

2023

School Officials' Perceptions of Threat Assessment Programs

William Ward
Walden University

Follow this and additional works at: <https://scholarworks.waldenu.edu/dissertations>



Part of the [Psychology Commons](#), and the [Sociology Commons](#)

This Dissertation is brought to you for free and open access by the Walden Dissertations and Doctoral Studies Collection at ScholarWorks. It has been accepted for inclusion in Walden Dissertations and Doctoral Studies by an authorized administrator of ScholarWorks. For more information, please contact ScholarWorks@waldenu.edu.

Walden University

College of Psychology and Community Services

This is to certify that the doctoral dissertation by

William Ward

has been found to be complete and satisfactory in all respects,
and that any and all revisions required by
the review committee have been made.

Review Committee

Dr. Scott Gfeller, Committee Chairperson, Psychology Faculty
Dr. Jana Price-Sharps, Committee Member, Psychology Faculty

Chief Academic Officer and Provost
Sue Subocz, Ph.D.

Walden University
2023

Abstract

School Officials' Perceptions of Threat Assessment Programs

by

William Ward

MS, Alliant International University, 2016

BS, California State University-Fresno, 1995

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Forensic Psychology

Walden University

August 2023

Abstract

Acts of targeted violence on school grounds, and most notably school shootings, continue to occur and are a serious concern for many people. Behavioral threat assessment programs are one method being used to address this problem, and while considerable research has been conducted on threat assessment programs, very little research has been conducted on how school officials implement, operate, or understand these programs. A more informed awareness of how school officials perceive the implementation, operation, and usefulness of threat assessment programs may provide insight into ways to improve the implementation and management of these programs. This was a qualitative phenomenological study focused on the perceptions of school officials involved in the implementation and routine operation of school threat assessment programs in high schools in the central valley of California. Three main themes emerged: The importance of effective communication, the importance of collaboration and having a multidisciplinary team, and the importance of building relationships. In addition to these themes, several other key points were referenced by some of the participants: the importance of training, having time for training and collaboration, and the negative impact of staff turnover. The findings of this study point to several opportunities for positive social change by providing options for consideration for school officials during the implementation and/or operation of a school threat assessment program that focuses on intervention and prevention of acts of targeted violence before they take place.

School Officials' Perceptions of Threat Assessment Programs

by

William Ward

MS, Alliant International University, 2016

BS, California State University-Fresno, 1995

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Forensic Psychology

Walden University

August 2023

Acknowledgments

With sincere thanks to my wife who has stood beside me throughout this process and has completely supported my goals all along.

To Mom who instilled a love of reading, writing, and critical thinking; you raised us right.

To Dr. Scott Gfeller and Dr. Jana Price-Sharps who guided me through this process and were very understanding of timelines in light of my other obligations.

To Dr. Eric Hickey who has been an inspiration since we met at Fresno State, thank you for staying in touch and providing guidance over all these years.

To Dr. Lissa Parker who introduced me to the concept of threat assessment and helped me realize this is what I want to do for my second career.

To all of my professors, colleagues, family, and friends, there are too many to list here, but know that your support has been invaluable and I appreciate you.

Table of Contents

Chapter 1: Introduction to the Study.....	1
Introduction.....	1
Background.....	2
Problem Statement.....	7
Purpose of the Study.....	8
Research Questions.....	9
Theoretical Framework.....	9
Nature of the Study.....	11
Definitions.....	12
Assumptions.....	13
Scope and Delimitations.....	14
Limitations.....	15
Significance.....	16
Significance to Practice.....	17
Significance to Theory.....	17
Significance to Social Change.....	18
Summary and Transition.....	19
Chapter 2: Literature Review.....	21
Introduction.....	21
Literature Search Strategy.....	22
Theoretical Foundation.....	23

Literature Review.....	24
Targeted School Violence.....	24
Response to School Shootings.....	32
Threat Assessment	40
Student Threat Assessment.....	49
Schools’ Implementation of Threat Assessment Programs	54
Summary and Conclusions	60
Chapter 3: Research Method.....	62
Research Design and Rationale	62
Role of the Researcher	65
Methodology.....	65
Participant Selection Logic.....	65
Instrumentation	66
Procedures for Recruitment, Participation, and Data Collection.....	67
Data Analysis Plan.....	68
Issues of Trustworthiness.....	69
Credibility	69
Transferability.....	70
Dependability	70
Confirmability.....	71
Ethical Procedures	71
Summary.....	74

Chapter 4: Results	75
Introduction.....	75
Research Setting.....	75
Demographics	76
Data Collection	76
Data Analysis	77
Evidence of Trustworthiness.....	77
Results.....	79
Importance of Effective Communication.....	79
Importance of Collaboration and Having a Multidisciplinary Team.....	81
Importance of Building Relationships	84
Additional Findings	86
Summary	88
Chapter 5: Discussion, Conclusions, and Recommendations	90
Introduction.....	90
Interpretation of the Findings.....	91
Limitations of the Study.....	95
Recommendations.....	97
Implications.....	97
Conclusion	99
References.....	101
Appendix A: Interview Questions	113

Chapter 1: Introduction to the Study

Introduction

Targeted violence on school grounds continues to be a great concern to many people; these incidents can vary from a fight on the playground to a mass shooting inside the school. Threat assessment programs have risen in prominence as a way to intervene in instances where a student may be on a pathway towards violence (Cornell, 2020; Cornell et al., 2018; Goodrum et al., 2018; Lenhardt et al., 2018). While considerable research has been conducted on school-based threat assessment programs and threat assessment in general, very little research has been conducted on how school officials implement, operate, or perceive these programs (Cornell, 2020; Cornell et al., 2018; Goodrum et al., 2018; Nekvasil & Cornell, 2015). Better awareness of the perceptions and experiences of school officials involved in threat assessment programs may provide valuable insight into ways to improve the implementation and routine operation of threat assessment programs in schools, thus helping to foster safer school climates.

This introductory chapter will briefly summarize some of the most pertinent literature related to the background of targeted school violence and threat assessment, the problem will be outlined and explained, and the purpose of the study will be stated. Three research questions will be presented, and the theoretical foundation of the study will be briefly introduced. This is a qualitative and phenomenological study involving participants who are school personnel directly involved in a threat assessment program at their school. Finally, the significance of this study will be outlined and explained.

Background

Cornell (2020) explained that violence prediction efforts are largely inaccurate and efforts to create a profile of school shooters have been unsuccessful and perhaps even detrimental. School shootings are extremely rare, even though they receive tremendous publicity in the media, and the offenders involved in school shootings are a very heterogenous group (Cornell, 2020).

Prevention models, rather than prediction models, seem to hold much greater promise for intervention into situations that may lead to violence (Cornell, 2020). Measures of success are extremely difficult since it is impossible to quantify situations where a violent act never occurred due to some type of intervention (Cornell, 2020). The Virginia Student Threat Assessment Guidelines (VSTAG) and the subsequent Comprehensive Student Threat Assessment Guidelines (CSTAG) seem to be the only programs examined in controlled studies (Cornell, 2020).

Cornell (2020) stated there is a need for much more research on school threat assessment programs, including experimental studies, longitudinal studies, and research on the quality and implementation of school threat assessment programs. Cornell also mentioned that many threat assessment teams receive little or inadequate training, and it is unknown how well threat assessment procedures are implemented and conducted in schools.

Goodrum et al. (2018) conducted a case study of an incident where a student made a threat, underwent a threat assessment, and then went on to shoot and kill a

classmate and then himself on campus. Based on the case study, Goodrum et al. concluded that campus threat assessment teams should consist of four or five members from school administration, law enforcement, mental health professionals, and school staff (such as teachers, counselors, or coaches). The team should receive comprehensive training and follow the guidelines of an empirically validated threat assessment program (Goodrum et al., 2018). Goodrum et al. stated that students being assessed should receive regular follow-up and check-ins to monitor their situation and information gathering efforts should be proactive and should draw information from multiple sources.

Goodrum et al. (2018) recommended further research on school staffs' perceptions of threat assessment program implementation and routine operation, as well as the observations of parents and students. They also recommended further research on the types of procedures that can be put in place to monitor and support students who are being assessed.

Cornell et al. (2018) conducted a study of the implementation of a threat assessment program in Virginia. This study included logistic regression analysis to determine types of cases and demographics relating to determination of the seriousness of a threat (Cornell et al., 2018). Cornell et al. concluded that it was about 12 times more likely that a threat deemed to be serious would actually be attempted, versus a threat deemed not serious.

Cornell et al. (2018) found that the Virginia school threat assessment teams were more likely to deem a threat as serious if it was made by a student above middle school

grades, a student in special education classes, if it involved a threat of battery, murder, or possession of a weapon, or if the threat was against an administrator rather than another student. Students' race and gender were not statistically significant when determining seriousness of a threat; however almost 75% of all cases involved male students (Cornell et al., 2018).

Cornell et al. (2018) recommended further research into how schools implement threat assessment protocols, from the initial report of a threat, through the assessment process, and then to interventions, and the final outcomes of the case. Cornell et al. also recommended research regarding schools that have threat assessment programs as compared to schools that do not have such programs, and research into different types of threat assessment programs.

Nekvasil and Cornell (2015) conducted a retrospective and quasi-experimental study of schools that use the Virginia Student Threat Assessment Guidelines (VSTAG) compared to schools that use another threat assessment model, or no threat assessment program at all. Based on the data obtained, it was shown that schools using the VSTAG model experienced fewer short-term suspensions, were rated as having more equitable discipline practices, experienced lower levels of student aggression, and teachers reported feeling safer (Nekvasil & Cornell, 2015). Additionally, long term use of the VSTAG model was associated with fewer long-term suspensions, students reporting fairer discipline practices, and lower reported levels of student aggression (Nekvasil & Cornell, 2015).

The VSTAG model emphasizes moving away from a zero-tolerance discipline model and tailoring problem-solving approaches to the behavior at issue (Nekvasil & Cornell, 2015). Threats are separated by transient or substantive, with substantive threats being taken more seriously as there are indications that the student truly intends to injure someone. Very serious substantive threats typically involve notifications to concerned parties, a law enforcement investigation, and a mental health evaluation of the student. A written safety plan details actions to be taken on behalf of potential victims as well as educational and intervention requirements for the student of concern (Nekvasil & Cornell, 2015).

Further research into different types of threat assessment models and an effort to identify best practices among the various programs, specifically practices that are associated with a more positive school atmosphere and better safety outcomes is recommended (Nekvasil & Cornell, 2015).

Goodrum et al. (2019) reported that no research has examined how school officials implement the 11 questions in the US Secret Service guidelines for school threat assessment. Goodrum et al. explained that in the wake of the mass shooting at Columbine High School in 1999 the US Secret Service and the US Department of Education established a threat assessment model using 11 questions to aid school personnel in identifying students, or other individuals, of concern who may pose a threat of targeted violence. Goodrum et al. stated that while the 11-question model has been in existence

for about 20 years, little is known about how school personnel actually implement threat assessment programs based on the 11-question model.

Andreou et al. (2015) explored school officials' perspectives regarding different factors that influence the effectiveness of School-Wide Positive Behavioral Interventions and Supports (SWPBIS). Andreou et al. studied 227 critical incidents; 13 categories emerged that point to the sustainability of the program from the perspective of the school staff who are responsible for the program. This program is one example of a variety of recent attempts to become more proactive regarding school discipline rather than reactive and punitive measures (Andreou et al., 2015).

Andreou et al. (2015) identified 13 categories that were identified as being key to a sustainable SWPBIS program: continuous teaching, positive reinforcement, team effectiveness, staff ownership, adaptation, community of practice, involving new staff, use of data, access to external expertise, maintaining proper priorities, school administrators' involvement, staff turnover, and conflicting personal beliefs. Andreou et al. found that school staff's dedication to a program and a lack of excessive staff turnover were critical to long-term success. Adaptation to changing needs was also found to be critical, both within the school staff themselves and while supporting students and their families (Andreou et al., 2015).

Andreou et al. (2015) recommended future research based around the variable of adaptation. While explaining the concept of adaptation, Andreou et al. pointed out that program practices need to "fit" the local school environment, including such things as

changing acknowledgement systems, making forms more efficient, and using creative ideals for expectations of teaching. Many, if not all, of the categories of interest for the sustainability of SWPBIS programs seem to correspond to the sustainability and effectiveness of other types of programs, such as behavioral threat assessment programs (Andreou et al., 2015).

Problem Statement

Instances of targeted violence, such as mass murders in schools, have been well-publicized in the last few decades. A series of school shootings in the late 1990s and early 2000s led some researchers to attempt to create a profile of likely school shooters; these profiles led to many false positives where someone was identified as a threat when they did not actually pose any threat (Cornell, 2020; Cornell et al., 2018). Other researchers realized that many students fit the broad and general profile of a school shooter, but posed no real threat; the concept of behavioral threat assessment has now been implemented in some schools as a means to avert acts of targeted violence through a prevention process rather than attempting to predict if a particular person will be violent in the future (Cornell, 2020; Goodrum et al., 2018; Lenhardt et al., 2018). This type of intervention focuses on the identification and intervention into instances where a student is having some type of problem or conflict and can be accomplished without any sort of prediction if the particular student may be violent in the future (Cornell, 2020).

While considerable research has been conducted on school-based threat assessment programs and threat assessment in general, very little research has been

conducted on how school officials implement programs, how they operate within the programs on a routine basis, and how they perceive the programs in terms of effectiveness and value (Cornell, 2020; Cornell et al., 2018; Goodrum et al., 2018; Nekvasil & Cornell, 2015). Goodrum et al. specifically stated that "future research on threat assessment should examine school staffs' perceptions of threat assessment training, forms, and procedures" and "in addition, research should examine the ways that schools can implement effective safety planning and support systems for student of concern after a threat assessment" (p. 134). Cornell et al. recommended further research into how schools implement their threat assessment programs and protocols from the initial threat through to the final outcome. Nekvasil and Cornell recommended further research to identify best practices from the various threat assessment programs in use; specifically, what practices are most strongly associated with more a more positive school atmosphere and better safety outcomes.

Purpose of the Study

The purpose of this study is to examine how school officials perceive the implementation, routine operation, and effectiveness of school-based behavioral threat assessment programs. This qualitative study will explore the experiences, thoughts, and perceptions of school officials regarding the threat assessment program in use, or being put in use, at their facility. Barriers to implementation, perceptions of training programs, perceived utility of forms and procedures, as well as program outcomes will be examined

from the perspective of school officials directly involved with threat assessment programs.

Research Questions

RQ 1: What are the perceptions of school staff regarding the implementation and routine operation of a behavioral threat assessment program at their school?

RQ 2: What are the perceptions of school staff regarding the effectiveness of behavioral threat assessment programs at their schools?

RQ 3: What are the perceptions of school staff regarding barriers that influence the effectiveness and value of behavioral threat assessment programs at their school?

Theoretical Framework

Since the research questions revolve around the experience of school officials in implementing and operating a threat assessment program, theories based on implementation science rather than on targeted violence or threat assessment were reviewed. Nilsen (2015) compiled a number of theories relating to implementation science, including the theory of reasoned action, diffusion of innovations theory, implementation climate theory, absorptive capacity theory, and organizational readiness theory. The theory that seems most pertinent to this study is the diffusion of innovation theory by Rogers (2003).

Diffusion of innovation theory posits that diffusion is the process where an innovation is communicated through various channels among members of a system (Rogers, 2003). Diffusion is a particular type of communication where individuals share

information with each other and eventually reach a mutual understanding; because of the nature of an innovation, the idea being discussed is new and there is some degree of uncertainty and risk associated with implementation of the innovation (Rogers, 2003). Uncertainty can be reduced by obtaining information from others in the social system, and in turn, the understanding of the characteristics of the innovation will determine the rate of adoption by the members of the social system involved (Rogers, 2003). As explanations of the new idea spread, or diffuse, among members of the social system, they begin to adopt the new idea at different rates (Rogers, 2003). Several factors tend to influence the adoption of an innovation: relative advantage over other ideas or products; compatibility with existing values or needs; complexity of use; testability of the innovation; and observability of tangible results (Rogers, 2003).

Mihalic and Irwin (2003) pointed out that Rogers' diffusion theory "provides a conceptual foundation for examining dissemination, adoption, implementation, and maintenance of innovations" (p. 309), but also note that a decision to adopt a particular program does not necessarily mean that it will be successfully implemented. Mihalic and Irwin explained that the way a program is implemented will affect the results and success of the program. Research regarding the implementation of new and innovative programs can help add to the understanding of organizational and employee capacities that are required to successfully implement and maintain new and innovative programs (Mihalic & Irwin, 2003). Goodrum et al. (2019) pointed to Mihalic and Irwin's conclusion that "we now know *what* to implement, but we know very little about *how*" (p. 308).

Nature of the Study

This study will utilize a qualitative and phenomenological approach to answer the research questions. Qualitative methodology seems most appropriate for this study as the research questions explore the perceptions and lived experiences of the school officials who work within threat assessment programs at their schools. Qualitative and phenomenological research aligns with the gaps in the literature identified by Cornell (2020), Cornell et al. (2018), Goodrum et al. (2018), and Nekvasil and Cornell (2015). These authors pointed out that more research is needed on how school officials perceive threat assessment programs in terms of effectiveness and value, and Goodrum et al. specifically stated that "future research on threat assessment should examine school staffs' perceptions of threat assessment training, forms, and procedures" (p. 134). Goodrum et al. stated that "little is known about the way that school officials implement threat assessment procedures, raising questions about their effectiveness" (p. 354).

