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THESIS

**PREVENTING SCHOOL SHOOTINGS:
A PUBLIC HEALTH APPROACH TO GUN VIOLENCE**

by

Edward Welch

March 2013

Thesis Co-Advisors:

Fathali M. Moghaddam
Paul J. Smith

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**PREVENTING SCHOOL SHOOTINGS:
A PUBLIC HEALTH APPROACH TO GUN VIOLENCE**

Edward J. Welch
Director-Port Authority of New York and New Jersey
M.A., City University of New York, 1992
B.S., Arizona State University, 1978

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requirements for the degree of

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March 2013**

Author: Edward J. Welch

Approved by: Fathali M. Moghaddam
Thesis Co-Advisor

Paul J. Smith
Thesis Co-Advisor

Harold Trinkunas
Chair, Department of National Security Affairs

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ABSTRACT

Gun violence in America must be addressed at the highest levels of society. Newtown, Aurora, and Virginia Tech were attacks on the very fabric of America. School shootings represent attacks on our nations' future. A public health approach to gun violence focuses on prevention. Public safety professionals, educators and community leaders are squandering opportunities to prevent horrific acts of extreme violence. Preparedness is derived by planning, which is critical to mobilizing resources when needed. Rational public policy can work. Sensible gun legislation, which is accessible through a public health approach to gun violence, neither marginalizes nor stigmatizes any one group. University administrators must fully engage the entire arsenal of resources available to confront this pernicious threat. The academic community can create powerful networks for research, collaboration and information sharing. These collective learning environments are investments in the knowledge economy. In order for the police to remain relevant, they must actively engage the community they serve by developing the operational art necessary to cultivate knowledge, relationships and expertise. Police departments must emphasize strategies that improve performance. Police officers must understand the mission and meaning of "To Protect and Serve" and the consequences of public safety, which often comes at their personal peril. Gun violence in America is a public health epidemic and preventing it requires a collective responsibility.

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LIST OF ACRONYMS AND ABBREVIATIONS

2IC.....	Individuals/Institutions/Communities
ATF.....	United States Department of Alcohol, Tobacco, Firearms and Explosives
CDC.....	Center for Disease Control
CIMS.....	Citywide (New York City) Incident Management System
COP.....	Common Operating Picture
COW.....	Cell Site on Wheels
DFLP.....	Democratic Front for the Liberation of Palestine
DHS.....	United States Department of Homeland Security
DOE.....	United States Department of Education
DOJ.....	United States Department of Justice
FBI.....	Federal Bureau of Investigation
FERPA.....	Family Educational Rights and Privacy Act
FFL.....	Federal Firearms Licensee
GAO.....	Government Accounting Office
GETS.....	Government Emergency Telecommunications Service
HIPPA.....	Health Insurance Portability and Accountability Act of 1996
ICS.....	Incident Command System
IDF.....	Israeli Defense Forces
JCTAWS.....	Joint Counter Terrorism Attack Work Shop
MACTAC.....	Multiple Assault Counter Terrorism Action Capability
MCI.....	Mass Casualty Incident
MRT.....	Mobile Response Team
NCAVC.....	National Center for the Analysis of Violent Crime

NICS.....	National Instant Criminal Background Check System
NIMS.....	National Incident Management System
NSSC.....	National School Safety Center
NTOA.....	National Tactical Officers Association
NYPD.....	New York City Police Department
PFLP.....	People’s Front for the Liberation of Palestine
SAT.....	School Assessment Team
SRO.....	School Resource Officer
STAT.....	School Threat Assessment Team
SWAT.....	Special Weapons and Tactics
UCC.....	Unified Command Center
USSS.....	United States Secret Service
VTPD.....	Virginia Tech Police Department
WPS.....	Wireless Priority Service

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I dedicate this thesis to the tens of thousands of survivors of gun violence and the thousands of victims who die every year. I hope their sacrifices motivate people to action.

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I. INTRODUCTION TO SCHOOL SHOOTINGS IN THE CONTEXT OF THE HOMELAND SECURITY ENTERPRISE

Over the past decade, the homeland security enterprise has evolved as the world has become more complex, threats have changed, and the impacts of global and local networks have collided. No longer solely the domain of terrorism, homeland security has taken on a wider array of complex tasks, adding to its portfolio of responsibility issues that had long been left to others or unattended. World economic turmoil, international crisis events, civil wars, insurgencies and conflicts, as well as government financial constraints, have forced the homeland security network to get leaner, more efficient and adapt more quickly to worldwide events.

At the same time, homeland security has taken on more complex issues and expanded its domain to look for better solutions to complex problems, refine strategy and improve collaboration. Many of the challenges that confront the various sectors of the homeland security enterprise affect other areas as well. Pandemics, earthquakes and terrorist bombings have striking similarities. Planning, response and resiliency rely on collaborative networks of community and government officials, citizens and private sector stakeholders to develop the frameworks necessary to solve complex problems, improve performance, expedite sound decision making and reduce costs.

It is through this lens that we look for other opportunities to improve this collaborative framework, share ideas and information and solve wicked problems in the homeland security enterprise.¹

A. VIOLENCE IN AMERICA

Violence in America impacts people's lives and drains considerable resources. Gun violence is particularly destructive, considerably more insidious than most

¹ Horst W. J. Rittel and Melvin M. Webber, Dilemmas in a General Theory of Planning, Policy Sciences, June 1973, Volume 4, Issue 2, 155–169. <http://link.springer.com/article/10.1007%2F01405730?LI=true>. As first described by Rittel and Webber, wicked problems are difficult to describe, have many causes and defy simple solutions. Poverty, climate change and terrorism are classic examples of wicked problems.

Americans understand and much more pervasive in the United States than in any other country in the world.

Researchers at Iowa State University estimate the cost to society for each murder in America amounts to \$17,250,000.² Firearm-related fatalities in the United States have averaged 32,300 annually since 1980.³ After motor vehicle accidents, it is the second leading cause of death in America. It is estimated that two nonfatal shooting injuries occur for every firearm-related death. More than 300,000 Americans are victims of a violent crime committed with a firearm every year.⁴ The collateral damage for families and loved ones is estimated in the millions of lives affected every year. Guns are the weapon of choice in 68 percent of all homicides, 52 percent of all suicides, 43 percent of all robberies, and 21 percent of all felony assaults.⁵ Guns account for 6.6 percent of the premature deaths in this country.⁶

The United States is a clear outlier in the international community for gun violence. The fatality rate due to firearm-related violence is more than five times the rate in any other industrialized nation.⁷ By a large measure, firearm-related homicide, suicide and unintentional death is higher in the United States than the next 25 other high-income countries.⁸

² “ISU Team Calculates Societal Costs of Five Major Crimes; Finds Murders at \$15.25 Million,” Iowa State University News Service (27 September 2010). Available: <http://archive.news.iastate.edu/news/2010/sep/costofcrime>.

³ *Firearm Injury in the U.S.* Firearm and Injury Center at Penn (2009), The University of Pennsylvania Health System, 5. Available: <http://www.uphs.upenn.edu/ficap/resourcebook/Final%20Resource%20Book%20Updated%202009%20Section%201.pdf#page=7>.

⁴ “How Prevalent is Gun Violence in America?” National Institute of Justice (26 October 2010). U.S. Dept. of Justice. Available: <http://www.nij.gov/topics/crime/gun-violence/welcome.htm>

⁵ *Firearm Injury in the U.S.*, 5, Source: National Center for Injury Prevention and Control, CDC. <http://www.cdc.gov/injury/wisqars/index.html>.

⁶ Ibid.

⁷ E. G. Krug, J. A. Mercy, L. L. Dahlberg, and K. E. Powell, “Firearm and Non Firearm-related Homicide Among Children,” *Homicide Studies* 2 (1998): 83–95.

⁸ R. A. Hahn, Oleg Bilukha, Alex Crosby, Mindy T. Fillilove, Akiva Liberman, Eve Moscicki, Susan Snyder, Faris Tuma, and Peter A. Brias, “Firearms Laws and the Reduction of Violence: A Systematic Review,” Task Force on Community Preventive Services. *American Journal of Preventive Medicine* (2005): 28. Available: <http://www.thecommunityguide.org/violence/viol-AJPM-evrev-firearms-law.pdf>.

