whose role has expanded beyond educating children in areas of academics (Manuel, 2016). Notably, however, a shortage of teachers has been observed (U.S. Department of Education, National Center for Education Statistics, 2019), prompting research to identify factors that compel some to pursue the career. Simultaneously, mass killings and violence in schools have been on the rise since the 1990s (Agnich, 2015; Elsass, Schildkraut, & Stafford, 2016; Langman, 2009). In response, schools are increasingly adding violent intruder drills to district emergency preparedness plans (National Association of School Psychologists [NASP], 2019). In the current study, I aimed to unveil the experiences of preservice teachers with respect to ongoing violence and their perceptions of violent intruder drills. This research was needed due to a lack of existing knowledge about the impact of violent intruder incidents and drills on teachers' motivation to enter the profession. This study carries the potential for positive social change because uncovering more about the experiences of preservice teachers could inform future research on strategies meant to recruit effective, quality educators.

This chapter begins with a presentation of the current literature related to violence in schools, preparedness plans, the psychological implications of emergency response training, and teacher shortages. I then explain the problem addressed by the study and the purpose, followed by a presentation of the research questions. A brief summary of Kahneman and Tversky's (1979) prospect theory, which grounded the study, is presented, as is a description of the qualitative, phenomenological nature of the study. I also present

definitions of key constructs, assumptions, specific aspects addressed, and limitations to the study. Finally, the significance of the study is described, including the potential implications for positive social change.

Background of the Study

The role of school teachers has expanded beyond educating children in areas of academics (Manuel, 2016). In addition to the traditional subjects of math and reading, now included in the responsibilities of many public school teachers is preparedness to react in the face of potential threats to the safety of the students (NASP, 2019). Public awareness of school shooting events, or so-called rampage shootings, has prompted public schools to adopt violent intruder drills in emergency preparedness plans. These school intruder drills have been developed by safety experts, who endorse them as best-practice procedures for reaction to a violent intruder with the purpose of preserving life and maintaining safety for school students and staff, along with the inclusion of other measures, such as physical barriers, surveillance cameras, and barricades for all interior doors (Strobach & Cowan, 2019).

A search of existing literature, which yielded few studies related to the topic, demonstrated that perceptions of violent intruder preparedness have been previously explored only within a minimal scope. In a heavily cited study, Zhe and Nickerson (2007) examined the effect of violent intruder drills on students and found no difference between treatment and control groups with respect to level of anxiety or perception of school safety. Yielding a different conclusion, Peterson, Sackrison, and Polland (2015) found college females who participated in a training on responding to a shooter expressed

higher levels of fear than a control group. Expanding beyond student perceptions, Alba and Gable (2011) conducted a study to learn about the experiences of school administrators and first responders with respect to violent intruder preparedness and found that administrators at both the elementary and secondary level expressed interest in receiving more direction from the state with respect to best-practice guidelines. However, their study did not include those who are likely to be the true first responders: teachers.

The social climate may have changed since 2011 with the continuation of school violence and reports of rampage shootings. For example, 17 people died in February of 2018 in Parkland, Florida when a gunman carried out an attack at Stoneman Douglas High School (Strobach & Cowan, 2019). In May of that same year, 10 people died and 13 others were wounded in a shooting at Sante Fe High School in Houston, Texas (Strobach & Cowan, 2019). In response to these and other incidents, the U.S. Congress and NASP called for a hardening of school security, including physical barriers, metal detectors, and district improvement plans that include the development of threat assessment teams and active shooter drills (Strobach & Cowan, 2019).

Research has addressed knowledge acquired subsequent to emergency response trainings within schools. Dries (n.d.) found one training approach to school violence increases knowledge of intervention and skills for triage and response as well as self-efficacy. However, Olinger Steeves, Metallo, Byrd, Erickson, and Gresham (2017) discovered school employees held inconsistent knowledge about their school's safety plans, which often did not include best-practice recommendations. Furthermore, Perkins (2018) found educators have limited confidence in the ability of local law enforcement to

respond to school crises effectively. Aside from knowledge gained, such perceptions and experiences of educators have been understudied.

Outside of schools, Gould et al. (2015) studied trainers who taught self-protection to military personnel and found instructors reported higher levels of mental health symptoms, such as anxiety or posttraumatic stress disorder, compared to trainees. The experiences of firefighters related to job retention has also been researched. For example, although the time commitment and family or work conflicts serve as barriers for volunteer firefighter retention rates, 40.03% of respondents also indicated unsatisfactory training was an additional barrier (Malinen & Mankkinen, 2018). Henderson and Sowa (2018) also reported that training and skills development were positively correlated with Pennsylvania firefighters' intention to continue to volunteer. Together, these findings suggest that, although training and skill development may be important for the retention of some first responders, engaging in such may lead to increases in unwanted mental health symptoms.

Like those of first responders, factors that motivate teachers to enter and remain in the teaching profession have also been studied. A survey of high school students found approximately half expected to work in a professional occupation, and only 10% of those aspired to teaching, indicating a potential shortage of future educators (Han, Borgonovi, & Guerriero, 2018). The same study revealed participants from cultures that value the profession as having great responsibility and being deserving of respect reported higher interest in pursuing a teaching career. High academic achieving participants were not influenced by higher salaries, although low- and middle-achieving students were (Han et

al., 2018). The results of another study indicated self-efficacy and prior experience were the strongest motivators for preservice teachers to enter the profession (Hennessy & Lynch, 2017). As individuals responsible for the development of future generations, understanding what motivates and deters people from a career in education is important for the recruitment of quality, future teachers.

A review of existing literature shows that the psychological impact of intruder drills on school staff and preservice teachers is unknown. That is, although the perceived deadliness of a large-scale school shooting is suspected to be high given the widespread reporting of such tragedies in media outlets, research has yet to uncover the perceptions of current and future educators related to that level and type of violence. Additionally, although numerous reports indicate the probability of experiencing a school shooting is highly unlikely (e.g., NASP, 2019), it is unclear how vulnerable teachers feel to potential victimization. Finally, despite receiving training on best-practice reactions for violent intruders, it is unclear whether preservice teachers believe they can effectively apply such strategies or even if the strategies will help. This is important because one identified motivation to become a teacher is an individual's belief in their ability to be effective (see Hennessy & Lynch, 2017). Few, if any, studies have been conducted exploring how violent intruder incidents and drills impact the perceptions of preservice teachers and their motivation to teach. As such, a gap in the current literature is that not enough is known about the perceptions of teachers, specifically preservice teachers who have participated in trainings and drills in response to violent intruders, with regards to the deadliness or harmfulness of a violent intruder event, the likelihood of victimization, and

self-efficacy in their own ability to make a difference. The findings of this study could benefit the field of education by informing future research on strategies meant to recruit high-quality, effective teachers.

Problem Statement

Considering ongoing incidents of violence, maintaining safety within schools is of utmost importance. In an effort to do so, schools across the country are adopting emergency preparedness plans that include the practicing of drills to best respond to such events (NASP, 2019). The impact of ongoing acts of violence and subsequent drills, specifically for preservice teachers in the face of a global teacher shortage, is unknown to the academic and professional community tasked with recruiting strong, quality teachers for the future. The problem this study addressed was the lack of knowledge about the perceptions of preservice teachers who have lived through an era of highly publicized school shooting events and have participated in school trainings and drills in response to violent intruders. Through an exploration of the preservice teachers' experiences of school shootings and violent intruder events as well as their experiences of related drills with respect to self-efficacy, a better understanding has been developed. The findings of this study add to the existing body of knowledge by providing the unique perspective of preservice teachers with respect to violence and drills on how to respond to violent intruders within public schools.

Purpose of the Study

This study was conducted to reveal the perceptions of preservice public school teachers faced with implementing violent intruder drills as part of a district emergency

preparedness plan. Specifically, through a qualitative, phenomenological research design, I examined the motivation to enter the profession relative to the preservice teachers' perceptions of the deadliness or harmfulness and potential victimization of a violent intruder event as well as their self-efficacy to respond to such an event through one-on-one interviews. The data collected in this qualitative study illuminated preservice teachers' experiences in order to inform future research on strategies meant to recruit effective, quality teachers.

Research Questions

The following research questions guided this study:

RQ1: What perceptions do preservice teachers have about violent intruder incidents and drills within public schools?

RQ2: What are the experiences of preservice teachers who engage in violent intruder drills and training related to self-efficacy?

Theoretical Foundation

The theoretical framework for this research stemmed from Kahneman and Tversky's (1979) prospect theory, which posits gains and losses are weighted in order to inform decisions that involve risk. According to Kahneman and Tversky, when making a decision that involves risk, people first edit the available information; one form of editing is to simplify the information, which includes "the discarding of extremely unlikely outcomes" (p. 275). However, when considering the frequency of an occurrence, people also employ heuristics, specifically the availability heuristic, which informs judgement or perception and leads to biases in decision-making (Tversky & Kahneman, 1972). With

prospect theory, after editing, the remaining information is evaluated and the decision with the highest valued prospect is selected (Kahneman & Tversky, 1979). Although decision weights do not factor in the *actual* likelihood of an event occurring, the *perceived* likelihood does impact the weight assigned (Kahneman & Tversky, 1979).

Despite the rarity of violent school intruder incidents (NASP, 2019), given that emotionally charged examples are more easily recalled (Kahneman & Tversky, 1979) and incidents of school violence have typically received extensive media coverage (Muschert, 2007) such incidents may be less likely to be edited out as extremely unlikely (see Hopwood & Schutte, 2017). Additionally, Hopwood and Schutte (2017) found a significant effect size when conducting a meta-analysis of exposure to disasters and violence in the media on negative psychological outcomes, such as anxiety, depression, and fearfulness. This is important because emotions impact self-efficacy, which is another influence on decision-making (Bandura, 1977), and these psychological effects may be considered special circumstances, according to prospect theory (Kahneman & Tversky, 1979). A more detailed explanation of prospect theory is provided in Chapter 2.

Using Kahneman and Tversky's (1979) prospect theory to anchor this study, I explored preservice teachers' thoughts about violent intruder incidents within schools. By asking participants to list known violent school intruder events and report their practices of viewing such media coverage as well as inquiring about learned statistics of the prevalence of rampage shootings from trainings, I examined the application of availability heuristics and the content details of learned information. I also examined the preservice teachers' self-efficacy and perceptions related to violent intruder drills and

emergency preparedness plans. Additionally, by asking participants to describe their expectations of a career in teaching as well as what success means, I explored factors that may be considered gains or losses to them.

Nature of the Study

According to Creswell and Creswell (2018), qualitative research is commonly used in social science studies by researchers who seek an understanding of the experiences of individuals and often involves interviews and the collection of data within the natural setting. Learning more about the point of view of others benefits the scientific community when limited prior research on a phenomenon has been conducted (Stadtlander, 2018). As such, I employed a qualitative, phenomenological approach in this study. This approach was consistent with the purpose of the study, which aimed to gain a better understanding of the perceptions and experiences of preservice teachers. One-on-one interviews of education major students were used for data collection. Interviews were transcribed, and segments that captured meaning were then coded with categories and themes identified as they emerged. I organized the data and emerging themes using ATLAS.ti data coding software. Examining the perceptions of preservice teachers addressed the gap in current knowledge of the impact of violent intruder incidents and drills on the teachers’ motivation to enter the profession.

Definitions

Preservice teachers: College students enrolled in an education program, seeking certification as a teacher (Baglama & Uzunboylu, 2017).

Violent intruder drill: "Actions designed to prevent, prepare for, and respond to safety threats" (NASP, n.d.b, p. 1). Experts describe the range of violent intruder drills as including:

> A *full scale lockdown* is used when there is imminent danger. Staff and students make rooms seem unoccupied, windows and blinds are closed, doors are locked, and all sit quietly against a wall positioned away from the sightline of doors or windows. This can result in traumatic stress reactions. In a *secured perimeter/lockout*, all exterior doors are locked and no one may enter or leave the building. Teachers can continue with instruction, as authorized. These may be used when there is a danger outside of the school campus, such as a robbery at a nearby bank. While still unnerving, this is less stressful than a full-scale lockdown. (Erbacher & Poland, 2019, p. 10)

Violent intruder incident or violent intruder event: Although there is no consistent description of what constitutes a violent intruder incident (Elsass et al., 2016, Madfis, 2017), NASP (n.d.c) defined school violence as

> a broad term that includes overt aggressive behaviors such as physical fights on campus, bullying (including online bullying or cyber-bullying), physical assault, bombing, arson, or other deliberate means of causing harm to the staff and students. Sadly, it includes rare, tragic, devastating school shootings. (p. 1)

For this study, a violent intruder incident or event was operationally defined as a deliberate threat to the physical safety of students and staff that occurs on campus, made by one or more individual.

Assumptions

Although there is no way to confirm whether the information regarding perceptions provided by participants was truthful and valid, I assumed that all participants' responses were honest in this study. This was necessary because as a qualitative, phenomenological study, the ultimate findings stem from those responses, which were expected to reflect the unique perceptions of the participants (see Creswell & Creswell, 2018).

Scope and Delimitations

Specific aspects of the research problem addressed in this study were the perceptions and experiences of preservice teachers. The specific focus was to examine the unique experiences of that population to learn more about what motivates individuals to pursue a teaching career as well as what factors might weigh into their decision to do so. Population boundaries limited participants to individuals who were currently enrolled as education majors in a college or university program and were engaged in student-teaching experiences.

Potential transferability was determined by participants' demographic information. Because the study was qualitative in nature, the generalizability of the findings is limited to others who share similar characteristics to the participants (see Creswell & Creswell, 2018). For example, the geographic location of residence or college of enrollment could determine transferability of the findings, depending on the variability of such characteristics of the participants.

Limitations

As with all qualitative research, the limitations of this study include that the results are not generalizable and causation or other statistical data cannot be determined (see Creswell & Creswell, 2018). That is, although I sought a better understanding of the participants' perceptions in this study, nothing has been learned about the influence of those perceptions on the decision to pursue a career in teaching. Furthermore, dependability in qualitative research requires awareness of the researcher as a key instrument and issues of reflexivity. Two important aspects of reflexivity are identifying the researcher's own past experiences and how those might influence the interpretation of data (Creswell & Creswell, 2018). For this study, potential influential experiences of mine include being a former police officer, a current school psychologist, and a mother of two school-aged children. I addressed these limitations through the use of bracketing and ongoing consultation with my dissertation committee members.

Another limitation relates to the participants' geographic residence and other personal demographic information, such as age, college of enrollment, or gender. This study was an examination of preservice teachers' lived experiences and perceptions. The experiences and perceptions of the participants in this study may not reflect those of the general preservice teacher population; rather, they may be unique to the participants. The findings may not be generalizable to those without similar characteristics. This has been addressed by reporting such characteristics that do not compromise confidentiality.

Significance of the Study

Motivated by the need for strong, quality teachers, conducting research that combines attrition rates and motivation to become a teacher with the psychological impact of violence in schools benefits the scientific community by developing an understanding of the experiences of potential future educators with respect to their desire to enter the profession in light of recent violent events. The current study provides an original contribution to the existing body of knowledge by examining the impact of violent intruder incidents combined with the motivation for preservice teachers to enter the profession. The results of this study contribute to positive social change by informing educational institutions on the recruitment and instruction of preservice teachers in order to continue to attract and retain effective, quality individuals to become educators of the future.

Significance to Practice

Adding to the recent increase in research on attrition rates and motivation for people to become teachers in response to a global shortage (e.g., Du Preez, 2018; Frei, Berweger, & Buschor, 2017; Han et al., 2018), by learning more about preservice teachers' perceptions of school violence and subsequent drills, the findings in this study shed light on a previously unexplained aspect that may influence individuals' decision to pursue an education degree. The findings of this study could inform future research on the relationship between such perceptions and intent to enter the profession, which, subsequently, has the potential to inform educational institutions on practices for recruiting strong teachers in the future.

Significance to Theory

The experiences and perceptions of preservice teachers illuminated through this study demonstrate what type of information comes readily to mind when thinking about motivation to pursue a career in teaching as well as issues of school safety. This, in turn, demonstrates what factors participants consider when deciding to enter the field of education as well as what factors may lead to biases in the decision-making process. Participants' belief about the likelihood of experiencing a violent intruder event were revealed in comparison to the actual likelihood, which presents insights into the weighting of available information in terms of gains and losses used to make the decision. This finding adds to the existing knowledge about the application of Kahneman and Tversky's (1979) prospect theory for decisions that involve risk. Additionally, the results of this study provide information for experts to consider when developing best-practice recommendations for trainings meant to educate others on safety preparedness and subsequent violent intruder response drills.

Significance to Social Change

One potential implication for positive social change resulting from this study is that, through gaining a better understanding of the perceptions and beliefs of preservice teachers about school violence and violent intruder drills, best-practice recommendations can be better informed. That is, awareness of teachers' perceptions and experiences can result in consideration of the impact of specific elements of trainings and drills by experts and instructors. Using that information, possible changes meant to improve the trainings and drills by supporting the mental health and well-being of all can be implemented. For

example, instructors could recognize the need (or lack thereof) to alleviate fears, reduce misconceptions, and minimize the potential for the development of negative psychopathological symptoms among educators, including preservice teachers, as the recipients of the trainings.

Another implication for positive social change resulting from this study is that it informs future research on strategies meant to recruit and retain high-quality, effective teachers. This benefits the education community, including students, as the first step towards potentially strengthening instruction and improving educational outcomes.

Summary and Transition

With ongoing reports of violence in schools and the implementation of violent intruder drills becoming the norm, developing an understanding of the experiences and perceptions of those involved was needed. Although I did not determine causation in this study, the qualitative, phenomenological approach employed led to increased knowledge about the impact of violent intruder incidents and drills on preservice teachers' motivation to enter the profession. The experiences and perceptions of preservice teachers related to both school violence and motivation to pursue a career in education had not been previously examined together. Grounded by Kahneman and Tversky's (1979) prospect theory, the findings of this study have the potential to foster positive social change by informing future research on strategies meant to recruit effective, quality educators in the presence of teacher shortages.

In Chapter 2, I will detail Kahneman and Tversky's (1979) prospect theory and provide an exhaustive review of existing literature, including themes that emerged through an iterative search of concepts related to this study.

Chapter 2: Literature Review

Public awareness of school shootings has prompted schools to adopt violent intruder drills in emergency preparedness plans (NASP, 2019). Drills range from lockdowns, where school adults assist students in barricading themselves behind locked classroom doors (Erbacher & Poland, 2019), to evacuating the building if the assailant is believed to be in a distant part of the school to counterattacking, including throwing classroom objects at the assailant and discussing ways to tackle as a team (NASP & National Association of School Resource Officers [NASRO], 2017). However, few studies have been conducted exploring how ongoing school violence and drills impact the perceptions of preservice teachers or their motivation to enter the profession. The purpose of this study was to learn more about the perceptions of preservice, public school teachers faced with implementing violent intruder drills as part of a district emergency preparedness plan. Specifically, through a qualitative methodology, I examined the motivation to enter the profession relative to the preservice teachers' perceptions of the deadliness or harmfulness, potential victimization, and self-efficacy to respond to a violent intruder event through one-on-one interviews. The data gathered in this qualitative study illuminates preservice teachers' experiences to inform future research on strategies to recruit effective, quality teachers.

There has been a recent increase in research on the attrition rates and motivation for people to enter the teaching profession in response to a global shortage in teachers (e.g., Du Preez, 2018; Frei et al., 2017; Han et al., 2018). Han et al. (2018) surveyed high school students and found approximately half expected to work in a professional

occupation and only 10% of those aspired to teaching, indicating a potential shortage of future educators. Previous research has found self-efficacy and prior experience motivate individuals to enter the profession (Hennessy & Lynch, 2017). Preservice teachers' self-efficacy related to school safety initiatives, however, has not been thoroughly examined. Learning about self-efficacy in light of these initiatives is important because perceptions of school safety may be evolving.

Elsass, Schildkraut, and Stafford (2016) found anxiety about the safety of schools in the United States has raised since the mass shooting at Columbine High School in 1999. Since that time, mass shootings in schools have continued, with experts claiming that such atrocities have become "part of the American cultural landscape" (Langman, 2009, p. 3). In addition to the traditional subjects of math and reading, now included in the responsibilities of many public school teachers is preparedness to react in the face of potential threats to the safety of the students (NASP, 2019). Although studies have found educators hold limited confidence in the ability of local law enforcement to respond to school crises effectively (Perkins, 2018), the current study was needed to help fill the gap in knowledge about preservice teachers' perceptions of their self-efficacy in light of these new best-practice recommendations.

This chapter includes a description of Kahneman and Tversky's (1979) prospect theory, which grounded the current study. A review of existing literature related to the history of violence in schools is also presented. I then discuss the current climate of schools as it relates to violence, perceptions of safety, and the psychological impact of trauma. Demonstration of how these concepts impact professions outside of education,

along with the lack of knowledge related to the perceptions of preservice teachers, are provided to justify the need for the current study.

Literature Search Strategy

In search of existing literature related to violent intruder drills and school safety preparedness, I first searched the Walden University Library website , using the Thoreau multidatabase. Additional searches were also conducted through Google Scholar. The search terms *safety in schools* AND *drills* and *schools* AND *safety* AND *drills* revealed almost 400 articles, most of which were housed in the PsychINFO, ERIC, and Education Source databases. Isolating those databases and refining search terms as well as limiting the results to peer-reviewed articles, yielded 14 sources, with only five pertaining to the topic. Attempting to expand the results, I reviewed the thesauruses for each database, identifying relevant and frequently used terms. New key terms included *school crisis preparedness, preparedness, teacher attitudes, teacher perceptions, teachers* OR *educators*, and NOT *fire*, and revealed nine more relevant articles. Additional sources of literature related to violent intruder drills and school safety preparedness came from direct links provided through weekly electronic newsletters distributed through NASP. These publications can be found at https://www.nasponline.org. Some of the articles were also obtained through NASP's print journal, *Communique*.