This study is intended to fill a gap in the literature by examining the perceptions of school officials relating to the implementation and routine operation of school threat assessment programs. Considerable research has been conducted on various aspects of school threat assessment programs, but little research has been conducted on how these programs are implemented, operated on a regular basis, or how valuable they are perceived to be by school staff (Cornell, 2020; Cornell et al., 2018; Goodrum et al., 2018; Goodrum et al., 2019; Nekvasil & Cornell, 2015). This study will focus directly on the

perceptions of school staff as they relate to various aspects of the implementation and operation of school threat assessment programs.

School officials involved in threat assessment programs will be interviewed regarding their perceptions of the program at their school, this qualitative data will then be analyzed for codes and themes. The results of this study will provide insights that could inform implementation practices and daily operational considerations for school-based threat assessment programs. Results from this study could also identify barriers to the effective implementation and operation of these programs as well as provide useful insight into administrative tasks related to the program, training considerations, and strategies to address students who cause concern.

Definitions

Targeted violence: Predatory violence preceded by planning and behaviors related to the attack; this type of violence results from a process of thoughts and behaviors by the offender and includes an interaction between the offender and the victim in a particular situation (Simons & Meloy, 2017). Targeted violence is deliberate, intentional, and premeditated; it is not violence that serves as a defensive or fearful response to some type of immediate perceived threat (Meloy, 2015).

Threat assessment: A type of systematic evaluation of risk conducted when there is a declared threat to commit violence, or threatening behavior is noticed, with the goal of differentiating an actual threat of violence from distressing behavior that poses no actual threat (Cornell et al., 2018; Cornell, 2020). Threat assessment typically includes a

component of risk management intended to disrupt an escalation towards violence; follow-up investigation continues until it is clear if there is an actual threat of violence or if the individual simply made a threat with no intention to carry it out (Louvar Reeves & Brock, 2017).

Threat management: Interventions designed to address and mitigate various aspects of threatening behavior; in a school environment this might include addressing bullying issues, social isolation issues, anger management, conflict resolution skills, problem solving skills, and emotional regulation skills (Louvar Reeves & Brock, 2017; Simons & Meloy, 2017). Different types of monitoring activities may be included in a school environment to include random checks throughout the day, check in and check out protocols, attendance tracking, and modifications of a student's schedule (Louvar Reeves & Brock, 2017). More invasive measures may also be taken by a school and/or law enforcement, depending on the seriousness of the apparent threat, these could include suspension from school, expulsion from school, GPS monitoring, formal probation, or even an involuntary mental health detention (Louvar Reeves & Brock, 2017; Simons & Meloy, 2017).

Assumptions

One of the primary assumptions in this study is that the participants will be honest about their experiences and perceptions of the threat assessment process at their school. While there may be some contentious issues discussed that may include statements about problems experienced or certain faults of school administration, the participants'

identities are confidential, and they will not be identified in any discussion of the topic. The questions asked of participants are designed to not gather any information about specific cases that have occurred or are on-going, so no identifying information for offenders or students of concern will be elicited. The assumption of honesty on the part of the participants is critical to a phenomenological study and all reasonable attempts will be made to ensure that the participants feel comfortable in telling the truth about their experience.

Another assumption is that most, if not all, of the high schools where participants will be recruited have some type of threat assessment program or are implementing some type of threat assessment program. If a participant reveals that their school does not have a threat assessment program or is not in the process of implementing a threat assessment program, that participant will not be included in the study.

Scope and Delimitations

This study will address three specific aspects of school officials' perceptions of behavioral threat assessment programs in high schools: Perceptions of the implementation and routine operation of threat assessment programs, perceptions of the effectiveness of these programs, and perceptions of any barriers affecting the utility of these programs. These aspects were chosen as they have been identified as areas in need of further examination (Cornell, 2020; Cornell et al., 2018; Goodrum et al., 2018; Goodrum et al., 2019; Nekvasil & Cornell, 2015). Any school official who is involved in operation of a threat assessment program, or in the implementation of a threat assessment

program could be included in this study; these participants will be from various disciplines within the school system and may include administrators, teachers, coaches, counselors, school psychologists, and school-based law enforcement officers. School personnel who have no direct role in a threat assessment program would be excluded from this study.

Limitations

The limitations of the study include participants only from the central valley of California and only from high schools. There is a wide variety of school sizes and demographic variances within the central valley of California, so the study will include participants from small and rural high schools as well as large and urban high schools. Even though a variety of different types of high schools will be represented, this study will only include schools in the central valley of California, and therefore, the results may not be generalizable to high schools in other areas.

A significant challenge at the time of this study is that most high schools are recently returning to in-person classes due to the Covid-19 pandemic; this could present a range of problems due to many school personnel being extremely busy and potentially overwhelmed by a large workload from returning to in-person instruction after approximately one year of not being present on campus.

It does not appear likely that any of the school officials to be interviewed will be in a vulnerable population, and no identifying information regarding minor students will be gathered.

Significance

Considerable research has been conducted on school-based threat assessment programs and threat assessment in general, but very little research has been conducted on how school officials implement programs, how they operate within the programs on a routine basis, and how they perceive the programs in terms of effectiveness and value (Cornell, 2020; Cornell et al., 2018; Goodrum et al., 2018; Nekvasil & Cornell, 2015). Goodrum et al. specifically state that "future research on threat assessment should examine school staffs' perceptions of threat assessment training, forms, and procedures" (p. 134). This study will directly address these recommendations. Cornell et al. recommended further research into how schools implement their threat assessment programs and protocols from the initial threat through to the final outcome. This study will also directly address this issue and will attempt to gather qualitative data to explain the perceptions of the implementation of school threat assessment programs by the school officials directly involved.

There is apparent potential for positive social change to occur as a result of this study; several identified gaps in the literature will be addressed and the results could help describe the way school threat assessment programs are implemented, administered, and school staffs' perceptions of the effectiveness of these programs in fostering a safer school climate. Based on the reporting of the experiences of the participants in this study, other school officials may be able to more effectively implement and operate a threat assessment program at their school. This study may identify themes among the

participants identifying certain shortcomings of the routine operation of the threat assessment program that are consistent across multiple schools. This study will also inquire as to how these programs have been implemented at the different schools and may provide practical advice to other schools looking to implement a student threat assessment program.

Significance to Practice

A better understanding of the way some school officials implement, operate, and perceive the effectiveness of threat assessment programs could assist other school officials in improving the implementation and routine operation of their threat assessment program. The perceptions of the effectiveness of school threat assessment programs described by the participants in this study could assist other school officials in adjusting or modifying their programs.

Significance to Theory

Rogers (2003) identified several factors that tend to influence the adoption of an innovation: relative advantage over other ideas or products; compatibility with existing values or needs; complexity of use; testability of the innovation; and observability of tangible results. In the case of this study, the innovation being scrutinized is a behavioral threat assessment program. This study may provide insight into how school environments adopt a relatively new idea as a way to manage a problem that has existed for many years. Mihalic and Irwin (2003) pointed out that Rogers' diffusion theory "provides a conceptual foundation for examining dissemination, adoption, implementation, and

maintenance of innovations” (p. 309), but also note that a decision to adopt a particular program does not necessarily mean that it will be successfully implemented. This study will explore how school officials adopt, implement, and operate or maintain, a threat assessment program, as well as how they perceive the effectiveness of the program; just because a decision was made to adopt a threat assessment program does not necessarily mean that the school officials will perceive it as useful or valuable. This study will explore school staffs’ perceptions of a threat assessment program from adoption, to implementation, to operation, to perceived effectiveness during routine operation.

Significance to Social Change

Targeted violence in general, and especially targeted violence within schools, is of great concern to many people. A tremendous amount of resources are dedicated to keeping schools and students safe from violence, yet instances of targeted violence at schools still occur (Cornell, 2020). Early efforts in threat assessment were focused more on prediction, while more recent models focus more on prevention, and in some cases utilize a public health approach similar in nature to programs that encourage the use of seat belts and smoking cessation (Cornell, 2020). This shift of focus is intended to address underlying issues before they rise to the level of grievances that will eventually push a person towards a pathway to violence (Cornell, 2020). There seems to be great potential for positive social change by addressing behaviors of concern before they turn into motivators for violence. As the field of threat assessment grows and matures, it seems important to pay attention to the way these programs are implemented and

operated within schools, and to listen to the school personnel who work within these programs on a regular basis. An understanding of the real-life experiences and perceptions of school officials who work with students of concern and apply the principles of student threat assessment in a school environment may shed light on opportunities to implement these programs in a more effective fashion and may also provide insight into ways to make these programs more effective and practical. Any improvement in the utilization of threat assessment programs to enhance school safety would be a step towards positive social change.

Summary and Transition

While targeted violence and school violence in general are topics of great concern to many people, significant efforts have been made to minimize the potential for violence by identifying concerning behaviors from students and intervening before violence occurs (Cornell, 2020; Cornell et al., 2018; Goodrum et al., 2018; Louvar Reeves & Brock, 2018). Early efforts in this field focused on formulating a profile of a potential perpetrator of targeted school violence, then efforts were made to predict if a student would become violence, and more recently the focus is on a preventive approach similar to public health model (Cornell, 2020). A lot of research has been conducted on threat assessment and targeted violence and a lot of research has been conducted on the implementation of new programs in schools, but very little research has been conducted on the actual implementation and operation of threat assessment programs in schools and how these programs are perceived by the school staff working within these programs

(Cornell, 2020; Cornell et al., 2018; Goodrum et al., 2018; Goodrum et al., 2019; Nekvasil & Cornell, 2015). Mihalic and Irwin (2003) point out that “we now know *what* to implement, but we know very little about *how*” (p. 308); this is completely pertinent to the implementation of threat assessment programs in schools as it is to many other fields and programs.

This study will capture the observations, perceptions, and experiences of school officials directly involved with a threat assessment program at their school. In order to place these statements in context, a thorough review of the pertinent literature is required.

Chapter 2: Literature Review

Introduction

Instances of targeted violence, such as mass murders in schools, have been well-publicized in the last few decades. A series of school shootings in the late 1990s and early 2000s led some researchers to attempt to create a profile of likely school shooters; other researchers realized that many students fit the broad and general profile of a school shooter, but posed no real threat; the concept of behavioral threat assessment has now been implemented in some schools as a means to avert acts of targeted violence through a prevention process rather than attempting to predict if a particular person will be violent in the future (Cornell, 2020; Cornell et al., 2018; Goodrum et al., 2018; Lenhardt et al., 2018).

While considerable research has been conducted on school-based threat assessment programs and threat assessment in general, very little research has been conducted on how school officials implement programs, how they operate within the programs on a routine basis, and how they perceive the programs in terms of effectiveness and value (Cornell, 2020; Cornell et al., 2018; Goodrum et al., 2018; Nekvasil & Cornell, 2015). Goodrum et al. specifically state that "future research on threat assessment should examine school staffs' perceptions of threat assessment training, forms, and procedures" and "in addition, research should examine the ways that schools can implement effective safety planning and support systems for student of concern after a threat assessment" (p. 134). Cornell et al. recommended further research into how

schools implement their threat assessment programs and protocols from the initial threat through to the final outcome. Nekvasil and Cornell recommended further research to identify best practices from the various threat assessment programs in use; specifically, what practices are most strongly associated with more a more positive school atmosphere and better safety outcomes.

The purpose of this study is to examine how school officials perceive the implementation, routine operation, and effectiveness of school-based behavioral threat assessment programs. This qualitative study will explore the experiences, thoughts, and perceptions of school officials regarding the threat assessment program in use, or being put in use, at their facility. The literature search strategy will be explained, the theoretical foundation will be identified, and a thorough review of the pertinent literature will be shown.

Literature Search Strategy

The literature search strategy for this study involved the use of keyword searches in several different search engines, namely the Walden University Thoreau application, Google Scholar, and in some instances, a general Google search. Most of the literature sources for this study are in the form of peer-reviewed journal articles, some are from chapters in textbooks or edited scholarly books, and a few are from other sources such as news articles or legal documents. Many additional resources were also identified from works cited in the articles used, these additional resources were then found using the Walden University Thoreau search engine, Google Scholar, or a general Google search.

Initial literature searches were conducted using the following keywords: *School violence, targeted school violence, school shootings, targeted violence, mass murder, mass shooting, threat assessment, behavioral threat assessment, Safe School Initiative, firearm violence in schools, active shooter, school active shooter, active shooter response, armed teachers, School Resource Officers, zero tolerance policies, diffusion of innovations, and school programs*. Resources from the past five years were preferred, and some literature searches were limited to the last five years; however, several seminal works from the early 2000s were included since they serve as a basis for some of the models and theoretical foundations reviewed in this study.

Theoretical Foundation

Diffusion of innovation theory posits that diffusion is the process where an innovation is communicated through various channels among members of a system (Rogers, 2003). Diffusion is a particular type of communication where individuals share information with each other and eventually reach a mutual understanding; because of the nature of an innovation, the idea being discussed is new and there is some degree of uncertainty and risk associated with implementation of the innovation (Rogers, 2003). Uncertainty can be reduced by obtaining information from others in the social system, and in turn, the understanding of the characteristics of the innovation will determine the rate of adoption by the members of the social system involved (Rogers, 2003). As explanations of the new idea spread, or diffuse, among members of the social system, they begin to adopt the new idea at different rates (Rogers, 2003). Several factors

tend to influence the adoption of an innovation: relative advantage over other ideas or products; compatibility with existing values or needs; complexity of use; testability of the innovation; and observability of tangible results (Rogers, 2003).

Mihalic and Irwin (2003) explained that the way a program is implemented will affect the results and success of the program. Research regarding the implementation of new and innovative programs can help add to the understanding of organizational and employee capacities that are required to successfully implement and maintain new and innovative programs (Mihalic & Irwin, 2003). Goodrum et al. (2019) point to Mihalic and Irwin's (2003) conclusion that "we now know *what* to implement, but we know very little about *how*" (p. 308).

This study will explore how school officials adopt, implement, and operate or maintain, a threat assessment program, as well as how they perceive the effectiveness of the program; just because a decision was made to adopt a threat assessment program does not necessarily mean that the school officials will perceive it as useful or valuable. This study will explore school staffs' perceptions of a threat assessment program from adoption to implementation, to operation, to perceived effectiveness during routine operation.

Literature Review

Targeted School Violence

While the terms *mass murder*, *mass shootings* and *school shootings* are commonly used to describe types of violent incidents in schools, there are some

important nuances that make the term *targeted school violence* more descriptive and inclusive of different types of predation. In the United States, the FBI has defined mass murder as an incident where four or more people are killed during the same event; these incidents usually occur in one place and with no significant gap in time between the killings (Hickey, 2016; Morton, 2008). School shootings can also describe incidents where shots are fired in or around a school, but no one is injured; shootings at a school facility but after school hours when no students are present; or shootings that occur near a school but are not related to the school (Cornell, 2020). Vossekuil et al. (2002) describe targeted school violence as “school shootings and other school-based attacks where the school was deliberately selected as the location of the attack and was not a simply random site of opportunity” (p. 4). Limiting attention to incidents involving only firearms or where at least four victims were killed can be detrimental to a thorough understanding of the phenomenon (Agnich, 2015; Cornell, 2020; Stallings & Hall, 2019). Some incidents of targeted school violence have been perpetrated with weapons other than firearms, and some instances of intended school violence have been prevented before they occur, or before at least four victims were killed (Agnich, 2015).

One of the first school attacks in the United States to receive widespread attention occurred on May 18, 1927 when Andrew Kehoe used explosives to destroy a school building in Bath, Michigan, killing 38 children and six adults including himself (Bernstein, 2009). The use of explosives in targeted school violence is not as common as the use of firearms, but when explosives are used, they tend to cause more fatalities than

firearms (Agnich, 2015). In an international study covering 282 incidents of targeted school violence from 1900 to 2012, Agnich found 306 of the weapons used were firearms and 53 of the weapons were explosives. Some perpetrators make use of different types of weapons during their attack, for example, the attack on Columbine High School by two students was initially planned to make use of two sets of homemade explosives, but when they failed to detonate, the perpetrators began shooting and throwing improvised incendiary devices (Cullen, 2009; Stallings & Hall, 2019). In their study of averted school attacks between 1900 and 2016, Stallings and Hall (2019) found that 60.7% of the perpetrators intended to use firearms, 25.8% intended to use explosives, 11.2% intended to use edged weapons, and 2.2% intended to use other weapons such as poison or a chainsaw.

The frequency of incidents of targeted school violence seems to be increasing, the FBI identified 160 mass shootings in schools between 2000 and 2013 with 13 deaths occurring in the 1999-2000 school year and 45 deaths occurring in the 2011-2012 school year (Lenhardt et al., 2018). While there were four incidents of targeted school violence in the 1970s and five in the 1980s, there were 28 in the 1990s and 25 in the first 10 years following 2000 (Lenhardt et al., 2018). Following the attack on Columbine High School in 1999, two additional attacks received a tremendous amount of public attention, in 2007 32 students and teachers were killed and another 29 were injured at Virginia Tech University and in 2012, 20 children and six adults were killed at Sandy Hook Elementary (Lenhardt et al., 2018). In all three of these instances, and many more that did not receive

as much media attention, the perpetrators used firearms and then killed themselves at the conclusion of their attack, which has led to discussions regarding gun control and mental health issues (Agnich, 2015; Lenhardt et al., 2018; Stallings & Hall, 2019).