Bombings, shootings, deaths and injuries are anathema to our highest ideals of educational freedom and open expression that are the central tenets that exist on our college and university campuses today. Understanding the history of these events may illuminate a pathway to safety and security by identifying patterns, persons, pathologies, conditions and techniques common to these devastating events.

B. FIREARM INJURIES AS A PUBLIC HEALTH ISSUE

Gun violence is generally viewed as a crime problem, gun suicides as a mental health problem and accidental shootings as a safety issue. While each emphasize prevention, there has been little effort, until recently, to bring together these diverse interests and focus on a broad array of policies that can significantly impact gun injuries and death. This full spectrum collaborative analysis focusing on prevention is referred to as the public health approach to reducing gun injuries and death.⁹

Firearm-related injury and death are preventable and represent a significant public health issue. Research on firearm-related injury provides abundant evidence that specific legislative changes in law and technology can be made to reduce the deaths, disability, and subsequent costs—both in terms of lives lost and economic impacts—to society.

Firearms are devastatingly effective weapons with the capability of escalating impulse-driven acts of interpersonal violence or suicidal thoughts into death, sometimes on a massive scale. As discussed in detail below, states with higher rates of household firearm ownership have significantly higher homicide victimization rates.¹⁰ Finally, and most importantly, firearm injury disproportionately affects young people.¹¹ Among the leading causes of death for persons ages 15–24, homicide ranks second and suicide third

⁹ David Hemenway, “Private Guns Public Health,” The University of Michigan Press, Ann Arbor, 2004, 8.

¹⁰ Firearm Injury in the U.S., 5.

¹¹ In 1992, school shooting data became much more reliable and accurate with the advent of in-depth analysis by the National School Safety Center, which was created in 1984 with federal funding directed by President Ronald Reagan. Homicide incidents in the early 1990s were almost exclusively single-victim episodes. Multiple victim episodes rose throughout the mid-1990s and 2000s.

with the majority of both related to firearms. Many diseases that attract more public attention and research cause far fewer deaths.¹²

C. PROBLEM SOLVING IN THE HOMELAND SECURITY ENTERPRISE (HSE): AN INTERDISCIPLINARY COLLABORATIVE FRAMEWORK

The issue of gun violence in America is too broad to confront generally. There are too many causes, considerations and consequences, as well as too much metadata to analyze that would render the effort meaningless within the constraints of a thesis.

The purpose of this thesis is to take a common homeland security problem-solving technique—an interdisciplinary collaborative framework—and apply it to gun violence in educational environments and, more specifically, to rampage shootings and mass murders at colleges and universities. By examining this specific type of extreme violence and exploring the pathologies and conditions conducive to it in the singular cohesive university environment, we intend to determine which prevention, protection, response and resiliency techniques are necessary to apply these findings, as well as make specific recommendations that can be applied to the community at large.

In order to better understand the opportunities for interdiction, we must first understand the behavioral, social and cultural context of school shootings.

This thesis takes a public health approach to gun violence to determine likely effective prevention, protection, response and resiliency techniques that can be taken to reduce the impact of these devastating yet preventable events.

A chapter has been included in this thesis about extreme violence in international educational environments related to terrorism. Thankfully, America has not experienced such an event on a destructive and massive scale. This information has been included to inform the reader of the acute risk involved if terrorists were to pursue executing such an attack in America. While these events are considered outliers, they must be taken into

¹² National Center for Injury Prevention and Control, Center for Disease Control, <http://www.cdc.gov/injury/wisqars/index.html>.

consideration when developing and implementing a comprehensive response strategy.¹³ Responding to terrorist events in educational environments requires thorough, comprehensive and well thought-out strategies, proper training and diligent preparation. Predictive policing strategies suggest that preparation for the worst-possible, low-probability event improves the chances that more probable events are handled more effectively, efficiently and expeditiously with lower impacts.

D. APPLICATIONS TO SOCIETY AT LARGE

Colleges and universities were chosen for this study because of their sense of community cohesiveness, similarities to society at large and for their depth of resources. Educational environments were selected because they represent our nation's future.

As the homeland security enterprise has evolved, so have school shootings. Once the domain of single victim events, as semiautomatic weapons have become more accessible and extended magazines more prevalent, school shootings have resulted in far greater casualties.

E. LASTING VICTIMS OF GUN VIOLENCE

While the murders committed during these horrendous events of gun violence are terrible, an even larger number of Americans suffer lifelong debilitating injuries, post-traumatic stress disorder and terrible memories that deserve our attention, consideration, medical and psychological treatment. Student survivors speak of lost hopes and dreams, loves and friends all destroyed by acts of extraordinary violence. Their memories are seared with images of beloved friends dying next to them and the anguish of being incapable and unable to help or comfort them, save them or reduce their misery.¹⁴ These are the lasting victims of gun violence in America.

¹³ Ted G Lewis, *Bak's Sand Pile: Strategies for a Catastrophic World* (Williams, California: Agile Press, 2011), 361.

¹⁴ "The Killer at Thurston High, What Led a 15-year-old Boy to Kill His Parents and Two Classmates and Shoot and Injure 25 Others?" *Frontline*. PBS New York. Available: <http://www.pbs.org/wgbh/pages/frontline/shows/kinkel/>.

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II. RESEARCH PROPOSAL

A. CAN SCHOOL SHOOTINGS BE PREVENTED?

Can institutions of higher learning better prepare to prevent and respond to school shootings and thus protect themselves from acts of extreme violence? How can the people, entities and institutions responsible for the safety and security of university and college campuses better work together to develop and implement policies to prepare, prevent, respond and survive these events? Are these findings applicable to larger communities?

Secondary questions include: Do preparation and planning activities actually prevent acts of extreme violence on college campuses? What role should prevention, protection, response and resiliency activities (mental health services, crisis counseling, gun control legislation, training including “active shooter” training) have in reducing the significant impacts of incidents of extreme violence on college campuses?

Tertiary questions include: What role do active shooter training and other types of advanced interdiction training for police, faculty, staff and students have in increasing survivability, organizational effectiveness and advancing the field of policing in the 21st century?

B. PROBLEM SPACE: DEFINITIONS

The Department of Homeland Security defines an active shooter as “an individual actively engaged in killing or attempting to kill people in a confined and populated area.”¹⁵ School shootings represent the largest single category of active shooter attacks

¹⁵ *Active Shooter, How to Respond*. Washington: U.S. Department of Homeland Security (2008).

in the country.¹⁶ According to Jesse Klein, a school social worker, more than 500 students and 150 adults including teachers, administrators, staff and parents have been killed in school shootings since 1969.¹⁷

However, school shootings are still rare events.¹⁸ Many police leaders, educators and researchers take a very narrow view of school shootings by looking for better weapons, response tactics and singular solutions to complex problems that do not ameliorate the effects of these tragic events.¹⁹ “For every problem, there is a solution that is simple, neat and wrong.”²⁰ After most school shootings, there is an immediate outcry for a direct and instantaneous response but very little sustained attention. To the extent that politicians, administrators, practitioners and researchers rely on media accounts of school shooting events for information and analysis, there is a proportionate likelihood that their conclusions will be skewed toward the sensational, inaccurate, and incomplete.

The added challenge is that leaders of academic institutions seek to create an atmosphere of scholarly freedom and serenity and thus object to a noticeable presence of security features. University administrators are inadequately prepared to prevent and respond to these tragic events because they do not fully engage the entire arsenal of resources available to confront this threat: the academic community. This community consists of faculty, staff, students and police who create powerful networks for collaboration, information sharing, community policing strategies and interpersonal relationships. These community members can assist in identifying people who display a propensity towards violence and intercede, when appropriate, to diminish or deescalate situations conducive to escalating violence. In their role as first preventers and first

¹⁶ According to Kelly, 29% (64) of 224 active shooter cases studied between 1966 and 2010 were school shootings compared with shootings in office buildings, 13% (29), commercial settings, 23% (52), factory settings, 13% (30), and other locations, 22% (49). Of the 35 documented foiled attacks, 10 were school-shooting cases.