I obtained literature related to other aspects of this study through additional database searches. Queries were conducted through PsychINFO, Military and Government Collection, Social Sciences Citation Index, Complimentary Index, and Academic Search Complete in search of articles related to the impact of emergency

preparedness drills on first responders. Search terms included *training, anxiety* OR *stress, terrorism,* and *first responders* OR *firefighters* OR *paramedics* OR *police*, and queries were limited to peer-reviewed articles only that were published between 2016 and 2020. To obtain literature related to factors that influence the decision to enter a teaching profession, I primarily searched the ERIC and Education Source databases. These queries brought up almost 80 articles using the search terms *motivate** AND *teachers or educators* AND *career choice*, with limiters of peer reviewed and 2016 to 2020 applied. I located literature related to prospect theory through the PsychINFO database. *Prospect theory, safety* OR *danger* OR *risks* AND *school* were used as search terms. After obtaining seminal articles, searches were limited to peer-reviewed articles published between 2016 and 2020. The results yielded over 100 articles, 19 of which I pulled and considered relevant enough to include in this study.

Theoretical Foundation

The theoretical framework that informed this study was Kahneman and Tversky's (1979) prospect theory. In prospect theory, potential gains and losses are weighted in order to inform decisions that involve risks; decisions more likely to avoid a potential loss tend to be favored over those that could result in a gain, particularly when they are presented as such. According to the theory, when making a decision that involves risk, people first mentally edit the available information. After editing, the remining information is evaluated and the decision with the highest valued prospect is selected. Although decision weights do not factor in the *actual* likelihood of an event occurring, the *perceived* likelihood does impact the weight assigned.

Tversky and Kahneman (1981) described the evaluation of options for risky decisions as nonlinear or, rather, s-shaped. They explained that, for every decision, people have a neutral or reference point from which they view potential gains and losses associated with options. These reference points are developed through several factors, including social norms, an individual's expectations, or an individual's desired outcome or personal aspiration. From this reference point, the relationship to gains is concave and to losses is convex. This means that outcomes falling further away from the point of reference yield increasingly less impact on the decision, a concept known as diminishing sensitivity. Tversky and Kahneman illustrated this phenomenon by comparing the possibility of earning $10 or $20 to the possibility of earning $110 or $120 when starting with nothing. Although equal, the difference between the amounts of the former seem greater than that of latter relative to the reference point of zero. That is, because of the varying distances from the starting point of zero, the perceived value of the $10 difference is less with the larger amount. In this way, people tend to evaluate the prospect of options presented relative to the point of reference. Although values could not be assigned quantifiably in the current study, the concept of diminishing sensitivity related because an individual's perception of social norms or expectations about the likelihood of a violent intruder incident may differ from that of others.

According to prospect theory, consideration of risky decision options is also influenced by how the problem is framed (Tversky & Kahneman, 1981). Most problems can be framed in more than one way or from more than one perspective. The relative desirability of the outcomes based on how the problem is framed results in different

decisions. In general, people tend to be loss averse (Kahneman & Tversky, 1979; Tversky & Kahneman, 1981). That is, people tend to prefer avoiding a loss to risking a gain. However, nuances are observed depending on the framing of the problem. When a problem is framed as a gain, risk aversion is more often observed. Tversky and Kahneman (1981) used the example of giving participants the choice between Option A, in which 200 of 600 lives are saved from a hypothetical disease (selected by 72% of the participants), and Option B, in which there is a 1/3 chance that all lives will be saved and a 2/3 chance that no lives will be saved (selected by 28% of participants). Despite the equality of the odds, preference tends to fall with Option A. However, when the dilemma is framed in terms of lives lost, for example, Choice C, in which 400 people die (selected by 22% of the participants), versus Choice D, in which there is a 1/3 chance that nobody will die and a 2/3 chance that all will die (selected by 78% of the participants), preference tends to fall with the risk-taking choice (i.e., Choice D). For the current study, learning more about how an individual frames their thoughts about pursuing a career in education provided insight into the ultimate decision made.

According to Kahneman and Tversky (1979), editing is the first step when making decisions that involve risk. The authors explained that, in addition to combining events or cancelling out information, editing involves "the discarding of extremely unlikely outcomes" (p. 275). However, when considering the frequency of an occurrence, people also employ heuristics, specifically the availability heuristic, a mental shortcut based on examples that readily come to mind (Tversky & Kahneman, 1974). Application of the availability heuristic informs judgment or perception and leads to

biases in decision-making (Tversky & Kahneman, 1972). People tend to overweight unlikely outcomes and underweight moderately or highly likely outcomes (Tversky & Kahneman, 1981). For example, the authors reported that extremely unlikely outcomes could result in an individual either ignoring or focusing too much on the possibility. Furthermore, information that is considered a loss, when it comes to risks, tends to be more salient than that which is considered a gain, possibly contributing to overweighting (Kahneman & Tversky, 1979). For the current study, learning more about how preservice teachers weight incidents of school violence provided insight about decisions made.

After editing, the remaining information is then evaluated and judged by the decision-maker (Kahneman & Tversky, 1979). Kahneman and Tversky (1979) explained that evaluation is dependent upon perspective. The authors used the analogy of the experience of a change in weather that is dependent upon the temperature from which an individual has adapted. Just like a particular climate can be experienced and adjusted to differently for individuals coming from hot or cold regions, information about decisions involving risk can be perceived differently for different people. Special circumstances, such as prior experience and self-efficacy, also influence the perceptions of individuals. For example, a person who has experienced prior trauma or someone with a prior military or law enforcement background may perceive a threat to safety differently than someone without that personal history. The available information, including what remains after editing and the unique perspective of the individual, is then mentally weighted in order to inform decisions (Kahneman & Tversky, 1979). Learning more about preservice

teachers' personal experiences, self-efficacy, and perspectives related to school safety or violence yielded information that speaks to their motivation to pursue a teaching career.

After editing and judging information for decisions involving risk, leading to weighting of that information, the final step is to make a decision (Kahneman & Tversky, 1979). Actions likely to yield the best outcome, based on the weighted information, are selected, which suggests that decisions do not always align with rational thinking (Tversky & Kahneman, 1981). That is, perceptions, rather than actual facts, tend to drive decisions. This is relevant to the current study because preservice teachers' perceptions about school violence may or may not be consistent with existing facts.

Martin, Reimann, and Norton (2016) examined decision-making in situations involving a subjective reference point, such as choosing whether to pay for the experience of watching a movie with unknown ratings. Through a series of studies, the researchers found people establish a reference point based on extreme examples from their past (i.e., prior viewing of a really good or really bad movie). They also found people tend to be more risk seeking for experiences that have a greater potential to be positive (i.e., deciding to order dessert rather than deciding to visit the dentist). Consistent with prospect theory, their findings suggested people are more motivated to avoid the potential for extremely negative experiences. Related to the current research, the findings of Martin et al. suggest past experience with school and beliefs about the potential for a teaching career to be positive or negative may impact the decision to pursue teaching as a career. Extending the perceptions of the potential for positive or negative experiences as influential to decisions, Konstantinidis, Taylor, and Newell

(2018) found the magnitude of prior experiences is also an important factor. Specifically, they reported that more extreme experiences have a stronger influence than mildly positive or negative experiences. When studying issues of school safety combined with the motivation to enter a teaching profession, this means the magnitude of perceptions of violence at schools and the pay-off of being an educator may serve to influence such decisions.

Taken comprehensively, prior research has demonstrated the value of prospect theory as an informant for the current study. Decisions regarding an individual's professional future involve uncertainty and risk. With no zero value, the reference point for making the decision of whether or not to pursue a career in teaching is subjective with the potential for both positive or negative outcomes. Furthermore, the perception of the decision-maker, which can be influenced by prior experience and self-efficacy, influences choices made. In the current study, I build upon the existing theory by revealing participant's understanding of prior experience, beliefs, and emotions, which may guide decisions about pursuing a career in teaching.

Literature Review

A review of existing literature illuminated several changes to the educational landscape in recent years, both globally and in the United States. According to the U.S. Department of Education, National Center for Education Statistics (2019), a shortage of professionals has been observed across many roles within public schools, as those who remain face additional and evolving responsibilities (Harris et al., 2018). The reporting and understanding of violence in schools has also shifted dramatically in the last few

decades, resulting in changes to the recommended approach and response to student violence suggested through professional associations and government mandates (NASP, 2019). These changes have also led to the rise of school safety experts (Brown & Munn, 2008), the inclusion of active shooter drills in public school crisis preparedness plans (U.S. Department of Homeland Security [USDHS], 2018), and discussions about the perception of safety in schools (Radu, 2018). The focus of much current discussion is on the psychological impact of trauma (Elsass et al., 2016) and building resiliency (Gavine, Donnelly, & Williams, 2016). How these changes in the educational landscape relate and influence each other has yet to be fully understood.

In the following literature review, I highlight school climate, first from a historic perspective, followed by current trends. I then present perceptions of safety and emergency preparedness for both those within school settings, as well as other first responders. Next, I provide research on trauma and resiliency. Finally, I review literature related to teacher shortages and the motivational factors contributing to the pursuit of and retention within a career in education.

Historical Trends of Violence in Schools

Violence in schools is not a phenomenon unique to the United States (Haner & Lee, 2017). It is also not a new phenomenon. However, past inconsistencies with record keeping and reporting make it difficult to analyze with confidence any patterns and changes to such incidents over time (Agnich, 2015; Elsass et al., 2016). Historical incidents involving mass casualties, as opposed to those involving single victims who may or may not have been killed, are more likely to have been recorded. Beginning in

the 1990s, awareness of incidents involving casualties of all types has increased, with multiple tragic events depicted in mainstream media each year. One message regularly given by school safety experts is that the prevalence of school violence is, in fact, very low and the vast majority of people in the United States will never directly experience a violent intruder incident (NASP & NASRO, 2017). However, in order to support this message, accurate and consistent data is needed.

Misleading information. One problem with comparing statistics is the lack of a universal definition (Elsass et al., 2016; Madfis, 2017). There is no consistent description of what constitutes a rampage shooting, violent intruder, or even violent event, for example. Furthermore, not all attacks involve guns, nor do they all result in deaths. As an example, Agnich (2015) reported in 2013 student Dylan Andrew Quick allegedly stabbed 12 of his peers, killing none. If researchers examined data about school shootings or homicides at school, this event would not be included. Also not included would be the numerous incidents that were thwarted before the perpetrator was able to go through with violent behavior, a concept that appears to be on the rise (Elsass et al., 2016), as well as events that go unreported by victims or by school officials who, for various reasons may not have included all incidents in state reporting (Schultz, 2016). These complications contribute to the limited historical knowledge surrounding violence in schools.

The perception held by some is that violence in schools, particularly rampage shootings or those that involve a high number of victims, is a U. S. problem (Schultz, 2016). However, such victimization is observed across the globe (Haner & Lee, 2017).

Agnich (2015) reported statistics of school violence, attempting to provide a comprehensive look using consistently defined constructs applied to incidents worldwide. Under the categories of mass shootings, mass killings, attempted mass shootings, and attempted mass killings, the United States had the highest number of total incidents recorded (Agnich, 2015). However, when broken down by region, mass killings were more prevalent in Asia (Agnich, 2015). Some within the research community claim the media is partially to blame for inaccuracies related to the prevalence of school violence in the United States, contributing to perceptions of the phenomenon as a U. S. problem, as well as raising anxiety and fear, making such acts seem more common than they are, and leading people to believe that this is a new epidemic (Elsass et al., 2016; Muschert, 2007).

Early incidents. Although reported school shootings in the United States did increase from 2000 to 2013 (Lenhardt, Graham, & Farrell, 2018), the earliest recorded incident took place in the 1760s (Lee, 2013). Lee (2013) provided an overview of the history of school shootings from that time until November, 2013. The author reported that prior to the 1990s, the decade with the most recorded incidents was the 1900s with a total of 26. In the 1980s, a sharp increase was observed, which the author attributes to the availability of information stemming from internet use making it easier to find information about such events. From that point, known incidents "increased from 23 to 179 between the 1980s and the 1990s, and from 179 to 245 between the 1990s and 2013" (p. 102).

Arguably the most well-known school shooting, and the one many believe sparked a trend in school violence, took place at Columbine High School in April of 1999 (Langman, 2009). In his 2009 book, leading expert Dr. Peter Langman provided an overview of the history of school violence. According to Dr. Langman, the deadliest incident took place decades before that in Bath, Michigan, and countless others were equally horrific. The incident in Michigan happened in 1927 when, after murdering his wife, a man blew up a school building, killing 45 people and injuring 58 others, mostly children. Another lesser-known tragedy took place when eight elementary children and a police officer were injured, and two adults were murdered in 1979 after a teenager shot at them from her home across the street. Ten years later, five children were murdered and 29 wounded when a man in his 20s sprayed bullets into an elementary school playground in 1989. These are all examples of school violence that transpired in the United States well before the term *school shooter*, according to Dr. Langman, was recognized as a defined cultural construct.

School shootings and the U.S. cultural landscape. Sadly, according to Dr. Langman, "rampage school shootings became part of the American cultural landscape in the 1990s" (Langman, 2009, p. 3). Between February of 1997 and May of 1998 highly publicized school shootings, all of which resulted in multiple deaths and the wounding of many others, took place in Bethel, Alaska, Paducah, Kentucky, Jonesboro, Arkansas, Edinboro, Pennsylvania, and Springfield, Oregon. These were followed by the widely known attack at Columbine High School, during which 15 students and staff lost their lives (including the two perpetrators) and 23 others were wounded.

Highly publicized events continued to take place throughout the next two decades. Although according to the Department of Education (Musu, Zhang, Wang, Zhang, & Oudekerk, 2019) "from 2000 to 2017, there were 37 active shooter incidents at elementary and secondary schools" (p. iv), other sources reported the number of school shootings increased to 160 separate incidents between 2000 and 2013 (Lenhardt et al., 2018). Included in those numbers is the 2001 California shooting, which took the lives of two students and injured 13, the 2005 Minnesota Red Lakes Indian Reservation massacre of seven innocent students, the 2007 Nickelmines Amish schoolhouse murders in Pennsylvania, and the 2012 rampage in Newtown, Connecticut, which resulted in the deaths of 20 young children in addition to six adults and the perpetrator. The 2015-2016 school year alone tallied 30 murders, seven suicides, and one incident during which law enforcement action resulted in the death of a student, according to Department of Education records (Musu et al., 2019). More recent highly televised tragedies include the Parkland, Florida attack at Stoneman Douglas High School in February of 2018 (17 people killed) and the Houston, Texas shooting at Sante Fe High School in May of that same year (10 people killed; Strobach & Cowan, 2019).

Statistics on school violence, which have been the inspiration for the implementation of intruder drills within public schools, vary depending on the source. The U.S. Department of Education (Musu et al., 2019) reported a relatively low number of incidents compared to other available sources, which utilized a broader, more comprehensive definition, such as Agnich (2015) or Lenhardt, Graham, and Farrell (2018). Adding to the confusion is the distinction between incidents that resulted in lives

lost compared to those that were thwarted or ended in injury only, as well as those that involved a gun versus some other type of weapon. These inconsistencies are relevant because, although educators are told and directed to tell students that actually experiencing a violent intruder event firsthand is extremely unlikely, the message received from alternative data sources and extensive media coverage available following such events may influence perception of vulnerability. The current study was meant to illuminate such perceptions held by preservice teachers.

Recent Trends Related to the Prevention of School Violence

In addition to the reporting of statistics on violent intruder events, current discussions about school climate and topics related to school violence may also influence perceptions of vulnerability. NASP (n.d.a) provided guidance to schools for the benefit of student outcomes, noting the importance of establishing a positive school climate, which they defined as including “the physical, social, and emotional environment” (p. 1). Other recent trends related to the prevention of school violence include discussions about the presence of guns in schools, the hardening of school campuses through the use of physical strategies, and the development of emergency preparedness plans.

School climate. School climate is an important factor with respect to resiliency in the face of violence. In search of support for this concept, Yablon (2015) examined school climate in relation to posttraumatic stress disorder (PTSD) among children in Israel under continual ethno-political conflict and subsequent violence. He found 36% of variability in PTSD symptoms was accounted for by school climate, as was 20% of variance in posttraumatic growth. Furthermore, connection to the school, regular

attendance, and school safety were identified as protective factors. In response to such knowledge, schools across the United States are taking measures to improve the social climate for the benefit of students. How school climate impacts adult staff members, however, is unknown.

Gun-free schools. U.S. gun laws are the source of much conversation about safety in and out of schools. In a compilation of gun legislature post school shootings, Schildkraut and Hernandez (2014) reported that in the 1 year following Columbine, more than 800 bills tightening control of guns were introduced, but only about 10% of those passed. The Gun-Free Schools Act was passed in 1994, which requires the expulsion for at least 1 year of any student who brings a gun to school (Borum, Cornell, Modzeleski, & Jimerson, 2010). This law was enacted as a protective measure against school shootings; but soon after, schools nationwide began to adopt a zero-tolerance policy, expelling students or transitioning them to alternative schools for *any* behavior deemed violent.

Understanding that expulsion has long-term negative impacts for students, particularly for minorities and those with disabilities, alternatives to zero tolerance were soon adopted, including the use of behavior contracts, in-school suspensions, and school-wide initiatives employing a multitiered system of supports (Brownstein, 2010). This means schools that were once taking a firm stance against any violent behavior were now implementing interventions meant to include students with concerning behavior in traditional buildings. Although the intent of inclusion is to protect individuals from potential negative long-term outcomes of school removal, the results may be counterintuitive for the masses. In 2017, for example, 6% of students reported being

threatened in school (Kann et al., 2018). The following year, in a study assessing the impacts of bullying or victimization, Radu (2018) found that students who perceive schools as unsafe are more likely to engage in violence themselves. This is supported by a student survey that found 3.8% of high school students reported carrying a weapon to school within the prior month (Kann et al., 2018). Shifting from gun-free schools, current trends in school safety initiatives now involve the consideration of arming teachers and employing school resource officers (SROs), bringing more weapons into school buildings.

Armed teachers, school resource officers, and the hardening of schools. Bringing guns to school in the hands of adults, whether they be teachers or SROs, sends a message to the school community. Although not research, in an editorial commentary on the social debate of whether or not teachers should be armed, Rajan and Branas (2018) reported the expense of arming just 20% of school employees or adding an armed security guard to every elementary and secondary building would take up almost one third of the federal education budget, and the mere presence of such would serve as reminders of vulnerability, thereby increasing anxiety. This public perception sounds similar to the findings of Radu (2018) reported previously, that students who perceive schools as unsafe are more likely to engage in violence. Conversations about arming school staff continue despite research that shows it is not effective. Specifically, Webster, Cerda, Wintemute, and Cook (2016) reported that armed guards or police officers were present in approximately 90% of incidents that resulted in the shooting of

more than one person, suggesting the presence of a weapon in the hands of law enforcement did not serve as a deterrent for violence.

Increasing the presence of guns is not the only way schools are being hardened. Using data from the School Survey on Crime and Safety, Cuellar (2018) conducted a quantitative study and found a positive correlation between physical strategies, such as surveillance cameras and metal detectors, and violence. Strategies that promote interpersonal connections were also positively correlated with school violence in that study. This suggests the employment of an SRO, whose very presence could be considered a physical strategy and who might serve as an additional source of social connection could, in fact, result in higher rates of violence in schools. Furthermore, in 2018, researchers examined regulations for SROs between states. They found Pennsylvania was the only state in which certification, training, defined roles and responsibilities, and data-based evaluation of existing SRO programs were required (Counts, Randall, Ryan, & Katsiyannis, 2018). In contrast to physical measures and social connections, parental involvement was negatively correlated to violence (Cuellar, 2018), meaning parental involvement, not the hardening of schools or hiring of SROs, was the only strategy found to be associated with the reduction of violent behavior.

Although the Cuellar study was conducted in 2018, experts have recognized that physical interventions incite fear and may be counterintuitive to learning for some time. Cowan, Vaillancourt, Rossen, and Pollitt (2013) was written years earlier and disseminated to school psychologists across the country through NASP again as recently as April of 2019. Cowan et al. called for a combination of physical measures and mental

health provisions, noting the belief that schools are "among the safest places for American's [sic] children" (p. 2). One of the same experts who made those recommendations later wrote that "school hardening and increasing the presence of guns in schools is not an evidence-based approach to school safety" (Strobach & Cowan, 2019, p. 29). This statement to school psychologists from their national association emphasized the importance of a comprehensive approach to safety, including physical measures, cultural changes, safety drills, and the presence of and access to mental health professionals as paramount to effectiveness.