Gun Control

Since the majority of targeted school attacks involve firearms, much attention has been focused on gun control measures and the ease with which most school attackers are able to acquire a firearm (Agnich, 2015; Cornell, 2020; Hamlin, 2021; Katsiyannis et al., 2018; Simons & Meloy, 2017; Stallings & Hall, 2019). After a school shooting incident, many jurisdictions enact some type of firearms legislation; while the United States has the highest rate of private firearms ownership and also the highest rate of school shootings among developed nations, there is disagreement about the effectiveness and feasibility of gun control legislation (Hamlin, 2021). Advocates of strict gun control measures argue that firearms are too readily available to those with mental health disorders and/or a propensity towards violence, while others argue that ownership of firearms is guaranteed by the Second Amendment of the US Constitution and is a means to protect oneself from being victimized (Hamlin, 2021; Paradice, 2017). In a study analyzing the relationship between firearm ownership rates and school shooting incident rates, Hamlin found that the average rate of firearms ownership in the US trended downward from about 51% in 1980 to about 40% in 2019; from 1980 to 2017 the number of school shootings in the US stayed between about 20 to 40 per year, however in 2018 there were 102 school shootings and in 2019 there were 110. Katsiyannis et al. (2018)

concludes that while there is no clear link indicating causality between the availability of high-powered firearms, adolescent mental illness, and school shootings, there is a trend of more adolescents with mental health or conflict resolution difficulties using easily obtained firearms in school shootings. Hamlin reported that there is no statistical significance between gun control laws being enacted and the number of school shootings, and although the results are inconclusive, required safety training prior to a handgun purchase shows the strongest association with a decline in school shooting incidents.

While there are very different and opposing views on the role of firearms availability in relation to targeted school violence, Simons and Meloy (2017) identified two key points they claim are undeniable: “Firearms are a weak predictor of violence in general” and “firearms can be a strong predictor of lethality risk when in reach of a person of concern” (p. 639). In their study of averted school attacks, Stallings and Hall (2019) found that 62.5% of the would-be offenders stole the weapon from their family, 12.5% intended to steal a weapon from their family, 10% legally purchased a firearm, 10% had another party legally purchase a firearm, and 5% intended to steal a weapon from a friend or acquaintance. Hamlin (2021) pointed out that more severe legal consequences for firearms owners who do not adequately secure their firearms may help prevent potential perpetrators of targeted violence from acquiring a weapon and may help reduce the number of school shootings. Hamlin also concluded that a number of interrelated factors, such as a dysfunctional home life, bullying, gang activity, childhood trauma, suicidal ideation, and mental health challenges play a role in targeted school

violence, but future work should further explore the efficacy of different types of firearms regulations in relation to school violence.

Characteristics of School Attackers

Although research has shown that efforts to create a profile of school attackers have been unsuccessful and possibly detrimental (Cornell, 2020), several findings have been consistent: Offenders who target middle school and high school populations are usually a current student at that school; offenders who target elementary school populations are usually not current students at the school; urban and suburban school attackers are usually white males with a perception of persecution; attacks in inner-city schools are usually the result of specific grievances between the offender and victims (Agnich, 2015; Stallings & Hall, 2019). Agnich also points out that perpetrators of mass school shootings kill themselves at the conclusion of the attack in about 31% of the cases, which is much higher than other types of mass attacks; and Lankford (2018) found that at least 78% of school shooters had suicidal thoughts or had engaged in suicidal behaviors prior to their attack, indicating that suicidal ideation should be explored as part of school violence prevention efforts.

A number of researchers have focused on student mental health issues as a component of targeted school violence and it is estimated that over 20% of students will struggle with a serious mental health issue at some point (Lenhardt et al., 2018). Researchers have identified three typologies of mental health issues that seem to play a role in the perpetration of targeted school violence: Psychopathic disorders, psychotic

disorders, and traumatization (Cornell, 2020; Langman, 2015; Lenhardt et al., 2018; Stallings & Hall, 2019). Psychopathic offenders tend to display arrogant and narcissistic traits along with a lack of empathy for others, psychotic offenders tend to experience delusions and/or hallucinations and likely suffer from a serious mental illness such as schizophrenia, traumatized offenders have experienced severe neglect and/or abuse and tend to suffer from chronic emotional disorders (Cornell, 2020; Langman, 2015; Stallings & Hall, 2019). It is important to note that these mental disorders do not explain why some of those affected go on to perpetrate school attacks, most people suffering from these types of disorders do not commit violent acts of targeted violence (Langman, 2015; Stallings & Hall, 2018).

Lenhardt et al. (2018), in their study of 18 school shooters between 1996 and 2012, found that 94% of the offenders “demonstrated a lack of resiliency or an inability to rebound from an unsatisfactory experience, hindrance, or insult” (p. 9), and 83% of the offenders demonstrated poor coping skills. Alongside the lack of resilience and coping skills, Lenhardt et al. also found that 67% of the shooters felt alienated, perceived that they had been bullied, and/or had made a previous threat of violence. Additionally, in 61% of the shooters there was a constellation of five variables: Depression, lack of empathy, poor anger management capabilities, an intent to actually follow through on threats, and history of prior threats of violence or attempted suicide (Lenhardt et al., 2018). A recent and significant loss or rejection was also noted in 61% of the shooters which is consistent with US Secret Service study results indicating that social rejection

was present in more than two-thirds of the cases analyzed (Lenhardt et al., 2018; Vossekuil et al. 2002).

In contrast to the data presented by Lenhardt et al. (2018), Cornell (2020) points out that when the full spectrum of school related homicides is examined, a different picture emerges. In a study of 431 school related murders from 1994 to 2018, only 53% of the perpetrators were students, 94% were males, and the motivations behind the acts of violence differed considerably from the topics of mental illness and bullying (Cornell, 2020). Cornell found that the most common motivation for a school related homicide was gang activity (41% of the cases), followed up by “interpersonal disputes” (32%), then brawls or fights (17%), and retaliation (16%). Less than 10% of the cases were due to romantic disputes, robbery, sexual violence, or mental health conditions (Cornell, 2020). Cornell (2015) asserted that regardless of tremendous attention given to attacks in schools, schools are actually very safe places. In a sample of 18,875 homicides in 37 states, only 0.3% occurred in schools with many more occurring in homes, streets, and restaurants; and analysis of the School-Associated Violent Death data indicates that while an average of more than 24 school age youth are murdered on a weekly basis in the US, only about 1% of these incidents occur in schools (Cornell, 2015).

Characteristics of Schools Where Attacks Have Occurred

In addition to characteristics shared by the perpetrators, researchers have also found some characteristics shared by the schools where targeted violence occurred or was planned to occur (Daniels et al., 2010; Stallings & Hall, 2018). Some commonalities

among schools where a shooting event took place or was planned include tolerance for certain students to be disrespectful, disciplinary measures applied unequally across the student population, school culture that was rigid and resistant to change, a “code of silence” where students are not comfortable bringing concerns to staff (Stallings & Hall, 2018). In their investigation of averted acts of school violence, Daniels et al. (2010) found that school conditions were the most frequently identified issue that prevented the act of violence from occurring, one participant specifically identified “rapport building” as the key component to preventing acts of violence. The participants also identified “watchfulness” and visible presence of school officials as important, along with “treating students with dignity and respect”, “efforts to break the code of silence”, and “the core idea of school – community cooperation” (Daniels et al., 2010, p. 81).

Response to School Shootings

The targeted school violence which occurred in the 1990s, and particularly at Columbine High School in 1999, led to a number of changes in response trajectories by school officials as well as law enforcement and emergency medical personnel (Cornell, 2020; Martaindale & Blair, 2019; Phillips, 2020). Researchers and educators were initially interested in creating a profile of potential school shooters or compiling checklist type documents that identified traits that could be considered warning signs that a student might attack the school; this possibility was short-lived and researchers quickly realized that many students may exhibit some of these characteristics and pose no threat of violence (Agnich, 2015; Cornell, 2003; Cornell, 2020; O’Toole, 2000). Utilizing a list of

behaviors or traits that may indicate a propensity towards violence was found to create a high number of false positives as well as unfairly label many students as posing a threat when they did not (Cornell, 2003; Cornell, 2020; O'Toole, 2000).

Another response to school violence in the form of “zero tolerance” policies also became widespread in the late 1990s and early 2000s (Cornell, 2003). Zero tolerance policies generally refer to the concept of uniformly punishing all offenses harshly and were largely a result of drug enforcement efforts starting in the 1980s (Skiba & Peterson, 1999). In the mid-1990s zero tolerance policies were initially put in place by schools to punish possession of firearms on campus with suspension or expulsion but were eventually applied to other areas such as drug and tobacco possession and other types of “school disruption” offenses (Skiba & Peterson, 1999). These mandatory punishment policies led to high levels of suspensions and expulsions, and particularly impacted minority students (Cornell, 2003).

In this same timeframe, law enforcement agencies began to re-examine the way they should respond to active shooter incidents and emergency medical agencies soon followed (Martaindale & Blair, 2019; Phillips, 2020). The traditional protocols for extremely dangerous situations, such as active shooter attacks, was to normally to contain the incident and wait for special response units such as a Special Weapons and Tactics (SWAT) team to respond and address the situation with their specialized equipment and training (Martaindale & Blair, 2019; Phillips, 2020). After the attack on Columbine High School, this strategy was called into question by many in the public as well as in public

safety organizations and new methods of responding to active shooter incidents were developed (Martaindale & Blair, 2019; Phillips, 2020).

Active Shooter Training

Post-Columbine active shooter response protocols involved several things that were new concepts to many in law enforcement and emergency medicine. While initial active shooter response training called for a small team of four, five, or six officers to gather and then engage the offender, later training protocols called for even a single officer to engage an offender if they were actively shooting when the officer arrived due to the likelihood of large numbers of injuries or fatalities every few seconds during an active shooting incident (International Association of Chiefs of Police, 2018; Martaindale & Blair, 2019; Phillips, 2018). This intentional insertion of one or a few officers into a very dangerous situation goes against much of the officer safety training that is common in law enforcement agencies (Phillips, 2020). Another key response that goes against much of the standard training of law enforcement is to disregard injured people and move past them in search of the offender who is actively shooting (Martaindale & Blair, 2019). Emergency medical personnel have also traditionally been trained to “stage” and not enter a scene until it is deemed safe and secure, current training for emergency medical personnel often includes the possibility that they may tend to the wounded in semi-safe or “warm” zones very close to the area where violence may still be occurring (International Association of Chiefs of Police, 2018; Martaindale & Blair, 2019). In addition to more immediate intervention by trained emergency medical personnel, some law enforcement

officers are being trained to higher standards of emergency medicine based on the concepts of Tactical Emergency Casualty Care (TECC) which were compiled over the course of the conflicts in Iraq and Afghanistan; these skills normally focus on bleeding control, airway maintenance, prevention of tension pneumothorax, and prevention of hypothermia (Martaindale & Blair, 2019).

Different types of programs have also been developed to train civilians, or those not affiliated with any type of emergency response organization, on the best ways to respond to an active shooter incident; these include Avoid Deny Defend (ADD) taught by the Advanced Law Enforcement Rapid Response Training (ALERRT) center at Texas State University; Run, Hide, Fight (RHF) developed by the Houston Police Department with funding through the Department of Homeland Security; and Alert, Lockdown, Inform, Counter, and Evacuate (ALICE) which is taught in person as well as online (Jonson et al., 2020; Martaindale & Blair, 2019). While these programs all have different components and terminology, all of them reinforce that potential victims in an active shooter incident must choose the most appropriate response based on their situation, these responses can vary from fleeing to hiding to defending oneself with force (Jonson et al., 2020; Martaindale & Blair, 2019).

In a study involving 326 participants, Jonson et al. (2020) presented a two-day ALICE Instructor Certification Course and conducted simulations involving the participants using different types of response methods, select participants with law enforcement experience played the role of an active shooter using Airsoft firearms. The

first simulation involved a traditional lockdown while the second and third simulation involved participants using the techniques learned in the ALICE training, specifically evacuate, counter, or lockdown; Jonson et al. found that in the traditional lockdown scenarios in a classroom, 74% of the participants were shot, but when multi-option methods (ALICE) were employed, only 25% were shot; in open area environments 68% of participants were shot when they used lockdown procedures and only 11% were shot when they employed multi-option responses (Jonson et al., 2020).

In an attempt to prepare for the possibility of an active shooter situation, over 70% of US schools conduct some type of active shooter drills; these can vary in intensity from lockdown or shelter-in-place drills where students hide under their desks, to full scale and multi-option drills where students employ various methods to counter an attacker, and in some cases select participants are outfitted with simulated bullet wounds, some pretend to be deceased, and blank rounds are fired from law enforcement and actors portraying active shooters (Erbacher & Poland, 2019; Jonson et al., 2020; Moore-Petinak et al., 2020). In their study of 815 participants, Moore-Petinak et al. found that 68.5% had experienced active shooter drills and 70.3% were primarily focused on hiding, 54.4% included locking or barricading doors, and only 6.7% referenced all of the aspects of the RHF concept. About half of the participants indicated that active shooter drills had made them feel scared and/or unsafe while about 20% reported that the drills made them feel safer; about 43% of the participants reported that they believed active shooter drills made the school a safer place while about 24% reported that the drills would not make a school

safer (Moore-Petinak et al., 2020). Moore-Petinak et al. and Erbacher and Poland reinforced that certain types of active shooter drills can have very negative impacts on students, and if full scale drills are to be conducted, safety measures must be put in place to ensure that none of the participants are needlessly traumatized. Erbacher and Poland specifically stated that school psychologists must be involved in the entire process of the drill, from planning through de-briefing, and a trauma-informed approach must be utilized.

School Protective Measures

In addition to active shooter response training and drills, many schools have adopted additional measures to protect against a targeted attack. Some of the measures that have been implemented include security features such as security guards, bullet resistant windows, metal detectors at entrances, clear backpacks, various types of alarm and video surveillance systems, mass notification systems, panic buttons in classrooms, electronic door locks, and even fortified safe rooms (Cornell, 2020; DeMitchell & Rath, 2019; Kelly, 2016). One school in Georgia considered building caches of firearms for use in the event of a school attack and many school districts across the US have considered hiring armed security and/or allowing staff members to carry firearms; additionally, many schools currently have on-site School Resource Officers who are armed members of law enforcement agencies assigned to a specific school or schools (Agnich, 2015; Cornell, 2020). In a study of 21 school administrators in New Jersey, Kelly (2016) found that the most common theme relating to school safety was appropriate policy and procedures, the

second most common theme was armed personnel on campus, and the third most common theme was physical security measures. While several of the participants were adamantly opposed to armed personnel on their campus, most were open to the idea of appropriately trained armed personnel, and some were open to the idea of school staff being armed (Kelly, 2016).

Between one third to about 42% of public schools in the US have an armed law enforcement officer assigned to campus, these School Resource Officers (SRO) may be full time or part time and are specially trained to work in the school environment (Allison et al., 2020; Katsiyannis et al., 2018). Allison et al. reported that in 66% of 41 school attacks between 2008 and 2017, SROs were assigned to the school, in 49% of the cases the officer was on duty at the school at the time of the attack, and in about 30% of the cases the SRO was able to respond to the location where the attack was taking place in one minute or less. DeMitchell and Rath (2019) pointed out that the presence of armed officers does not seem to deter some would-be school attackers citing incidents that occurred at Umpqua Community College which had a police component of three officers, and the Stoneman Douglas High School which had an armed officer on site at the time of the attack. DeMitchell and Rath hypothesized that the selection of a school to attack is likely more related to the perpetrators reason for the attack than if the school has an armed presence or is identified as a gun-free zone.

While there seems to be substantial support for armed SROs in many schools, there is a sharp divide in opinions regarding arming teachers or school staff to respond to

acts of targeted violence (Allison et al., 2020; Mancini et al., 2020). In a poll of 521 participants in Virginia, Mancini et al. found that 49% of the respondents supported allowing teachers to be armed, this contrasts somewhat from the US national average of 42% (Newport, 2018). DeMitchell and Rath (2019) offer four considerations based on their concerns with arming teachers or other school staff: firearms are capable of causing death and injury and must be secured properly yet immediately available should a need arise; liability concerns; increased likelihood of unintentional discharges or casualties from errant rounds; and potential misidentification possibilities that might lead to law enforcement mistakenly shooting school staff rather than the perpetrator during an active shooter incident. Mancini et al. concluded that many factors must be taken into consideration if a school is considering arming teachers including input from parents, teachers, school administration, and law enforcement. There is a lack of empirical evidence that arming teachers or even having armed law enforcement personnel on campus will prevent targeted school violence from occurring, and many researchers recommend a more comprehensive approach that includes measures such as close attention to student mental health, anti-violence programs, controlling access to firearms and other weapons, building meaningful relationships among staff, students, and community, and student threat assessment programs (Agnich, 2015; Cornell, 2020; DeMitchell & Rath, 2019; Fein et al., 2004; Katsiyannis et al., 2018; Lenhardt et al., 2018; Mancini et al., 2020; Stallings & Hall, 2019).

Threat Assessment

The early beginnings of the concept of threat assessment can be traced back to 1940 when the US Secret Service Protective Research Section was tasked with gathering and analyzing information about individuals or groups who may pose a danger to the President of the US (Vossekuil et al., 2015). In the early 1990s, after at least four cases where lone individuals attempted to attack a person under the protection of the Secret Service, an examination of characteristics of potential assassins was undertaken and the term *targeted violence* came into use (Fein et al., 1995; Vossekuil et al, 2015).