¹⁷ Jesse Klein, *The Bully Society: School Shootings and the Crisis in American Schools* (New York and London: New York University Press, 2012).

¹⁸ Glenn W Muschert, “Research in School Shootings,” *Sociology Compass* 1–1 (Sept 2007): 60–80.

¹⁹ Raymond W. Kelly, Testimony before the Senate Committee on Homeland Security and Governmental Affairs: 2004.

²⁰ Aphorism attributed to H. L. Mencken.

responders, they can also provide much-needed intelligence to responding police officers in the event of an incident of extreme violence.²¹

A central aim of this thesis is to discover, develop and understand the homeland security concepts and strategies that will help college and university communities prevent and, more importantly, survive campus shootings. The practical value of this research is to save lives, improve performance and relieve the devastating impacts of these events.

This research will produce a resource guide not only for university stakeholders to improve university safety and security but also offer recommendations applicable to other educational environments, elementary schools, high schools and vocational schools, as well as larger communities such as towns and cities. It will assist in the development of policies, procedures and training imperatives to better prepare communities and governments to respond to potential threats including crime and other types of extreme violence. University officials will better understand their respective roles in preventing and responding to active shooters, as well as help them fulfill their moral obligation—and Clery Act requirements—to inform and protect students, faculty and staff and to identify and avoid dangerous, life-threatening situations.

This research will contribute to the prevention of extreme school violence on college campuses due to a deeper and more meaningful understanding of extreme violence, aid in the identification of risk, and protect the university community while remaining consistent with pedagogical goals.

The incidents of school shootings on college campuses can be prevented through the collaboration and application of whole-of-community concepts: Students, faculty, staff and police working together to prevent incidents of extreme violence on college campuses and responding more effectively and safely when they do occur. Police play a leading role in this engagement by training civilians to survive an active shooter attack. Police also play a key role in preventing extreme violence, preparing for it and training and preparing civilians to assist the police in the event of an attack. Civilians need to

²¹ Christopher D. Troughton, “Prepared Response, A Mitigation Strategy to Prepare School Communities for School Shooters,” University of Connecticut, Capstone Project, August 15, 2011, 26.

know how to call police for help, program key information into their cell phones, and be taught what information is most useful to police: Location, number of perpetrators, types of weapons, descriptions, direction of attack, etc. When police train active shooter techniques, they do so with the assent and assistance of community volunteers who participate and relay the information back to their communities. Two notable examples of community preparation include Run, Hide and Fight, and Have a Plan: Find Out, Get Out, Hide Out and Take Out.²² People need to have a plan to survive active shooter events and know what to expect, see, hear, and feel. Police also train civilians to save themselves so police can focus on eliminating the threat.

C. LITERATURE REVIEW

Past research indicates that schools, particularly college campuses, are distinctly vulnerable to high casualty active shooter attacks. These types of attack will continue to be imminent hazards to individuals, institutions and communities (2IC) with devastating consequences until they are better understood by school administrators, community leaders and police commanders.

School shootings have been studied from many divergent points of view, but there has been little effort to synthesize past studies or take a common methodological approach to orient future ones.²³

Through the examination of current literature and exploring the importance and relevance of training, information sharing and team work among the trilogy of key resources (2IC), we hope to ascertain important information in order to respond, survive and terminate school shootings. The literature about school shootings generally falls into four distinct categories: official policy documents, case studies, after-action reports and academic scholarship.

²² Troughton, A Mitigation Strategy to Prepare School Communities for School Shooters 27.

²³ Muschert, "Research in School Shootings," 1.

1. Official Policy Documents and Government Reports

In 1999, The Federal Bureau of Investigation (FBI) produced a report entitled: *The School Shooter: A Threat Assessment Perspective*.²⁴ The purpose of the report was to develop threat assessment recommendations and prevention strategies designed to address the mental health of students likely to commit extreme school violence. The study was designed (intended) to examine specific cases of school shootings or foiled attempts in order to develop a better understanding of the perpetrator, incident, school and social dynamics. The FBI's National Center for the Analysis of Violent Crime (NCAVC) explored ideas presented during the gathering of 160 experts on the subject. The report does not state the backgrounds or other identifying information about the participants of this symposium "due to confidentiality issues."²⁵ It is therefore difficult to draw any conclusions as to their expertise, biases or other professional considerations that may impact this report. The report focused on 18 schools, 14 of which suffered shooting incidents and four of which had an attack averted by law enforcement engagement with the perpetrator. While the report is very careful to explain the limitations of other studies, it too falls victim to many of the same deficiencies. Drawing conclusions from an extremely small sample, making unsupported recommendations, and proffering unjustified claims are just a few of the problems of this report. The report also includes very little useful information about the averted attacks.

The Bureau of Justice Statistics and International Association of Chiefs of Police collaborated on *Guide for Preventing and Responding to School Violence*,²⁶ which provide hundreds of recommendations and suggestions for school administrators, teachers, parents and students to recognize indicators of extreme violence to help prevent them. Helpful suggestions are also provided for the police, media and community to

²⁴ M. E. O'Toole, *The School Shooter: A Threat Assessment Perspective*. National Center for the Analysis of Violent Crime. Quantico: Federal Bureau of Investigation (1999).

²⁵ O'Toole, *The School Shooter*, 46.

²⁶ *Guide for Preventing and Responding to School Violence 2nd Edition*. Alexandria, Va.: U.S. Department of Justice, Bureau of Justice Statistics and The International Association of Chiefs of Police (2007).

consider when assessing, planning and training for school crisis events and how to handle the aftermath of a crisis. Studies of actual cases are used to illustrate the potential value of these suggestions. The document provides a broad overview of issues, elements, and considerations, as well as the potential legal consequences for addressing the problem of school violence in order to help communities audit their schools' existing policies, procedures and plans. Schools and communities could benefit from the intense collaboration recommended in this document. Collaborative school policies, plans and procedures that foster information sharing and written documentation can assist schools' safety-planning activities to tailor policies to unique communities and circumstances.

As comprehensive as this document is, it fails to address gun policy, a considerable omission, as well as the tactical and procedural issues associated with preventing and responding to extreme school violence.

Prompted by several high-profile school shootings, the U.S. Secret Service and U.S. Department of Education collaborated on an endeavor to study cases of planned or targeted violence in schools. In *Prior Knowledge of Potential School Based Violence: Information Students Learn May Prevent Attack*, the authors focused on past incidents that were planned in advance to determine what could be done to prevent future attacks.²⁷ The study, known as the Safe School Initiative, focused on the operational conditions experienced by those involved in school safety to increase knowledge and improve prevention capabilities. Although released in 2008, the study examined 37 incidents of school violence involving 41 perpetrators between January 1974 and May 2000. The study found that in 93 percent of the cases the perpetrator exhibited concerning behavior prior to the attack, and in 81 percent of the cases a nonparticipant had some type of prior knowledge of the attacker's plan. These results are difficult to interpret for several reasons. As we have experienced, connecting the dots after an event is quite easy. Identifying patterns and understanding the intricacies of relationships, social influences and community standards before an attack, however, is quite difficult. While this study

²⁷ William S. Pollack, Ph.D., William Modzeleski, and Georgeann Rooney. *Prior Knowledge of Potential School-Based Violence: Information Students Learn May Prevent a Targeted Attack*. Washington: U.S. Secret Service and U.S. Department of Education (May 2008).

and the analysis of the resulting data is interesting, it does not offer prescriptive, specific recommendations that would allow administrators and law enforcement to identify genuine threats.

These studies, taken together, establish the importance of developing meaningful social and emotional connections with 2IC: Individuals, institutions and communities including students, faculty, administrators, police officers and community members. Promotion of social, ethical and emotional connections encourages collaboration and information sharing.

2. Case Studies

Two studies of multiple active shooter cases were reviewed. The Brady Campaign to Prevent Gun Violence, *Major School Shootings in the United States Since 1997*, is a running history of school shootings that includes rampage shootings and targeted killings.²⁸ The authors relied solely on media accounts of these shootings, which tend to be skewed toward the sensational, unbalanced and incomplete. This study included shootings of students shot off school property, which made the data difficult to compare to other studies. The study also included data derived from shootings that occurred in the vicinity of schools that did not have a nexus to schools, students or school administration. There is no shooting summary or analysis included in this document. This study is an exhaustive compendium of shooting incidents, some related to schools and others that are not.