Preparedness plans. Adding to the confusion stemming from the dissemination of contradicting information, another recommendation sent to school psychologists from NASP was to engage in discussion-based or operations-based crisis response training, meaning school staff should be educated on preparedness either through seminars, workshops, or by conducting tabletop drills, where responses to crises are discussed in detail, or through drills with various levels of simulation (NASP, 2019). Informing the recommendation, a study conducted years earlier (Zhe & Nickerson, 2007) was cited as research demonstrating drills do not elevate anxiety levels or perceived safety for children. The Zhe and Nickerson study is actually widely cited in studies and articles on the topic of school safety. However, an exhaustive review of existing literature has yet to reveal the existence of a study confirming their findings. Beyond confirmation, a lot may have changed with the continuation of school violence incidents reported in the media. An additional limitation of the study is that it was conducted with students from only one school district, minimizing the generalizability of the results.

With schools adhering to the recommendations of state and federal associations, the implementation of prevention strategies and calls for crisis preparedness have introduced new responsibilities to the roles of educators. Teachers are now tasked with creating a positive climate, participating on threat assessment teams, learning to recognize the signs of potentially violent youth, and preparing to respond to an emergency violent intruder event (U.S. Department of Education, Office of Elementary and Secondary Education, & Office of Safe and Healthy Students, 2013). In fact, national associations recognize that teachers, as those present in school buildings, are the true first responders in emergency situations and, as such, call for them to be trained to respond immediately to such events. As immediate responders, educators are now being trained in curriculums such as "Stop the Bleed," which involves learning how to effectively apply a tourniquet to wounded individuals (Harris et al., 2018), a responsibility previously reserved for school nurses or responding paramedics.

Just over a decade ago, emergency management plans in schools were not required, although they were considered best-practice (U.S. Government Accountability Office, 2007). By 2016, the Centers for Disease Control and Prevention reported 79.9% of schools required preparedness plans to include students and staff members with special needs, and over 90% of those schools required plans be developed with help from local first responders (Silverman et al., 2016). Although this demonstrates the prevalence of preparedness plans, only 69.3% of the existing plans included a requirement for mental health services to be available following a crisis, and "only 29 states met the basic standards for safety of children during an event" (p. 952). With no further guidance, the

USDHS (2018) recommends developing a plan for response to a violent intruder "in an effective but not traumatic way" (p. 7), leaving schools to navigate that delicate balance on their own. Included in their recommendations is a listing of available physical interventions, along with recognition that effectiveness of each is unknown. Extending the responsibility to respond immediately, some argue that following actual violent events, individuals who are killed when responding are hailed as heroes, sending mixed messages that the right thing to do is attack the shooter (Brown, 2019).

With all of the changes related to school safety, the perception preservice teachers have of their own self-efficacy in relation to these changes was unknown. These perceptions were also likely continuing to evolve with the ongoing considerations of guns in schools, hardening of the environment, and preparedness plans. Research was needed to unveil these perceptions.

Varying Perceptions of Safety and Fear

The perceptions of safety and fear within schools is not fully understood, nor is it necessarily consistent between various school roles. For example, different stakeholders, specifically students and staff members, may hold different perceptions. In fact, reports sent to staff members from national associations claim that although the percentage of children who fear crime victimization at school has decreased since 2005, staff feel *less* safe and are *less* confident in law enforcement to provide sufficient protection (Camera, 2019). The cause and scope of this disparity in perception is not clear. Another area not fully understood is the perception of violent intruder preparedness. For example, Alba and Gable (2011) conducted a study to learn about the experiences of school

administrators and first responders with respect to such preparedness. However, the social climate may have changed since 2011 with the continuation of school violence and reports of rampage shootings. As reported previously, that is, 17 people died in February of 2018 in Parkland, Florida when a gunman carried out an attack at Stoneman Douglas High School (Strobach & Cowan, 2019). In May of that same year 10 people died and 13 others were wounded in a shooting at Sante Fe High School in Houston, Texas (Strobach & Cowan, 2019). The findings of Radu (2018) taught the scientific community that students who perceive schools as unsafe are more likely to engage in violent behavior. This means perceptions may have dangerous consequences. As such, understanding perceptions is an important first step to understanding behavior.

Public schools have been aiming to improve emergency preparedness plans and are increasingly implementing violent intruder drills (USDHS, 2018). Tabletop discussions, simulations, and monthly lockdowns are on school agendas, and specialized trainings are available to all stakeholders. Recent studies have been conducted examining the perceptions of school staff with respect to feeling personally prepared to respond to an emergency.

One theme observed in the existing literature is that school staff do not fully trust others to be effective in the face of an emergency event. Werner (2014), for example, found school counselors felt personally “moderately to extremely prepared for a major school crisis” (p. 22). However, those same participants reported believing the school as a whole is less prepared. It should be noted that school counselors receive training through certification programs to respond to emergencies, so their perceptions might

differ from that of others in the school community. An additional finding of the Werner study was that participants who were aware of the school's preparedness plan, or who were on the crisis team, felt more prepared than others. Participants in Perkins (2018) expressed wanting more realistic drills to boost their level of confidence and, like the findings of Werner, had limited confidence in others. Specifically, the teachers in the Perkins study did not believe local law enforcement would be able to respond effectively to a school crisis. This lack of belief in the readiness of others may contribute to perceptions of vulnerability.

Lowered confidence in the preparedness of others might not be entirely unfounded. Participants in one study of elementary school staff in Louisiana felt adequately prepared for a crisis (Olinger Steeves, Metallo, Byrd, Erickson, & Gresham, 2017). However, the researchers found that, despite feeling prepared, those school employees held inconsistent knowledge about their school's safety plans. Furthermore, the existing safety plans reviewed in the study often did not include best-practice recommendations. So, although school staff felt prepared, their self-perception may have been inappropriately confident for both personal reasons as well as a reflection of flawed instructional plans from the school district.

Perhaps relating more directly to the current study, Clark, Bass, and Boiteaux (2019) evaluated confidence and knowledge of preparedness in teachers of medical imaging and radiation therapy with regards to responding to an active shooter incident. When considering how confident participants felt to protect students, they found that only 13.9% felt extremely confident. The remaining 86.1% ranged from not feeling confident

at all to feeling only moderately confident. Themes that emerged from the study included lack of preparedness, lack of institutional policy, and proactive techniques. The authors also noted, “educators who were employed at facilities that provided active shooter training were more prepared to respond appropriately to an active shooter incident than were educators who worked at a facility that did not offer active shooter training” (p. 549). This means that, although participants who were trained to respond were better prepared, their perceptions of confidence remained mostly low.

As a whole, perceptions of violence in schools and fear are inconsistent. Research on preparedness demonstrates a general lack of trust in the readiness of others and self-perceptions that are inconsistent between professions and do not align with current best-practice recommendations. More research on such perceptions is needed.

Psychological Impact of Violent Intruder Drills

Although publications reflecting public opinion of safety drills and emergency preparedness in schools are prevalent, limited resources involving research on the efficacy and impact of violent intruder drills was found. Prolific access to public opinion and reports of school violence in the media may incite fear in the absence of evidentiary support for the drills. National and state agencies recommend best-practice strategies; however, it is up to individual schools to implement the strategies, and the psychological impact of violent intruder drills is not sufficiently addressed. The lack of existing literature and knowledge about how the practicing of drills contributes to or alleviates fear speaks to the need for the current study to learn more about the perceptions of specific stakeholders.

Public opinion. Articles on public opinion related to the practicing of violent intruder drills in schools are widely disseminated through various media outlets, including television, newspapers, and social networking websites. One example is Blad (2018), who wrote that traditional lockdown drills, as opposed to those "not supported by evidence" (p. 5) recommended by governing agencies, are preferred because parents are not comfortable with the current best-practice recommendations. Beyond general discomfort, Frosch (2014) described lawsuits filed following active shooter drills as a result of trauma experienced by the exercise. A similar story was repeated in Schultz (2016), which claimed a child was traumatized when he was not informed that a drill was not real. This author opined such safety measures are creating a false sense of danger. This sentiment was again expressed in a report sent out by NASP in December of 2019 (Mahamud, 2019). Without research to demonstrate otherwise, it is hard to challenge such opinions.

Determining the most appropriate balance between preserving safety and mental health is not an easy task. NASP (n.d.b) recommended conducting safety drills without creating undue stress. However, the authors did not provide a prescription for doing such. Fox and Savage (2009) reviewed the recommendations made by task forces and study groups examined by the authors. They warned that some measures go too far, inciting anxiety and possibly even enticing copycats by providing too much attention to school violence. Tactical trainings involving students, which are used in some districts, were described as "unwise" and "potentially traumatizing" (p. 1473). As an alternative, training staff members and students on what their roles are in an emergency and on the

emergency notification system was suggested by the authors. Another alternative would be to forgo any type of emergency response preparation. This, however, is not likely the best course of action.

Response trainings versus inciting fear alone. Doing nothing to prepare for potential violence in school does not seem wise in the current cultural landscape. Real threats resulting in the need for a school lockdown have been documented up to 20 times within the last year for some districts (Lewin, 2019). Recommendations for schools to implement formal plans have been made for at least 20 years, as evidenced by articles sent from the National Association of Secondary School Principals, such as Walker and Eaton-Walker (2000). At that time, the use of alarms and basic lockdown drills were recommended. More recently, however, districts are expressing desire for more direction and guidance from experts (Alba & Gable, 2011), and think more realistic drills are needed (Perkins, 2018). Individual school districts are deciding, relying on guidance from state and national associations, just what those drills should include.

In 2015, Peterson et al. conducted an experimental study comparing the impact on college students of viewing a video on school shootings with the impact of viewing a training video, instructing viewers how to respond to a shooter. Participants in one group viewed the PBS Frontline documentary “Raising Adam Lanza,” the story of an actual school shooter. Participants in the other group watched “Shots Fired: When Lightning Strikes,” an emergency response training video. Following the videos, participants completed an online survey. The researchers found that both groups had elevated levels of fear that a shooting would happen on their campus and both felt better prepared

compared to before viewing the videos. However, the training video resulted in statistically higher belief of preparedness. This suggests training people, rather than simply scaring them, is preferable for perceptions of readiness.

Best practice recommendations from state and national agencies. Determining the efficacy of emergency plans is challenging because creating experimental research to evaluate such would be considered extremely unethical. Regardless, recommendations are provided to school districts from state and national agencies. Additionally, school districts are tasked with making up their own training and plans based on guidance disseminated from the governing authorities (Mahamud, 2019). This means the response to emergency situations and violent intruder drills is different for every school.

Although the implementation of active shooter drills is not required in all states, state and federal agencies strongly encourage their use and offer recommendations, considered best practice. Specifically, U.S. Department of Education, Office of Elementary and Secondary Education, and Office of Safe and Healthy Students (2013) encourages all staff and students receive training on what to expect in such a situation and how to react. The authors also note the importance of considering the ages of the students when planning drills, and teaching staff about warning signs of potential threats. Acknowledging staff members are the ones expected to serve as first responders, the authors wrote that “there is no single answer for what to do, but a survival mindset can increase the odds of surviving” (p. 63). They also wrote about the unlikelihood of staff members having all available information at their disposal in the event of a real

emergency; but despite this, directed them to "respond immediately" (p. 64). Running, hiding, and fighting are detailed as the available options. In addition to these authors, experts from NASP and NASRO offer recommendations for safety drills within schools.

In a recent NASP publication, experts wrote about the importance of teaching and planning before implementing any active shooter drills (Erbacher & Poland, 2019). The authors noted that at least one state (Florida) recommended conducting such drills once per month. The authors also provided a description of types of drills to implement:

> A *full scale lockdown* is used when there is imminent danger. Staff and students make rooms seem unoccupied, windows and blinds are closed, doors are locked, and all sit quietly against a wall positioned away from the sightline of doors or windows. This can result in traumatic stress reactions. In a *secured perimeter/lockout*, all exterior doors are locked and no one may enter or leave the building. Teachers can continue with instruction, as authorized. These may be used when there is a danger outside of the school campus, such as a robbery at a nearby bank. While still unnerving, this is less stressful than a full-scale lockdown. (p. 10)

Using a trauma-informed approach was also recommended by the experts. In NASP and NASRO (2017), two federal organizations came together with input from other leading experts to provide updated guidance to schools. The authors explained the purpose of such drills is to practice responses, as well as to identify potential security vulnerabilities. Citing only the Zhe and Nickerson (2007) study as research, the authors reported that, if done "according to best practice" (p. 4), drills will not increase anxiety or perceived risk

among students. In addition to the full-scale lockdown drills described in Erbacher and Poland (2019), NASP and NASRO detail options-based drills, which are meant to empower staff members and students to respond differently, based on the information available to them. For example, evacuation of the building might be done if an assailant is suspected to be in a distant part of the school, barricading the door might be considered if the assailant is close, and counter-attacking, using objects found within the room, could be another option. Progression of the implementation of drills was suggested, with education as the first step, ending with some schools considering the use of props or simulation techniques, such as airsoft guns or simulated gunshots. Careful consideration of the "developmental age and readiness of staff" (p. 5) was noted. Recognizing that some decisions could put students and staff members in more danger, perhaps causing them to cross paths with the assailant or exposing them to scenes of violence involving their peers, the authors warned, "helping students and staff understand the decision-making-criteria is crucial" (p. 5).

With such a wide range of available information, from public opinion to guidance provided by state and federal agencies, it is easy to imagine potential increases in fear and perceived vulnerability among individuals who occupy school buildings. Although employing a trauma-informed approached is suggested by experts, guidance has not been provided for doing so with the exception of considering student ages and teacher readiness. Additionally, the use of simulations along with the warning of extreme danger if the wrong decision is made, seems to contradict a gentle approach. Although training people to respond is a better option compared to scaring them or simply doing nothing,

engaging in practices that may incite fear and are not research based may be inadvertently leading to undesirable perceptions among preservice teachers. Studies, such as the current one, are needed in order to illuminate perceptions currently held by school personnel.

Other First Responders

Public school staff are not the only ones whose career may require them to engage in emergency preparedness and response plans. Other first responders, including police officers, firefighters, paramedics, military personnel, and hospital staff are just a few who routinely practice drills and receive such training. With a limited amount of existing literature on the impact of violent intruder drills for school employees, examining the findings of research in other fields provided some insight for the current study.

Training and retention. Some studies have found associations between training and skills development and the intent to enter or remain in emergency responder professions. Although Malinen and Mankkinen (2018) studied Finnish firefighters and Henderson and Sowa (2018) studied volunteer firefighters from Pennsylvania, both found a link between training and intent. In the Finnish study, 40.03% of respondents indicated unsatisfactory training was a barrier for retention. The Pennsylvania firefighters identified management and relationship building as factors predicting retention, but training perceived as better was also correlated to a stronger intent to stay. These studies speak to the importance and value of adequate training for individuals in professions that inherently involve emergency response. Teachers, however, are not traditionally thought of as first responders.

Although school staff members are not traditionally considered first responders, as adults who are charged with the care of school students, they may be called upon as immediate responders in the event of a violent intruder. In a concept paper, Harris et al. (2018) distinguished between immediate responders and first responders. Although first responders are those who receive official training and make the conscious decision to help in emergency situations, immediate responders are defined by the authors as "an unprompted group of people comprised of both casualties with minor injuries and uninjured others located in direct proximity to an incident site" (p. 2). The concept of immediate responders has prompted schools to adopt trainings, such as "Stop the Bleed," in addition to the practicing of violent intruder response drills. Although not related to emergency response, similar to the correlation between training and retention found in the Malinen and Mankkinen (2018) and Henderson and Sowa (2018) studies, Hennessy and Lynch (2017) found self-efficacy and prior experience were the strongest motivators for preservice teachers to enter the profession, with Dries (n.d.) demonstrating one training approach to school violence not only increases knowledge of intervention and skills for triage and responses, but also raises self-efficacy. A better understanding how training impacts self-perception, then, was important for the current study.

Self-perception of skills following training. In a continued examination of literature related to other first responders, perceptions of preparedness and self-confidence was found to vary following training experiences. Abelsson and Lundberg (2019) assessed medical personnel's self-perception of skills and knowledge after participation in a simulation training of battlefield injury response. They found the

ratings of these experts were fairly low following the training, with doctors rating themselves as 2.4 out of 5.0 for practical skills knowledge, 2.0 out of 5.0 for experience, and 2.0 out of 5.0 for training. Medics involved in the study rated themselves even lower in some areas. Beyond self-perception immediately following training, Holgersson, Sahovic, Saveman, and Bjornstig (2016) found a positive correlation between first responders' willingness to respond to an emergency event and having been specifically trained or having engaged in table top exercises related to the emergency. Compared to women, men had better perceptions of preparedness and medical staff had higher self-efficacy to manage such situations compared to others. For school staff members, who are not experts in the medical field, may not consider willingness to respond to emergencies an important personal quality for the education profession, and who consist primarily of women, the variation in perceptions presented through these studies suggests the experiences of any one particular group cannot be assumed. Although some express high levels of confidence following training, others demonstrate increased levels of trepidation.

Implications of training and response. Increased levels of trepidation may be justified by the potential impact emergency response training and response to actual emergency events has had on first responders. Kranke, Weiss, Heslin, and Dobalian (2017) found some volunteer veterans may be resilient to undesirable mental health consequences related to helping in disaster relief programs. In that study, positive mental health benefits were actually correlated with the application of the unique skills afforded through the volunteer opportunity for participants. Prior experience and training were

attributed to these findings. However, this has not been universally observed. For example, Fleischmann, Strode, Broussard, and Compton (2018) found approximately half of the police officers included in their study reported knowing of at least one colleague whose behavior changed following the experience of a traumatic event. These behaviors included leaving the profession in addition to relationship problems or substance abuse. Comparing this to teachers, police officers enter the field expecting to witness and respond to violence. Despite those expectations, experiencing actual trauma inspires some to quit.

So far, the impacts I considered have related to experiencing actual traumatic events, not preparing for the possibility of such. Other studies have found trainings also have mental health impacts. Robinson et al. (2009) examined the effect of a 12-week combat medic training (Advanced Individual Training) for military personnel. They found symptoms of depression, anxiety, and suicidal ideation worsened from the beginning of the training to the end, particularly for women, those with lower education, and those with lower income. Similar, or perhaps worse, findings have been observed not just for those facing deployment, but also those who instruct others. Gould et al. (2015) studied trainers who taught self-protection to military personnel and found instructors reported higher levels of mental health symptoms, such as anxiety or PTSD, compared to trainees. This means those who receive training, as well as those who deliver training to others, experience heightened levels of mental health symptoms. Responsible for the education of students, school staff not only receive training on violent

intruder response, but are also tasked with passing lessons on to children in their classrooms.

Research has been conducted on professions outside of education who engage in emergency preparedness. Studies have found a lot of variability in perceptions of self-efficacy. Training as immediate or first responders influences the perceptions of self-efficacy for those who volunteer or chose professions that inherently involve emergency response. Experiencing trauma, including that which stems from training for emergency response, has been found to increase negative mental health symptoms in other professions. Research is needed to better understand the experiences of preservice teachers who engage in similar practices.

Trauma and Resilience

Accounts of school violence are not difficult to come by in today's climate. Unfortunately, exposure to such traumatic events has psychopathological impacts. Whether witnessing acts of terror firsthand or hearing about them through reports in media outlets or when talking with others, knowledge of violence can leave children and adults feeling fearful and helpless (Pfefferbaum et al., 2004). The impact of these feelings relating to violence in schools and the intent to enter the teaching profession was previously unknown. Although research has illuminated strategies aimed at boosting resilience in school students, the impact of these strategies on preservice teachers was also unknown.

Secondhand trauma. Exposure to trauma can come in multiple ways. Directly witnessing a violent act is only one way. Comer and Kendall (2007) reviewed multiple

studies on the impact of terrorism. They found three recurring themes of exposure. One was via proximal contact, which includes directly witnessing a violent act or losing a loved one to an act of violence. A second was media-based, or viewing footage of terrorism via media outlets. The third was through "exposure to an extended climate of threat, expectation, and alert (i.e., 'secondhand terrorism,' in which cultural influences disproportionately attend to the *possibilities* rather than the *probabilities*, of terrorism)" (p. 180). Although the actual likelihood of direct victimization or witnessing a violent school incident is statistically low, the potential of viewing media coverage of school violence is high, and with schools routinely engaging in violent intruder drills and educating students and staff members to stay vigilant of signs of potential threats, focusing on the possibility, rather than the probability, is possible.

Viewing media coverage of violence raises mental health symptoms, just as witnessing violence firsthand does. Hopwood and Schutte (2017) conducted a meta-analysis of 18 studies and found a significant effect size of exposure to disasters and violence in the media to negative psychological outcomes, including anxiety, depression, and feeling threatened or fearful. Anxiety levels, in particular, were heightened, and the effects were worsened in communities that had recently experienced an event similar to what was presented in the media. The researchers' findings were supported by the results of another study conducted following the Boston Marathon bombing in 2013. In that study, Comer et al. (2014) analyzed the rates of psychopathology in children who attended the race or who were required to shelter in place during the subsequent manhunt for the assailants. They found participants had high levels of PTSD symptoms, including

emotional symptoms, relationship problems, hyperactivity or difficulty with focus, for up to six months following the event. Importantly, symptomology was worse for those who were in attendance and for those who watched over three hours of the manhunt footage in the media. These studies suggest media viewing can influence secondhand trauma in a significant way. With symptoms lasting up to six months and worse for those in proximity to the violence, seemingly constant reports of new incidents of school violence occurring all over the United States, an unprecedented number of children may be affected.