Exceptional Case Study Project and the Safe Schools Initiative

In 1992 the Secret Service began a study of every known person who attacked a well-known political or public figure, or who approached the person with a weapon and an apparent intent to attack, between 1949 and 1995; this study was published as the Exceptional Case Study Project (Fein & Vossekuil, 1997). The goal of the Exceptional Case Study Project was to inform the Secret Service and other law enforcement agencies on potential methods to prevent attacks on public figures (Fein et al., 1995; Vossekuil et al, 2015).

In 1999, following the targeted attack on Columbine High School, the US Secret Service and the US Department of Education initiated a multidisciplinary effort to study if there is a potential to learn of planned attacks on schools before they occur and what types of measures can be undertaken to prevent such attacks from occurring (Vossekuil et al., 2002; Vossekuil et al, 2015). This effort, the Safe Schools Initiative, involved the

analysis of 37 incidents of targeted school attacks in the US between 1974 and June of 2000 and focused on the behaviors of school attackers with an emphasis on identifying pre-attack indicators that may be useful in preventing attacks in the future (Vossekuil et al., 2002; Vossekuil et al, 2015).

A number of key findings arose from the Exceptional Case Study Project and the Safe Schools Initiative (Vossekuil et al, 2015), including that “targeted attacks are rarely sudden, impulsive acts,” “prior to the attacks, others often knew about the attacker’s idea/plan,” “most attackers did not threaten their targets directly prior to the attack,” “there is no accurate or useful ‘profile’ of an assassin or a school shooter,” “most attackers had difficulty coping with significant losses or failures,” “most attackers had behaved in a way that concerned others in their lives prior to the attack,” “many [attackers] felt bullied, persecuted, or injured prior to the attack,” and “most attackers had access to weapons – and had used weapons – prior to the attack” (pp. 246-247).

In addition to these findings and specifically relating to school environments, Fein et al. (2004) found that “in many cases, other students were involved in some capacity” and “despite prompt law enforcement responses, most shooting incidents were stopped by means other than law enforcement intervention” (p. 17).

Based on the findings of the Exceptional Case Study Project and the Safe Schools Initiative, Fein et al. (2004) outlined six core principles that serve as the foundation for threat assessment: “Targeted violence is the end result of an understandable, and oftentimes discernible, process of thinking and behavior,” “targeted violence stems from

an interaction among the individual, the situation, the setting, and the target,” “an investigative, skeptical, inquisitive mindset is critical to successful threat assessment,” “effective threat assessment is based upon facts rather than characteristics or ‘traits’,” “an ‘integrated systems approach’ should guide threat assessment inquiries and investigations,” and “the central question in a threat assessment inquiry or investigation is whether the student *poses* a threat, not whether the student has *made* a threat” (p. 29).

As a result of the Exceptional Case Study Project and the Safe School Initiative the Secret Service developed a list of key questions that should be explored during a threat assessment (Vossekuil et al., 2015, pp. 250-252):

- “What are the subject’s motives and goals?”
- “What has the subject communicated about his or her intentions to anyone (target, law enforcement, family, friends, colleagues, associates, diary/journal)?”
- “Is there evidence that the subject is engaged in attack-related behaviors?”
- “Is there evidence that the subject has engaged in menacing, harassing, and/or stalking-type behavior?”
- “Does the subject have a history of mental illness involving command hallucinations, delusional ideas, feelings of persecution, and so forth, with indications that the subject has acted on those beliefs?”
- “How organized is the subject? Does the subject have the ability to plan and execute a violent action?”

- “Is there evidence that the subject is experiencing feelings of hopelessness, desperations, or despair?”
- “Is what the subject says consistent with his or her actions?”
- “Does the subject see violence as acceptable, desirable, or the only way to solve problems?”
- “What concerns do those who know the subject have about the subject’s behavior?”
- “What factors in the subject’s life and/or environment could change and thereby increase the subject’s risk of attacking?”
- “What factors could change and thereby decrease the risk posed?”

Warning Behaviors

Meloy and his colleagues formulated a list of warning behaviors (Meloy & O’Toole, 2011; Meloy et al., 2012; Simons & Meloy, 2017) for consideration when conducting a threat assessment: “pathway warning behavior,” “fixation warning behavior,” “identification warning behavior,” “novel aggression warning behavior,” “energy burst warning behavior,” “leakage warning behavior,” “last resort warning behavior,” and “directly communicated threat warning behavior” (Simons & Meloy, 2017, pp. 635-636).

In a study of nine German school attackers and 31 students of concern who did not carry out an attack, Meloy et al. (2014) found that 100% of the school attackers exhibited signs of pathway behavior, fixation behavior, identification behavior, and

leakage, 78% exhibited last resort behavior, and 56% exhibited novel aggression before their attack; in the 31 students who did not carry out an attack, 90% showed signs of leakage and 39% made a direct threat. Meloy et al. concluded that pathway, fixation, identification, last resort, and novel aggression seemed to distinguish school attackers from non-attacker students of concern in their sample, and directly communicated threats may actually prove be a negative finding as future research is conducted.

The concept of a distinct pathway to violence was first hypothesized by the work of the US Secret Service in the Exceptional Case Study Project and the Safe Schools Initiative (Fein & Vossekuil, 1997; Simons & Meloy, 2017; Vossekuil et al., 2002) and later explored in more detail by Calhoun and Weston (2003). The pathway to violence model posits that a would-be attacker first develops a grievance where they perceive a great injustice has been perpetrated upon them by an individual or organization. This grievance then transitions into an ideation stage where the subject fantasizes about solving their problem through violent means as no other option would accomplish their goal. Once the decision to employ violence has been thoroughly embraced the subject begins research and planning with concrete steps to bring their plot into fruition. Once the research and planning are concluded, the subject moves into the preparation stage where necessary materials and weapons are collected or prepared for an attack. After the necessary items are made ready, the subject then moves towards the target, breaching any barriers and ultimately attacking the target itself (Calhoun & Weston, 2003; Simons & Meloy, 2017).

Fixation in terms of threat assessment can be defined as a pathological “preoccupation with a particular person or cause that is accompanied by deterioration in social and occupational functioning (Meloy & Rahman, 2020, p. 1). Fixation has been identified as a common warning behavior in targeted violence (Meloy & O’Toole, 2011; Meloy et al., 2012; Simons & Meloy, 2017) and was originally conceptualized by Mullen et al. (2009) in relation to public figure stalking and harassment. In an analysis of 377 cases of targeted attacks, Meloy and Rahman found evidence of fixation in an average of 81% of cases, they further explored the concepts of delusion, obsession, and extreme overvalued beliefs as potential drivers behind pathological fixation. While obsessions and delusions may be evidence of an identifiable mental health disorder and are possibly treatable in a clinical setting, extreme overvalued beliefs are shared by others in a person’s subculture, become more extreme and refined over time creating an intense emotional commitment by the believer, and appear to require a different approach from traditional mental health clinical practice (Meloy & Rahman, 2020; Rahman et al, 2020).

The concept of identification in relation to threat assessment involves patterns of behavior where a person psychologically identifies themselves as a “pseudocommando”, exhibits a warrior-like mentality, has a fascination and association with weapons and other military or law enforcement related equipment, has a desire to emulate previous mass attackers or murderers, or perceive themselves as an agent to further a specific cause or system of beliefs (Knoll, 2010; Meloy et al., 2012; Meloy et al, 2015; Simons & Meloy, 2017). Dietz (1986) first coined the term “pseudocommando” and explained that

this typology of offender is fascinated with firearms and perpetrate their attacks “after long deliberation” (p. 482). Hempel et al. (1999) expanded on the concept of these factors using the term “warrior mentality” and explained that these types of people are typically narcissistic and antisocial, associate with military service, are fascinated with weapons, have a violent history, and are predatory. Knoll explained that the “pseudocommandos” are injustice collectors who exhibit high levels of narcissism and experience strong feelings of rage and resentment for perceived slights, these narcissistic injuries lead to strong desire for revenge. Like other warning behaviors, identification behavior alone does not predict that someone will perpetrate an act of targeted violence, but when observed in conjunction with other warning behaviors it may elevate the level of concern (Meloy et al., 2015).

Last resort warning behavior refers to an “action imperative” and a “time imperative” where a person of concern demonstrates an increasing sense of desperation and distress and sees no alternative other than violent action to remedy their situation (de Becker, 1997; Mohandie & Duffy, 1999). De Becker explained that if a person of concern feels justified in their grievance, sees no alternatives to resolving the situation other than violence, does not care about the consequences of their actions, and has the ability to carry out their revenge, they may decide to carry out an act of targeted violence. In an article regarding law enforcement response to schizophrenic people, Mohandie and Duffy wrote about an “action imperative” where an individual believes they have “exhausted the legitimate avenues of addressing their issues and not believe they have to

take matters into their own hands” and a “time imperative” where the individual feels “a sense of urgency or desperation about the need for such actions” (p. 12). Although this original concept was regarding schizophrenic individuals likely experiencing delusional beliefs, the broader concept of last resort behavior is now considered a warning behavior in threat assessment operations (Meloy et al., 2012; Simons & Meloy, 2017).

The concept of leakage was first articulated by O’Toole (2000) and has since been studied by other researchers. Leakage occurs when a would-be attacker intentionally or unintentionally communicates the intent to harm someone to a third party and can occur in many different forms such as veiled threats, boasts, ultimatums, diary entries, poems, drawings, social media posts, or videos (Lankford et al, 2019; Meloy & O’Toole, 2011; O’Toole, 2000). In an early study of the concept of leakage, Hempel et al. (1999) found evidence of leakage in 67% of their population of 30 adult mass attackers. In a study of 34 adolescent mass attackers Meloy et al. (2001) found that the offender discussed their plot to kill with at least one other person before the event occurred in 44% of the incidents and some type of identifiable leakage occurred in 58% of the cases. The findings of the Safe Schools Initiative (Vossekuil et al., 2002) indicated that in 81% of cases, at least one person had information that an attack was planned. More recently, Silver et al. (2018) conducted a study of all known public mass murderers in the US between 1990 and 2014 and found that some form of leakage occurred in 58.3% of the population. Lankford et al. studied the 15 deadliest mass murder incidents between 1998 and 2018 and found that leakage of the offender’s homicidal intent was present in 87% of

cases, leakage of particular interest in mass attacks were present in 80% of cases, and in 80% of cases the concerning behavior was reported to law enforcement prior to the attack.

Threat Assessment and Management Protocols

Threat assessment and threat management are somewhat new to many law enforcement entities who have traditionally responded to crimes after they occurred rather than attempting to intervene in an event that may occur in the future (Borum et al., 1999; Simons & Meloy, 2017). Prevention of an act of targeted violence does not require threat assessment professionals to predict the act, but rather recognize potential warning signs and take proactive steps to address and manage potential threats before violence occurs (Simons & Meloy, 2017).

Threat assessment has been conducted in several different ways since the 1990s (Hart et al., 2016; Simons & Meloy, 2017). Prior to 1993, assessments of violence risk were undertaken using the practitioner's clinical knowledge, experience, and instinct in a system that has been identified as "unstructured clinical judgement" (Hart et al., 2016). In 1993 a new type of system known as actuarial instruments came into use for violence risk assessment when the Violence Risk Assessment Guide, later renamed the Violence Risk Appraisal Guide (VRAG), was published (Hart et al., 2016). Actuarial instruments are non-discretionary and use algorithms rather than clinical judgement to assess risk; as a reaction to this purely statistical approach, a new type of threat assessment protocol known as "structured professional judgement" was developed (Hart et al., 2016; Simons

& Meloy, 2017). Structured clinical judgement systems make use of the practitioner's clinical or professional expertise within a structured format but do not provide a numerical estimate of potential risk (Simons & Meloy, 2017). Structured professional judgement instruments are now commonplace in the field of threat assessment and are widely accepted as evidence in courts of law, over 100 studies have indicated that structured professional judgement instruments demonstrate good interrater reliability and predictive validity (Hart et al., 2016; Simons & Meloy, 2017).

Student Threat Assessment

Although the concept of threat assessment began with the protection of public figures, after a number of school shootings in the 1990s, most infamously the attack on Columbine High School in Colorado, the principles of threat assessment began to be applied to schools (Cornell, 2020; Daniels et al, 2010; Fein et al., 2004; Goodrum et al., 2019; O'Toole, 2000; Vossekuil et al., 2002). Based on the findings of the Safe Schools Initiative, 11 questions were developed by the US Secret Service and the US Department of Education to guide a student threat assessment process in schools (Vossekuil et al, 2002; Fein et al., 2004). In the years since the original 11 question model, other models have come into use, most notably the Virginia Student Threat Assessment Guidelines (VSTAG) originally developed by the University of Virginia (Cornell & Sheras, 2006) and later updated and renamed the Comprehensive Student Threat Assessment Guidelines (CSTAG) to reflect its potential for use outside the state of Virginia (Cornell, 2018).

The following 11 questions, developed by the US Secret Service and the US Department of Education pursuant to the Safe Schools Initiative, serve as basic queries for school threat assessment (Fein et al., 2004, pp. 55-57):

1. What are the student's motive(s) and goals?
2. Have there been any communications suggesting ideas or an intent to attack?
3. Has the subject shown inappropriate interest in any of the following? (school attacks or attackers, weapons, incidents of mass violence)
4. Has the student engaged in attack-related behaviors?
5. Does the student have the *capacity* to carry out an act of targeted violence?
6. Is the student experiencing hopelessness, desperation, and/or despair?
7. Does the student have a trusting relationship with at least one responsible adult?
8. Does the student see violence as an acceptable—or desirable—or the only – way to solve problems?
9. Is the student's conversation and "story" consistent with his or her actions?
10. Are other people concerned about the student's potential for violence?
11. What circumstances might affect the likelihood of an attack?

Once a student has been assessed to pose a threat, the threat assessment team's primary focus is preventing the attack from occurring and protecting likely targets through threat management strategies (Fein et al., 2004). Fein et al. identified three primary components of a basic threat management strategy: "controlling/containing the

situation and/or the student in a way that will prevent the possibility of an attack,” “protecting and aiding possible targets,” and “providing support and guidance to help the student deal successfully with his or her problems” (p. 63). In some cases, immediate steps, such as an arrest or mental health detention, are required to prevent an act of targeted violence and protect potential victims, in other instances long term strategies are needed to address the motivations of the potential attacker so that they no longer feel an attack is possible or necessary (Fein et al., 2004).

The primary mission of a threat assessment and management team is to prevent an attack from occurring, this intervention should address threat and risk factors from the perspective of long-term prevention and may not call for traditional punitive responses (Fein et al., 2004; Louvar Reeves & Brock, 2018). Traditionally, many school administrators expel or suspend students for serious misbehavior and law enforcement officers arrest people who make threats, Fein et al. point out that these actions may not be the best strategy to address a long-term threat, and in the aftermath of an arrest, suspension, or expulsion, the person of concern may be even more motivated to eventually carry out an attack. Fein et al. identify an “integrated systems approach” involving entities such as school administration, mental health professionals, law enforcement, youth services, and perhaps courts and probation as the most appropriate way to intervene in a situation involving threats of violence, with the long-term goal of convincing the person of concern that there are non-violent ways to address their grievances.

After the release of the FBI and Secret Service reports recommending school threat assessment programs (O'Toole, 2000; Fein et al., 2002), Cornell and his colleagues (Cornell, 2003; Cornell et al., 2004) at the University of Virginia created a framework of practical guidelines for school threat assessments and field tested them at two school districts in Virginia. The school threat assessment teams were composed of the school's principal or vice principal, a school resource officer, a school psychologist, and a school counselor; personnel from the school were used rather than an external team because they would have more knowledge of the student body and would be able to respond more quickly (Cornell, 2003; Cornell et al., 2004). Teachers were not included in the threat assessment team since their role is to be in the classroom; however, they did have a primary function of reporting concerns and keeping the team apprised of any additional information. A seven-step decision tree model was utilized to assess the threat; threats were classified as "transient" if they were less serious, or "substantive" if they were more serious, and were handled accordingly with actions ranging from a referral to counseling up to law enforcement intervention (Cornell, 2003; Cornell et al., 2004). During the 2001-2002 school year, these guidelines were used to assess threats in 188 cases resulting in 70% of threats being classified as transient and 30% of threats classified as substantive; of all the threats analyzed, only six cases resulted in an arrest being made, three students were suspended, and 94 students were suspended for one to ten days (Cornell, 2003; Cornell et al., 2004). In follow-up interviews, school principals reported that the behavior of an assessed student improved in 43% of cases, remained about the

same in 39% of cases, and got worse in 18% of cases (Cornell, 2003; Cornell et al., 2004).

The procedures used in this field study were refined and then formalized as the Virginia Student Threat Assessment Guidelines (VSTAG) model in 2006 (Cornell & Sheras, 2006; Cornell et al., 2018). The VSTAG model employs a multidisciplinary team that methodically gathers information and then assesses the seriousness of the threat to determine what type of action is most appropriate, this can range from a referral to counseling services up to arrest or other law enforcement intervention (Cornell et al., 2018). Threat assessment procedures, such as those outlined in the VSTAG, are flexible and intended to differentiate between threats actually posed versus threats that are not truly serious; this is a different approach from zero-tolerance policies where a standard consequence is applied to all cases regardless of the motivation behind the behavior (Cornell et al., 2018). A number of controlled studies by Cornell and his colleagues (Cornell et al., 2009; Cornell et al., 2011; Cornell et al., 2012; Cornell et al., 2018; Nekvasil & Cornell, 2015) have shown that schools using the VSTAG model have less bullying and student aggression, more favorable views of overall school climate by teachers and students, lower rates of suspensions and other exclusionary discipline, more favorable perceptions of discipline as being fair, and no statistically significant disparities in disciplinary measures among Black, White, and Hispanic students.