The other case study reviewed was the *New York City Police Department Active Shooter Recommendations and Analysis for Risk Mitigation*.²⁹ This is a compendium of 281 active shooter incidents that occurred between 1966 and 2010, drawn from open source data identified from Internet searches. The document includes a summary of 64 school shootings. The NYPD included only incidents that met the DHS definition of an

²⁸ *Major School Shootings in the United State Since 1997*. Washington: Brady Campaign to Prevent Gun Violence (Updated 2/29/2012). Available: www.bradycampaign.org.

²⁹ *Active Shooter: Recommendations and Analysis for Risk Mitigation*. New York City Police Department (2010).

active shooter event and further restricted this definition by eliminating gang-related violence, domestic assaults, robberies and drive-by shootings. There is a strong sampling bias in this report toward recent events for several reasons. Most prominently, the compendium was compiled in 2010 and failed to include many incidents that predated Internet news reporting. For shooting incidents that occurred between 2000 and 2010, the compendium is almost complete. For attacks before this period, the case studies reported are biased toward events with higher numbers of killed and wounded that attracted more media attention. The report is also heavily biased toward events that occurred in English-speaking countries, or ones that were sensational enough to have been reported from non-English-speaking countries on English-language Internet sites. The NYPD restricted quantitative analysis to cases that occurred in the U.S., and had one or more documented dead casualties. An added deficiency of this report is its lack of critical analysis. Despite these shortcomings, this report is thorough, complete and well documented.

3. After Action Reports and Strategy Papers

Although Columbine is often referred to as the most widely written about school shooting in U.S. history, two of the most thorough after action reports occurred after the Virginia Tech shootings. These include reports directed by the president of the United States³⁰ and another directed by the governor of Virginia.³¹

Report to the President on Issues Raised by the Virginia Tech Tragedy summarizes the results of official interviews and meetings with educators, mental health experts, law enforcement and other key representatives in 12 states. The major recurring themes reported in this report include: improving information sharing, advancing gun control legislation, enhancing mental health services and more thoroughly developing emergency preparedness procedures. The report encourages an ongoing national dialogue to address these issues in order to minimize the risk to school safety. While focusing on

³⁰ *Report to the President on Issues Raised by the Virginia Tech Tragedy*. Washington: U.S. Department of Health and Human Services, U.S. Department of Education, and U.S. Department of Justice (June 2007).

³¹ *Mass Shootings at Virginia Tech: Report of the Review Panel Presented to Governor Kaine*. Commonwealth of Virginia (August 2007).

the federal response to local school shootings, *Report to the President* provides keen insight and information for state, local and tribal community leaders to navigate the sometimes confusing and risk-averse complexities of the federal government. The report includes examples of how federal resources are available to address local issues, including clarification from the U.S. Department of Health and Human Services about the Health Insurance Portability and Accountability Act of 1996 (HIPAA) and Family Educational Rights and Privacy Act (FERPA) guidelines, information about Center for Disease Control (CDC) resources including “Project Respect” to build healthy school climates and prevent school violence, and information about the resources of Alcohol, Tobacco Firearms and Explosives (ATF) to provide critical information about persons banned from gun ownership. The report does not explain its methodology, how to access training resources or other important tactical resources related to school violence. Like the 1999 FBI report, *Report to the President* does not include an explanation or index of the interview subjects, making it difficult, if not impossible, to assess whether or not these people are experts in the field for which they offered opinions, recommendations and guidance.

The Virginia Tech Review Panel’s report, *Mass Shootings at Virginia Tech* on the other hand includes an extensive list of authorities, sources and references. The painstaking detail is evident in mental health histories, campus maps, sketches and drawings. Interviews are summarized in detail with the subject’s background, expertise and experience clearly articulated. Technology that existed at the time of the attack is thoroughly detailed and explained. Primary sources are cited, sourced and provided in an appendix. The panel used a revised methodology to capture confidential information, provide expert opinions on issues relating to privacy, record keeping, public meeting protocols and the authorization to meet in closed session. The report includes a summary of key findings and recommendations, background and scope, university setting, campus environment and security. The university’s police department’s mission statement, staffing, training, campus alerting systems and emergency response plans are summarized and evaluated. This report is discussed in detail later in this paper.

4. Academic Scholarship and Research

In *Research in School Shootings*, Glenn W. Muschert from Miami University in Oxford, Ohio studies school shootings from a multidisciplinary perspective.³² Mr. Muschert contends that to date there is no unified body of knowledge that examines extreme violence on school campuses. His article proposes a typology from which to study school shootings, examines the media's propensity to sensationalize such events and examines the TIC dynamics at various social levels. While Mr. Muschert contends school shootings have occurred at a relatively steady rate over time, he offers no evidence to support this conclusion. He also contends that school shootings contribute to the general impression that school shootings are an emerging and increasing social problem, but he again offers no evidence in support of this conclusion.

In *School Shootings as Organizational Deviance*, Cybelle Fox and David J. Harding argue that rampage school shootings can be understood in the context of organizational deviance.³³ Organizational deviance, a concept originally proposed by Diane Vaughan in her study of the culture of NASA before the *Challenger* disaster, occurs when events created by an organization do not conform to an organization's goals or expectations and produce unanticipated outcomes.³⁴ It is often an unintended consequence of the normal activities of people within an organization. In studying the events that led to the *Challenger's* ill-fated final launch, for example, Ms. Vaughan credited the failure of information sharing among the various decision makers within the organization as a key factor that led to organizational deviance. Drawing on data from two case studies of schools that experienced shootings, the authors of *School Shootings* demonstrate how the structure, environment, and culture of these schools led to the loss of information sharing about socially and/or emotionally troubled students that may have led to some form of intervention.

³² Muschert, "Research in School Shootings," 60–80.

³³ Cybelle Fox and David Harding, *School Shootings as Organizational Deviance*, *Sociology of Education*, January 2005 78: 69–97.

³⁴ Diane Vaughan, *The Challenger Launch Decision, Risky Technology, Culture and Deviance at NASA*, University of Chicago Press, 1996, 273.

A fascinating study, the authors omitted several key factors necessary for extreme violence to take place in schools. One of the more important variables in determining the relationship between schools and violence is the role police and authority figures play in creating a safe environment. Other factors include emergency and crisis planning activities, a commitment to preparedness, and the designation of a person in charge of emergency activities. Another deficiency in this study is its inherent lack of consistency in approach. Despite the authors' stated intention to identify the key elements of organization deviance that contribute to school shootings there were too many variables to consider:

Our goal is to understand whether ideas that were developed or invoked to understand white-collar crime, manmade disasters, or the decision to launch the Challenger, such as structural secrecy, loosely and tightly coupled systems, organizational environment, role strain, routine signals, and organizational culture (among others), can help us to understand why schools fail to identify certain youths with social or emotional problems.³⁵

Studying rare events, such as school shootings also presents methodological challenges.³⁶ One particular problem is the selection of comparison cases. Without a common theoretical perspective and prior knowledge of which factors will be identified as important, selecting comparison cases is all but impossible.

D. SUMMARY AND CONCLUSIONS

The literature review identified important and relevant topics and sources of information about school shootings.

Scholars from a variety of disciplines have studied campus crime and safety. School shootings, however, receive widespread media attention after an event but very little sustained attention afterwards. Academic attention has been minimal with the

³⁵ Cybelle Fox and David J. Harding, 2005. 'School Shootings as Organizational Deviance' *Sociology of Education* .78

³⁶ David Harding, Jal Metha, and Katherine Newman 2003. "No Exit: Mental Illness, Marginality, and School Violence in West Paducah, Kentucky" 132–162 in *Deadly Lessons: Understanding Lethal School Violence*, edited by Mark H. Moore, Carol V. Petrie, Anthony Braga and Brenda L. McLaughlin, Washington, D.C.: National Academies Press.

exceptions noted and the work of a few researchers discussed in subsequent chapters of this thesis.