Children are not the only ones impacted by secondhand trauma. Attorneys who practice criminal law have been found to experience significantly higher levels of vicarious trauma compared to noncriminal lawyers (Vrklevski & Franklin, 2008). Secondhand trauma symptoms in that study included higher rates of depression, stress, participants' beliefs about personal safety, the safety of others, and mistrust in others. Fear of victimization and heightened levels of anxiety symptoms were also found among college students following the Virginia Tech and Northern Illinois shootings (Kaminski, Koons-Witt, Thompson, & Weiss, 2010). Researchers in that study found media coverage contributed to experiences of fear. Taken together, prior research has demonstrated the influence of secondhand exposure to violence on higher levels of negative mental health symptoms.

Psychopathological impact of trauma. Anxiety about the safety of schools in the United States has raised since the brutal attack at Columbine High School (Elsass et al., 2016). Such anxiety has implications on individuals. Understanding how trauma

impacts children and adults may help explain decisions made by individuals, as well as behavior in general.

Exposure to violence, whether through direct or secondhand experiences, makes people feel helpless. In a 2004 study following the Oklahoma City bombing, Pfefferbaum et al. found nearby teachers experienced numbness and helplessness, with close to 20% reporting having a hard time responding to students and functioning both in and outside of school. Symptoms were worse for female participants in that study. PTSD symptoms were also observed at heightened levels among Virginia Tech students following the shooting at that campus (Hughes et al., 2011). Again, women in that study reported more severe symptoms than men. For violence on a more individualized scale, Gummelt (2018) analyzed the writings of middle school students, who responded to a prompt about their experiences with violence. The qualitative data contained three themes: cognitive (violence is pervasive), emotional (violence causes helplessness), and moral (violence is wrong). Perhaps contributing to the belief about the pervasiveness of violence, Shields, Nadasen, and Pierce (2008) found the ongoing experience of violence has a cumulative effect on children. These studies show that violence, whether on a large scale such as a bombing, or on a smaller, personal scale, inspires feelings of helplessness for both adults and children. In addition to feeling helpless, exposure and victimization may lead to feelings of vulnerability reflecting disproportionate thoughts about the pervasiveness of violence.

Individuals having a disproportionate belief about the prevalence of violence in schools could lead to self-perpetuating problems. That is, children who perceive schools

as unsafe have been found more likely to engage in violence (Radu, 2018). In turn, staff burnout has been linked to teachers feeling threatened or experiencing victimization (Bass et al., 2016). This means trauma not only plays a role in the development of mental health symptoms, but also influences the behavioral choices of individuals, which impacts others. As such, interfering with this cycle could be critical to the recruitment and retention of strong, quality teachers, as well as the mental health and well-being of all within schools.

Resilience. Interfering with the psychopathological impacts of trauma in order to foster resilience among individuals and schools as a whole is imperative for the future of the education system within the United States. Strategies can be employed at both the family and school level to support all. In general, building social capital acts as a buffer to the negative outcomes associated with trauma. The development of social capital relies on actions taken by families as well as schools.

In the home setting, finding an appropriate approach to talking about violence with children is not simple. Although scaring children may be ill-advised, so too is restricting all exposure. Crowell McQuarrie and Caporino (2017) found children whose parents chose extreme methods, either scaring or restricting access, to help them process violence presented in the media reported higher levels of anxiety. Realistic assurance on the part of the parent yielded the most desirable results. Employing routines and consistent expectations were also found to be supportive practices parents can engage in to protect children against the impact of exposure to violence (David, LeBlanc, & Self-

Brown, 2015). The choices and support offered through the family are invaluable resources that can benefit resilience in children.

In addition to realistic assurance and consistent routines provided in the home setting, schools should also do their part to ensure resilience among students. Specifically, the overall school climate (Reuter-Rice, 2008) and individual students feeling connected to the school helps children grow and feel safe (Yablon, 2015). Although it might look different for every school, national associations recommend creating a positive, caring climate at all schools (NASP, n.d.c), which include multitiered levels of support and increasing the availability of mental health services to students (Cowan et al., 2013). In a review of 21 studies, Gavine, Donnelly, and Williams (2016) found schoolwide universal programs that incorporate both social development instruction and the establishment of social norms were the most effective in reducing and preventing violence committed by adolescents. Not only do such schoolwide approaches improve students' attitudes toward violence, but the number of incidents involving physical aggression and violent behavior declined in schools employing such. Meaningfully supporting students builds resilience and benefits the reduction of violence in schools, which in turn yields positive outcomes for school staff members. How such resiliency factors into the current conversation about the impact of ongoing school violence nationwide and the practicing of violent intruder drills, particularly as these phenomena pertain to the experiences of preservice teachers, had yet to be revealed.

Teacher Shortage

There has been a recent increase in research on attrition rates and motivation for people to become teachers in response to a global shortage (e.g., Du Preez, 2018; Frei et al., 2017; Han et al., 2018). Researchers in Australia surveyed educators who had been employed between 1 and 4 years, identifying changes in motivation to continue to work in that capacity (Manuel, 2016). Specifically, they found that although reasons for entering the profession included wanting to make a difference, enjoying the course subject area, and wanting to impact children socially, those with more experience reported over time feeling constrained by pressure to prepare students for tests and engaging in practices that were the ideas of others (i.e., school administrators, rather than their own). These pressures led participants to report lowered self-efficacy, with over one third expressing uncertainty about whether they would continue teaching in 5 years. In addition to the decrease in self-efficacy related to teaching practices within the classroom, the results of other studies suggest the violent behavior of students (Bass et al., 2016) and additional responsibilities placed on teachers (Round, Subban, & Sharma, 2016) may be contributing to low numbers. Relevant to the United States, shortages exist across several specialization areas within education, including mental health professionals and teachers (U.S. Department of Education, National Center for Education Statistics, 2019).

Motivation to enter the teaching profession. With attrition rates rising, researchers have turned to studying motivational factors that attract individuals to the profession before actually entering the field. Han et al. (2018) surveyed high school

students and found higher interest in teaching among participants from cultures that value the profession as having great responsibility and deserving of respect. High academic achieving participants were not influenced by higher salaries, although low- and middle-achieving students were. The researchers also found that approximately half expected to work in a professional occupation and only 10% of those aspired to teaching, indicating a potential shortage of future educators among current high school students.

In addition to high school students, preservice teachers have also been the focus of research on motivation to enter the field. Wanting to work with children and appreciation for the work schedule have been identified as compelling reasons to pursue a career in education for some (Frei et al., 2017). Other studies have found intrinsic motivations, such as wanting to influence children and help them develop to their full potential (Du Preez, 2018), contribute to the decision. Four themes emerged from a qualitative study conducted in Sweden by Bergmark, Lundstrom, Manderstedt, and Palo (2018): "(Re)creating the caring school, Creating a desirable (professional) life, Fostering the upright human being and Forming valuable knowledge" (p. 270). In addition to the attractive schedule, the results of these studies suggest the potential to make a difference in the lives of children is a compelling reason to become a teacher.

Role of self-efficacy. Personal factors and experience also contribute to preservice teachers' thoughts and expectations about becoming certified educators. Baglama and Uzunboylu (2017) found a positive correlation among preservice teachers between age and self-efficacy. They also found a relationship between career decision-making self-efficacy and vocational outcome expectations. Hennessy and Lynch (2017)

identified self-efficacy and prior experience with teaching as the strongest motivators for preservice teachers to enter the profession. These findings highlight the importance of self-efficacy, which may be influenced by age and prior experience, as influential to the decision to pursue a career in education.

Motivation can also be impacted by experiences obtained during college coursework. Ismail and Jarrah (2019) found preservice teachers felt motivated by their student teaching experiences, which also influenced their perceptions of self-efficacy. It is important to recall that student teaching experiences come at the end of certification requirements. However, as previously noted, Manuel (2016) found early-career teachers reported lowered self-efficacy, with over one third expressing uncertainty about whether or not they would continue teaching in 5 years. With self-efficacy being energized at the end of schooling and then lowered within the early years of employment, the implication is that something happens during this time to alter self-perception.

Social utility. In line with the findings of others, Ponnock, Torsney, and Lombardi (2018) reported that most teacher career attrition happens within the first 5 years of employment. The researchers conducted a study to learn more about the differences in motivation between early-, mid-, and late-career teachers. Although other studies identified both internal and external factors generally serve as motivators for teachers, including personal success and finding inspiration in students and colleagues (Boru, 2018), Ponnock et al. found changes in motivation are observed over time. Specifically, although mid-career teachers reported being demotivated by the amount of work expected of them, the ability to make a positive contribution (social utility value)

influenced early-career teachers. Specifically, social utility value was found to be highest among preservice teachers, with significantly lower values for early-career teachers. The authors suggest the implementation of additional training to better prepare them for the transition to actual employment, warning that "the first five years in the field are the most crucial and also the most sensitive for teachers' motivation" (p. 39).

For some teachers, actual employment might include harassment and threats from students in the face of their attempts at social utility (Bass et al., 2016). In an anonymous online survey of teachers in one district in northeast United States, a positive correlation was found between student violence against employees, including insults, threats, physical attacks, and sexual harassment, and staff burnout. The same study found that when staff perceive schools as unsafe, they have a higher burnout rate and decreased work engagement. In an effort to preserve the safety within schools and in response to incidents of violence, teachers and other school employees are now tasked with added responsibilities, including being observant of indicators for potential violence among students (Cowan et al., 2013; NASP, 2015; Strobach & Cowan, 2019), engaging in crisis response trainings and threat assessments (Harris et al., 2018; Lenhardt et al., 2018; NASP, 2019), and leading students through lockdown drills (NASP, n.d.b). What was unknown was how preservice and practicing teachers' perception of school safety in light of highly publicized violent incidents and the practice of violent intruder drills may be influencing current staffing shortages.

Taken together, research on teacher shortages have identified several factors that motivate individuals to enter the profession. These include having a positive impact on

the learning and social development of children, appreciation for the work schedule, and salary for some. However, pursuing and staying in the teaching profession is also related to self-efficacy, which has been found to be strong towards the end of schooling, but drop off the first few years of employment. This drop in self-efficacy is suspected to reflect increasing work load demands, low rates of perceived social utility, and possibly feeling unsafe in the school environment. A gap in the existing literature was that teacher perceptions of self-efficacy specifically related to school violence was unknown.

Summary and Conclusions

I started this chapter by restating the purpose of the current study, which was to learn more about the perceptions of preservice public school teachers faced with implementing violent intruder drills as part of a district emergency preparedness plan. After presenting my literature search strategies, as well as the iterative process that guided the search, I detailed Kahneman and Tversky's (1979) prospect theory. I then presented major informative themes by synthesizing existing literature.

Relating to the current study, one of the major tenets of prospect theory is that decisions involving risk are made by weighting available information, which is also impacted by the *perceived*, rather than *actual*, likelihood of a potential outcome. Furthermore, prior experience and self-efficacy influence the perception of the decision-maker. Available knowledge about vulnerability to violence within public schools is inconsistent. Depending on how violence is defined, statistics demonstrate the likelihood of victimization ranges from extremely low (37 incidents within a 17-year span, according to Musu et al., 2019) to less so (160 incidents within a 13-year span, according

to Lenhardt et al., 2018). Extensive media coverage, the rise of the school safety expert as a role within the school community, and the focus on emergency preparedness related to violence suggests school shootings and violence in schools, in general, may now be embedded in our culture.

Decisions about safety and preparedness are left to individual schools with guidance provided by state and federal agencies. Best-practice recommendations range from taking a trauma-informed approach by increasing the employment of mental health professionals to considerations of hardening schools through the installation of physical measures, including simulations during violent intruder drills, or employing SROs. However, comprehensive literature on the perceptions of violent intruder drills is inconsistent and sparse. Public opinion includes the belief that current safety measures in schools create a false sense of danger. Research findings have revealed that, although training is valued, there is a general mistrust in others to respond effectively in the face of a violent event, as well as inconsistent and inaccurate knowledge about existing safety plans, which may or may not follow best-practice recommendations. With a lack of corroborating research, a single study conducted well over a decade ago with outdated practices continues to be cited as evidence that violent intruder drills do not raise anxiety in children. Perceptions of preservice teachers had yet to be analyzed.

Through studies conducted on other professionals who engage in emergency response training, such as first responders or military personnel, researchers have found varying results with respect to perceptions of and responses to such training. Although trainings have been found to improve skills and knowledge, increased mental health

symptoms, including anxiety and PTSD, have also been associated with the trainings. Both directly experiencing a traumatic event, and learning about an event through secondhand knowledge, have also been found to correlate with negative mental health symptoms.

Within the existing literature on teacher shortages, self-efficacy and prior experience were identified as driving motivators for individuals to enter and remain in the profession. Additional themes of making a positive difference in the lives of children academically and socially also emerged. However, the perceptions of preservice teachers on their social utility in light of sensationalism and inconsistent reports of violence within schools was unknown. The impact of the added responsibilities of school employees, now tasked with participating on threat assessment teams and being vigilant of signs of potential violence, on preservice teachers' self-efficacy was also unknown. The present study addressed the gaps in current knowledge about the impact of violent intruder incidents and drills on motivation to enter the teaching profession. Knowledge has been extended by illuminating preservice teacher's perceptions about violent intruder incidents and drills and the experiences of preservice teachers related to self-efficacy through the examination of qualitative data.

In Chapter 3, I present my role as the researcher and primary instrument for the current study. I then detail the methodology applied. I also detail issues of research trustworthiness and ethical procedures.

Chapter 3: Research Method

As teacher attrition rates are on the rise, examining preservice teachers' motivation to enter the profession relative to their perceptions was needed in order to inform future research on strategies meant to recruit effective, quality teachers. The purpose of this study was to learn about the perceptions of preservice, public school teachers faced with implementing violent intruder drills as part of a district emergency preparedness plan. Data were collected through individual, semistructured, open-ended interviews with participants.

I begin this chapter with a restatement of the research questions as well as the identification of the central phenomena and qualitative, phenomenological nature of the study. I then present my role as the researcher and primary instrument. I then detail specific aspects of the methodology used in the study, including participant selection, instrumentation, procedures for participant recruitment and data collection, and data analysis. Finally, I address issues of trustworthiness, including credibility, transferability, dependability, confirmability, and ethical procedures.

Research Design and Rationale

The following research questions guided this study:

RQ1: What perceptions do preservice teachers have about violent intruder incidents and drills within public schools?

RQ2: What are the experiences of preservice teachers who engage in violent intruder drills and training related to self-efficacy?

The central phenomena of this study were preservice teachers' perceptions of violent intruder incidents and their experiences of violent intruder drills within public schools.

In this study, I employed a qualitative, phenomenological approach. According to Creswell and Creswell (2018), the qualitative method is commonly used in social sciences research that seeks an understanding of the experiences of individuals and often involves interviews and the collection of data within the natural setting. Moreover, qualitative, phenomenological research is applicable for uncovering the perceptions held by participants related to a specific, definable experience or phenomenon (Burkholder, Cox, & Crawford, 2016). This approach was consistent with the purpose of the current study, which aimed to gain a better understanding of the perceptions and experiences of preservice teachers.

I used a phenomenological approach to address the identified gap in current knowledge regarding the impact of violent intruder incidents and drills on individuals' motivation to enter the teaching profession. Specifically, not enough was known about the personal lived experiences of preservice teachers with respect to the phenomena of interest. This research tradition has been applied to the search for themes of motivating factors that compel individuals to enter the teaching profession in previous studies (e.g., Bergmark et al., 2018; Boru, 2018; Low, Ng, Hui, & Cai, 2017). Seeking a deeper understanding of experiences for individuals tasked with responding to violent events, researchers have also applied this tradition in studies involving participants outside of the education field, such as first responders (e.g., Kranke et al., 2017; Spence & Millot,

2016). Learning more about the point of view of others benefits the scientific community when limited prior research on a phenomenon has been conducted (Stadtlander, 2018). Employing an emic focus, phenomenological research aims to give participants their own voice with the understanding that perceptions are not always consistent with reality (Burkholder et al., 2016). Because existing research had yet to illuminate the unique perceptions of preservice teachers, a qualitative, phenomenological approach was most appropriate for the current study. Consistent with Burkholder et al.'s (2016) ideas on phenomenological research, uncovering such perceptions will allow future studies to explore subsequent behavior and inform transferability of experience.

Role of the Researcher

Within qualitative studies, researchers play a critical role as an instrument for data collection, essentially becoming part of the study itself (Creswell & Creswell, 2018). Furthermore, it is through the researcher's own lens that the study is developed and carried through as well as the data analyzed (Creswell & Creswell, 2018; Ravitch & Carl, 2016). As the researcher in this study, my role included developer of the methodology and data collection tool (i.e., the interview protocol). I also facilitated all interviews; maintained, analyzed, and synthesized the data; and reported on the overall findings of the study. Additionally, my role required me to abide by the scope and boundaries of the study because this is ethically sound and expected within qualitative research. This included recognizing and addressing any potential sources of bias throughout the study.

Outside of the study, there were no relationships between me and the participants. The study was also not conducted in my place of employment. However, with the

researcher as the primary instrument in qualitative studies, bias and power differentials are inherent (Ravitch & Carl, 2016). I attempted to eliminate or reduce the potential for misrepresentation through the application of reflexivity strategies (see Creswell & Creswell, 2018; Ravitch & Carl, 2016). One strategy I employed was bracketing, which involves self-reflection through ongoing journaling done over the course of the entire research process as well as writing memos during interviews and data analysis as thoughts arise (see Burkholder et al., 2016). Engaging in bracketing helped me acknowledge and appreciate positionality (i.e., my role within the context of the research), my own social identity, and how the combination of these might have influenced my interpretation of the findings (see Ravitch & Carl, 2016). Reflexivity through bracketing also contributed to transparency within the study.

Initiating reflexivity for this study, I acknowledged related past experiences and social identities. Specifically, I am a former police officer, a current school psychologist, and a mother of two school-aged children. Each of these experiences and social identities had the potential to bias the lens through which I planned, carried out, and completed this study. Recognizing that potential caused me to reflect on the influence and subsequent biases affecting each step of the research process. Applying ongoing strategies of reflexivity helped me manage those potential sources of bias throughout the study (see Creswell & Creswell, 2018).

In addition to bracketing and recognizing past personal experiences, I continually consulted with members of my dissertation committee over the course of the study. Through consultation as well as sharing issues of my positionality, past experiences, and

areas of potential bias, I maintained honesty and neutrality for the duration of the research (see Creswell & Creswell, 2018; Ravitch & Carl, 2016). Furthermore, my notes and memos added another layer of transparency (see Korstjens & Moser, 2018). Those practices ensured the unique voices of the participants were represented in the study findings.

Methodology

According to Ravitch and Carl (2016), the complexity of the research design contributes to the validity of the findings within qualitative research. Such complexity is established through careful and intentional data collection, which starts with the deliberate sampling of participants and the selection or development of appropriate instrumentation, followed by careful recruitment of participants and recording of data. Finally, a well-developed plan for data analysis is also imperative.

Participant Selection

Although data collection should be cyclical and fluid (Ravitch & Carl, 2016), employing purposeful sampling is appropriate for qualitative studies (Patton, 2015). Purposeful sampling has been applied in other studies that informed the current study, including Bergmark et al. (2018); Bern-Klug, Singh, Liu, and Shinkunas (2019); Boru (2018); Kranke et al. (2017); Low et al. (2017); Perkins (2018); and Spence and Millot (2016). I used purposeful sampling in this study, which allowed for the collection of rich data that were specific and unique to the research population. The population of interest for the current study was preservice teachers who are engaged in the student-teaching phase of their education program.

I selected participants based on their status as a preservice teacher. The initial plan approved by the Walden University Institutional Review Board (IRB) opened participation to individuals who were enrolled in an education program and who were engaged in the student-teaching portion of their program. After this initial approval, however, I worked with the IRB to expand the inclusion criterion to those who were engaged in the student-teaching portion of their program as well as those who completed that phase of their certification within the preceding 6 months. Participants were known to meet the criterion by responding affirmatively when asked if they were enrolled in a teacher education program or if they were currently or within the preceding 6 months had been engaged in the student-teaching phase of their program.

The Walden University IRB initially approved plans for the recruitment of participants to be conducted primarily through Millersville University, located in Lancaster County, Pennsylvania. According to a spokesperson from the education department at the school, on average, Millersville University has 275 undergraduate students completing the student-teaching experience through the course of an academic year. The spokesperson also reported that approximately 165 individuals were completing that phase of their degree for the Spring 2020 semester. After receiving the initial approval, however, I worked with the IRB to change the recruitment strategy. Ultimately, and with renewed Walden University IRB approval, I recruited participants through online social media platforms, specifically Facebook and LinkedIn.

The number of participants for the current study was dependent upon saturation of the data, which Mason (2010) described as the point at which all themes that will emerge

have been presented. Furthermore, because the interest of qualitative, phenomenological studies is to obtain transferable, rather than generalizable findings, such research usually includes between five and 15 participants (Burkholder et al., 2016). Transferability refers to how easily a person outside of the study can recognize similarities between their own experiences and the experiences of the participants in order to infer the results to themselves related to the phenomenon at question (Burkholder et al., 2016). This circles back to the complexity of data collection within qualitative research spoken of by Ravitch and Carl (2016). Consistent with the estimation of Burkholder et al. (2016) that 15 participants is sufficient, in order to meet both transferability and obtain saturation of data, I recruited 15 participants for this study in addition to two participants who engaged in pilot interviews.

Interested individuals responded to posts on social media platforms, particularly Facebook and LinkedIn, by contacting me directly through my Walden University e-mail address. Additional potential participants were identified through snowballing, or asking those who had already agreed to participate in the study to invite others they knew to meet the inclusion criteria to contact me via e-mail, phone, or text message.