In 2018, the VSTAG model was updated and renamed the Comprehensive School Threat Assessment Guidelines (CSTAG), the seven-step decision tree process was

condensed into a five-step process and the name was changed to better reflect potential for use outside the state of Virginia (Cornell, 2018; Cornell, 2020). The updated five-step process (Cornell, 2020, p. 244) consists of the following elements:

1. Evaluate the threat
2. Attempt to resolve the threat as transient
3. Respond to a substantive threat
4. Conduct a safety evaluation for a very serious substantive threat
5. Implement and monitor the safety plan

While there are currently a variety of student threat assessment programs available to educators, the effective implementation of these programs in the school environment continues to be a challenge (Cornell, 2020; Cornell et al., 2018; Goodrum et al., 2018; Goodrum et al., 2019; Nekvasil & Cornell, 2015).

Schools' Implementation of Threat Assessment Programs

While numerous studies have been conducted on threat assessment programs and targeted violence and many research projects have been conducted on the implementation of new programs in a variety of settings, very little research has been conducted on the implementation and operation of threat assessment programs in schools and how these programs are perceived by the school staff working within these programs (Cornell, 2020; Cornell et al., 2018; Goodrum et al., 2018; Goodrum et al., 2019; Nekvasil & Cornell, 2015). Oftentimes, when programs are implemented in a real-world setting, they do not function in the manner specified in the initial design, this can be exacerbated by

the scarcity of resources in some school settings (Goodrum et al., 2019). Furthermore, since school threat assessment teams are typically collaborative efforts among school administration, school counselors, law enforcement, and mental health professionals; the training, implementation, and operation of these programs requires that all the personnel from these varied disciplines communicate effectively, work together, and maintain an awareness of their role in the process (Stohlman et al., 2020).

Diffusion of Innovations

Rogers' (2003) identifies *diffusion* as “the process in which an innovation is communicated through certain channels over time among members of a social system” (p. 5). Diffusion is identified as a type of social change that involves modification of certain elements of a social system, some of this change is planned as part of the process, and some is spontaneous, occurring naturally as the innovation expands through the social system (Rogers, 2003). An *innovation* is “an idea, practice, or object that is perceived as new by an individual or other unit of adoption” (Rogers, 2003, p. 12). The actual newness of the innovation is inconsequential in Rogers' theory, anything that is perceived as new to the social group is considered an innovation.

Rogers' (2003) theory proposes that the rate of adoption of an innovation will be affected by several characteristics:

- It's *relative advantage* to other alternatives currently available
- It's *compatibility* with existing values, past experiences, and current needs of the social system

- It's *complexity*, the simpler the innovation is to understand and incorporate, the more likely it will be adopted quickly
- It's *trialability* or how easily it can be tested on a trial basis
- It's *observability*, innovations that provide easy-to-see results will be adopted more readily

Rogers' (2003) theory takes into account that the type of communication will affect the way an innovation is diffused across a social group. While mass media has the ability to inform large numbers of people quickly and efficiently, and scientific studies may influence early adopters of an innovation, interpersonal communication among trusted members of particular social group are more effective at convincing most people to adopt an innovation (Rogers, 2003). Most potential adopters of an innovation tend to rely on modeling and imitation of peers who have already adopted the innovation and express positive qualities of the innovation (Rogers, 2003). Innovations are adopted at different rates within different systems; normally, a few individuals, called innovators, will adopt the innovation early in the process, and then as time goes on, more and more of the people within the system will embrace the innovation until there are few left who have not adopted the innovation (Rogers, 2003). Rogers also points out that much of the process of diffusion cannot be explained solely by individuals' behaviors, the norms and institutionalized customs of the social system have a direct impact on the adoption of an innovation.

Mihalic and Irwin (2003) conducted a study of eight different programs implemented at 42 different sites over two years to explore the factors that can cause a newly implemented program to be successful or to fail. Ideal program characteristics, such as high-quality materials, flexibility, time requirements, and cost; and ideal staff characteristics, such as buy-in and support, motivation, staff skills and knowledge, prioritization of the program, good communication, and ability to hire qualified staff were found to be very important to the successful implementation of the new program (Mihalic & Irwin, 2003). Community support, time to devote to the program, an ideal program champion / leadership, and ideal agency characteristics, such as staff participation, support from administration, effective communication, financial resources, and political climate were also found to be important for the successful implementation of the new program (Mihalic & Irwin, 2003). Technical assistance visits were negatively correlated with program outcomes, but this is possibly because the sites that had multiple problems with the implementation of the program requested more visits (Mihalic & Irwin, 2003). Although many of the sites expressed concern about financial resources, inconsistent funding did not appear to significantly affect program outcomes (Mihalic & Irwin, 2003).

Consistent with the findings of Mihalic and Irwin (2003), Gottfredson and Gottfredson (2002) found that quality of supervision, quality of training, and support from the principal were important to the successful implementation of new school programs. The quality of leadership, specifically from the principal of a school, was found to be a key indicator of program success when a school implemented a new

program (Payne et al., 2006), and in a review of over 500 studies on program implementation, Durlak and Dupre (2008) found that good leadership and effective program champions were critical to the success of program implementation. Goodrum et al. (2019) pointed out that even if a school has all of the necessary components in place to implement an effective school safety program, much of the success of a program can be stymied by a toxic school climate where students are unwilling to report concerns, staff members don't communicate with each other about concerns, or won't share information due to a misunderstanding of the Family Educational Rights and Privacy Act (FERPA) as it relates to safety situations.

Reporting of Concerns

Research has suggested that people are often reluctant to report concerning behavior to law enforcement (Lankford et al., 2019). In a study of 63 active shooters between 200 and 2013, Silver et al. (2018) found that 83% of people who noticed concerning behavior communicated directly with the person of concern and 54% did nothing, in 41% of the cases the concerns were reported to law enforcement. Lankford et al. (2019) note that the failure to report behaviors of concern seem consistent with the literature on the failures of bystanders to intervene in serious circumstances. In many cases the "code of silence" among social groups, such as students, hampers the transmission of behaviors of concern to authorities (Goodrum et al, 2019; Lankford et al. 2019); however, Madfis (2014) found that since the Columbine attack, more students are willing to come forward with information regarding school violence. Madfis also found

that a critical factor in the decision of students to come forward with information about a potential attack related to a positive atmosphere where students felt that they were trusted, supported, and safe, and trusted that school administration would listen to them and take appropriate action regarding their concerns. Madfis concluded that very punitive and authoritarian approaches, such as zero-tolerance policies, are counterproductive to encouraging students to come forward with concerns.

Family Educational Rights and Privacy Act (FERPA)

In addition to a code of silence among students, a misunderstanding of the elements of FERPA has been identified as being detrimental to information sharing and proactive responses to potential threats of violence (Goodrum et al, 2017; Goodrum et al., 2019). In their case study of a fatal school shooting, Goodrum et al. found that various officials within the school itself had difficulty in sharing information amongst each other because they believed FERPA rules prohibited them from discussing a student's concerning behaviors, while some of the school officials knew about some of the concerning behavior, none of the school officials knew about all the concerning behavior. Teachers knew about classroom behaviors and academic performance, school counselors knew about the results of a threat assessment, security officers knew about concerning Internet material, and the assistant principal knew about disciplinary issues, but none knew all the details because the information was not shared (Goodrum et al., 2017).

In the case study conducted by Goodrum et al. (2017) the school officials and the school resource officer reported that they believed they could not discuss the concerning

behaviors of the student with other school staff because school administration had told them that FERPA rules prohibited this type of information sharing. While FERPA guidelines do protect a student's privacy regarding their education records, there is an exception to information sharing without permission from the student or their parents when it involves a "legitimate educational interest" or "in cases of health and safety emergencies" (Privacy Act and the Disclosures of Student Information Related to Emergencies and Disasters, 2015). Goodrum et al. also explained that school staff are able to share information about a student of concern so long as there is a "rational basis" for sharing the information, no school system has ever been fined for violation of FERPA rules, and there is no private right for parents or students to take legal action against schools for a perceived violation of FERPA (*Gonzaga University v. Doe*, 2002).

Summary and Conclusions

After a thorough review of the literature, several gaps in the current body of knowledge regarding the implementation and routine operation of threat assessment programs in schools are apparent and have been identified by other researchers. Goodrum et al. (2018) stated that "future research on threat assessment should examine school staffs' perceptions of threat assessment training, forms, and procedures" and "in addition, research should examine the ways that schools can implement effective safety planning and support systems for student of concern after a threat assessment" (p. 134). Cornell et al. (2018) recommended further research into how schools implement their threat assessment programs and protocols from the initial threat through to the final outcome.

Nekvasil and Cornell (2015) recommended further research to identify best practices from the various threat assessment programs in use; specifically, what practices are most strongly associated with more a more positive school atmosphere and better safety outcomes. Goodrum et al. reported that while the Secret Service 11-question model has been in existence for about 20 years, no research has examined how school officials actually implement the 11 questions for school threat assessment.

While considerable research has been conducted on threat assessment and threat assessment in schools, very little research has been conducted on how school officials implement threat assessment programs, how the programs operate on a routine basis, and how the programs are perceived in terms of effectiveness and value (Cornell, 2020; Cornell et al., 2018; Goodrum et al., 2018; Nekvasil & Cornell, 2015). This study will capture the observations, perceptions, and experiences of school officials directly involved with the implementation and operation threat assessment program at their school, and their perceptions of the effectiveness and value of these programs.

Chapter 3: Research Method

The purpose of this study was to examine how school officials perceive the implementation, routine operation, and effectiveness of school-based behavioral threat assessment programs. The experiences, thoughts, and perceptions of school officials regarding the threat assessment program in use, or being put in use, at their facility were explored. Barriers to implementation, perceptions of training programs, perceived utility of forms and procedures, as well as program outcomes were examined from the perspective of school officials directly involved with threat assessment programs.

This chapter will include the rationale for the qualitative and phenomenological research design based on the research questions and the role of the researcher as an interviewer. The logic behind participant selection will be described and the reason for the use of open-ended interviews will be explained. The procedures for participant recruitment, involvement, and data collection will be outlined, and the data analysis plan will be explained. Finally, issues of trustworthiness and will be explained and the procedures utilized to ensure the ethical treatment of participants will be addressed.

Research Design and Rationale

RQ 1: What are the perceptions of school staff regarding the implementation and routine operation of a behavioral threat assessment program at their school?

RQ 2: What are the perceptions of school staff regarding the effectiveness of behavioral threat assessment programs at their schools?

RQ 3: What are the perceptions of school staff regarding barriers that influence the effectiveness and value of behavioral threat assessment programs at their school?

The purpose of this study was to explore the perceptions and lived experience of school officials who have been involved with the implementation and/or operation of a school threat assessment program. Areas of inquiry included the perceptions of the participants regarding the implementation and routine operation of their school threat assessment program, the efficacy of the threat assessment program at their school, and the barriers that influence the effectiveness and value of the threat assessment program at their school.

The approach used in this study was a qualitative and phenomenological approach using open-ended interviews with study participants (Patton, 2015). The participants were current school officials who are directly involved in the implementation and operation of the threat assessment program at their school. Questions were designed to capture the participant's description of their first-hand lived experience without attempting to explain or interpret their experience (Patton, 2015). Since this study focused on discovering and exploring the lived experience and perceptions of the participants regarding the phenomenon of a threat assessment program, a phenomenological approach seems most appropriate (Patton, 2015; Ravitch & Carl, 2016).

Qualitative research includes a number of different approaches, and in many cases, these can be blended into a general or non-specific qualitative approach (Ravitch & Carl, 2016); however, for this study, a phenomenological approach seems to be indicated.

Ravitch and Carl (2016) explained that action research involves a “meeting place of research and action” (p. 20), this study did not include any action regarding the threat assessment programs being discussed. A case study involves exploring a case, or many cases (Ravitch & Carl, 2016); this study did not examine specific cases, but rather explored the participants’ personal lived experiences. This study did not include ethnography or an in-depth immersion of the researcher into the phenomenon of interest, nor did it include any sort of evaluation research where performance is monitored or evaluated (Ravitch & Carl, 2016). This study did not attempt to develop a theory as is the case in grounded theory research, nor did it attempt to chronicle the story of a particular individual as would be expected in narrative research (Ravitch & Carl, 2016).

Participatory action research refers to situations where the researcher takes some sort of action regarding fostering social change for a marginalized group (Ravitch & Carl, 2016), this was not the goal of the present research. Finally, practitioner research involves addressing problems or situations that emerge from the situations stemming from the researcher’s professional capacity (Ravitch & Carl, 2016), and again, that was not the situation for this study. Out of all the traditional and widely accepted qualitative research traditions, it seems clear that since this study is exploring the lived experience of the participants regarding the phenomenon of a student threat assessment program, a phenomenological approach seems to be the most appropriate choice.

Role of the Researcher

In this study, I assumed the role of an observer conducting interviews with the participants to gain insight into their lived experience regarding their involvement in student threat assessment programs. I was not in any way a participant in the study and did not become involved in the implementation or operation of the threat assessment programs. My role in this study was to merely ask questions to gain insight into the participants' lived experience.

I do not believe there were any biases in favor of or against any of the participants. If an issue of bias had arisen, it would have been noted and explored, and the issue would have been discussed with the Dissertation Chair and Second Committee Member to determine the appropriate resolution. It is likely that the participant's responses and participation would have been dropped completely from the study.

Methodology

Participant Selection Logic

The participants for this study were high school personnel involved in the implementation and/or routine operation of a threat assessment program at their school. These individuals were from different positions within the school and included classroom teachers, counselors, psychologists, administrators, and school resource officers. Participants were all over the age of 18 and were school employees personally involved in the implementation and/or operation of the school's threat assessment program. There

was no indication that any of the participants were from a vulnerable population in the context of this research project.

Sampling was based on purposeful sampling methods and snowball sampling (Ravitch & Carl, 2016). Staff from local high schools that have a threat assessment program were contacted and asked for agreements to participate in this study. The first few prospective participants were contacted by phone or in person to better explain the research program and to attempt to identify additional participants through a snowball sampling method. The initial participants were asked to identify other schools that they know to have threat assessment programs; they were then asked about social media or messaging platforms that could reach other potential participants in the local area. A standard invitation form, approved by Walden University, was provided along with an informed consent document. Ten participants, from several different high schools, were identified and scheduled for an interview. Data saturation was achieved after 10 participants were interviewed.

Instrumentation

The data collection instrument for this study was an open-ended, semi-structured, interview protocol with questions outlined in an interview guide. The interview guide and questions (see Appendix A) were derived from gaps identified in the literature (Cornell, 2020; Cornell et al., 2018; Goodrum et al., 2018; Nekvasil & Cornell, 2015) and from experience with the implementation of workplace violence related programs and involvement in other public safety-oriented programs. The interview questions were

designed to elicit information from the participants that will provide meaningful responses to each of the three research questions.

Procedures for Recruitment, Participation, and Data Collection

Data was collected from all participants in the same manner, open-ended and semi-structured questions were asked, follow-up questions were sometimes asked in order to gain a clearer understanding of the participants' answer(s) and to better understand their experience. Data was collected from participants who are high school staff involved in the threat assessment program at their school. Participants were contacted in person, through social media or messaging platforms, or through email and/or phone calls; the interviews were conducted in person or over the phone. Participants' names were not included in any documents other than research notes; the research notes were secured in a locked file cabinet in a secure office.

Data collection was planned to occur on a weekly basis with at least one interview per week. Data collection ultimately took place over five months. The data collected during the interviews was recorded on a digital voice recorder and then transcribed by a paid transcriber. The transcriber understood confidentiality and signed a confidentiality agreement, has experience in transcribing law enforcement investigative interviews, and has passed a law enforcement background check.

If too few participants were obtained through the proposed purposeful and snowball sampling methods, members of professional organizations such as the Association of Threat Assessment Professionals or the Society for Police and Criminal

Psychology would have been contacted for assistance in locating suitable participants with permission from Walden University's Institutional Review Board (IRB).

At the conclusion of the interview, participants were given contact information and encouraged to reach out with any questions. Contact information was also taken from the participants so they could be contacted to review the completed transcript, if they chose to do so. Participants were not contacted for any follow-up interviews, but they were offered a copy of the research document when it is completed, and a follow-up contact will occur at that time if the participant wished to have a copy of the completed document.

Data Analysis Plan

Since the purpose of this study was to explore lived experience, perceptions, and thoughts of the participants, a qualitative and phenomenological approach is indicated (Ravitch & Carl, 2016). All data was collected through personal interviews with school personnel. Data collected included the perceptions of school staff relating to the lived experience of implementing and/or maintaining a student threat assessment program (Research Question 1); the experiences of school staff relating to their perceptions of the effectiveness of student threat assessment programs (Research Question 2); and the lived experiences of school staff relating to barriers or roadblocks that influence the effectiveness of the student threat assessment program at their school (Research Question 3).

Data analysis involved using NVivo software to identify codes and combine these codes into themes. These codes and themes were then revised and refined during a continuous review process until data saturation was reached and there were no additional interviews to analyze. Triangulation and dialogic engagement were utilized during this analysis and review process, and memos regarding the evolving understanding of the data were written throughout the analysis (Ravitch & Carl, 2016). No references from the literature was used to set initial codes.