This literature review clearly demonstrates the need for additional research. The homeland security enterprise as an academic discipline has tremendous potential to use its collaborative framework and multi-dimensional lens to dramatically improve the knowledge and understanding of these devastating attacks of extreme violence. Since the homeland security enterprise was created in 2002, school shootings have received considerably more attention and increasingly better understanding.

School shootings have been studied from many divergent points of view but there has been little effort to synthesize past studies or orient future ones.³⁷ Understanding the varieties of school shootings—rampages, mass murder, terrorist attack, targeted attack, and government shootings—is an integral first step to determining what can be done to prevent, terminate and recover from extreme school violence and increase the likelihood of victim survival.

E. RESEARCH METHODS: COMPARATIVE CASE STUDIES

Extreme violence in educational environments can be prevented and safety on college campuses can be improved. This research will provide an evaluative analysis of recent case studies and the devastating consequences of extreme violence at Virginia Tech and Northern Illinois University. It will also provide several examples and analysis of international terrorist events that occurred in educational environments.

The case studies will examine the personal histories and pathologies of the perpetrators, university environments, and official and unofficial interactions with students, faculty and staff. They will look at how these interactions may influence collaboration and information sharing and the willingness of individuals to share sensitive and pertinent information across sectors and report suspicious, unusual and dangerous behavior to people who have the authority and responsibility to take action.

³⁷ Muschert, “Research in School Shootings,” 1.

This study will also comparatively examine foreign incidents of major mass casualty school shootings. Despite various cross-cultural differences, modern educational environments share common features in key social, cultural and educational respects across major societies that are central to this study of prevention. In many important ways, school shootings in Israel and Russia are described as terrorist events because they targeted school children for ideological reasons, offer important lesson to inform planning and response techniques in America. The 1974 Ma'alot Massacre in Israel, which resulted in the deaths of 25 hostages, and the 2004 Beslan Massacre in North Ossetia, which killed 334 hostages, are included for responders to understand the consequences of such events. The domestic and international case studies together examine planning and coordination, training and equipment, communications, intelligence and information sharing, and legal and policy issues, not only in terms of the human capital needed to support these endeavors but also in terms of the costs associated with inadequate preparation as expressed in survivability, community confidence, and resiliency.

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III. THE HISTORY OF EXTREME VIOLENCE IN EDUCATIONAL ENVIRONMENTS

A. INTRODUCTION TO EXTREME VIOLENCE AS A DYNAMIC EVENT

Incidents of extreme violence in educational environments are dynamic events that vary greatly. In most cases of extreme violence on college campuses, perpetrators use firearms, and there is no pattern or method to their selection of victims.³⁸ The best type of response for victims, witnesses, community members, university leaders and police officials depends greatly on the unique circumstances and characteristics of the event. Because school shootings are dynamic events, there is no single set of best practices that can be described. However, there are clearly recognizable indicators and recommendations that can significantly increase survivability, mitigate risk and inform response interdiction. Understanding the history of these events increases our understanding and may illuminate a pathway to safety and security by identifying underlying pathologies, conditions and techniques that link these devastating events.

B. TYPOLOGY OF SCHOOL SHOOTINGS

School shootings have been studied from many divergent points of view but there has been very little effort to synthesize past studies or orient future ones.³⁹ Understanding the variety of school shootings rampages, mass murder, terrorist attack, targeted killings and government shootings is an integral first step to determining what can be done to prevent, terminate and recover from extreme school violence.⁴⁰ While violence is the essential component of each type of incident, and firearms the overwhelmingly popular weapon of choice, explosives are commonly used in conjunction with firearms and sometimes, although rarely, explosives are used exclusively.

³⁸ *Active Shooter: How to Respond* (Washington: U.S. Department of Homeland Security, 2008).

³⁹ Muschert, "Research in School Shootings," 60.

⁴⁰ *Ibid.*, 63.

1. Rampage Shootings

Rampage shootings are expressive, non-targeted attacks, usually committed by a former member of the school or community.⁴¹ Victims are targeted either at random or for their symbolic value, not as individuals.⁴² Power, revenge and anger are all motivations for the rampage shooter. Many shooters equate the school with the community, and therefore, an attack on a school is seen by the shooter as an attack on the community. Mr. McGhee and Ms. DeBernardo refer to these shooters as “avengers.” They seek revenge for a perceived or actual slight or insult to themselves and/or to the group or class they represent. While most rampage shootings occur at primary or secondary schools, college and universities are not immune. The killings at the University of Texas in 1966, at Virginia Tech in 2007, and at Northern Illinois University in 2008 are all examples of rampage shootings. Rampage shootings are terroristic in nature because they create fear and confusion across a broad spectrum of individuals, institutions and communities.

2. Mass Murders

School-related mass murders are typically carried out by an individual who targets categories of individuals selected for their symbolic importance or the school in general. Power, revenge and a displaced sense of loyalty are motivations for school-related mass murders.⁴³ The worst incident of school violence in U.S. history falls into this category, although it was not a shooting. In 1927, motivated by revenge for a new school tax in Bath, Michigan, school board treasurer, Andrew Kehoe, killed his wife,⁴⁴ blew up all of the buildings on his farm and detonated explosives under a school building,

⁴¹ Muschert, “Research in School Shootings,” 63.

⁴² Katherine Newman, *Rampage: The Social Roots of School Shootings* (New York: Basic Books, 2004).

⁴³ Jack Levin and James A. Fox, “Making Sense of Mass Murder” *Handbook of Psychological Approaches to Violent Offenders*, edited by Vincent B. van Hasselt and Michael Hersen, Norwell, Ma: Kluwer Academic, 1999, 173–187.

⁴⁴ “Bath School Disaster,” *Wikipedia*. Available: http://en.wikipedia.org/wiki/Bath_School_disaster.

killing 45 people and injuring 58.⁴⁵ In 1989, Marc Lepine, an engineering student at Ecole Polytechnique de Montreal, Canada entered a classroom, claimed he hated feminists, segregated the men from the women, and shot the women, killing six.⁴⁶ In 1996, Thomas Hamilton, a local shopkeeper, entered the Dunblane Middle School in Dunblane, Scotland and killed 17 people, including 16 children and their teacher.⁴⁷ In October 2006, Charles Roberts, a milk truck driver “angry at God” shot 10 Amish girls, killing 5, at the West Nickel Mines Amish School, a one-room school house in Lancaster County Pennsylvania.⁴⁸

3. Terrorist Attacks

Terrorist attacks at school institutions are the third category of incidents of extreme violence at schools. Schools and children are selected by terrorists as symbolic targets because of their perceived importance in communities. These attacks are motivated politically or ideologically. Two noteworthy examples of terrorist attacks at school institutions described at length later in this thesis are the 1974 incident at Ma'alot, Israel where three Palestinian terrorists murdered 25 people, including 21 children at the Netiv Meir elementary school.⁴⁹ The 2004 incident at Beslan, Russia is another example of a terrorist attack at a school that left 344 people dead including 186 children.⁵⁰

⁴⁵ Monty J. Ellsworth, *The Bath School Disaster, Text and Pictures, 1927*, <http://www.msu.edu/~daggy/tbsd/tbsd-x.htm>.

⁴⁶ Peter Elgin and Stephen Hester, *The Montreal Massacre: A Story of Membership Categorization Analysis* (Waterloo, ON: Wilfrid Laurier University Press, 2003).

⁴⁷ “1996 Massacre in Dunblane School Gym,” *On This Day 1950–2005*. BBC Today. Available: http://news.bbc.co.uk/onthisday/hi/dates/stories/march/13/newsid_2543000/2543277.stm.

⁴⁸ “Amish School Shooting Still Testing Faith,” CBS News. Available: www.cbsnews.com/stories/2007/03/29/earlyshow/main2622842.shtml.

⁴⁹ Jeff Jacoby, ‘Arafat the Monster’ *The Boston Globe*, November 11, 2004 http://www.boston.com/news/globe/editorial_opinion/oped/articles/2004/11/11/arafat_the_monster/.

⁵⁰ John Giduck, *Terror at Beslan, A Russian Tragedy with Lessons for America’s Schools*, Bailey, Co., Archangel Group (2005).