Instrumentation

In addition to the intentional selection of participants, employing appropriate and beneficial data-collection strategies is vital to the validity of qualitative research (Ravitch & Carl, 2016). I collected data for the current study using face-to-face (i.e., either in-person or through electronic platforms, such as Zoom), open-ended, semistructured interviews. Through open-ended interviews, which allow participants to respond using

their own words, data are collected that detail the unique perceptions and experiences of participants (Creswell & Creswell, 2018) as well as their attitude towards a phenomenon (Bradburn, Sudman, & Wansink, 2004). Applying a semistructured interview format includes asking questions that relate directly to the research question, followed up by probing questions that can elicit deep, rich, and nuanced data (Burkholder et al., 2016). Conducting the interviews individually was appropriate for this phenomenological study because such practices unveil unique and repeated themes beneficial for data analysis and overall findings (see Burkholder et al., 2016). To aid in data analysis, I audio-taped the interviews for future transcription. Using an open-ended, semistructured interview that incorporated questions directly related to the purpose and goal of the study was sufficient to gather data with which to answer the research questions.

I developed an interview protocol using guidance from Ravitch and Carl (2016), Burkholder et al. (2016), Creswell and Creswell (2018), and Bradburn, Sudman, and Wansink (2004). The interview protocol consisted of four parts. Part 1 included demographic questions, as well as space to record the date, time, and location of the interview. Part 2 included an introduction and brief summary of the purpose of the study. Part 3 consisted of the questions themselves, which were based on the research questions, purpose, and goal of the study. Samples of probing questions were included for each of the main questions, with the intent of garnering responses that included deep, unique perceptions and experiences of the participants. Part 4 of the protocol included closing remarks, as well as an explanation of next steps.

Pilot study. In order to further develop the instrument, establishing sufficiency and content validity, I conducted two pilot interviews. According to Bradburn et al. (2004), engaging in such practice can identify needed alterations for the improvement of the instrument, such as eliminating redundant or unnecessary questions, or clarifying confusing questions. For the pilot interviews, I pretested the interview protocol with two participants, who met the same criteria as the participants for the main study. The recruitment and data collection processes were also identical to those of the main study. The IRB approval number for the pilot study was 05-04-20-0724747.

Using face-to-face, open-ended, semistructured interviews, I collected data related to the research questions. The interview protocol was developed by me, and was further developed through the application of pilot interviews. This practice helped to ensure the unique perceptions and experiences of participants were captured, in addition to deep, rich, and nuanced data. The development of an appropriate instrument and methods for participant selection are the first steps in creating complex and valid research (Ravitch & Carl, 2016).

Procedures for Recruitment, Participation, and Data Collection

I also carefully considered the recruitment of participants and recording of data for the current study. The initial plan was that, once the interview protocol was fully developed and approval was granted through both the Walden University and Millersville University IRB, potential participants would receive an announcement describing the study and detailing the inclusion and exclusion criteria. Through the announcement, potential participants would have been invited to contact me directly through e-mail,

phone, or text message. After this initial plan was approved by the Walden University IRB, however, I proposed changing this process to recruit potential participants through social media outlets. Once the Walden University IRB granted approval for this change, I posted an announcement on Facebook and LinkedIn. Interested participants reached out to me directly through my Walden University e-mail. I then contacted them to set up a date, time, and location to meet. I based the details of the meetings on potential participant's comfort and convenience. For example, if the participant wanted to meet at their place of employment following the workday, I arranged to meet them there. However, if they preferred a different location, such as a public library, I met them there. Depending on the facility (i.e., school building or library), a private room was identified in advance and used in order to protect the anonymity and identity of the participant.

Upon arrival to the meeting, I provided and reviewed a consent form with the potential participant. When necessary, I sent the form electronically. After determining eligibility was met, if the potential participant provided consent, I commenced the interview.

When possible, I conducted direct, face-to-face interviews. I audiotaped the interviews, which served as the data collection for future transcription. If face-to-face interviews were not possible, I applied an electronically sourced platform (Zoom). I also recorded all Zoom interviews for future transcription of data. I recorded field notes on the interview protocols during the interview sessions.

Following the interview, I provided participants with an explanation of the next steps for the research. I also explained that the recorded interviews would be transcribed,

and the transcription provided to them via e-mail for review of accuracy, ensuring credibility, prior to the completion of the study. I gave participants the opportunity to ask questions immediately, and provided them with my contact information for questions that arose after the conclusion of the interview session. I also gave participants a $20 Amazon gift card as compensation for their participation.

The lengths of the interview sessions varied, and were determined by the responses of each participant to the interview questions. I determined the duration of data collection by saturation and number of participants. When recruitment resulted in too few participants, I identified additional potential participants through snowballing (Ravitch & Carl, 2016), asking those who had already agreed to the study to invite others they know to meet the inclusion criteria to contact me via e-mail, phone, or text message. Ravitch and Carl (2016) explained that snowballing, or chain sampling, occurs when one or a few participants provide the names of others who could contribute by offering additional perspectives. I also recruited additional participants through social media platforms. For example, I joined social media groups meant for current college students enrolled in an education program. Through such groups, I posted an advertisement for participation in the current study. Interested individuals responded to my post. These additional recruitment strategies resulted in participants from other universities.

I collected consent for participation and data through comfortable, convenient meetings. This included audiotaped recordings of one-on-one interviews, as well as my notes documented on individual interview protocols. I recruited additional participants, as needed, until saturation of data was met.

Data Analysis Plan

Phenomenological research is used to unveil the perception held by participants related to a specific, definable experience, or phenomenon (Burkholder et al., 2016). Because the purpose of this study was to learn about the perceptions of preservice teachers faced with implementing violent intruder drills, I developed the interview protocol intentionally to elicit data related to those perceptions. In order to make sense of and synthesize the data collected through this instrument, and thus answer the research questions, I dissected the data into codes, categories, and themes. I maintained organization of the data and emerging themes using ATLAS.ti data coding software.

First, I transcribed the audio recordings from all of the interviews. I included any field notes generated during the interviews with the connected transcriptions. Once transcribed, I identified and coded segments that captured meaning. According to Ravitch and Carl (2016), codes are labels or phrases assigned to meaningful segments. The assigned codes succinctly captured the meaning of the speaker's intent.

Once all of the data from the interviews were coded, I then inductively generated categories. Categories encapsulate groups of codes that share similarities, which are consolidated to represent major findings of all the collected data (Creswell & Creswell, 2018; Ravitch & Carl, 2016). Again, I intentionally assigned category names in order to best represent the overall meaning.

Finally, incorporating both codes and categories, I identified overriding themes. Themes may represent abstract relationships between the segments of data (Ravitch & Carl, 2016). I assigned a descriptive term that captures the meaning. The entire process

of identifying, synthesizing, and assigning descriptive terms to qualitative data is cyclical, requiring meticulous scrutiny and reflection in order to arrive at consolidated meaning (Saldana, 2016). In order to ensure the validity and objectivity of the codes, categories, and subsequent themes, I conducted repeated and continual analysis of the data. Specifically, I listened to the recorded interviews and read the transcripts multiple times, while engaging in practices of reflexivity and consulting with members of my dissertation committee. Engaging in this type of data analysis illuminated the unique perceptions and experiences of the participants, specific to the phenomenon at study.

Issues of Trustworthiness

Issues of trustworthiness within qualitative research include credibility, transferability, dependability, confirmability, and the inclusion of ethical procedures. In the following section, I further explain these concepts and how they relate to the current study. I also explain how the issues were addressed.

Credibility

Credibility refers to validity within qualitative studies (Saldana, 2016), and is directly linked to the research design (Ravitch & Carl, 2016). Ravitch and Carl (2016) offered several techniques to boost credibility, which were incorporated in this study. First, I ensured the data were consistent with the intent of the study through the selection of participants based on eligibility criteria. Saturation of the data, which was achieved through a sufficient number of participants, also contributed to the study's credibility. I employed member checking by periodically summarizing responses during the interview in order to allow for confirmation of understanding and by forwarding transcripts of

individual interviews to each participant, allowing them to confirm or further explain any responses using their own voice. I continually challenged interpretation of the data through my efforts at reflexivity, which included the use of journaling and bracketing. Finally, through consultation with my dissertation committee members, I ensured my understanding and representation of the data was genuine.

Transferability

The focus of phenomenological research is transferability of findings, or how easily a person outside of the study can recognize similarities between their own experiences and the experiences of the participants in order to infer the results to themselves related to the phenomenon at question (Burkholder et al., 2016). In order to increase transferability, I aimed to include thick descriptions of participants and the context, including general demographics as well as past experiences related to violent intruder drills and incidents. The first question of the interview protocol served to collect general demographic information of each participant. Additionally, within the subsequent questions I probed each participant's past experiences, definitions of success, and future expectations related to a career in teaching as well as school violence and drills. I added further contextual data through my field notes and memos recorded throughout the research process.

Dependability

Dependability in qualitative research is reliant upon research design resulting in the generation of stable data to accurately answer the research question (Ravitch & Carl, 2016). I ensured that the appropriate research methods were selected through alignment

within the current study. Specifically, seeking understanding of the perceptions and experiences of preservice teachers, I employed purposeful sampling and used a phenomenological approach. This was consistent with the teachings of Burkholder et al. (2016), who explained that phenomenological research is appropriate when analyzing the perception held by participants related to a specific, definable experience, or phenomenon.

Dependability within qualitative research also refers to the reliability of the findings (Ravitch & Carl, 2016). In order to demonstrate transparency and allow others to challenge the findings that emerge, Saldana (2016) suggested attaching a codebook as an appendix to research. For this study, I included a description of my reflexive thoughts and steps for coding. This detailed the iterative process that allowed me to arrive at the ultimate themes, serving as an audit trail. Additionally, I consulted with my dissertation committee members to vet the design of my research.

Confirmability

Confirmability in qualitative research refers to the objectivity of the findings (Ravitch & Carl, 2016). Transparency, reflexivity, and consultation with other experts contribute to confirmability (Ravitch & Carl, 2016). I addressed and maintained confirmability for the current study through member checking, bracketing, and consultation with my dissertation committee members, as described in the previous sections related to issues of trustworthiness. Engaging in each of these strategies ensured the findings reflect the unique and accurate experiences of the participants, rather than my own biases.

Ethical Procedures

Social scientists are expected to anticipate potential ethical issues when conducting research (Creswell & Creswell, 2018). This includes the need to protect potential participants, preserve respect for all, minimize harm, and maximize benefit. For the current study, no recruitment of potential participants or any gathering of data took place until IRB approval was granted. The initial plan was that consent from the Millersville University IRB would also be collected prior to the recruitment of potential participants from that institution and the gathering of data. Had consent been collected, recruitment would have begun by the Millersville University education department chair forwarding an e-mail composed by me to potential participants. Working with the Walden University IRB, however, I started recruitment of potential participants by posting an announcement on social media platforms. After potential participants contacted me directly, I obtained consent electronically prior to scheduling interview sessions. I maintained respect for all persons by emphasizing the voluntary nature of participation and describing the study in terms understandable to undergraduate college students. I also initially planned to ask the Millersville department chair to refrain from including me on the e-mail, and to refrain from telling me who the e-mail was sent to, in order to preserve anonymity and eliminate the pressure to participate.

I kept the identities of potential participants who responded to the e-mail, indicating consideration of inclusion in the study, confidential. I made participants confidential through the application of a coding system. Although I collected names and identifying information on the consent form, I assigned each participant a code, such as

P1, P2, etc. I did not include identifying information in any subsequent documents, but rather, replaced them with the corresponding code or simply removed them. For example, if P5 reported that she is currently employed at a specific elementary school, the name of the school was omitted. This is consistent with the teachings of Ravitch and Carl (2016), who suggested removing identifying information from all materials in order to protect participants' anonymity, thus preserving the ethical standard of respect.

I continued respect for persons by allowing potential participants a voice in determining the location for the initial meeting and interview session. I determined the location and time dependent upon the potential participant's comfort and preference, with the requirement of privacy being upheld. Once contact was made with potential participants, I presented them with a consent form, which explained the study. In conjunction with the consent form, I verbally explained the study, including potential risks and benefits, measures of privacy, and options to decline or discontinue involvement at any time. Additionally, I provided potential participants with a list of area counseling service providers. I paid special attention to the nonverbal behavior of each participant and I revisited the option to discontinue participation as the interview progressed, thus protecting the safety and well-being of each individual.

Establishing a system for data security is an important ethical practice, which serves to preserve the privacy of participants (Ravitch & Carl, 2016). To protect the participants in this study, I have maintained any confidential documents or artifacts in a locked cabinet in my office. These include consent forms, interview protocols, audio recordings, and field notes. I have also maintained electronic documents on my

computer, in a secure, password-protected Google drive. I am the only person who has access to any of the confidential information.

Following the completion of the study, I disseminated the results and findings to each participant via e-mail. The findings were also distributed to representatives from Millersville University charged with the education and training of educators. I will maintain data collected for this study for 5 years after the completion of the study, at which point it will be destroyed.

Summary

I detailed the research methods for the current study in Chapter 3. I used a qualitative, phenomenological approach to gain an understanding of the perceptions and experiences of preservice teachers, addressing the gap in current knowledge of the impact of violent intruder incidents and drills on preservice teachers' motivation to enter the profession. The described methods are consistent with recommendations presented in the literature for approaching such a research topic. I presented issues of research trustworthiness and ethical procedures. In Chapter 4, I present the results of the study.

Chapter 4: Results

Recognizing a current shortage of teachers in the United States (U.S. Department of Education, National Center for Education Statistics, 2019) as well as a gap in the existing literature about teacher perceptions of self-efficacy related to school violence, I conducted this study to explore the perceptions of preservice, public school teachers faced with implementing violent intruder drills as part of a district emergency preparedness plan. Using a qualitative, phenomenological approach, I attempted to gain a deep and unique understanding of preservice teachers' perceptions and motivation to enter the profession relative to the phenomena of interest: ongoing school violence and violent intruder drills in public schools. The illumination of such perceptions may serve to inform future research on strategies meant to recruit effective, quality teachers. The following research questions guided this study:

RQ: What perceptions do preservice teachers have about violent intruder incidents and drills within public schools?

RQ2: What are the experiences of preservice teachers who engage in violent intruder drills and training related to self-efficacy?

I begin this chapter with a description of the pilot study as well as the research setting and specific conditions that may have influenced the experiences of the participants. The data collection and analysis procedures are then presented, followed by a discussion of the strategies employed to preserve and enhance trustworthiness. Finally, I provide the results of the study in detail along with supporting data.

Pilot Study

With the intent of identifying areas of needed improvement for the development of an appropriate instrument for data collection and following the suggestion of Bradburn et al. (2004), I conducted two pilot interviews. These interviews resulted in two changes to the data collection procedures for the main study. First, the pilot interviews consisted of the same interview protocol questions and prompts with one exception. During the second pilot interview, I asked the participant if he had considered violent intruders and drills when contemplating the pursuit of his degree in education. His response helped me realize that the potential information collected from that prompt could provide meaningful data with which to answer the research questions. As such, I added the prompt to the subsequent main study interviews. Second, rather than writing fairly detailed observation notes during the interviews, which I realized was distracting me from the natural flow of the interview and causing me to overlook opportunities to delve deeper into the conversation through the application of prompts and probing statements, I jotted one- or two-word notes to myself. Immediately following the interviews, I then expanded the words to complete ideas or sentences. According to Ravitch and Carl (2016), development of a meaningful data collection instrument is vital for conducting complex and valid research. Carrying out the pilot interviews ensured that my interview protocol and procedure would garner meaningful data.

Research Setting

I initially planned to recruit potential participants for this study from Millersville University, a small university with an established education program in southeast

Pennsylvania. I limited the initial inclusion criteria to preservice teachers currently enrolled in an education program and engaged in the student-teaching phase of the degree program. However, due to the timing of the data collection, particularly in light of the closure of all Pennsylvania schools by the Governor in response to the coronavirus disease of 2019 (COVID-19) pandemic, I realized recruitment from that site would no longer be feasible. Restricting the inclusion criteria in such a way would also no longer be feasible. Effective March 16, 2020, Pennsylvania Governor Wolf closed all K–12 schools (Commonwealth of Pennsylvania, 2020) and Millersville University moved all classes to virtual instruction (Vigna & Krajcsik, 2020), changes that continued for the duration of the 2019–2020 academic year. As such, I sought and was granted approval from the Walden University IRB to recruit potential participants through social media platforms, such as LinkedIn or Facebook, and expand the inclusion criteria, opening the study to preservice teachers currently enrolled in the student-teaching phase of their education program as well as those who completed that phase of their program within the preceding 6 months.

In addition to the changes I made with respect to participant recruitment and inclusion criteria, the COVID-19 pandemic may have also impacted the data since the experiences of the participants at the time of the study were different than was reasonably expected when I initially developed the research plan. For example, during the proposal phase of this study, I did not expect that participants' experiences would include government-initiated social restriction, widespread remote learning for students, and increased mental health symptoms for many individuals subsequent to factors related to

the pandemic. These unanticipated and unprecedented phenomena may have influenced the participants' experiences as well as the data collected and my own interpretation of the study results.

Demographics

I kept individual participant demographics for this study confidential. I provided this assurance to potential participants through the recruitment announcement; detailed it verbally and in writing during the consent process; and maintained the expectation throughout the data collection, storage, and analysis. Relevant to the study, however, all participants met the inclusion criteria of being currently enrolled in the student-teaching phase of a teacher education program or having completed that phase of their education degree program within the previous 6 months. I made one exception, however, for one of the pilot interview participants. That participant reported having just completed the internship phase of a school psychology degree program. Similar to student-teachers, school psychology interns are required to complete 1,200 hours of field training, with at least 600 of those hours in a school setting (NASP, 2019). Two individuals participated in the pilot study. The sample for the main study included a total of 15 participants. This number of participants is consistent with the recommendations of Burkholder et al. (2016) to include between five and 15 participants in phenomenological research in order to reach data saturation. Additionally, it met the Walden University standard sample size of 10 to 20 participants for qualitative research. Through analysis of the data, I believed saturation was met.

Data Collection

Once granted approval from the Walden University IRB (Approval Number 05-04-20-0724747), I posted a recruitment announcement on two social media platforms: LinkedIn and Facebook. I posted the announcement multiple times to specific groups within those platforms. The announcement was also posted to various university alumni networking groups. I intentionally selected these and other groups because I am both a member of them and believe other members of those groups might meet the inclusion criteria for the study or know of individuals who meet the criteria. The recruitment postings also included intentionally applied hashtags, such as #StudentTeachers and #EducationAndSchools, because I believe those who follow such hashtags might have met or know someone who met the participant criteria.

Interested potential participants contacted me directly through my Walden University e-mail address. I replied to those who expressed interest by thanking them for their consideration, providing them with an electronic consent form, and asking them to respond to my e-mail with the words, "I consent," after having reviewed the form and if they felt they understood the study well enough to make a decision about participation. Once they gave consent, I scheduled interviews with the participants at their convenience. A total of 30 individuals contacted me with interest. Most e-mailed me after viewing the announcement on social media; however, some indicated having heard about the study through other participants. Seventeen ultimately granted consent and participated in the study; two of them as pilot participants for the development of the interview protocol.

The interview protocol, initially developed by me and further developed following the two pilot interviews by me along with my dissertation committee members, consisted of open-ended questions and probing follow-up questions in a semistructured format. This format benefits qualitative research by serving as a vehicle for the solicitation of individual experiences (Creswell & Creswell, 2018), which was consistent with the alignment of this study. In addition to participant responses to interview questions, I also recorded my observations and impressions in notes created during the interviews. I recorded the notes on electronic interview protocol forms and included them in the data analysis process.

I conducted all interviews virtually using Zoom. Because I conducted the interviews virtually, the location of the participants at the time of the sessions varied based on their own preference and was not known to me. I worked from my third-floor office at my residence at the time of all interviews. The door to the office was closed at all times, and nobody else was on the third floor of my residence when I conducted the interviews. The participants' interviews were conducted over a span of 3 weeks, and each lasted approximately 32 minutes, on average. I used the record feature of Zoom to audio record the interviews. Using the audio recordings, I then transcribed the data into Microsoft Word documents. I e-mailed the transcriptions to each respective participant individually to review for accuracy. None of the participants responded with feedback other than expressions of satisfaction with the accuracy.

Data Analysis

After the completion of data collection, I organized the raw data into codes. I then employed an inductive process to convert codes into larger categories and themes. The process began with transcribing the interviews into Microsoft Word documents, which I then uploaded to ATLAS.ti software along with my recorded field notes. My notes and each transcription were read through multiple times so meaningful segments could be identified. Ravitch and Carl (2016) described this as the coding process. While engaging in this activity, I periodically referred to the conceptual framework of the study and reminded myself of the research questions. To complete this stage of the process, I assigned succinct codes, which captured the meaning of the segments to each.

The data yielded a plethora of meaningful segments. The succinct codes I assigned related to the impact violent incidents and violent intruder drills within schools have on preservice teachers and students along with the subsequent added responsibilities of school adults, perceptions of vulnerability, experiences from and thoughts following training and the implementation of drills within classrooms, and perceived sufficiency of training. The codes were then organized into categories that shared similar meanings through comparing segments across transcripts. Discrepant cases were included where they existed to have a more comprehensive understanding of participants' overall voices. Through this process, I identified emergent themes, each of which contained subthemes from the categories and groupings, for both of the research questions. Finally, after identifying the emergent themes, I read through each piece of data one more time to ensure an accurate understanding, thus boosting the validity of the study.