In qualitative data analysis, it is important to notice and acknowledge information that does not correspond to initial suppositions (Ravitch & Carl, 2016). These type of data, or discrepant cases, should not be ignored or minimalized, rather they should be considered as important evidence to challenge any preconceived ideas. Discrepant cases can help guide the process of refining themes and searching for different explanations to make the findings more robust (Ravitch & Carl, 2016). Discrepant data were treated as prompts to consider the data in a different light and to challenge any preconceived ideas or biases that may have been present.

Issues of Trustworthiness

Credibility

Credibility in qualitative studies is similar to the concept of internal validity in quantitative studies (Ravitch & Carl, 2016). This principle involves ensuring that findings are compatible with the data and not shaped by bias or preconceived notions (Patton, 2015). According to Patton, the credibility of a qualitative study relies upon systematic

and intensive data gathering, methodical and diligent analysis of the data obtained, the integrity and experience of the researcher, and the research consumer's appreciation of qualitative inquiry. Ravitch and Carl suggested that credibility can be established by employing triangulation, member checking or participant validation, using thick description, addressing discrepant cases or data, engaging in persistent field study, debriefing with peers, and possibly utilizing an external assessor.

Transferability

Transferability can be compared to generalizability or external validity in other types of studies (Ravitch & Carl, 2016). Ravitch and Carl noted that qualitative research is not strongly focused on arriving at conclusions that can be generalized to other circumstances, but rather is focused on reporting detail-rich and contextual data from the participants. However, qualitative findings may be transferable to other situations so long as the descriptions are rich and thick enough that consumers can compare these to other contexts (Ravitch & Carl, 2016).

Dependability

Dependability is similar to the concept of reliability in quantitative studies and refers to the degree to which the data is stable and consistent through time (Ravitch & Carl, 2016). Dependability requires that data collection methods are reasonable for the study and that the data answers the research question; triangulation, audit trails, and appropriate research design are critical to achieving dependability (Ravitch & Carl, 2016).

Confirmability

Confirmability is similar to objectivity in quantitative research, but in the qualitative realm, researchers do not claim to be completely objective, rather they pursue verifiable data with relative objectivity and neutrality, with special attention to unknown bias that may exist and skew the way data are analyzed (Ravitch & Carl, 2016). In qualitative analysis, bias is managed through techniques such as triangulation, reflexivity, and external audit processes; since the researcher is a primary instrument in qualitative research, they should challenge themselves and have others challenge them throughout the entire research process to ensure that bias does not unduly influence any portion of the research process (Ravith & Carl, 2016).

Ethical Procedures

The participants in this study were school officials who are involved in the implementation and/or operation of their school's threat assessment program. They were all over the age of 18 and not in any protected category for the purpose of this study. An informed consent form, approved by Walden University, was provided to each prospective participant and they signed the form, indicating they understood the waiver and were willing to participate, before proceeding with an interview. Permission to proceed with this study was obtained from Walden University's IRB (approval number 01-04-23-0987532) prior to the time any participants were contacted regarding their participation in this study.

Some school administrations may have concerns about an employee speaking candidly about problems or shortcomings surrounding their threat assessment program, so participants were not contacted through school administration, nor were the names of any participants be divulged to any school administration. Participants were contacted individually through a purposeful sampling procedure that utilizes snowball sampling to obtain contact information for additional prospective participants; personal emails and/or phone numbers were used rather than business contact information unless the participant chose to use their business email or phone number. Interviews were scheduled at a time of the participant's choosing and most were conducted after school hours. It was left to the discretion of the participant if they chose to disclose to their administration that they were participating in this study. No information identifying any school, or any participant, was included in the study, schools were identified by grades taught, size, and general geographical area (such as "a medium sized high school in central California"); participants were identified by the letter P, for participant, and a number for the order in which they were contacted (the first participant contacted was identified as "P1"). Due to the sampling strategy, it is almost certain that the name of school where the participant is employed would be known, this information was kept with the participants' contact information in a locked file cabinet in a secure office and/or in an encrypted and password protected digital file.

If a prospective participant had any doubts or concerns about participating, their participation would not have been pursued. If a prospective participant initially agreed to

an interview, and then changed their mind, further contact would not have been pursued, or if the interview had already started, the interview would have terminated at that point. It was made clear that participation is entirely voluntary with no compensation provided for an interview, and if a prospective participant was reluctant to agree, their participation was not pursued.

The data collected during this study is confidential, it cannot be considered anonymous because the participants were contacted directly, either in person or by phone. The names and any other information identifying the participants was not included in the transcripts nor anywhere in the study. The names and identifying information of the participants was stored in a locked file cabinet in a secure office and/or in an encrypted and password protected digital file. The identifying information of the participants was not shared with anyone other than Walden University staff who have a valid need for the information.

There were no apparent ethical issues arising from this study. There was no apparent conflict of interest nor any power differential among any of the individuals who were recruited to become participants. While there may have been some professional interactions with some of the prospective participants in the past, these interactions were not related to the implementation or operation of their schools' threat assessment program. No compensation or incentives for participation in this study were offered, and it was made clear to the prospective participants that there is no benefit to them to participate.

Summary

This chapter described the methodology of the research, the data analysis plan, issues of trustworthiness, and ethical considerations. This is a qualitative and phenomenological study with school officials who have personal knowledge and experience with student threat assessment programs as participants; they were selected through purposeful and snowball sampling. Interviews were conducted and then analyzed using NVivo software to identify codes and themes. Issues of trustworthiness were recognized, and accepted procedures were followed to ensure the integrity of this study. There were no personal relationships with any of the participants, and any interactions in the past were brief and professional in nature. All interviews were entirely voluntary in nature and with full informed consent by the participant.

Next, chapter four will detail the research setting, the demographics of the participants, data collection procedures, data analysis procedures, evidence of trustworthiness, and the results of the study.

Chapter 4: Results

Introduction

The purpose of this study was to explore the perceptions and lived experience of school officials who have been involved with the implementation and/or operation of a school threat assessment program. Areas of inquiry included the perceptions of the participants regarding the implementation and routine operation of their school threat assessment program, the efficacy of the threat assessment program at their school, and the barriers that influence the effectiveness and value of the threat assessment program at their school. Three research questions were formulated:

RQ 1: What are the perceptions of school staff regarding the implementation and routine operation of a behavioral threat assessment program at their school?

RQ 2: What are the perceptions of school staff regarding the effectiveness of behavioral threat assessment programs at their schools?

RQ 3: What are the perceptions of school staff regarding barriers that influence the effectiveness and value of behavioral threat assessment programs at their school?

Research Setting

The research for this study was conducted through direct interviews of voluntary participants either in person or over the phone. The participant was given the option for a personal interview, a web meeting via Zoom or Microsoft Teams, or a phone interview at a time of their choosing. Eight of the participants opted for a phone interview and two

were interviewed in person. The interviews were conducted between January and May of 2023.

Demographics

Ten school officials in central California were interviewed for this study. Three participants were employed as School Resource Officers in large high schools (P7, P8, and P9), two participants were employed as school psychologists in small high schools (P5 and P6), one participant was employed as a School Resource Officer in a small high school (P4), one participant was employed as a school psychologist in a large high school (P10), one participant was employed as a Special Education teacher in a small high school (P1), one participant was employed as an administrator in a medium sized Department of Education (P3), and one participant was employed as an administrator in a small high school (P2).

Data Collection

Data was collected through open-ended and semi-structured interviews with participants either in person or over the phone; all participants signed a consent form either on paper or via email. All the interviews were audio recorded and later transcribed by a professional transcriber. Notes were taken during the interviews to capture key terms or phrases and follow-up questions were asked when some clarification seemed important. Transcripts of the interviews were sent to all participants for review and none of them identified any inaccuracies in the content.

Data Analysis

Transcripts of the interviews were reviewed multiple times and uploaded into NVivo software to assist with identifying key words and terms. Notes from the interviews were reviewed; key words, terms, and phrases were identified and notated on the transcripts; and NVivo software was utilized to identify additional key words and their context in the interview transcripts.

Initial application of open coding identified specific words and terms that represented segments of meaning. A number of individual codes were identified and refined during multiple reviews of the data. The semi-structured interview questions sought to elicit information from the participants that would provide insight and understanding of their experience and perceptions relating to the three research questions regarding student threat assessment programs. Data saturation was achieved within the ten interviews as evidenced by the similarity in responses of the different participants.

Evidence of Trustworthiness

In qualitative research, credibility, transferability, dependability, and confirmability are often used as principles to demonstrate trustworthiness (Ravitch & Carl, 2016). Patton (2015) indicated that systematic and intensive data gathering, methodological and diligent analysis of data, and the integrity and experience of the researcher are all crucial components to credibility. These concepts were employed during this study, all participants were interviewed following the same guidelines, the data was analyzed in an immersive engagement process as outlined by Ravitch and Carl,

and I applied personal experience relating to school violence and threat assessment concepts gained from over 27 years in law enforcement. Triangulation and participant validation were utilized in this study as suggested by Ravitch and Carl. I engaged in self-reflection to ensure that biases or preconceived ideas did not influence data gathering, notes were taken throughout the data collection process, transcripts were sent for member checking, the transcripts were carefully reviewed against the recordings of the interviews, and then reviewed multiple times during data analysis.

With qualitative studies, the focus is not primarily on arriving at conclusions, but rather focusing on reporting rich details and contextual data gathered from the participants' perceptions and lived experience (Ravitch & Carl, 2016). Transferability concerns the generalizability of qualitative findings to other situations, which can be accomplished so long as the data from the participants is sufficiently rich and detailed (Ravitch & Carl, 2016). The focus of the semi-structured interview questions in this study was to gain an understanding of the observations, opinions, and lived experience of the participants as they relate to student threat assessment programs. While this study focused on threat assessment programs in high schools, many of the insights could likely be applied to threat assessment programs in other settings.

Dependability refers to the degree to which the data is stable and consistent through time (Ravitch & Carl, 2016). The data gathering method employed, semi-structured and open-ended interviews, is appropriate for a qualitative and phenomenological study. The interview questions were designed to elicit responses

pertinent to the research questions and to gain insight into the participants' thoughts and lived experience relating to the threat assessment program at their school.

Confirmability refers to ensuring that the findings reflect the participants' responses rather than the thoughts or biases of the researcher (Ravith & Carl, 2016). To ensure confirmability, I engaged in frequent self-reflection and multiple reviews of the transcripts to ensure that codes and themes were collected from the words of the participants rather than my thoughts or opinions. Transcripts were sent to all the participants so they could review the content for accuracy and no corrections were indicated.

Results

Three primary themes emerged from the data analysis: The importance of effective communication, the importance of collaboration and having a multidisciplinary team, and the importance of building relationships. These three themes carried over across all three research questions and there were examples of each of the three themes pertinent to each question.

Importance of Effective Communication

All ten participants identified communication as a key aspect of threat assessment programs. Communication was identified as being important within the threat assessment team, between different levels of school personnel, with students, and with families of students.

Relating to RQ1 (what are the perceptions of school staff regarding the implementation and routine operation of a behavioral threat assessment program at their school?) P3 pointed out that there needs to be regular communication between school officials, teachers, psychologists, as well as the students directly and that “making connections” with the students is the “way to prevent things like this from happening.” When asked about the most important thing to pass on to a school district implementing a threat assessment program, P2 said “just that communication piece.” P8 reported “I make relationships with all the school staff members, vice principal, principal, school psychologist, social workers, campus safety people, and also the students,” and then described that “from there, there’s information that flows to all of us and is disseminated.”

Relating to RQ2 (what are the perceptions of school staff regarding the effectiveness of behavioral threat assessment programs at their schools?) P7 indicated that the threat assessment program was working well and improving all the time and that “the biggest thing is just open communication with the different resources we have.” When asked if they thought the school threat assessment program would likely prevent an act of targeted violence, P5 said it would, largely due to the fact that the SRO takes the time to know the students, and “when there’s a threat they communicate that to the front office;” P5 also mentioned that when a student is being assessed there is “a lot of consultation and collaboration” among the staff.

Relating to RQ 3 (what are the perceptions of school staff regarding barriers that influence the effectiveness and value of behavioral threat assessment programs at their school?) P1 plainly stated “communication is our biggest barrier.” When asked what could be done to make the program better, P7 said “I think the biggest thing is communication needs to [be] built upon,” P5 stated “just continuing that communication,” and P4 said “probably more communication from the school, that’s a big complaint I hear from parents, that there’s not enough communication.” P6 specifically identified crisis communication during an actual threat situation as a roadblock to the effectiveness of a threat assessment team.

Participants identified different contexts where communication was a key to a successful program as well as where a lack of communication was detrimental to the threat assessment team. Regular communication between all members of the team, with other school personnel, with students, and with parents was identified as important by all participants.

Importance of Collaboration and Having a Multidisciplinary Team

All 10 participants identified collaboration and/or having a multidisciplinary component as important to the success of the team. Participants indicated that there was some difficulty in collaboration at times because of the different perspectives involved, specifically law enforcement and education personnel having different roles and expertise, but it was reinforced that having those different perspectives was important.

Relating to RQ1 (what are the perceptions of school staff regarding the implementation and routine operation of a behavioral threat assessment program at their school?) P8 said, on a daily basis, “I make relationships with all the school staff members, vice principal, principal, school psychologist, social workers, campus safety people, and also the students.” When asked about advice to a school implementing a threat assessment program, P2 said “get input from everyone” and “like, a paraprofessional or custodian or maintenance, but really establishing and getting input from everyone on your staff to buy into what it is that we’re doing.” P4 said “get all your stakeholders together ... get everyone together that potentially could have, you know, a stake in it.” P6 answered “my advice, to involve everyone who, pretty much everyone who has contact with the kids ... I think in the schools there’s always a place for involving the community and the parents.” P10 said “make sure you have all parties involved, so I think it would be a really good thing to have teachers, to have custodians, to have nurses and psychs and I mean obviously you’re going to have your SRO and your admin, but I definitely think you want multiple perspectives to your campus safety.”

Relating to RQ2 (what are the perceptions of school staff regarding the effectiveness of behavioral threat assessment programs at their schools?) P5 identified one of the reasons their program was working well was that when a student is being assessed there is “a lot of consultation and collaboration” among the staff. P7 said their school has weekly meetings with the SRO and “vice principals, the psychologists, and some of the counselors” and they “sit down and brainstorm as a team what resources we

have ... what resources outside that we can bring into campus, not necessarily from the law enforcement aspect.”

Relating to RQ 3 (what are the perceptions of school staff regarding barriers that influence the effectiveness and value of behavioral threat assessment programs at their school?) P1 reported that a barrier to the effectiveness of the threat assessment program is that there is no standardized system and that “each school is sort of handling it differently.” P2 identified a barrier as “the difficulty of bringing law enforcement and education together because it is such two different mindsets,” and that “everyone knew they had roles, but they didn’t necessarily understand each other’s roles.” Several participants identified a disconnect between line staff and administration, P9 explained that the school “had issues in the beginning and that’s due to the administration not being aware of the procedures.” P10 explained that in their school “there’s a disconnect between what we’re being told and how to support our students versus what our administrators are being told,” “there needs to be cohesiveness,” and “they’re not bringing in everybody that also has an understanding.”

Participants identified different types of collaboration as important, between school officials, different disciplines, as well as with parents, students, and the community. Lack of communication was cited as problematic and breakdowns in communication within the school site itself as well as with parents and students were noted.

Importance of Building Relationships

All ten participants identified building and/or maintaining relationships, both amongst the team members as well as with students and parents, as important to a threat assessment team.

Relating to RQ1 (what are the perceptions of school staff regarding the implementation and routine operation of a behavioral threat assessment program at their school?) P8 said, on a daily basis, “I make relationships with all the school staff members, vice principal, principal, school psychologist, social workers, campus safety people, and also the students.” P6 said that they “build rapport with the kids, they start to feel comfortable to come into my office and start opening up to me a lot” and “just kind of bridging that communication and making them feel comfortable to come to me has worked really nicely.” When P2 was asked about daily operations regarding the threat assessment program, the response was:

I think one of the biggest things we’re very intentional about as a staff is that relationship piece ... I think just our intentional relationship building and being aware of students and where they’re at every day, throughout the day, is a big thing that we can do.

P5 reported that one of her “daily tasks are on building good connections so that students know they can come to me should a threat arise,” and that “trust and awareness” are the two main things critical to a threat assessment program.

Relating to RQ2 (what are the perceptions of school staff regarding the effectiveness of behavioral threat assessment programs at their schools?) when asked if the school's threat assessment program would likely prevent an act of targeted violence, P4 explained that "every kid is reachable and it's important to have adult relationships with them or reach out to them ... get them involved with not being isolated, kind of more of an outreach." P4 added that since they are in a smaller school setting "our counselors know their family and background, siblings, they know a lot more of the history at home." When asked what advice they would give to a school implementing a threat assessment program, P6 said the school should work on "getting the community buy-in and like building relationships as kind of a resiliency factor, so hopefully we don't have threats." P3 reported "the thing I've found over the years is making connections with those guys ... is the way to prevent things like this from happening ... so being out there ensuring the kids are feeling connected." P2 clarified that the "relationship piece" is between school staff as well as between staff and students, and that a key to success is "really knowing your students." P7 stated that "as long as that relationship is built and the communication is open and everyone is professional, I think it will always trend in the right direction."

Relating to RQ 3 (what are the perceptions of school staff regarding barriers that influence the effectiveness and value of behavioral threat assessment programs at their school?) P9 identified "parents, not involved, having no buy-in, not supporting the kids" as their main issue and "we're only as strong as whatever buy-in we can get from the

family.” P7 echoed this sentiment when asked about roadblocks to the threat assessment program working as well as it could, “it’s just getting the cooperation of the parents ... you’re fighting an uphill battle because even when you do get cooperation with the student, that gets pulled back because of the parents.” When asked how to make their program better, P8 said:

for me it’s all about relationship building and coaching each other up with the counselors and psychologists, every opportunity you have to engage with a kid and a parent is an opportunity to educate, so take advantage of every opportunity.