4. Targeted Attacks

Targeted attacks are the fourth and largest category of shooting instances at schools, although they rarely receive the national media attention of the other types of school attacks. Targeted attacks are described as shooting instances that are conducted by a member or former member of the school community who specifically attacks individuals or specific groups of individuals in order to exact revenge for a perceived or actual grievance or mistreatment. Unlike the other types of attack, they are not symbolic but are motivated by revenge and generally are not focused on the entire school. In 1992, Joseph White shot and killed Delondyn Lawson at the Tilden School in Chicago and in 2003 James Sheets, 14, shot the school principal, Eugene Sergio, in Red Lion, Pennsylvania, resulting in Mr. Sergio's death. Mr. Sheets then killed himself.⁵¹

5. Government Provoked Violence

The fifth type of school violence involves government agents who are attempting to restore peace or quell civil unrest. Incidents of school violence in response to student protests include the 1968 anti-segregation protest at South Carolina State University that left three dead, and two anti-war demonstrations: The 1970 Kent State University protest that killed four and the Jackson State College shootings two weeks later where two people were killed.⁵²

⁵¹ "Police Search for Motive in School Shooting," CNN: 25 April 2003. Available: <http://edition.cnn.com/2003/U.S./Northeast/04/24/school.shooting/index.html>.

⁵² "Chronology of Events," May 4 Task Force. Kent State University: April 1996. Available: <http://dept.kent.state.edu/may4/chrono.html>.

Table 1. Compendium of Selected Cases 1853–2012⁵³

Date	Place	Outcome
November 2, 1853	Louisville, Kentucky	First recorded school shooting, student shoots and kills headmaster to avenge his brothers honor, shooter survives
April 9, 1891	St. Mary's School, Newburgh, New York	First recorded mass shooting, 70 year old male unaffiliated with school, opens fire on a group of elementary school children, no deaths, numerous injuries, shooter survives
May 18, 1927	Bath Consolidated School, Bath, Michigan	Deadliest mass murder, School Board Treasurer kills 42 in domestic terrorist IED attack, terrorist dies
August 1, 1966	University of Texas, Austin, Texas	Graduate student kills 16 and injures 32, shooter dies
December 30, 1974	Olean High School, Olean, New York	Student kills 3 and injures 11, shooter survives
July 12, 1976	University of California, Fullerton	Staff member kills 7 and injures 2, shooter survives
January 29, 1979	Cleveland Elementary School, Stockton, California	First female shooter, unaffiliated with school, kills 2 and injures 9, shooter survives
April 7, 1982	Deer Creek Junior High School, Littleton, Colorado	14 year old student intentionally kills another student while shooting prairie dogs on school grounds, shooter survives

⁵³ The recorded history of extreme violence in educational environments in the United States dates back to 1764. On Thursday, July 26, 1764, during the Pontiac Rebellion four Delaware (Lenape) American Indians entered a school house in present day Franklin County, Pennsylvania and clubbed, scalped and killed the headmaster, Enoch Brown, and 10 students. One child who was clubbed and scalped survived. When the warriors returned to their village with the scalps of the children, they were accused of cowardice by the great Delaware Chief Pontiac. Another interesting aspect about this incident, one that appears to be repeated throughout the history of extreme school violence, is the tendency or perhaps the willingness for people to forget these horrific events. This incident was all but lost to historical memory, some believing it was merely a legend, for 79 years when a committee headed by A. B. Rankin was formed to try to find the mass grave in which the school master and children were buried. They were successful in finding the grave, but it was another 40 years before any action was taken to mark or memorialize the grave. This willingness to forget is an interesting accompaniment to school violence.

Date	Place	Outcome
May 16, 1986	Cokeville Elementary School, Sweetwater County, Wyoming	Unaffiliated couple take 167 students and teachers hostage, demand ransom, accidentally detonate IED, 70 injuries, perpetrators die: murder/suicide
January 17, 1989	Cleveland Elementary School, Stockton, California	Unaffiliated male, 26, kills 5 and injures 34, shooter dies suicide
February 2, 1996	Frontier Middle School, Moses Lake, Washington	Student kills 3, survives
December 1, 1997	Heath High School, West Paducah, Kentucky	Student kills 3 and injures 5, shooter survives
March 4, 1998	Westside Middle School, Jonesboro, Arkansas	2 Students kill 5 and injure 10, shooters survive
May 21, 1998	Thurston High School, Springfield, Oregon	Student kills parents and 2 students, injures 35, shooter survives
April 20, 1999	Columbine High School, Littleton, Colorado	2 students kill 13, injure 21, shooters die: suicide
January 16, 2002	Appalachian School of Law, Grundy, Virginia	Student kills 3, injures 3, shooter survives
October 29, 2002	University of Arizona, Tucson, Arizona	Student kills 3 professors, shooter dies, suicide
March 21, 2005	Red Lake High School, Red Lake, Minnesota	Student killed both grandparents and 7 students, shooter dies: suicide
October 2, 2006	School House Lancaster County Pennsylvania	Unaffiliated male kills 5 and wounds 5 shooter dies: suicide
April 16, 2007	Virginia Tech, Blacksburg, Virginia	Student kills 32 and injures 20, shooter dies: suicide
December 7, 2007	Youth with a Mission Training Center, Arvada, Colorado & New Life Church, Colorado Springs, Colorado	Unaffiliated male kills 4, injures 5, in two separate shootings, engages in gun battle after second shooting with security guard and finally kills himself
February 14, 2008	Northern Illinois University, DeKalb, Illinois	Former student kills 5 injures 20, shooter dies: suicide
February 10, 2012	University of Alabama, Huntsville, Alabama	Professor kills 3 injures 3, shooter survives
February 23, 2010	Deer Creek Middle School, Littleton, Colorado	Unaffiliated male shoots 2 and is subdued by teacher, shooter survives
February 27, 2012	Chardon High School,	Student shoots 5 students

Date	Place	Outcome
April 2, 2012	Chardon, Ohio Oikos University, Oakland, California	Former student kills 7 and injures 3, shooter survives
December 14, 2012	Sandy Hook Elementary School, Newtown, Connecticut	Unaffiliated male, 20, kills his mother and 26 students and faculty, shooter dies suicide

It is important to note that the case studies examined in this thesis are hardly isolated events. Violence in educational environments unfortunately has a long history in America. The following incidents of extreme violence in educational environments were selected for notable characteristics, such as type and level of violence, number of casualties, the identity of the offender, as well as weapons and/or techniques. The common details of these shootings underscore the fact that preparation for these devastating events may actually improve the opportunities for preventing them from occurring in the first place.

Scholars from a variety of disciplines have studied campus crime and safety. School shootings receive widespread media attention immediately after an event, but they receive very little sustained academic attention afterwards.⁵⁴

Organized chronologically, these cases represent significant incidents of extreme violence in educational environments. The analysis of these cases found a large degree of variation across broad categories in terms of description and type of perpetrator, motivation, planning tactics, targets, intent and number of casualties.

The first school shooting recorded in America was on Wednesday, November 2, 1853, in Louisville, Kentucky, when Matt Ward, a student, brought a single-shot pistol to school demanding that the headmaster, Professor Butler, apologize for calling his brother, William Ward, a liar the day before.⁵⁵ Professor Butler refused, a struggle ensued, Ward fired once and Butler collapsed and died in his office. Mr. Ward was acquitted of the

⁵⁴ Muschert, "Research in School Shootings," 1.

⁵⁵ "The Kentucky Murder," *New York Times*, April 29, 1854. Available: <http://query.nytimes.com/mem/archive-free/pdf?res=9B07E3DC153DE334BC4151DFB266838F649FDE>.

murder of the headmaster after a lengthy public trial. Published reports at the time indicated that the judge believed Mr. Ward's brother's honor was at stake, and he was not convinced the shooting was not an accident.

The first recorded mass shooting of school children occurred on Thursday, April 9, 1891, in Newburgh, New York when 70-year-old, James H. Ferguson, described as demented, opened fire with a shotgun into a group of school children playing in front of St Mary's School. No children were killed "although several were well filled with lead" according to the New York Times account of the incident.⁵⁶ Mr. Ferguson was institutionalized.