Evidence of Trustworthiness

To enhance the contributions of this study to the existing body of knowledge, I addressed trustworthiness by employing strategies meant to increase credibility, transferability, dependability, and confirmability. These efforts are described in greater detail in the following subsections.

Credibility

To enhance credibility, or qualitative research validity (Saldana, 2016), I applied several techniques described by Ravitch and Carl (2016). First, with the exception of the participants included in the pilot interviews, I required all participants to meet the inclusion criteria of engaging in the student-teaching phase of their education degree program or having completed that phase within the preceding 6 months. One participant in the pilot interviews had just completed her internship for a school psychology certification rather than a teacher certification. Second, I obtained data saturation by including a sufficient number of participants. Third, to ensure my understanding of participants' responses and accuracy of the data, I periodically summarized replies during the interviews and forwarded transcripts of individual sessions to participants for confirmation. Finally, through reflexivity efforts and consultation with committee members, I continually challenged my interpretation of the data.

Transferability

To boost the transferability of the findings in this phenomenological study, I sought and included thick descriptions of the participants and their experiences. General demographic information was collected from each participant through the opening

questions of the interviews. By including this data, I allow those outside of the study to recognize similarities between themselves and the participants. Through the subsequent interview questions posed, I probed each participant's past experiences, definitions of success, and future expectations related to a career in teaching as well as school violence and drills, which allowed for the collection of thick and rich data. Direct quotes from the interviews were intentionally selected and included in the findings to emphasize the experiences of participants representative of themes that emerged. I further supplemented the data with field notes recorded throughout the research process.

Dependability

In order to generate stable data to accurately answer the research questions, known as dependability within qualitative research (Ravitch & Carl, 2016), I employed several intentional strategies. First, I used purposeful sampling when identifying participants for the study. I then followed the semistructured interview, which was improved through the implementation of two pilot sessions, for the collection of focused data. This process yielded data aligned with the purpose of the study, with the flexibility to account for individual differences between participant's experiences. Following the interviews, I provided each participant with a transcript of their session, enabling them to clarify any responses for accuracy. By maintaining recordings of the interviews, I repeatedly listened to each session, while reading the corresponding transcripts along with my field notes. In doing so, I reflected on the sessions multiple times for the identification of codes and emergent themes. Finally, I consulted with my dissertation

committee members for the overall design of my research, for each step of the entire process, and ultimately for the understanding and interpretation of the data.

Confirmability

Ravitch and Carl (2016) suggested practicing transparency, reflexivity, and consultation in order to uphold objectivity, or confirmability, within research studies. I maintained confirmability throughout this study by engaging in several activities. I actively committed myself to increase self-awareness of my own biases by engaging in reflective journaling. I supplemented this practice of reflexivity through consultation with my dissertation committee members. In order to enhance the accuracy of my interpretation of the experiences of the participants, I also employed member checking by providing interview transcripts to each participant following individual sessions. Finally, I maintained an audit trail, which further contributes to the confirmability of the research findings.

Study Results

Through meticulous and repeated consideration of the data, I identified codes and subsequent emergent themes related to the purpose of this study, which was to learn more about the perceptions of preservice teachers who have lived through an era of highly publicized school shooting events, and who have participated in school trainings and drills in response to violent intruders. In this section, I present the resultant themes for both research questions.

Research Question 1

I investigated two research questions through this study. Through the first research question I sought the perceptions of preservice teachers about violent intruder incidents and drills within public schools. Participant responses to the semistructured interview yielded three emergent themes: awareness of violence, vulnerability, and professional impact. I broke each of these themes down into subthemes, which consisted of multiple codes or categories. Figure 1 is a visual representation of the emergent themes and subthemes for this research question.

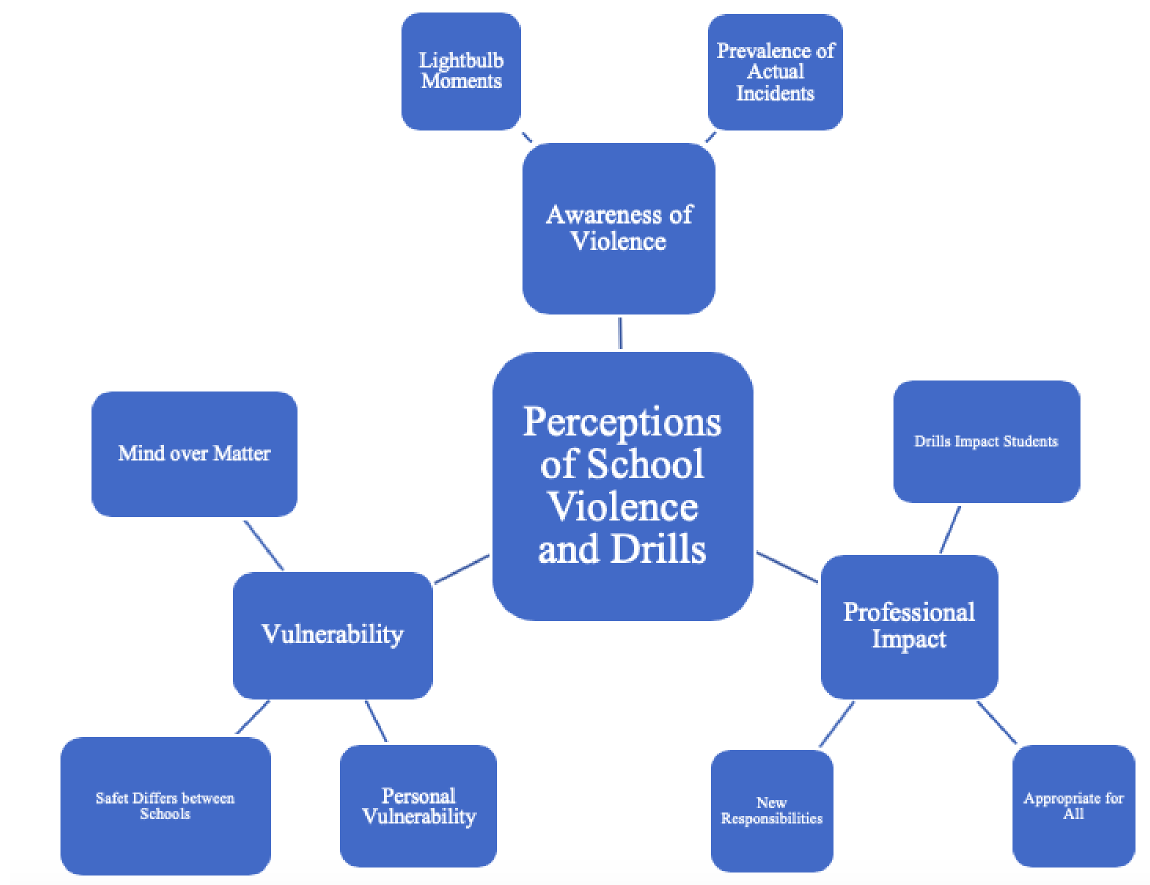

Figure 1. Emergent themes and subthemes for RQ1.

Awareness of violence. I identified awareness of violence as one recurring theme that emerged from the data. This included the conscious awareness of the very existence of violence within schools, as well as awareness of statistics, or the prevalence of actual incidents. The subthemes of lightbulb moments and prevalence of actual incidents capture how and when participants became attuned to school violence and their beliefs about how common school shootings or violent intruder incidents are.

Lightbulb moments. Although educators regularly practice violent intruder drills and the media reports on incidents when they occur, not all participants consciously thought about them when considering career options. Within the data, several

participants recounted their lightbulb moment, or when they first considered school violence. When asked what role violent intruder incidents or drills had, if any, on their thought process when deciding to pursue a career in education, 11 participants indicated violent intruders were not a factor, coded as *pursuit not impacted*. Most had not consciously considered it. For example, participant M18 stated, “I truly did not think about it too much.” Others, such as M5, indicated actively putting thoughts about violence out of their minds: “I try not to think about it because I don’t want that to influence my decision on something I really do enjoy doing.” This suggests that for a majority of the participants, the decision to pursue a teaching certification was not impacted by ongoing school violence or subsequent drills. However, not all of the participants responded consistently.

Four of the 15 participants indicated they did consider school violence when they were deciding on a career path. Participant M13 stated, “I thought about it and did take serious consideration towards it.” In addition to personal consideration, some shared having conversations about school violence with concerned loved ones. For example, M8 reported, “my family talked about it, like, ‘do you really want to pursue this because this might happen to you, especially depending on where you teach and such?’” After conversations with loved ones about their future and beginning the certification process, the reality of school violence moved closer to the forefront of some participants’ minds.

Beyond initial consideration of school violence when deciding on a career path, many participants described moments during which the potential for school violence rose to the forefront of their minds for the first time. These moments often transpired as a

result of experiences or witnessing media coverage throughout the duration of their time as a college student. Assigned codes included *increased awareness* and *media caused reflection.* Participant M13 reported, "in the past it wasn't as publicized and also as a young child, I was unaware." Another participant, M18, stated school violence "wasn't something that was on my brain until I started talking about it at school and then seeing some of the shootings on tv in schools and, like, on tv shows." Other participants witnessed violence between students for the first time during the course of their student-teaching. For example, M13 shared, "there was a fight in one of the classrooms, and I think that that experience as a whole was very pivotal because I did see violence between students … more than I had initially perceived during my own experiences as a student." These lightbulb moments may have contributed to the belief many participants shared about the prevalence of actual incidents.

***Prevalence of actual incidents*.** I identified a second subtheme within awareness of violence in schools related to the perceived frequency of school violence, which included assigned codes of *prevalence* and *statistics*. Although not all participants spoke of their beliefs about current trends, six reported thinking the prevalence of actual incidents of school violence is on the rise. Comments, such as "the statistics on school shootings have definitely gone up in the last couple of years" made by M3, "that seems to be more prevalent of a reality now more than it was even when I was in grade school and high school" made by M13, and "there is, you know, a higher chance of something happening in the school setting nowadays" made by M19, support prevalence as an emergent subtheme. None of the participants cited any clear statistics on the prevalence

of violence. In fact, some participants, such as M14, were misinformed, confidently stating rates such as “1 in 20 schools will experience a school shooting within a year.” I do not know from where such beliefs originated. For example, I do not know whether participants heard these rates through viewing media coverage or learned of such statistics in an educational environment. That is, M19 stated, “I’m not really sure if it’s more often, but it’s definitely shown more in the media recently” and M20 reported “I’ve tried to look at statistics and it’s so unclear whether these incidents have increased or decreased over time because of all the unsuccessful ones that have been stopped before they actually happen.” In addition to lightbulb moments and prevalence of actual incidents as subthemes to the emergent theme of awareness of events coming into view from the data, I identified vulnerability as a second recurring theme for the first research question.

Vulnerability. Within the data, I found emergent subthemes of personal vulnerability, safety differs between schools, and mind over matter. Noting a relationship, I meshed these subthemes together under the overall theme of vulnerability. In addition to the connection between the concepts relating to vulnerability, responses from the participants shed light on possible rationalization techniques for the juxtaposition of preservice teachers’ awareness of violence within schools and their desire to teach.

Personal vulnerability. Although not all reported feeling unsafe, almost half of the participants expressed feeling personally vulnerable in school settings. That is, 7 of the 15 participants shared sentiments coded as *do not feel safe*, such as “I get weary

standing outside alone. Like, I like to walk to my car with another teacher just to makes sure I'm okay" shared by M5, "I think [a violent intruder event is] very likely" shared by M8, or "it's likely that something like that would happen, whether it's an active shooter or a bomb threat, or whatever it may be, someone would be trying to cause harm to my students, and possibly even to me" shared by M17. Participant M19 explained her feelings of vulnerability in schools on multiple levels:

> It's a scary thing to be a student and be a teacher at the same time because, you know, whether I'm at college or I'm student-teaching, I kind of feel I'm in an unsafe space that whole time, which is kind of worrisome.

Although that participant spoke of safety in educational environments, a sense of pervasive vulnerability emerged from the data in other forms as well.

Six of the participants insinuated violence can happen anywhere, believing schools are no more dangerous than other places. For example, M11 stated:

> I think that there is a sense of danger, but I don't think that it's necessarily drastically more than any other big venue with a lot of people… in airports, at concerts… all places that we don't necessarily avoid just because of the violence. So, I don't think that there should necessarily be that worry about schools.

Another participant, M19, said,

> As a woman … as a minority, just you know, walking on the street at night, my safety is at jeopardy. Walking into a school building as a student, you're … you never know who can walk in. But I think no matter where you are, you could be

> at a restaurant, you could be at a bar, you could be at the library, and you never know what's going to happen because people are unpredictable.

Within the data, the notion of unpredictability was found repeatedly, coded as *never know*. At least 8 of the 15 participants provided responses to which this code was assigned.

I included the assigned code *feel safe* within the subtheme of personal vulnerability. Participant responses coded as such demonstrate that not all participants experience vulnerability in the same way. This code included statements such as "I've never felt unsafe in a school that I've walked in" shared by M2, "I think they're safe. I feel safe. I do not think I'm in danger when I'm at school" shared by M7, and "I think the likelihood [of experiencing violence] is pretty small" shared by M20. Although some articulated feeling more adamant about schools being safe than others, 10 of the 15 participants made comments that were assigned this code. With seven providing comments coded as *do not feel safe*, and ten as *do feel safe*, I recognized such perceptions must be more complex than simply feel feeling one way or another because mathematically those straightforward beliefs exceed the number or participants in the study.

Safety differs between schools. I identified a second subtheme related to the variability of perceptions of safety between schools, which also contributed to the overall emergent theme of vulnerability. Eight participants shared believing their own schools were safe. Examples of statements coded as *my school is safe* included "I think that in my school district it would probably be very, very unlikely that something would

happen" reported by M1 and "the district I was in was safe … I don't think that threat was a reality for me" reported by M13. Simultaneously, I assigned codes of *other schools are less safe* and *differs between schools* to comments such as "it depends on the school. For instance, my high school, anyone could just walk through the front door at any time," which was shared by M10. Respondents mostly agreed that high school buildings were more vulnerable than others due to lax safety measures. I found frequent comments about open doors for students to come and go throughout the day in the data. School demographics also came up frequently, with several participants expressing cultural differences between urban, rural, and suburban schools. That is, respondents often indicated believing urban schools have a culture more accepting of violence, but perhaps are less vulnerable due to subsequent increased security measures. One participant, M10, shared:

> In ________ City, because the distrust is so high, unfortunately, students could only come in through the front and there was a metal detector … and I felt safer there because everyone was coming through the same entrance I did with a metal detector and everything. But, I think in more rural or more suburban districts, because they're more lax about it, it would probably be easier for something like that to happen there and that's scarier for me.

Not all participants felt that way, however. Participant M5 commented on the district where she completed her student-teaching, saying "I was in a very foresty-type area, nothing else was really around, so it was a lot … it felt a lot safer in that sense." Still

others mentioned the downside of hardening schools through increased visible security measures.

Regarding the perception of vulnerability and safety between schools employing different approaches, two participants shared concerns that *security measures can be harmful*, a code that I included under the subtheme of security differs between schools. Participant M20 stated, “the thing I’ve been thinking about recently is the presence of police personnel in schools and how that impacts students, and whether or not that’s more of a threat versus a safety thing.” She added, “especially with police brutality and everything that’s going on,” suggesting the current social climate may play a role in perceptions, possibly serving as a limitation to the study. I discuss this and other potential limitations in Chapter 5.

Mind over matter. I identified a third subtheme that emerged under the overall theme of vulnerability: mind over matter. Most of the participants made comments such as “I don’t want to think about it every time I step in the school” shared by M1 or “I don’t really try and dwell on it because I don’t want to be scared at work and I don’t want my kids to be scared” shared by M7. I coded these as *out of mind*, understanding them to mean participants intentionally avoided thoughts of violence at schools. Four participants put such thoughts out of mind so much that, when asked directly, they reported having never been directly impacted by school violence; however, they later shared experiences to the contrary. For example, after saying she has never had any personal experience with violent intruder events, participant M19 described being at college when someone “came on to campus with a machete and, uh, they kind of, ran over some people with

their car." The participant minimized this experience, sharing that she was on the other side of campus at the time of the event. Other incidents of violence minimized by participants included an adult trying to burn down an elementary school while school was in session, lockdown as a high school senior for several hours while school officials searched for a gun on campus, shots fired outside of a school building, and a stabbing that took place at a neighboring district where friends of one participant attended high school. The nonchalant recollections of these accounts stood out to me as the participants' way of rationalizing their lived experiences.

Despite intentionally putting thoughts of violence out of mind or unconsciously forgetting or minimizing past experiences of actual victimization, many of the participants provided responses that I assigned codes of *think about victimization* or *could happen to me*. The code think about victimization included statements made by participants who explicitly said they have thought about the possibility of experiencing a violent event firsthand, as well as descriptions of measures taken indicating the respondent has considered the possibility. For example, participant M20 stated,

> If it's on the other side of the building we run out that exit, or I lock the door and we all get behind the one wall. So like, I basically in my head had it narrowed down to two options.

That same participant later added having thought

> I can be one of the people that's killed in a violent intruder incident. And, I even thought about that during the student-teaching because my room was right near

> the one entrance. Like, if there was an intruder, my classroom would be the first target. So like, that's something to think about.

Examples from the code *could happen to me* also demonstrated that just because they might not think about it all the time does not mean the potential for victimization has not crossed participant's minds. I assigned this code to quotes from ten different participants, including "I'm like, wow, this is something that could actually happen" stated by M1 and "I do think about it happening. I kind of look at it as like a 50-50 shot it's happening, um, all over" stated by M12. Participant M10 even described thinking while practicing a fire drill during her student-teaching that the drill itself might be a set-up for a violent intruder to draw all of the students and teachers out in order to impact more violence. Through analysis of the data, I realized the connections between these two codes, both meaning the potential for victimization has been considered by participants.

Along with the thoughts about potential victimization, six participants indicated knowing violent intruder incidents and drills are a part of public education these days. Coded as *know what you're getting into*, participants, such as M19, shared thoughts such as "I think a lot of teachers are really aware that their physical … being put in a position, physically, where they would have to protect their students." I identified another code of *willing to step up* with some participants, perhaps taking the awareness one step further, indicating confidence in how they might react to a violent intruder situation and others less so. For example, M2 stated,

> You almost have to have some level of confidence for standing up because it's just the same as me advocating for one of my kids for help. Um like, you have to have the will-power to just do what's right for kids in that moment.

Another participant, M3, shared,

> I love my students, but if push comes to shove, they're not, like, your whole world. And so, that was also, kind of, jarring to have to reevaluate how invested I am and to, just like, have a hard conversation with yourself about that.

I interpreted comments such as these to mean participants have evaluated their own role as protectors for students. Again, the data suggests participants block such thoughts from their constant conscious awareness.

The variation between participants of expressed levels of vulnerability, along with statements and actions to the contrary and consideration of willingness to protect students at all costs shows some participants may find comfort in putting on a brave face. That is, some reported consciously feeling safe, while subconsciously engaging in behavior or sharing thoughts that indicated feelings of vulnerability to varying degrees. This may be indicative of rationalization techniques employed by student-teachers to work through the juxtaposition of school violence and their future career goals.

Professional impact. I identified a third emergent theme from the data related to the first research question. Subthemes included drills impact students, appropriate for all, and new responsibilities under the overall theme labeled professional impact. This theme covers thoughts student-teachers have about how their role as educators applies to ongoing school violence and subsequent safety drills practiced in the classroom.

Drills impact students. The perception preservice teachers have about the impact of drills on students contributes to the professional impact of ongoing school violence and violent intruder drill. This subtheme consisted of a range of codes from drills are *empowering* and drills are *important for developing awareness* among students to drills *teach potential perpetrators* and drills *cause anxiety/trauma*. The range of codes exemplifies the complex implications such drills are perceived to have on students.

Every participant expressed believing the practicing of drills with students should be done. Participant M2 explained that "they are important just so we have, the kids have an understanding that bad things can happen." Once an understanding of school violence as a possibility exists, "students need to be aware of what to do at least, even if it's just getting into a classroom, hiding, or something," as participant M8 stated. I assigned the code empowering to response segments from ten different participants. For example, M1 stated,

> I also want my students to know where [the emergency binder] is, too, because they're fully capable of picking up the phone and making a phone call, or they're fully prepared of reading a short, quick sentence that says this is what you need to do real quick.

The benefit of practicing responses was further explained by M3, who described working through violent intruder drills with students as important in order "to be able to work together as a team because there is only one teacher and 25 students." Although different reasons were provided, the idea of teaching students proactively was consistent between all participants in the study.

In addition to raising awareness among students and empowering them, many participants shared concern that engaging in violent intruder drills also has negative consequences for students. Only one raised concern about drills helping future perpetrators learn ways to cause more violence. However, 11 of the 15 participants provided responses coded as drills *cause anxiety/trauma*. Examples included a statement by M14:

> I had a few students that, kind of, cried. And you try to reiterate that this is just a drill. We're showing you, you know, if something were to happen what we would do. But, I think it's very, um, a surreal moment for them.

That participant later shared, "I think that was probably one of the hardest days in my student-teaching experience was having them practice this lockdown drills, and then just ask … just all these questions, like 'if this were real, would I die?'" Taken together, in addition to all participants indicating they believe engaging in violent intruder drills is needed, most also shared beliefs about the emotional harm such practices cause for students.