Participants identified building and maintaining relationships with everyone involved in the safety of the school as important, and several identified the lack of meaningful relationships, specifically with family of students, as detrimental to a threat assessment program working as well as it could.

Additional Findings

In addition to the three themes that emerged, there were several other key points referenced by some of the participants: The importance of training, having time for training and collaboration, and the negative impact of staff turnover. Five participants identified training as a key component to a successful threat assessment team. When asked what advice should be given to a school planning on implementing a threat assessment program, P9 replied “I think training’s the big one,” P5 responded that a school should not have threat assessment training just at the beginning of the year, but there should be ongoing training that occurs “at least four times a year.” P1 identified a

lack of training for all of the team as one of the roadblocks to their threat assessment team working as efficiently as possible. P10 recommended that a school starting a threat assessment program should send staff to “evidence based, research based” training.

Three participants (P4, P5, and P6) identified a lack of time for staff to participate in training and collaboration as a team as a barrier to the success of their team. P6 suggested that a school might consider “three days or a week like over summer when none of us have the stress of the rest of our jobs” as a time for the threat assessment team to train and “all get on the same page.” P5 said that “just to schedule out time to work together I think was definitely a barrier.” P4 identified “getting the time off to attend the training” as a roadblock to their threat assessment program working as well as possible.

Two participants (P7 and P9) identified staff turnover as a detriment to a threat assessment team functioning as well as possible. P7 said “you know with the ever-changing turnover, whether it’s in administration, or with the counselors or psychologists, sometimes you can’t take it further because you’re kind of starting from square one.” P9 related that he “had a good team, then people started getting promoted ... you’re working as a team, once you’re all calibrated, then, obviously, at the end of the year things change.”

A key question asked of all the participants was if they believed their school’s threat assessment program would likely prevent an act of targeted violence. Two participants (P3 and P5) answered affirmatively, two participants (P2 and P4) said they did not believe it would, and the other six participants indicated that they were uncertain

and qualified their answer with phrases such as “I’m not confident,” “it would depend on if it was random,” and “nothing’s ever 100%.”

Only two of the participants were present at the school when a threat assessment program was implemented, so there is a lack of data concerning the implementation of threat assessment programs. The two participants (P3 and P4) who were present when a threat assessment program was implemented reported that they attended a weeklong training on the Salem-Keizer method taught by John Van Dreal. P3 reported that the program was going very well and they had started teaching the concepts to other school personnel in the district, but then the Covid-19 pandemic shut the schools down and they had to conduct refresher training when the students came back to the classrooms. P4 reported that the program works well and the biggest obstacle has been getting school administration to understand the needs and processes of the program.

Summary

This qualitative and phenomenological study involved open-ended and semistructured interviews with high school officials regarding their perceptions of the threat assessment program at their school. Ten school officials were interviewed and the recorded interviews were transcribed for analysis. The transcripts were provided to all participants for their review and no corrections were indicated. The data was then reviewed multiple times, using NVivo software as well as manual review, in order to identify codes, and from the codes, three themes emerged. These themes were pertinent

and applicable to each of the three research questions and may provide additional insight into school officials' perceptions of threat assessment programs.

Chapter 5 will summarize the findings of this study, examine the limitations of the study, identify implications and conclusions of this study, as well as provide recommendations for further research.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

A series of incidents of targeted violence on school grounds, specifically school shootings, in the late 1990s and early 2000s led to efforts to create a profile of a potential school shooter; however, these profiles led to a number of false positive conclusions where a student was identified as a threat, when in reality they did not pose a threat (Cornell, 2020; Cornell et al., 2018). Researchers realized that while some students exhibited concerning behavior, they posed no actual threat of violence; the concepts of threat assessment and management have now been implemented in some schools as a means to avert acts of targeted violence through a prevention model rather than through a prediction model (Cornell, 2020; Goodrum et al., 2018; Lenhardt et al., 2018). While considerable research has been conducted on threat assessment programs in general as well as on school-based threat assessment programs, very little research has been conducted on how school officials' implement these programs, how they manage the programs on a routine basis, and how they perceive the programs in terms of effectiveness and value (Cornell, 2020; Cornell et al., 2018; Goodrum et al., 2018; Nekvasil & Cornell, 2015).

This study examined how school officials perceived the implementation, routine operation, and effectiveness of school-based threat assessment programs. Ten school officials were interviewed to explore their thoughts, perceptions, and experiences with the threat assessment program at their school. Three research questions were formulated:

RQ 1: What are the perceptions of school staff regarding the implementation and routine operation of a behavioral threat assessment program at their school?

RQ 2: What are the perceptions of school staff regarding the effectiveness of behavioral threat assessment programs at their schools?

RQ 3: What are the perceptions of school staff regarding barriers that influence the effectiveness and value of behavioral threat assessment programs at their school?

Three themes emerged from the data collected from the participants: The importance of effective communication, the importance of collaboration and having a multidisciplinary team, and the importance of building relationships.

Interpretation of the Findings

All ten participants clearly identified communication as very important to the success of a threat assessment team, and a lack of communication was identified as detrimental to effectiveness. Different contexts for communication were described: Communication between members of the team, communication between officials at the school or across the district, communication between school officials and students, and communication between school officials and parents or guardians of the students. Breakdowns in communication or a lack of understanding between line staff and school administration was cited as problematic, difficulties in communication between the various disciplines represented on the team was identified as an issue, and a lack of effective communication between the school and parents of students was identified as problematic.

All ten participants identified the importance of collaboration and having a multidisciplinary team. Although communication between the different disciplines on a team was identified as difficult in some cases, specifically between law enforcement and school personnel, this collaboration was identified as critical to the success of a team. The differences in roles, such as enforcing laws versus educating students, as well as the different sets of rules and laws familiar to each discipline was identified as a potential barrier, but also as complementary to each other and important for thorough threat assessment and management. While school officials were more familiar and comfortable with rules and regulations such as those contained in FERPA and the Education Code, law enforcement was more comfortable with criminal investigations and the Penal Code, and school psychologists were more familiar with HIPAA rules and regulations. Participants indicated that the collaboration between these disciplines was important to the success of a team, and each discipline should be heard and allowed to provide input from their unique perspective.

All ten participants identified the importance of building relationships. These relationships were identified as being between several different groups. Participants indicated that the team members should build and maintain good working relationships with each other as well as other school staff not involved with the threat assessment team. Building trusting relationships with students was cited as critical to the success of a threat assessment team as well as important for overall school climate. Participants also stressed

the importance of building and maintaining relationships with students' parents as well as the community in general.

In addition to the three themes that emerged from the data, the participants also identified several other factors important to the success of a threat assessment team. Five participants indicated that training was a key factor for a team to be successful and one participant elaborated that the training should be evidence based. Three participants mentioned that finding time for training and collaboration as a team was problematic, they indicated that oftentimes school officials and SROs are so busy with their normal daily work that there is no time to dedicate to an additional function. One participant recommended that there should be a person or several people dedicated to threat assessment and able to focus their time and energy on that specific work.

One of the key questions asked of participants was if they believed their threat assessment program would likely prevent an act of targeted violence. Two of the participants said they believed it would, two said they did not believe it would, and six were uncertain. There was clearly a lack of certainty that a threat assessment program will be completely effective at preventing an act of targeted violence.

Only two of the ten participants were present at the school when a threat assessment program was implemented, so there is a lack of data concerning implementation of threat assessment programs. Those two participants reported that they attended a weeklong training on the Salem-Keizer method of school threat assessment and that the training was valuable to the implementation and structuring of their program.

The results of this study may provide insight into some of the areas that other researchers have identified as needing further investigation. Goodrum et al. (2018) stated that "future research on threat assessment should examine school staffs' perceptions of threat assessment training, forms, and procedures" and "in addition, research should examine the ways that schools can implement effective safety planning and support systems for student of concern after a threat assessment" (p. 134). This study examined school staffs' perceptions of the threat assessment program at their school as well as some of the measures that are taken for students causing concern. Effective communication, collaboration and having a multidisciplinary team, and building trusting relationships were identified as critical components to a successful team; counseling and therapy were identified as common measures taken when a student exhibited concerning behavior and it was noted that involuntary mental health holds and/or arrests may be necessary in certain circumstances.

Cornell et al. (2018) recommended further research into how schools implement their threat assessment programs and protocols from the initial threat through to the final outcome. The participants in this study outlined how their threat assessment programs function and consistently indicated that one of the key factors was school staff having trusting relationships with the students so that when concerning behavior was noticed by students, it would be brought to the attention of school staff so that some type of intervention could be implemented.

Diffusion of innovation theory by Rogers (2003) posited that the understanding of innovations is communicated through various channels among members of a system. As explanations of the innovation spread through the social system, the members begin to adopt the new idea at different rates and different factors influence the rates of adoption (Rogers, 2003). Participants in this study indicated that a threat assessment program was a new idea, either implemented while they were at the school, or a new idea to them when they came to the school. Participants indicated that getting everyone “on the same page” in regard to the threat assessment program was a challenge, but through effective communication and meaningful collaboration, the various staff involved were able to work together towards the common goal of violence prevention. Two examples of challenging relationships specific to the threat assessment process were identified as the different disciplines (education and law enforcement) and different roles (threat assessment team and school administrators). The participants made clear that when these groups communicated and collaborated, and eventually understood each other’s roles, the result was that the threat assessment program functioned in a more effective manner and there was an understanding of the value of the program.

Limitations of the Study

There are several limitations to this study. All the participants were drawn from high schools in the central valley of California, and while the schools varied significantly in student population (from less than 100 to over 4,000) and setting (rural, urban, and suburban), they are all located in the same general geographical area of one state.

Therefore, results from this cohort may not be transferrable to other populations. Only ten participants were interviewed, making the sample population likely quite small in proportion to the number of school officials involved in threat assessment programs in the same geographical area. Sampling bias is a potential limitation for this study. Purposeful sampling and then snowball sampling were utilized to recruit participants; while purposeful sampling was effective with the initial four participants recruited, snowball sampling proved to be challenging, with over 25 invitations sent or shared and only six participants recruited.

Only two of the ten participants were present at their school when a threat assessment program was implemented, so there is limited data available with regard to the implementation portion of RQ 1 (what are the perceptions of school staff regarding the implementation and routine operation of a behavioral threat assessment program at their school?).

Another limitation to this study is due to the researcher being solely responsible for data collection and coding. Ravitch and Carl (2016) point out that credibility and confirmability are enhanced when a researcher makes use of peer debriefers, external audits, and being challenged by others. While self-reflection and member checking were utilized to minimize bias, there were no external audits, peer debriefs, or challenges from peers.

Recommendations

One consideration for future research into this area would be to recruit participants from high schools in different geographical areas and in states other than California. A more diverse participant population would likely yield additional and different insights into the implementation and effectiveness of student threat assessment programs and the barriers that influence the effectiveness and value of these programs.

Another consideration for future research would be to identify effective methods to build trusting relationships with students' parents in the context of threat assessment programs. The importance of these relationships was highlighted by several of the participants and one participant (P9) identified the lack of support from the students' parents as the major barrier to their program working as well as it could.

Several strategies for intervention with students causing concern were identified and were primarily focused on therapy and counseling; involuntary mental health holds and arrests were also mentioned as being necessary at times. An additional consideration for future research would be to examine different methods of intervention or threat management after a concern has been identified to identify what types of intervention or prevention practices are most effective.

Implications

The findings of this study point to several opportunities for positive social change. The findings indicate that communication within the team and externally, collaboration and the use of a multidisciplinary threat assessment team and building trusting

relationships within the team as well as with students and parents are important to the success of the team. School officials may be able to utilize these concepts as foundational ideas during the implementation of a school threat assessment team, or as options for consideration to improve an existing program.

Since this study revolved around the experience of school officials in the implementation and operation of a threat assessment program, the Diffusion of innovation theory (Rogers, 2003) seemed more pertinent than theories based around targeted violence or violence prevention. Diffusion of innovation theory posits that diffusion is a specific type of communication where individuals share information with each other and eventually reach a mutual understanding when dealing with an innovation or a new idea (Rogers, 2003). Due to the nature of innovation, there is some degree of uncertainty and risk associated with the implementation of the innovation (Rogers, 2003). This uncertainty can be mitigated by obtaining information from others in the social system, and the understanding of the characteristics of the innovation will determine how readily it is adopted (Rogers, 2003). The participants in this study discussed the importance of communication between members of the threat assessment team as well as within the different levels of school administration, and how important it was that all the members understood each other and were “on the same page.” The concept of threat assessment was new to some of the participants when they became involved with the process. One participant explained that threat assessment was a new idea, and it was difficult to bring law enforcement and education together because they didn’t understand

each other's roles; this was only corrected as they communicated and eventually reached mutual understandings of their individual roles and how they relate to the team.

The data from the participants indicates that effective communication is essential to the implementation of a school threat assessment team. Communication was also identified as a key component of collaboration and building relationships, making it clear that communication is critical to the success of a threat assessment team. The results of this study suggest that a school implementing a threat assessment program, or seeking to improve an existing program, should focus strongly on communication as a foundational piece of the program and make use of effective communication practices to ensure that the team is collaborating, internally and externally, and building trusting relationships within the team as well as with the larger school community.

Conclusion

Targeted violence in schools has been of great concern to many people for decades. Early attempts to create a profile of likely school shooters created many false positives and the illusion of being able to predict when a student posed a threat (Cornell, 2020; Cornell et al, 2018). Researchers realized that behavioral threat assessment programs could be utilized to identify behaviors of concern and then intervene without having to predict if a particular student may be violent in the future (Cornell, 2020; Goodrum et al., 2018; Lenhardt et al., 2018). The behavioral threat assessment model is preventive rather than predictive.

Very little research has been conducted on how school officials implement these programs, how they operate within the programs on a routine basis, and how they perceive the programs in terms of effectiveness (Cornell, 2020; Cornell et al., 2018; Goodrum et al., 2018; Nekvasil & Cornell, 2015). The purpose of this study was to examine how school officials perceive the implementation, routine operation, and effectiveness of school-based behavioral threat assessment programs. The findings of this study indicate that effective communication, effective collaboration and having a multidisciplinary team, and building trusting relationships are critical components of a successful school threat assessment team.

Although this study only included insight from ten participants, three clear themes emerged. It is also clear that future research is necessary to identify effective ways to build trusting relationships with students' parents in the context of school threat assessment and to explore what types of interventions are most effective in managing a potential threat. Emergency response protocols and active shooter training are necessary and part of a complete preparedness program, but once an act of targeted violence is taking place, it is too late. A focus on prevention and intervention can prevent these tragedies before they take place.

References

- Agnich, L. E. (2015). A comparative analysis of attempted and completed school-based mass murder attacks. *American Journal of Criminal Justice, 40*, 1-22. DOI 10.1007/s12103-014-9239-5
- Allison, J., Canady, M., & Straud, F. G. (2020). *School Resource Officers: Averted school violence special report*. Office of Community Oriented Policing Services.
- Andreou, T. E., McIntosh, K., Ross, S. W., & Kahn, J. D. (2015). Critical incidents in sustaining school-wide positive behavioral interventions and supports. *The Journal of Special Education, 49*(3), 157-167. DOI: 10.1177/0022466914554298
- Bernstein, A. (2009). *Bath massacre: America's first school bombing*. The University of Michigan Press.
- Borum, R. (1996). Improving the clinical practice of violence risk assessment: Technology, guidelines, and training. *American Psychologist, 51*(9), 945-956.
- Borum, R., Fein, R., Vossekuil, B., & Berglund, J. (1999). Threat assessment: Defining an approach for evaluating risk of targeted violence. *Behavioral Sciences and the Law, 17*, 323-337.
- Calhoun, F., & Weston, S. (2003). *Contemporary threat management: A practical guide for identifying, assessing, and managing individuals of violent intent*. Specialized Training Services.
- Cornell, D. G. (2003). Guidelines for responding to student threats of violence. *Journal of Educational Administration, 41*(6), 705-719. DOI 10.1108/09578230310504670

- Cornell, D. (2015). Our school are safe: Challenging the misperception that schools are dangerous places. *American Journal of Orthopsychiatry*, 85(3), 217-220.
<http://dx.doi.org/10.1037/ort0000064>
- Cornell, D. (2018). *Comprehensive student threat assessment guidelines: Intervention and support to prevent violence*. School Threat Assessment Consultants LLC.
- Cornell, D. G. (2020). Threat assessment as a school violence prevention strategy. *Criminology & Public Policy*, 19(1), 235–252. <https://doi-org.ezp.waldenulibrary.org/10.1111/1745-9133.12471>
- Cornell, D. G., Sheras, P. L., Kaplan, S., McConville, D., Douglass, J., Elkon, A., McKnight, L., Branson, C., & Cole, J. (2004). Guidelines for student threat assessment: Field-test findings. *School Psychology Review*, 33(4), 527-546.
- Cornell, D., & Sheras, P. (2006). *Guidelines for responding to student threats of violence*. Sopris West.
- Cornell, D., Sheras, P., Gregory, A., & Fan, X. (2009). A retrospective study of school safety conditions in high schools using the Virginia threat assessment guidelines versus alternative approaches. *School Psychology Quarterly*, 24(2), 119-129.
 DOI: 10.1037/a0016182
- Cornell, D. G., Gregory, A., & Fan, X. (2011). Reductions in long-term suspensions following adoption of the Virginia Student Threat Assessment Guidelines. *National Association of Secondary School Principals Bulletin*, 95(3), 175-194.
 DOI: 10.1177/0192636511415255

- Cornell, D. G., Allen, K., & Fan, X. (2012). A randomized controlled study of the Virginia Student Threat Assessment Guidelines in kindergarten through grade 12. *School Psychology Review, 41*(1), 100-115.
- Cornell, D., Maeng, J. L., Burnette, A. G., Jia, Y., Huang, F., Konold, T., Datta, P., Malone, M., & Meyer, P. (2018). Student threat assessment as a standard school safety practice: Results from a statewide implementation study. *School Psychology Quarterly, 33*(2), 213–222. <https://doi-org.ezp.waldenulibrary.org/10.1037/spq0000220>
- Cullen, D. (2009). *Columbine*. Hachette Book Group.
- Daniels, J. A., Volungis, A., Pshenishny, E., Gandhi, P., Winkler, A., Cramer, D. P., & Bradley, M.C. (2010). A qualitative investigation of averted school shooting rampages. *The Counseling Psychologist, 38*(1), 69-95. DOI: 10.1177/0011000009344774
- De Becker, G. (1997). *The gift of fear*. Dell Publishing.
- DeMitchell, T. A., & Rath, C. C. (2019). Armed and dangerous-teachers? A policy response to security in our public schools. *Brigham Young University Education and Law Journal, 63-93*.
- Dietz, P. E. (1986). Mass, serial, and sensational homicides. *Bulletin of the New York Academy of Medicine, 62*(5), 477-491.
- Durlak, J. A., & DuPre, E. P. (2008). Implementation matters: A review of research on the influence of implementation on program outcomes and the factors affecting

implementation. *American Journal of Community Psychology*, 41, 327-350. DOI
10.1007/s10464-008-9165-0

Erbacher, T. A., & Poland, S. (2019). School psychologists must be involved in planning and conducting active shooter drills. *Communique*, 48(1), 10-13.