The deadliest mass murder in an educational environment in our nation's history took place on Wednesday, May 18, 1927, in Bath, Michigan when Andrew Kehoe, 55, killed 42 people, mostly children. It is also the first recorded instance of politically inspired terrorism at a school. Andrew Kehoe was the School Board's Treasurer and was upset due to a recent school tax increase. After killing his wife at home, Kehoe detonated fire bombs throughout his farm, destroying every building. Kehoe then blew up the Bath Consolidated School, killing 38 people. Kehoe had planned the attack for weeks, meticulously wiring over 1000 pounds of dynamite beneath the school. Surprisingly, only one shot was fired at the school that day by Kehoe and that was to trigger a truck bomb that he had configured in a suicide attack to kill the Superintendent of Schools Emory B. Huyck and other first responders, who were in front of the school trying to rescue victims. Mr. Huyck, Mr. Kehoe and two rescuers were killed.⁵⁷

⁵⁶ "Fired Into a Group of Children," *New York Times*, 9 April 1891. Available: <http://query.nytimes.com/mem/archive-free/pdf?res=9E00EFDE163AE533A25753C1A9629C94609ED7CF>.

⁵⁷ "Maniac Blows Up School, Kills 42, Mostly Children, had Protested High Taxes," *New York Times*, 19 May 1927. Available <http://select.nytimes.com/gst/abstract.html?res=F00B11FC3E5F147A93CBA8178ED85F438285F9>.

Extreme violence in educational environments continued unabated through the 1930s, 1940s and 1950s with 12 to 15 school shootings per decade, each with at least one injury and often at least one death.

The following compendium includes only mass murders, defined as the death of three or more individuals not including the perpetrator, and other notable cases highlighted for the reasons indicated, that occurred in educational environments in the United States since 1960.

On Monday, August 1, 1966, Charles Whitman, 25, a former Marine and graduate student at the University of Texas, Austin, perpetrated one of the most notorious school shootings in our nation's history. After killing his mother and wife, he packed three rifles, a shotgun and three pistols and hundreds of rounds of ammunition into a foot locker that he carried to the observation deck atop the University's Observation Tower. He used the foot locker to barricade himself from police. Some of the weapons he was about to use he had purchased that very morning. He then systematically shot and killed 16 people and wounded 32 others over the next 96 minutes. As a small fixed wing, single engine airplane with a police officer on board provided air cover, Whitman was finally killed by two police officers and an armed civilian who stormed his fortress-like perch.⁵⁸

Although the 1970s had relatively few reported school shootings, three of the four reported events were notable.

On Monday, December 30, 1974, 60 miles south of Buffalo, not far from the Pennsylvania border in upstate, Olean, New York, Anthony Barbaro, 17, a senior honors student and rifle team member, entered Olean High School, which was closed for the Christmas holidays. From a position on the third floor, he systematically shot 14 people, killing three who were walking in front of the school.⁵⁹ Despite a gas mask he had worn,

⁵⁸ "Report of the Governor on Medical Aspects of the Charles J. Whitman Catastrophe," *Houston Chronicle*, 8 Sept 1966. Available: <http://alt.cimedia/statesman/specialreports/whitman/findings.pdf>.

⁵⁹ Timothy J. Madden, "Sniper at high school kills 3 and wounds 11," *St. Petersburg Times*, December 31, 1974. Available: <http://news.google.com/newspapers?id=pQAOAAAIBAJ&sjid=hHkDAAAIBAJ&pg=5285,4047540&dq=anthony+barbaro>.

Barbaro was rendered unconscious by tear gas and taken into custody.⁶⁰ He was tried and convicted and remains in prison. On Monday, July 12, 1976, Edward Charles Allaway, 37, a custodian at the University of California at Fullerton who was upset about the proliferation of pornography and suspected that his former wife was involved, armed himself with a semiautomatic rifle, killed seven people and wounded two others in the school's library where he worked.⁶¹ Allaway fled in an automobile and surrendered to police several miles away. Allaway claimed an insanity defense and the judge agreed.⁶² Allaway is confined to Patton State Hospital in San Bernardino, California, a mental institution, and has sought and been denied parole five times since becoming eligible in 1991.

Men are by far the predominate perpetrators of extreme violence in educational environments but in a rare school shooting incident, a female, Brenda Ann Spencer, 16, shot and killed the school principal and a custodian and wounded nine children and a police officer on Monday, January 29, 1979, at Cleveland Elementary School in Stockton, California in the state's central valley. When Ms. Spencer, the first female school shooter in recorded history, was asked why she had done this, she is reported to have said "I don't like Mondays" and thus inspired the song "I Don't Like Mondays" by the Boomtown Rats, which is about school shootings.⁶³ She is currently incarcerated in the California Institution for Women.

An analysis of the historical data about extreme violence in educational environments acquired through Internet searches, media and governmental reports suggests a strong sampling bias toward sensational events. Single casualty events tend to be of only local interest while multiple casualty events attract national media attention.

⁶⁰ "Upstate Youth in Sniper Trial a Suicide," *New York Times*, 2 Nov 1975. Available: <http://query.nytimes.com/mem/archive/pdf?res=F60C12FC3F55167A93C0A9178AD95F418785F9>.

⁶¹ Nicole M. Smith, "The Quiet Custodian," Hearst Journalism Awards Program, 2007. Available: http://www.hearstfdn.org/hearst_journalism/competitions.php?type=Writing&year=2007&id=1.

⁶² "Release Bid Denied for Mass Killer," *Los Angeles Times*, 4 Dec 2003. Available: <http://articles.latimes.com/keyword/edward-charles-allaway>.

⁶³ Associated Press, "Parole Denied in School Shooting," *San Diego Union Tribune*, 9 June 2001. Available: <http://www.cyberspace7.btinternet.co.uk/idlm.htm>.

While this phenomenon is discussed in further detail later in this thesis, the advent of high capacity magazines and the proliferation of semiautomatic weapons are largely responsible for multiple casualties and the resulting national media focus. Also while data collection techniques for extreme violence in educational settings prior to 1992 were limited,⁶⁴ sensational media reports in the early 1970s may have focused primarily on news reports concerning the controversial war in Vietnam and the sometimes equally disturbing demonstrations supporting the end of this war. Another reason for this lack of focus on school shootings may have been that the media was preoccupied with other sensational violence, specifically serial murders like the Son of Sam shootings—perpetrated by David Berkowitz—and the Ted Bundy killings.

Ted Bundy is loosely affiliated with this area of investigation because of his confessed involvement with as many as 30 murders and numerous assaults of high school and college women between 1971 and his apprehension in 1978. Some of these killings had a nexus to educational environments, particularly the double bludgeoning homicides and multiple assaults at Florida State University and various murders of high school and college students in Colorado, Oregon and Washington State.⁶⁵ Several hundred spectators gathered to celebrate Mr. Bundy's death by execution on January 24, 1989.

The 1980s experienced an increase in the level of violence and a new element in extreme school violence: hostage-taking.

In 1982 Littleton, Colorado experienced its first, but certainly not its last school shooting incident on Wednesday, April 7, 1982, when 14-year-old Jason Rocha shot 13-year-old Scott Darwin Michael.⁶⁶ The boys were shooting prairie dogs on the grounds of

⁶⁴ Data collection techniques were extremely limited before the creation of the National School Safety Center in 1992 (which is discussed in further detail later in this chapter).

⁶⁵ Ann Rule, *The Stranger Beside Me* (New York: Signet Books, 2000). Book notes. Available: <http://en.wikipedia.org/wiki/Special:BookSources/978-0-451-20326-7>.

⁶⁶ On February 23, 2010, Bruco Strong Eagle Eastwood opened fire at the school with a high-powered rifle, wounding two students before being subdued by faculty members.

Deer Creek Junior High School when Rocha suddenly turned the gun on his friend.⁶⁷ Rocha, tried as an adult, was convicted of killing his friend and served 12 years in prison.