Appropriate for all. As a part of the overall theme of professional impact, I identified the need to differentiate the lessons and instruction on violent intruder drills between various student populations as an emergent subtheme labelled appropriate for all. This subtheme included the code *age-appropriate*, which captured segments in which participants expressed the need for drills to be done at the appropriate developmental level of the students. For example, participant M7 stated,

> I think it looks different more with the preparation; the leading up to the practice. Like, in kindergarten this year we read a book, 'I am Not Afraid,' and we talked about the intruder being a wolf and how you're running from the wolf. I wasn't in the older grade when they were preparing, but I think that you could, kind of, maybe be a little more honest and they would be able to understand.

A lot of the comments included recognition of the need to minimize fear, particularly among younger students. One code that I assigned repeatedly for participants speaking of experiences with young students was *books are helpful*. I found no such strategies or tips for facilitating the drill process with older students within the data.

Beyond the age of the student, ability level also came up frequently. Of the 15 participants, seven just earned or are working to earn certification in special education. One other is certified as an intervention specialist. I coded segments from these participants repeatedly as *special education needs may differ*. One participant, M11, describing a time when she led her students through a different type of safety drill, stated that the class

> knew about the drill plenty ahead of time. So, we practiced it a few times … and then when the actual drill happened, I remember one of the students, his knees just locked because he was so stressed and so overwhelmed at what was happening.

Another participant, M17, shared "in an Autism support classroom, drills are really hard to do. I've seen, with fire drills it's very hard for our students to react well in a situation where they're not … where it's not something they're used to doing." These thoughts

suggest preservice teachers recognize training students and practicing drills cannot be done using a cookie cutter approach, and there are multiple factors to consider in order to ensure the drills are done appropriately to match the unique developmental level of the students.

New responsibilities. I noted a third subtheme within the overall theme of professional impact, which relates to the change in responsibilities teachers now face in light of ongoing school violence and as facilitators of violent intruder drills. I found the subtheme of new responsibilities includes codes such as need to *be prepared*, *stay vigilant*, *keep kids calm*, and *process emotions*.

Several participants highlighted the need for preparation, such as knowing the basic procedures and where to go during the chaos of an event. One participant, M5, described a time when an administrator in her school used a code word to announce a lockdown because gunshots had been reported outside of the school building. Hearing the announcement and not recognizing the code, the participant went into the hallway and asked another teacher what the code meant. As participant M20 explained, in her student-teaching classroom "there was a big book, like, what to do in these scenarios. I wouldn't have the time to read that in an emergency situation." She later added,

> I need to be prepared and to know what happens, but the students do too. They need to be cooperative and understand, like, I need to do this and be quiet because that could be the difference between life and death, which is crazy to even think about.

I found the meaning behind these segments indicate preservice teachers recognize the importance of advanced preparation.

In addition to being prepared for drills and actual events, six participants also discussed the need to stay vigilant. Participant M17 commented on the need to observe the mental health of her students as potential perpetrators of violence, saying "you have to be vigilant at all times. Like I said, you have to be looking for those nonverbals … seeing those warning signs." Others discussed vigilance with respect to the immediate environment. For example, M14 asked,

> What if you don't get an intercom, like, what if in a real situation someone's not over the intercom saying 'this is what's going on,' you know? So like, how do you keep teaching, but you're listening for something else that could possibly be going on?

Staying vigilant, in that sense, is a constant added responsibility.

A responsibility that is not constant, but would fall on the shoulders of educators in a real emergency event is the need to make a decision. I coded data as need to *make a decision* in 12 out of the 15 interview transcripts. Some participants described being given scenarios during drills and deciding what course of action to take with the class. These decisions were reportedly "nerve-racking," according to both M2 and M17, particularly as other school adults followed the lead of the student-teacher. However, beyond making decisions during drills, some participants spoke about the challenge of deciding how to respond in the event of a real emergency situation. For example, although participant M13 stated the "training I received stressed that it doesn't matter;

like, it doesn't need to be perfect. You just need to remember these main things and do what you can," others expressed anxiety about the consequences of their actions, such as "it's definitely scary thinking about I might have to protect my students one time, and then if I do protect them, like, was I really protecting them or did some of them end up passing with me?" asked by participant M5. Regarding such decisions, participant M18 summarized her thoughts succinctly: "that's a lot of responsibility for a lot of little children."

In addition to making decisions, participants also reported on the responsibility to preserve the mental health of their students surrounding violent intruder drills. Coded as *keep kids calm*, M3 stated "even though it's a drill … I would have to be emotionally in charge of all of my students while trying to keep my own [emotions] in check." That task is not simple, according to some participants. As M2 noted, "it's hard because they have to be quiet at the same time, so you can't console them." I considered *process emotions* as a related code, which I assigned to segments from five different interview transcripts. Through their statements, participants recognized the need to help students digest their thoughts and feelings following both drills and actual events as an additional professional responsibility.

Although to some, violent intruder drills may seem like a small addition to the tasks expected of teachers throughout a school year, the preservice teachers in this study unveiled several perceptions of the impacts the drills have on them professionally. These include managing the multi-faceted effects the drills have on students, assuring the drills

are conducted at the appropriate developmental level of the students, and the need to be prepared and vigilant at all times.

Analyzing the data, I found three emergent themes to answer the first research question. Specifically, I recognized awareness of violence, vulnerability, and professional impact all contribute to preservice teachers' perceptions of violent intruder incidents and drills within public schools. My identification of these themes was supported by the emergence of multiple subthemes for each.

Research Question 2

Through the second research question I sought the experiences of preservice teachers who engage in violent intruder drills and training related to self-efficacy. I identified two emergent themes from the data: self-confidence and sufficiency of training. As with the themes from the first research question, I broke down both of these overall themes into subthemes comprised of multiple codes or categories. Figure 2 is a visual representation of the emergent themes and subthemes for this research question.

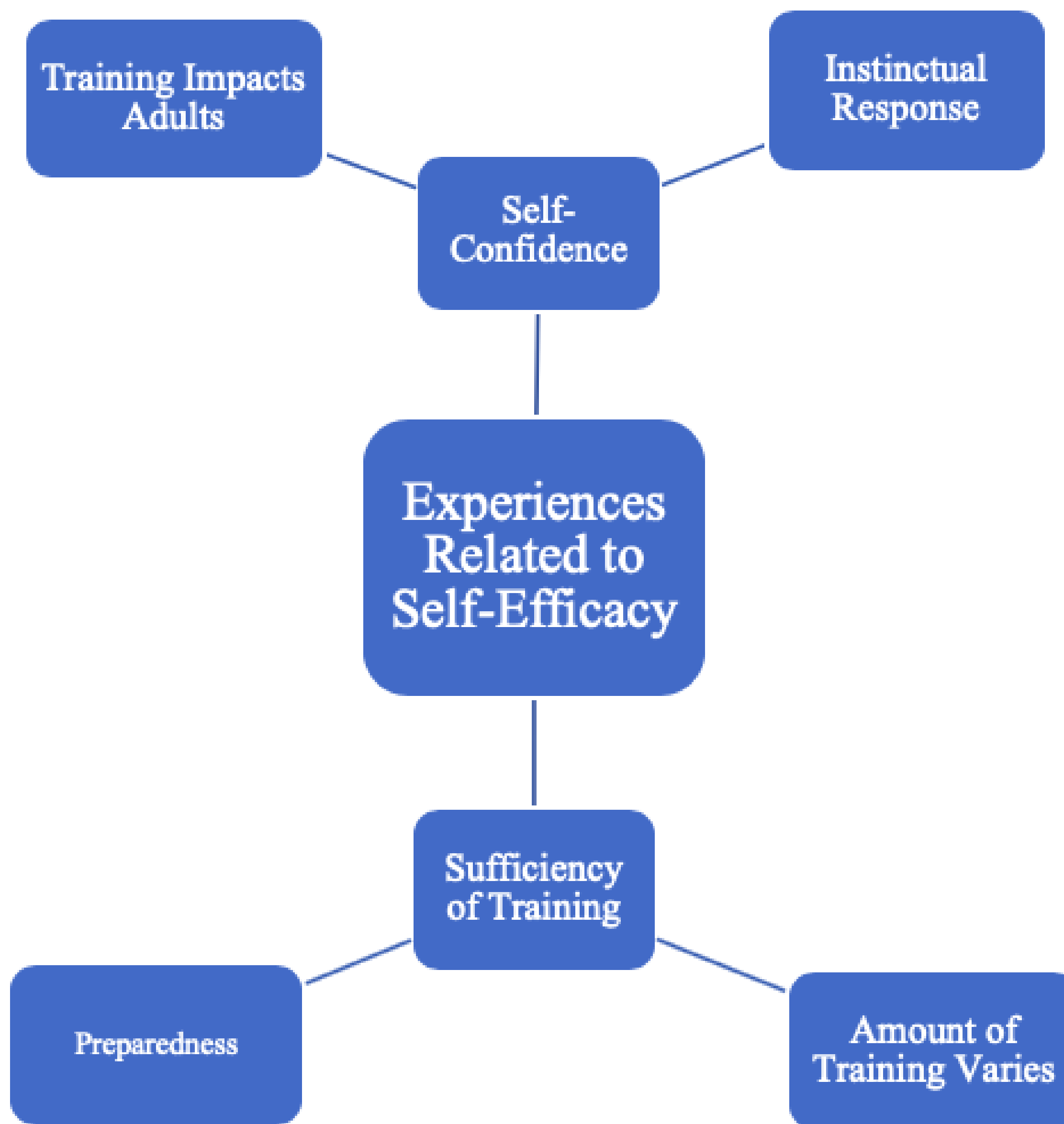

Figure 2. Emergent themes and subthemes for RQ2.

Self-confidence. I identified one emergent theme related to the second research question, which dealt with the confidence participants expressed about their ability to respond in accordance with guidelines and training received on violent intruder drills. This included various impacts such trainings have on preservice teachers and their beliefs about how they would actually respond in a true violent intruder situation. I identified

the subthemes of training impacts adults and instinctual response to capture the concepts repeated throughout the data. All participants spoke of their self-confidence, which ranged widely. For example, although participant M11 reported "I would be panicked and a little scared, but I think that I would be able to put it all into action," M19 stated "I'm not that confident." Most participants fell somewhere in the middle, including acknowledgments such as "I'm still learning a lot and I have a lot to learn" shared by participant M1.

Training impacts adults. As a subtheme to self-confidence, I noted the impact of running drills and learning about concepts of school safety on participants multiple times when analyzing the data. Several participants spoke about experiences and trainings as a college student, which caused them to think about their role during violent intruder events for the first time. As participant M3 stated, "it was like, oh, I never really put that responsibility on myself as a teacher." When engaging in drills, although M11 described feeling "numb to it" having been through so many drills as a child, most participants told of adverse reactions. I assigned codes such as drills are *chaotic* and drills are *stressful* to numerous segments throughout the data. Participants listed things that contribute to the chaos of drills, such as daily attendance, knowing where each student is at that exact moment, keeping students in line, making sure they are following along and taking the drill seriously, managing personal emotions and keeping students calm, remembering the training, and making decisions as a leader. As M20 put it, "it's pretty scary because even remembering what stuff you have to take out of the room … it's, like, a lot to think about." Participant M2 described the stress she experienced during a drill: "it's definitely

nerve-racking … you second guess yourself in that moment. Like, did I actually lock the door? Or did I just pull it shut? Is this, like, do I need to close my outside blinds, too?" Participant M14 stated, "a lot of times, you know, you feel like, what more could I do? Am I doing enough? You know, is this the right decision? Is this going to protect my students?" Such comments describe the emotional impact running drills with students have on some preservice teachers.

Outside of classroom drills, participants spoke of the emotional impact of the educational trainings themselves. Many described different trainings they received either through college courses or student-teaching professional development. Most mentioned A.L.I.C.E. (Alert, Lockdown, Inform, Counter, Evacuate) trainings or videos. Although some described hearing only stories about actual school shootings, others reported sitting through actual simulations or reenactments of events. For example, participant M10 stated a trainer

> lined us up and had us sit … he walked between us and, just kind of, pointed at the floor on both sides, which is apparently what the Kent State shooter did. So, he was trying to show us, if you just sit there, you're sitting ducks and, and … and you're going to be killed.

She later described her emotional reaction following that training, stating:

> It was scary for me … it was awful, you know? Like, I hadn't even been in the classroom yet with the kids there, and this was something that we were already doing, and it was just … yeah, it was nerve-racking.

Participant M3 also described how she felt after participating in a violent intruder training. She shared, "it definitely left me feeling, like, a little scared or nervous the rest of the day to have that training." Analyzing these segments helped me realize school safety trainings may teach more than simply the steps to follow in an emergency.

As a result of what was learned through trainings or experiences at student-teaching sites, many participants commented on the importance of preparing the physical environment for defense against violence. Participant M1 talked about asking each of her second grade students to bring in a can of soup to keep at their desks all year as an object for throwing at a potential attacker. Others mentioned setting up the classroom in a way that would make evacuating or barricading a simpler process. For example, the idea of putting a magnet in the doorframe of a locked door came up multiple times, so "if there's an intruder, you just take away the magnet, close your door, and you don't have to worry about fumbling with your keys or anything," as M3 explained. In addition to the emotional impacts of training mentioned earlier, these were some practical ideas the preservice teachers could apply for the safety of themselves and students.

Instinctual response. A second subtheme I identified under the overall theme of self-confidence had nothing to do with the training received or any drills practiced. Nine out of the 15 participants provided response segments which I coded as *response will be instinctual*. This and other codes, such as *adrenaline* and *willing to step up* contributed to the subtheme of instinctual response. For example, participant M20 shared "I think at the end of the day it ends up being almost more instinct." Furthermore, participants communicated an appreciation for and wanting of more instruction and practice on how

to respond in a real emergency situation, but ultimately predicted their actions might not align with those trainings anyway. As M8 put it,

> I would like to know some more options on what I could do, but yeah, at the same time, whatever happens that day is going to happen, and you're going to do your first instinct and hope for the best.

Incorporating both the impact of training for violent intruders with and without students and beliefs about an instinctual response, most indicated a mid-range level of confidence. That is, some participants expressed confidence and some a lack thereof, but most fell somewhere in the middle.

Sufficiency of training. I identified a second theme related to research question two from the data with subthemes of preparedness and amount of training varies. The theme sufficiency of training covers perceptions preservice teachers have with respect to the sufficiency of the training they have received. Specifically, how satisfied participants are with the types and amount of training they have completed as they move on to the start of a career in education fall within the theme of sufficiency of training.

Preparedness. Participants reported various levels of readiness when thinking about their own ability to lead an emergency response. I identified codes such as *feel prepared*, *feel unprepared*, *disagree with recommendations*, and *want more training/guidance*, which made up the subtheme of preparedness. Of the 15 participants, only three explicitly reported feeling prepared. Likewise, only three reported feeling unprepared. The remaining nine presented feelings of ambiguity.

I understood some of the ambiguity in perceptions of preparedness as stemming from the recognition that guidance and procedures vary between trainings, districts, and even buildings. Participant M10 explained,

> The drills that my district implements with the kids could be completely different from what I've learned. And so, I might be telling the kids 'we need to do this, this, this, and this,' and they might be like, 'but that's not what we practiced.'

Another participant, M14, shared, "where I graduated from, they don't do A.L.I.C.E. training. They're just not there yet, which is a shame because you would think that all schools would, kind of, come together and say, you know, what is the best way." Others expressed dissatisfaction with recommendations they received from trainings, believing them to be outdated or simply not the best course of action. For example, when asked to describe how closely she thinks she would be able to follow the recommendations from her training, M8 said "I did not think that it was the best way to handle things in the middle school. Um, just lock the doors and hide." This suggested she disagreed with what was taught.

In addition to schools and districts following different procedures, some classroom procedures vary within schools. So, although one participant shared feeling more prepared at the end of a week during which her student-teaching school practiced violent intruder drills every day, others implied feeling unprepared due to a lack of training in all settings to match their certification. For example, M13 stated "I was only with the regular education class whenever we did the drill. I would like to see how that life skills teacher approached these as well." Much of the data showing a lack of

preparedness or ambiguity overlaps with the other subtheme (amount of training varies) within the overall theme of sufficiency of training.

Amount of training varies. When considering sufficiency of training for response to school violence as it relates to preservice teachers' self-efficacy, I noted discussion dealing with the amount and source of such training repeatedly. Subsequently, I identified amount of training varies as an emergent subtheme consisting of codes such as *trained through college*, *trained at site*, and *independently trained*. Of the 15 participants, only 7 reported gaining experience through their college program. Within those, only a few indicated the training was a requirement for graduation. The others mentioned discussing school violence with professors only informally following highly publicized school shootings in the media. At student-teaching sites, some preservice teachers participated in emergency response trainings during convocation or teacher in-service days. However, not all were given that opportunity. Additionally, not all participants experienced violent intruder drills at their student-teaching sites. Coupled with the inconsistency between guidance and lack of any sort of consistent curriculum for learning such procedures, this suggests the amount of training and experience varied widely between the participants.

In response to the second research question, I identified two emergent themes. Self-confidence was one theme, in which I recognized the influences of training and thoughts about instinct. The other theme I identified, sufficiency of training, incorporated participants' thoughts on preparedness and variations in trainings received.

In search of answers to two research questions proposed within this study, I reviewed and analyzed all data collected. The following research questions guided this study:

RQ: What perceptions do preservice teachers have about violent intruder incidents and drills within public schools?

RQ2: What are the experiences of preservice teachers who engage in violent intruder drills and training related to self-efficacy?

Through my analysis I identified codes, made connections between segments, and unveiled multiple themes related to the purpose of this research, which was to learn more about the perceptions of preservice teachers who have lived through an era of highly publicized school shooting events, and who have participated in school trainings and drills in response to violent intruders.

Summary

I identified five emergent themes and answered both research questions from the data I collected for this study. I began this chapter with a review of the purpose and research questions for this study. I then reported on the pilot interviews, followed by a description of the research setting, participant demographics, and data collection and analysis process. After addressing evidence of trustworthiness, I detailed the study results. Specifically, in response to the first research question, through which I inquired about perceptions held by preservice teachers for violent intruder incidents and drills, the data yielded by this study unveiled three emergent themes: awareness of violence, vulnerability, and professional impact. In response to the second research question,

through which I sought the experiences of preservice teachers who engage in violent intruder drills and training related to self-efficacy, I identified two emergent themes: self-confidence and sufficiency of training.

In Chapter 5, I provide an interpretation of the findings, specifically describing how the results extend and relate to existing knowledge within the field of school safety. Additionally, I outline limitations of the study. Finally, I offer recommendations for future research and potential implications of positive social change stemming from the study.

Chapter 5: Discussion, Conclusions, and Recommendations

Ongoing school violence and the implementation of violent intruder drills in public schools prompted this qualitative, phenomenological research study in order to explore the perceptions of preservice teachers faced with these phenomena. I conducted this study to illuminate the perceptions of those who have not yet entered the profession, particularly in light of prior research on current teacher shortages. The results of such prior studies have revealed experience and self-efficacy as factors that motivate individuals to pursue a career in education (see Du Preez, 2018; Frei et al., 2017; Han et al., 2018; Manuel, 2016). Learning more about preservice teachers' perceptions regarding school violence and violent intruder drills may inform future research on strategies meant to recruit effective, quality educators.

I found that most participants had not been consciously aware of school violence or at least had not considered their future role as it relates to school violence until after beginning in their certification programs. Furthermore, although a few confidently reported feeling safe, some contradicted themselves, and some even minimized or blocked out previous experiences with school violence. I also found participants believe they are responsible for processing emotions with students following incidents or drills. Regarding self-efficacy, participants reported feeling anxious or scared having participated in violent intruder trainings, and many also reported their ultimate response in a real violent intruder situation will likely be instinctual. Finally, participants reported feelings of ambiguity about their preparedness for responding to a real violent intruder

situation. Dissatisfaction with the consistency of guidance between schools and insufficient training experiences contributed to such ambiguity.

In this chapter, I offer an interpretation of the findings, specifically describing how the results extend and relate to the existing body of knowledge as well as the limitations of the study. I also provide recommendations for future research and describe the potential for positive social change at the individual, organizational, and societal level. The chapter and overall dissertation concludes with a message that envelops the general spirit of the study.

Interpretation of Findings

In response to ongoing violent incidents in public schools, such as the 2018 shootings at Stoneman Douglas High School in Parkland, Florida and Santa Fe High School in Houston, Texas, the Department of Education has employed safety experts for the provision of guidance and recommendations on how to protect U.S. schools (Strobach & Cowan, 2019). Recommendations for safety include physical changes to schools and the implementation of drills in response to violent attacks, which have added new responsibilities to educators (Harris et al., 2018). Specifically, in addition to their traditional role, teachers must now be prepared to react to potential safety threats (NASP, 2019). Some schools are training staff with courses in emergency response, such as "Stop the Bleed," which teaches how to correctly apply a tourniquet (Harris et al., 2018), recognizing that school staff would be the true first responders because they would be on scene if an attack were to transpire. Simultaneously, current trends in the field of education show teacher shortages worldwide, with researchers such as Manuel (2016)

identifying the perceptions of prior experience and self-efficacy as motivating factors for individuals to enter the profession. Despite the prevalence of violence and violent intruder drills in schools, not enough is known about how ongoing school violence and related drills impact the perceptions of preservice teachers who have not yet begun their career.