Fein, R. A., Vossekuil, B., & Holden, G. A. (1995). *Threat assessment: An approach to prevent targeted violence*. National Institute of Justice.

Fein, R. A., & Vossekuil, B. (1997). *Preventing assassination: A monograph. Exceptional Case Study Project*. U.S. Secret Service.

Fein, R. A., & Vossekuil, B. (1998). *Protective intelligence and threat assessment investigations: A guide for state and local law enforcement officials*. U.S. Department of Justice.

Fein, R. A., Vossekuil, B., Pollack, W. S., Borum, R., Modzeleski, W., & Reddy, M. (2004). *Threat assessment in schools: A guide to managing threatening situations and to creating safe school climates*. U.S. Secret Service and U.S. Department of Education.

Gonzaga University v. Doe, 536 U.S. 273, 122 S. Ct. 2268 (2002).

[https://www.lexisnexis.com/community/casebrief/p/casebrief-gonzaga-univ-v-doe#:~:text=Doe%20%2D%20536%20U.S.%20273%2C%20122,2268%20\(2002](https://www.lexisnexis.com/community/casebrief/p/casebrief-gonzaga-univ-v-doe#:~:text=Doe%20%2D%20536%20U.S.%20273%2C%20122,2268%20(2002)

)

- Goodrum, S., Woodward, W., Thompson, A. J. (2017). Sharing information to promote a culture of safety. *NASSP Bulletin*, 101(3), 215-240. DOI: 10.1177/0192636517727347
- Goodrum, S., Thompson, A. J., Ward, K. C., & Woodward, W. (2018). A case study on threat assessment: Learning critical lessons to prevent school violence. *Journal of Threat Assessment and Management*, 5(3), 121-136.
<https://doi-org.ezp.waldenulibrary.org/10.1037/tam0000104.supp>
- Goodrum, S., Evans, M. K., Thompson, A. J., & Woodward, W. (2019). Learning from a failure in threat assessment: 11 questions and not enough answers. *Behavioral Sciences & the Law*, 37, 353-371. DOI: 10.1002/bsl.239
- Gottfredson, D. C., & Gottfredson, G. D. (2002). Quality of school-based prevention programs: Results from a national survey. *Journal of Research in Crime and Delinquency*, 39(1), 3-35.
- Hamlin, D. (2021). Are gun ownership rates and regulations associated with firearm incidents in American schools? A forty-year analysis (1980-2019). *Journal of Criminal Justice*, 76. <https://doi.org/10.1016/j.jcrimjus.2021.101847>
- Hart, S. D., Douglas, K. S., & Guy, L. S. (2017). The structured professional judgement approach to violence risk assessment: Origins, nature, and advances. In D. P. Boer, A. R. Beech, T. Ward, L. A. Craig, M. Rettenberger, L. E. Marshall, & W. L. Marshall (Eds.), *The Wiley handbook on the theories, assessment, and treatment of sexual offending* (pp. 643–666). Wiley Blackwell.

- Hempel, A. G., Meloy, J. R., & Richards, T. C. (1999). Offender and offense characteristics of a nonrandom sample of mass murderers. *Journal of the American Academy of Psychiatry and Law*, 27(2), 213-225.
- Hickey, E. W. (2016). *Serial murderers and their victims* (7th ed.). Cengage Learning.
- Jonson, C. L., Moon, M. M., & Hendry, J. A. (2020). One size does not fit all: Traditional lockdown versus multioption responses to school shootings. *Journal of School Violence*, 19(2), 154-166. <https://doi.org/10.1080/15388220.2018.1553719>
- Katsiyannis, A., Whitford, D. K., & Ennis, R. P. (2018). Historical examination of United States intentional mass school shootings in the 20th and 21st centuries: Implications for students, schools, and society. *Journal of Child and Family Studies*, 27, 2562-2573. <https://doi.org/10.1007/s10826-018-1096-2>
- Knoll, J. L. (2010). The “pseudocommando” mass murderer: Part I, the psychology of revenge and obliteration. *The Journal of the American Academy of Psychiatry and the Law*, 38, 87-94.
- Langman, P. (2015). *School shooters: Understanding high school, college, and adult perpetrators*. Rowman & Littlefield.
- Lankford, A., Adkins, K. G., & Madfis, E. (2019). Are the deadliest mass shootings preventable? An assessment of leakage, information reported to law enforcement, and firearms acquisition prior to attacks in the United States. *Journal of Contemporary Criminal Justice*, 35(3), 315-341. <https://doi.org/10.1177/1043986219840231>

- Lenhardt, A. M. C., Graham, L. W., & Farrell, M. L. (2018). A framework for school safety and risk management: Results from a study of 18 targeted school shooters. *Educational Forum*, 82(1), 3–20. <https://doi-org.ezp.waldenulibrary.org/10.1080/00131725.2018.1381792>
- Louvar Reeves, M. A., & Brock, S. E. (2018). School behavioral threat assessment and management. *Contemporary School Psychology*, 22, 148-162. DOI: 10.1007/s40688-017-0158-6
- Madfis, E. (2014). Averting school rampage: Student intervention amid a persistent code of silence. *Youth Violence and Juvenile Justice*, 12(3), 229-249. DOI: 10.1177/1541204013497768
- Mancini, C., Cook, A. K., Smith, J. C. & McDougle, R. (2020). Packing heat in the classroom: Public support for “armed teacher” policy. *Journal of School Violence*, 19(4), 610-622. <https://doi.org/10.1080/15388220.2020.1786835>
- Martaindale, M. H., & Blair, J. P. (2019). The evolution of active shooter response training protocols since Columbine: Lessons learned from the Advanced Law Enforcement Rapid Response Training Center. *Journal of Contemporary Criminal Justice*, 25(3), 342-356. DOI: 10.1177/1043986219840237
- Meloy, J. R. (2015). Threat assessment: Scholars, operators, our past, our future. *Journal of Threat Assessment and Management*, 2, 3-4, 231-242. <http://dx.doi.org/10.1037/tam0000054>

- Meloy, J. R., & Rahman, T. (2019). Cognitive-affective drivers of fixation in threat assessment. *Behavioral Science and Law*, 1-20. <https://doi.org/10.1002/bsl.2486>
- Meloy, J. R., Hempel, A. G., Mohandie, K., Shiva, A. A., & Gray, B. T. (2001). Offender and offense characteristics of a nonrandom sample of adolescent mass murderers. *Journal of the American Academy of Child and Adolescent Psychiatry*, 40(6), 719-728.
- Meloy, J. R., & O'Toole, M. E. (2011). The concept of leakage in threat assessment. *Behavioral Sciences and the Law*. DOI: 10.1002/bsl.986
- Meloy, J. R., Hoffmann, J., Guldemann, A., & James, D. (2012). The role of warning behaviors in threat assessment: An exploration and suggested typology. *Behavioral Sciences and the Law*, 30, 256-279. DOI: 10.1002/bsl.999
- Meloy, J. R., Hoffmann, J., Roshdi, K., & Guldemann, A. (2014). Some warning behaviors discriminate between school shooters and other students of concern. *Journal of Threat Assessment and Management*, 1(3), 203-211. <http://dx.doi.org/10.1037/tam0000020>
- Mettler, K. (2019, May 9). *It's the law now: In Florida, teachers can carry guns at school*. *Washington Post*. Retrieved from <https://www.washingtonpost.com/education/2019/05/09/its-law-now-florida-teachers-can-carry-guns-school/>
- Mihalic, S. F., & Irwin, K. (2003). Blueprints for violence prevention: From research to real-world settings-factors influencing the successful replication of model

programs. *Youth Violence and Juvenile Justice*, 1(4), 307-

329. DOI:10.1177/1541204003255841

Millspough, S. B., Cornell, D. G., Huang, F. L., & Datta, P. (2015). Prevalence of aggressive attitudes and willingness to report threats in middle school. *Journal of Threat Assessment and Management*, 2(1), 11-22. <http://dx.doi.org/10.1037/tam0000031>

Mohandie, K., & Duffy, J. (1999). Understanding subjects with paranoid schizophrenia. *FBI Law Enforcement Bulletin*, 68, 6–16.

Moore-Petinak, N., Waselewski, M., Patterson, B. A., & Chang, T. (2020). Active shooter drills in the United States: A national study of youth experiences and perceptions. *Journal of Adolescent Health*, 67, 509-513. <https://doi.org/10.1016/j.jadohealth.2020.06.015>

Morton, E. J. (ed.). (2008). *Serial murder: Multi-disciplinary perspectives for investigators* In *Behavioral Analysis Unit, National Center for the Analysis of Violent Crime*. Federal Bureau of Investigation.

Mullen, P. E., James, D. V., Meloy, J. R., Pathe, M. T., Farnham, F. R., Preston, L., Darnley, B., & Berman, J. (2009). The fixated and the pursuit of public figures. *The Journal of Forensic Psychiatry & Psychology*, 20(1), 33-47. DOI: 10.1080/14789940802197074

- Nekvasil, E. K., & Cornell, D. G. (2015). Student threat assessment associated with safety in middle schools. *Journal of Threat Assessment and Management*, 2(2), 98–113. <https://doi-org.ezp.waldenulibrary.org/10.1037/tam0000038>
- Newport, M. (2018, March 15). *Broad agreement on most ideas to curb school shootings*. Gallup. <https://news.gallup.com/poll/229805/broad-agreement-most-ideas-curb-school-shootings.aspx>.
- Nilsen, P. (2015). Making sense of implementation theories, models and frameworks. *Implementation Science*, 10(53). Retrieved from <https://implementationscience.biomedcentral.com/articles/10.1186/s13012-015-0242-0>
- O'Toole, M. E. (2000). *The school shooter: A threat assessment perspective*. National Center for the Analysis of Violent Crime. Federal Bureau of Investigation.
- Paradice, D. (2017). An analysis of US school shooting data (1840-2015). *Education*, 138(2), 135-144.
- Patton, M. Q. (2015). *Qualitative research & evaluation methods: Integrating theory and practice* (4th ed.). SAGE.
- Payne, A. A., Gottfredson, D. C., Gottfredson, G. D. (2006). School predictors of the intensity of implementation of school-based prevention programs: Results from a national study. *Prevention Science*, 7(2). DOI: 10.1007/s11121-006-0029- 2
- Phillips, S. W. (2020). Police response to active shooter events: How officers see their role. *Police Quarterly*, 23(2), 262-279. DOI: 10.1177/1098611119896654

- Privacy Act and the Disclosures of Student Information Related to Emergencies and Disasters of 2015, 34 CFR 99 (2015). <https://www.govinfo.gov/content/pkg/CFR-2017-title34-vol1/pdf/CFR-2017-title34-vol1-sec99-31.pdf>
- Rahman, T., Hartz, S. M., Xiong, W., Meloy, J. R., Janofsky, J., Harry, B., & Resnick, P. J. (2020). Extreme overvalued beliefs. *The Journal of the American Academy of Psychiatry and the Law*, 48(3), 1-8. DOI:10.29158/JAAPL.200001-20
- Ravitch, S. M., & Carl, N. M. (2016). *Qualitative research: Bridging the conceptual, theoretical, and methodological*. SAGE.
- Rogers, E. (2003). *The diffusion of innovations* (5th ed.). The Free Press.
- Rubin, H. J., & Rubin, I. S. (2012). *Qualitative interviewing; The art of hearing data* (3rd ed.). SAGE.
- Silver, J., Simons, A., & Craun, S. (2018). *A study of the pre-attack behaviors of active shooters in the United States between 2000 – 2013*. Federal Bureau of Investigation.
- Silver, J., Horgan, J., & Gill, P. (2018). Foreshadowing targeted violence: Assessing leakage of intent by public mass murderers. *Aggression and Violent Behavior*, 38, 94-100. <https://doi.org/10.1016/j.avb.2017.12.002>
- Simons, A., & Meloy, J. R. (2017). Foundations of threat assessment and management. In V. B. Van Hasselt & M. L. Bourke (Eds.), *Handbook of Behavioral Criminology* (pp. 627-644). DOI 10.1007/978-3-319-61625-4_36

- Skiba, R., & Peterson, R. (1999, January). The dark side of zero tolerance: Can punishment lead to safe schools? *Phi Delta Kappan*.
- Stallings, R., & Hall, J. C. (2019). Averted targeted school killings from 1900-2016. *Criminal Justice Studies*, 32(3), 222-238. DOI: 10.1080/1478601X.2019.1618296
- Stohlman, S., Konold, T., & Cornell, D. (2020). Evaluation of threat assessment training for school personnel. *Journal of Threat Assessment and Management*. Advance online publication. <http://dx.doi.org/10.1037/tam0000142>
- Van Dreal, J. (2017). *Assessing student threats: Implementing the Salem-Keizer system* (2nd ed.). Rowman & Littlefield.
- Vossekuil, B., Fein, R., Reddy, M., Borum, R., & Modzeleski, W. (2002). *The final report and findings of the Safe School Initiative: Implications for prevention of school attacks in the United States*. U.S Department of Education and U.S. Secret Service.
- Vossekuil, B., Fein, R. A., & Berglund, J. M. (2015). Threat assessment: Assessing the risk of targeted violence. *Journal of Threat Assessment and Management*, 2(3-4), 243-254. <http://dx.doi.org/10.1037/tam0000055>
- Whaley, A. L. (2020). The massacre mentality and school rampage shootings in the United States: Separating culture from psychopathology. *Journal of Community and Applied Social Psychology*, 30, 3-13. DOI: 10.1002/casp.2414

Appendix A: Interview Questions

1. How did the threat assessment program at your school get started? (Cornell, 2020)
2. What were some of the barriers to getting the program started? (Cornell, 2020)
 - a. Can you give me a specific example of the most difficult barrier?
3. What do you do daily to support the threat assessment program? (Goodrum, Thompson, Ward, & Woodward, 2018)
 - a. Tell me about what you do in a typical day related to the threat assessment program.
4. What is your perception of your school's program? (Goodrum, Thompson, Ward, & Woodward, 2018)
5. What is your view of the paperwork and procedures involved in your school's program? (Goodrum, Thompson, Ward, & Woodward, 2018)
 - a. Can you give me a specific example of completing that task?
6. What are some of the roadblocks to your threat assessment program working as well as it could? (Cornell, 2020; Goodrum, Thompson, Ward, & Woodward, 2018)
 - a. Can you give me a specific example of the most difficult roadblock you have experienced?
7. What would you do to make your program better? (Cornell, 2020; Nekvasil & Cornell, 2015)

- a. Can you give me a specific example of the most important thing that should be done?
8. Do you think your school's threat assessment program will likely prevent an act of targeted violence? (Cornell et al., 2018)
 - a. Can you give me a specific example of how your program could prevent an act of violence?
 9. What types of things does your school offer for safety planning and support for students who are being assessed? (Goodrum, Thompson, Ward, & Woodward, 2018)
 - a. Tell me about what is done in a typical case.
 10. Can you describe for me how a threat assessment works in your school, from being notified of a potential threat all the way to the final outcome? (Cornell et al., 2018)
 - a. Tell me about the steps taken in a typical case.
 11. Can you tell me how your threat assessment program is working; do you think it is contributing to a better school atmosphere and better safety? (Nekvasil & Cornell, 2015)
 - a. Can you give me a specific example of how the threat assessment program helped make the school environment better and safer for everyone?
 12. What advice would you give to a school planning on implementing a threat assessment program? (Cornell et al., 2018)

a. Can you give me specific examples of the most important things that should be done?

13. Is there anything else you would like to tell me about the threat assessment program at your school?