The findings of this study contain the unique perceptions of preservice teachers. I framed the research using Kahneman and Tversky's (1979) prospect theory, which posits gains and losses are weighted to influence decisions people make that involve risk. According to the theory, information is edited to eliminate what might be considered extremely unlikely, and the availability heuristic is employed to further inform perception (Tversky & Kahneman, 1972). What is left is then evaluated, and the decision with the highest potential value is then selected (Kahneman & Tversky, 1979). This process results in the *perceived* likelihood of an event rather than the *actual* likelihood, influencing the decision (Tversky & Kahneman, 1981). Themes that emerged from the collected data of this study show confirming and extending examples of how prospect theory can be applied to the decision to pursue a career in education in light of school violence and subsequent response drills.

Research Question 1

Through the first research question, I investigated preservice teachers' perceptions of violent intruder incidents and drills within public schools. I identified three emergent themes concerning this research question: awareness of violence, vulnerability, and

professional impact. Supported by multiple subthemes, each theme confirms or extends current knowledge in the school safety discipline.

Data supporting the theme of awareness of violence shows the appropriateness of applying prospect theory to the understanding of preservice teachers' motivation to enter the profession. Within the theme of awareness of violence, although anxiety about the safety of schools in the United States has been on the rise since the tragedy at Columbine High School in 1999 (Elsass et al., 2016) and experts now claim that mass school shootings have become "part of the American cultural landscape" (Langman, 2009, p. 3), I found many participants had not thought about school violence or what school violence could mean for them as future educators until after they had begun their program requirements. In addition, many participants reported awareness that rates of violence in schools has been on the rise in the last few years, the years in which they were working through their certification program. According to prospect theory, people eliminate extremely unlikely events from their conscious thoughts when making decisions that involve risk (Tversky & Kahneman, 1972). This may explain the number of data segments coded as *pursuit not impacted*, which I found in 11 out of the 15 interviews. However, with 79.9% of public schools requiring all students and staff to participate in violent intruder drills (NASP, 2019), the notion of school violence and subsequent drills have become commonplace. As participants engaged in educational experiences, both in- and outside of degree requirements, lightbulb moments transpired and inaccurate beliefs about the prevalence of school violence rose for many, demonstrating the impact of emotionally charged experiences, such as viewing reports of school shootings in the

media or participating in simulation trainings, on the saliency of thoughts. With comments about not wanting fear of violence to deter them from fulfilling a meaningful personal goal, participants' continuation despite trepidation is consistent with the findings of Konstantinidis et al. (2018) that the magnitude of incentives can buffer risk-aversive behavior even when extreme outcomes are possible.

I also found an appropriate application of prospect theory to understanding the perceptions of preservice teachers through the identified theme of vulnerability. Participants expressed complex perceptions of safety with some providing comments coded as *do not feel safe*, some as *do feel safe*, and some incorporating both sentiments. Such complexity may reflect current trends in school safety. For example, despite the prevalence of violent intruder drills in public school safety plans, only 29 states met the basic standards of safety in 2016 and only 69.3% included mental health services (Silverman et al., 2016). The findings of the current study demonstrate preservice teachers' perceptions as a unique population may be consistent with the teachings of Elsass et al. (2016) with respect to heightened levels of anxiety within schools. Furthermore, participants shared confidence in their own school's safety while recognizing the vulnerability of others and minimized prior firsthand experiences with school violence, which was interpreted as a way to keep uncomfortable thoughts out of their mind. Again, engaging in such mental activity may serve to justify selection of their career choice through editing out extreme examples.

The identified theme of professional impact confirms and extends prior knowledge found in the literature, such as Harris et al.'s (2018) findings regarding the

additional responsibilities educators face with ongoing school violence and the practicing of violent intruder drills. Beyond engaging in the motions of the drills themselves and making difficult decisions, such as whether to barricade themselves and their students in a classroom, try to escort students out of the building without encountering the assailant, or lead the class in a group attack and throwing objects or attempting to tackle the threat (NASP & NASRO, 2017), participants recognized the impact violent events and drills have on students. They explained the impact on students requires teachers to provide lessons at the appropriate developmental level of the students in their classrooms to help students process subsequent thoughts and emotions. Although providing appropriate lessons would actually be considered a traditional responsibility of an educator, processing emotions is typically reserved for mental health professionals. This means that in addition to responding to situations as immediate responders, as suggested by Harris et al., and serving as makeshift paramedics by applying tourniquets or nursing wounded individuals, preservice teachers also envision the added responsibility of maintaining the mental health of the students in their classrooms.

Each of the three themes that emerged from the data relating to the first research question support or extend what is currently found in the literature on school safety. Applying prospect theory to better understand preservice teachers' perspectives provides a possible explanation for their decision to pursue a career in education despite awareness of ongoing school violence and feelings of vulnerability. In addition, the data provide detail into participants' perceptions of the added responsibilities resulting from violence

and school safety drills, which include the duty to process students' emotional responses, a responsibility that has, thus far, been awarded to mental health professionals.

Research Question 2

Through the second research question, I sought the experiences of preservice teachers who engage in violent intruder drills and training related to self-efficacy. Two themes emerged in response to this question: self-confidence and sufficiency of training. Both themes confirm or extend current knowledge and support the application of prospect theory to gain a deeper understanding of the unique experiences of preservice teachers.

Data related to the theme of self-confidence show the usefulness of applying prospect theory to the possible understanding of preservice teachers' self-efficacy. One of the major tenets of prospect theory is that decisions involving risk are made by weighting available information, which is impacted by the perceived rather than the actual likelihood of a potential outcome (Kahneman & Tversky, 1979). Furthermore, prior experience and self-efficacy influence the perception of the decision-maker. Through the subthemes of training impacts adults and instinctual response, participants in this study implied that their self-confidence for responding to school violence and engaging in violent intruder drills changed from the time when they made the initial decision to pursue a teaching certification to the time of their interview, during or within 6 months of having completed the student-teaching phase of their certification program.

Data supplied by participants in this study revealed a change in their perceptions over time along with the accumulation of training and experience. With the provision of examples from past school shootings during trainings and attention drawn to current

incidents portrayed in the media, which changed the amount and detail of available information to weigh, participants considered school violence differently than they had previously, perhaps impacting their level of self-confidence. Although causation cannot be determined due to the qualitative nature of this study (see Creswell & Creswell, 2018), participants' gained experiences would impact the saliency of concepts related to school violence. This revelation carries potential for understanding the decisions of preservice teachers. As noted previously, that is, the availability heuristic is employed to inform perception, which then impacts decision-making (Tversky & Kahneman, 1972).

The reporting and understanding of violence in schools has shifted dramatically in the last few decades, resulting in changes to the recommended approach and response to student violence suggested through professional associations and government mandates (NASP, 2019). These changes have also led to the rise of school safety experts (Brown & Munn, 2008), the inclusion of active shooter drills in public school crisis preparedness plans (USDHS, 2018), and discussions about the perception of safety in schools (Radu, 2018). Participants in the current study voiced their thoughts regarding the sufficiency of the training they received with subthemes of preparedness and amount varies. Of the 15 participants, three reported feeling prepared and three unprepared. The remaining nine expressed feelings of ambiguity. Inconsistency of the amount and actual guidance between districts, buildings, and classrooms contributed to these results. Manuel (2016) found that although teachers chose their career path in order to make a difference or positively impact children, a decrease in self-efficacy was correlated to higher attrition, with over one third of the participants expressing uncertainty about whether or not they

would continue teaching in 5 years. The sufficiency of training surrounding school violence and preservice teachers' perceptions of preparedness are areas of self-efficacy that may now enter the conversation about teacher attrition, particularly as the results of other studies suggest the violent behavior of students (Bass et al., 2016) and additional responsibilities placed on teachers (Round et al., 2016) may be contributing to low numbers.

The two themes that emerged from the data relating to the second research question confirm or extend what is currently found in the literature on school safety. Over time from their initial decision to pursue a career in education and with continued experiences and training related to school safety, participants' self-efficacy reportedly changed. Further, ambiguity about preparedness and the differences recognized between the amount of training, in addition to recommendation variations, may contribute to that self-efficacy among the participants.

In response to both research questions, the findings of this study relate to what is currently found in the peer-reviewed literature by exposing the perceptions of preservice teachers with respect to their awareness of school violence, vulnerability, and the professional impact of such events, and by illuminating preservice teachers' experiences of self-efficacy related to confidence and sufficiency of training. The application of Kahneman and Tversky's (1979) prospect theory benefits the study by offering a deeper understanding of participants' comprehensive responses to the interview questions posed. Although limitations to the study exist, I will detail recommendations for future research and present implications stemming from the current results.

Limitations of the Study

Limitations for this study exceed those which were previously considered during the planning phase. As reported in Chapter 1 and as is true for all qualitative research, one limitation is that causation or other statistical data cannot be determined (Creswell & Creswell, 2018). Dependability, although enhanced through the application of strategies such as journaling and consultation with committee members, should also be recognized as a limitation for qualitative research (Creswell & Creswell, 2018). To increase dependability, I included a description of my reflexive thoughts and steps for coding. This detailed the iterative process that allowed me to arrive at the ultimate themes, serving as an audit trail, strategies suggested by Saldana (2016) for qualitative studies. Furthermore, generalizability is limited by the demographic information of the participants, such as college of enrolment or gender, much of which was kept confidential in order to respect the privacy of those who contributed to the study. For this study, uncompromising demographic information included that all participants of the main study were both female and traditional students, meaning the age of all main study participants fell within early to mid-20s. College of enrollment for all main study participants included universities located within Pennsylvania and Ohio. Areas of certification included elementary, secondary, and special education. As a limitation to qualitative studies, the focus of phenomenological research is transferability, or how easily a person outside of the study can recognize similarities between their own experiences and the experiences of the participants in order to infer the results to

themselves related to the phenomenon at question (Burkholder et al., 2016), rather than generalizability.

An unanticipated, yet significant, limitation of this study stemmed from the unprecedented social restrictions mandated by state and local government agencies at the time of data collection due to the COVID-19 global pandemic. The subsequent changes to the daily lives of the participants may have resulted in data unique to that situation. Furthermore, the experiences and perceptions reported by the participants may not reflect those of the preservice teacher population at any other given time. Again, the generalizability of the findings within qualitative research is limited to others who share similarities to the participants (Creswell & Creswell, 2018).

Recommendations

I conducted this qualitative, phenomenological study in order to gain an understanding of the perceptions and experiences of preservice teachers, addressing the gap in current knowledge of the impact of violent intruder incidents and drills on preservice teachers' motivation to enter the profession. Resultant themes included awareness of violence, vulnerability, professional impact, self-confidence, and sufficiency of training. With limited prior research on the perceptions of preservice teachers in light of ongoing school violence and the implementation of violent intruder drills, the results of this study not only open the door for future studies comparing preservice teacher's varying levels of found perceptions to that of motivation, but also highlight the need for additional research to unveil the full scope of perceptions that

exceed the limitations to this study, as well as the changes in perceptions of preservice teachers over time.

After revealing preservice teachers' perceptions through this study, I recommend future studies quantitatively compare varying strengths or levels of such perceptions to other qualities held by members of that population. For example, I recommend comparing perception of violence, including awareness of violence and feelings of vulnerability, to personality traits, demographic information, exposure to media, or amount of prior knowledge or experience with school violence. Perception of school safety could also be compared to how valuable preservice teachers consider a career in education. Comparing such relationships to those of individuals who are not pursuing a degree in education could provide additional insight on motivation to pursue the career.

I also recommend a quantitative or mixed-method study comparing preservice teachers' level of anxiety regarding school violence to different experiential or setting variables. For example, research that considers the relationship between anxiety and the type of training received could inform training practices. Research comparing anxiety levels of preservice teachers between class environments, such as general education second grade or middle school emotional support, could shed light on the unique differences and needs of preservice teachers based on their area of specialization.

One of the strengths of this study was the revelation that the perceptions of preservice teachers of school violence and violent intruder drills may change over time and with the accumulation of training and experience. As such, I recommend future studies examine these trends. A longitudinal study spanning high school through college

coursework and training could illuminate the impact of gained experience on perceptions. Furthermore, I recommend expanding that research to consider trends in perception of professional teachers, or those actually employed in public school districts, as they continue to gain experience. Such studies could contribute to the existing knowledge on teacher attrition and retention.

In light of the limitations of this study and because this study was the first of its kind, I recommend future research parallel the methodology I used, expanding the generalizability of the results. For example, I recommend future studies include a broader population, including potential participants residing in different geographic locations or of varying ethnicity or age. In addition, I recommend conducting this research at a time when social restrictions and heightened levels of personal vulnerability, such as those brought on by the COVID-19 pandemic, do not exist. Conducting such research could inform the reliability of this study.

Through the current research, I identified several emergent themes related to preservice teacher's perceptions and experiences. Additionally, I recognized specific areas in need of future research. As a result, I recommend future studies be conducted to compare preservice teacher's varying levels of perceptions to personal variables and motivation, to consider changes in perception over time, and to support the results of this study in light of its limitations.

Implications

The results of this study carry both social and theoretical implications. Although safety experts provide general guidance to schools (Strobach & Cowan, 2019), I found

the potential to impact positive social change within the emergent themes, representing the unique voices of the participants themselves. The analytical process revealed the theoretical implications for applying prospect theory beyond its previous use with studies on economic behavior, as presented in Kahneman and Tversky (1979). In conjunction with the presentation of these implications I suggest pragmatic recommendations for consideration.

Social Change

The potential for positive social change resulting from this study primarily applies to the operating procedures for training preservice teachers at institutes of higher education and within public primary and secondary schools. Themes that emerged from the data include participants' feelings of vulnerability, recognition of added responsibility, wide-ranging sense of self-confidence, and desire for more consistent and sufficient training with respect to school violence and violent intruder drills. Revealing participants' unique perspective, the findings can inform those responsible for providing experience and training to preservice teachers about potential gaps in education which, if filled, could reduce or alleviate any existing anxieties and better develop the skills of future educators.

With the knowledge gleaned from this study, I recommend administrators review education certification programs to identify any potential areas of needed improvement. For example, not all certification programs include training on how to access mental health services for educators themselves or for students. The results of this study show participants believe violent intruder drills raise anxiety for themselves and for students,

and the responsibility to help students process their emotions falls on the educators. Incorporating lessons on accessing mental health services into the curriculum along with lessons on emotional de-escalation could result in some preservice teachers feeling more adequately prepared and self-confident when faced with the added responsibility of helping students remain calm during emergency events and drills or the possibility of students asking tough questions, such as the example given by participant M14 of a young student asking "if this were real, would I die?" In addition to those in charge of developing certification program requirements considering ways to support preservice teachers' self-confidence by changing the curriculum, I also recommend public K–12 school districts consider the addition of training sessions covering topics of mental health to new-employee induction training. Again, preservice teachers could benefit from learning basic de-escalation strategies and how to access mental health services for themselves and their students within their communities.

I also recommend consideration of a more systemic change to the requirements of all education certification programs, recognizing this recommendation is far-reaching. That is, I recommend the national department of education consider requiring consistency between certification programs. The results of this study highlight participants' concern about inconsistent guidelines. Universal certification requirements with respect to educators' role in school violence and violent intruder drills could benefit individual preservice teachers' feelings of preparedness as well as ensuring a more consistent knowledge base of future educators just entering the profession. Following suit, schools could also consider consistent trainings from building to building, as well as district to

district. The exact changes to implement for this lofty recommendation could be better informed following future research, such as those recommended previously.

Finally, I recommend school districts repeatedly practice violent intruder drills throughout the school year. Participants in this study reported feeling better prepared and more confident following repetitious drills. One participant, M13, described engaging in a violent intruder drill week during her student-teaching experience. She explained, by the end of the week "students and staff felt a little more at ease." Further, repeated practicing of drills could also allow for preservice teachers engaged in the student-teaching phase of the certification program to experience drills in multiple settings or with different student populations. Participants in this study shared awareness of the different needs of students in special education classrooms, expressing a desire to practice drills in those settings as well as in general education classrooms.

In order to apply the results of this study for the benefit of positive social change, I recommend those responsible for preparing preservice teachers review current practices and consider alterations to fill any identified gaps and provide consistency. I suggest training educators on strategies for emotional de-escalation and access to mental health services, universal certification requirements and practices between schools, and repeated practicing of drills in schools to boost comfort and familiarity. In addition to these social implications, the results of this study also carry theoretical implications.

Theoretical Implication

Kahneman and Tversky (1979) developed prospect theory as an explanation for economic behavior. Researchers have demonstrated its application to decisions that

involve risk in various fields, such as the behavior of farmers in Ghana in a study conducted by Balcombe, Bardsley, Dadzie, and Fraser's (2019), which considered the parameter of loss aversion, or Martin et al.'s (2016) study of the impact of a subjective reference point for making choices such as choosing whether or not to pay to view a movie with unknown ratings. In the current study, the experiences and perceptions offered by preservice teachers illustrate the thoughts that readily come to mind with regards to school violence and violent intruder drills for individuals pursuing a career in education. The findings reveal factors that may be considered and may lead to biases in the decision-making process. For example, the found subtheme of lightbulb moments reveals a reported change in awareness of school violence for participants over time throughout their coursework and experiences. The subtheme of prevalence of actual incidents demonstrates the impact of saliency on perception. Mind over matter as a subtheme offers an explanation for the juxtaposition of ongoing school violence and the decision to pursue a career in education. Taken together, the findings demonstrate the usefulness of prospect theory for understanding the decision to seek employment as a teacher despite the potential risk of experiencing violence in schools.

The findings of this study offer the potential to impact positive social change and demonstrate the appropriateness of prospect theory to better understand preservice teachers' decision to pursue a career in the field of education as school violence and the practicing of violent intruder drills in schools continues. To benefit positive social change, I recommend considerations be made to support the development of future

educators, with respect to both self-confidence and skill development. I also recommend the use of prospect theory to ground future studies related to this topic.

Conclusions

Reports of mass killings and violence in schools have been on the rise since the 1990s (Agnich, 2015; Elsass et al., 2016; Langman, 2009). In response, schools are increasingly adding violent intruder drills to district emergency preparedness plans (NASP, 2019). I conducted this study in order to explore the perceptions of preservice teachers who have lived through an era of highly publicized school shooting events, and who have participated in school trainings and drills in response to violent intruders. The impact of these phenomena on preservice teachers had not been previously studied. Using a qualitative research design, I interviewed participants engaged in the student-teaching phase of their education certification program, or those who had completed that phase within the preceding 6 months. The results unveiled participants' unique perspective and, through the application of Kahneman and Tversky's (1979) prospect theory, contribute to a better understanding of preservice teacher's decision to pursue the career in light of ongoing violence and violent intruder drills.

I found five emergent themes in response to the research questions. For the perceptions of preservice teachers about violent intruder incidents and drills within public schools' awareness of violence, vulnerability, and professional impact emerged as themes. I found participants' awareness of violence in schools differed from one to another, was not accurate with respect to prevalence, and their responses to interview questions suggested individual awareness changed over time as they gained more

experience and training. Regarding vulnerability, most participants expressed feeling safe personally, but shared concerns that schools other than their own are less secure. Furthermore, despite sharing stories to the contrary several participants indicated they had never directly experienced school violence when asked specifically, suggesting they subconsciously block out such experiences in order to justify their continued pursuit of employment in the field. The final theme for this research question, professional impact, showed participants' beliefs about the impact of violence and drills are consistent with what is already found in existing literature along with one addition: the responsibility to help students process their emotions subsequent to the phenomena.

In response to the research question seeking the experiences of preservice teachers who engage in violent intruder drills and training related to self-efficacy self-confidence and sufficiency of training emerged as themes. Participants' levels of self-confidence ranged widely, with most not feeling strongly one way or the other. For some, these levels were impacted by training they received, which at times included simulations that reportedly evoked anxiety. For others, lack of training or inconsistent guidelines were said to influence self-confidence. Regarding sufficiency of training, many participants expressed the desire for more opportunities to learn and practice recommended responses, as well as consistency between schools.

I offered recommendations and detailed the implications stemming from this study. First, this study opens the door for future research to compare preservice teachers' varying levels of found perceptions to that of motivation to pursue a career in education. It also highlights the need for additional research to unveil the full scope of perceptions

that exceed the limitations to this study, as well as the changes in perceptions of preservice teachers over time. The findings hold the potential to impact positive social change by illuminating areas of needed continued educational growth for preservice teachers. The results of the study also support the application of prospect theory to better understand the juxtaposition of preservice teachers' motivation to enter the field despite ongoing school violence and violent intruder drills.

Understanding what compels some to enter the field of education and others not is of utmost importance in light of current national teacher shortages as reported by the U.S. Department of Education, National Center for Education Statistics (2019). Research has already found prior experiences and self-efficacy serve to motivate individuals to pursue a teaching career (e.g., Du Preez, 2018; Frei et al., 2017; Han et al., 2018; Manuel, 2016). As reported rates of violence in schools continue to rise since the 1990s (Agnich, 2015; Elsass et al., 2016; Langman, 2009), implementation of violent intruder drills led by teachers has also risen (NASP, 2019). With a lack of existing knowledge about the combination of violent intruder incidents and drills with motivation to enter the profession, this study intended to unveil the experiences and perceptions of preservice teachers. Having achieved that intent, discussions about the connection between such experiences, perceptions, and motivation can begin and with additional research may, ultimately, lead to a better understanding about how to recruit and retain effective, quality educators of the future.

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