On Tuesday, November 26, 1985, in Spanaway, Washington, 14-year-old Heather Smith brought a rifle to school and waited outside of the school gymnasium for the boy who had earlier that day broken up with her. When Gordon Pickett, also 14, and his friend Joe Begay, 14, exited the school she shot and killed both of them but fled before police arrived. She returned to the school several hours later still carrying the rifle and, as the police approached her, she shot herself in the head and later died at the hospital.⁶⁸

On Friday, May 16, 1986, David Young, a former town marshal and self-described “revolutionist” and his wife Doris “Dorsie” Young, armed with a manifesto, a gun and a shopping cart filled with homemade explosives, entered the Cokeville Elementary School in Sweetwater County, Wyoming. Mr. Young delivered his manifesto to the school principal and his wife lured everyone into one room. Together they took 167 students and teachers hostage. Mr. Young demanded a ransom of “\$2 million dollars per student” roughly \$300 million dollars, and an audience with President Reagan. After 90 minutes, Ms. Young accidentally detonated the bomb when Mr. Young was out of the room. Mr. Young returned to the room and shot a teacher, John Miller, who was helping children escape. Mr. Young then shot and killed his wife and then fatally turned the gun on himself. All of the hostages escaped but 70 children were wounded in the blast. The incident inspired a book *When Angels Intervene*, by Hartt Wixom and Judene Wixom, and a 1994 television movie *To Save the Children*.⁶⁹

Cleveland Elementary School in Stockton, California, was once again the scene of another horrific act of extreme school violence in 1989. On Tuesday, January 17, twelve days before the 10th anniversary of Brenda Spencer’s Monday Morning murders at the

⁶⁷ “Deer Creek was also Site of a Shooting in 1982,” *Denver Post*, 24 February 2010. Available: http://www.denverpost.com/news/ci_14458475.

⁶⁸ “3 Die as Teen Romance Sours,” *The Seattle Times*, 26 November 26 1985. Available: http://www.columbine-angels.com/School_Violence_1985-1986.htm.

⁶⁹ “25 Years after School Bombing, Wyoming Town Remembers Story of Survival,” *Billings Gazette*, 16 May 2011. Available: http://billingsgazette.com/news/state-and-regional/article_c50c0569-aa7e-56ac-8e1e-42a9fd55f34a.html.

elementary school, Patrick Edward Purdy, 26, a career criminal and an unemployed drifter, used a high-powered semiautomatic rifle to shoot a teacher and 34 school children, killing five of the children.⁷⁰ This shooting triggered the enactment of the Roberti-Roos Assault Weapons Control Act of 1989 in California.⁷¹ This act banned over 50 specific firearms including several types of rifles, shotguns and hand guns.⁷² After most acts of extreme violence involving firearms, there is a call for gun legislation; this subject will be explored more thoroughly in a later chapter of this thesis.

The 1990s brought the advent of better reporting, enhanced analysis and improved data collection to school shootings. The National School Safety Center (NSSC), although created in 1984, began fulfilling this vital role in 1992. Beginning in 1992, The National School Safety Center was the first organization to focus specifically on school-related deaths, as well as to define and categorize school shootings. NSSC defines a school-associated violent death as any homicide, suicide or weapons-related violent death in which a fatal injury occurs in the United States.⁷³ The NSSC also defines school property, school sessions, official functions and the incidents nexus to the institution. It is interesting to note that, to date, the Brady Center to Prevent Gun Violence has demonstrated no sustained attention or provided any analysis of school shootings other than to compile a compendium of loosely related media accounts of incidents described as school shootings. The list includes many shootings that have no obvious nexus to schools and many that are gang related and occurred well after school hours. This makes thoughtful analysis of the data virtually impossible.

While media attention may have resulted in better reporting of school shooting incidents, data from the late '90s reveals a dramatic increase in the number of mass murders in educational environments. High capacity magazines and the prevalence of

⁷⁰ "Rifleman Slays Five at School," *Washington Post*, January 18, 1989, 1.

⁷¹ "History of the Brady Center," Brady Center to Prevent Gun Violence. Available: <http://www.bradycenter.org/about/centerhistory/bce1980s>.

⁷² California Firearms Laws, 2007. California Department of Justice: Penal code section 12276. Available: <http://ag.ca.gov/firearms/forms/pdf/Cf12007.pdf>.

⁷³ Dr. Ronald D. Stephens, The National School Safety Center, School Associated Violent Death, 1992.

semiautomatic weapons are two important reasons for the increased casualty counts. Other reasons may include national media attention and better reporting mechanisms, such as the NSSC, and the advent of the Internet.

On Friday, February 2, 1996, 180 miles east of Seattle in Moses Lake, Washington, 14-year-old honors student Barry Loukaitis thought it would be “pretty cool” to go on a murderous rampage like the two main characters in the movie “Natural Born Killers.”⁷⁴ Loukaitis, armed with three firearms taken from his family’s home, walked into Frontier Middle School where he was a student and killed his algebra teacher and two fellow students in class. Loukaitis was tried as an adult and sentenced to two life terms of imprisonment plus 205 years. He is currently in the Callum Bay Corrections Center in Washington State.

On Monday, December 1, 1997, in West Paducah, Kentucky, three girls were killed and five others wounded when 14-year-old Michael Carneal opened fire on a prayer group meeting at Heath High School.⁷⁵ Carneal pled guilty by reason of mental illness and is serving a 25-year sentence in the custody of the Kentucky Department of Corrections. He is eligible for parole in 2023.

On Tuesday, March 24, 1998, at the Westside Middle School in Jonesboro, Arkansas, Mitchell Johnson, 13, “a hunter from an early age”⁷⁶ and Andrew Golden, 13, described as an “expert marksman,” killed four students and a teacher and wounded 10 others after they pulled the school’s fire alarm and waited in the nearby woods for faculty, staff and students to evacuate the school and began shooting.⁷⁷ Described as the worst middle school mass murder in our nation’s history, Johnson and Golden are among the youngest children ever charged with murder. Both boys were tried as juveniles, found

⁷⁴ Timothy Egan, “Where Rampages Begin,” *New York Times*, 14 June 1998. Available: <http://www.nytimes.com/1998/06/14/us/where-rampages-begin-special-report-adolescent-angst-shooting-up-schools.html?pagewanted=all&src=pm>.

⁷⁵ Egan, “Where Rampages Begin,” 1998.

⁷⁶ David Koon, “A Boy Killer Speaks,” *The Arkansas Times*, 4 December 2008. Available: <http://arktimes.com/arakansas/a-boy-killer-speaks/Content?oid=934386>.

⁷⁷ Egan, “Where Rampages Begin,” 1998.

guilty and received maximum sentences. Both were released on their 21st birthdays and Johnson has repeatedly run afoul of the law since. Johnson has been arrested on federal and state weapons charges and has been in and out of jail on numerous occasions.⁷⁸

On Thursday, May 21, 1998 in Springfield, Oregon, Kipland “Kip” Kinkel, a 15-year-old with a history of mental illness and aggressive behavior, armed himself with two knives, three guns and over 1000 rounds of ammunition and fired 48 rounds in Thurston High School’s crowded school cafeteria, killing two students and wounding 35 others with a gun purchased for him by his parents. Kinkel used the same gun to kill his parents on May 20.⁷⁹ Kinkel, a popular student and member of the football team, admitted his guilt and was sentenced to 111 years in prison without the possibility of parole.

Then in 1999, one of the most notorious and most referenced school shootings in our nation’s history: Columbine.

The Columbine High School Massacre occurred on Tuesday, April 20, 1999, near Littleton, Colorado in an unincorporated area of Jefferson County. Informed by many of the previous school shootings, particularly Kip Kinkel’s deadly rampage in Springfield, Oregon, Dylan Klebold and Eric Harris, both 18 years old and seniors at Columbine, murdered 12 classmates and a teacher and shot 21 others after a year of planning, preparation and copious note-taking.⁸⁰ It was only by sheer luck, incompetence and circumstance that Mr. Klebold and Mr. Harris did reach Mr. Klebold’s stated goal of inflicting “the most deaths in U.S. history.”⁸¹ Originally planned primarily as a bombing, it was only after the propane bombs they assembled failed to detonate that Mr. Harris and Mr. Klebold launched their deadly fusillade of bullets. The FBI reported that the bombs alone could have killed 600 students in the cafeteria at the time. The FBI concluded that

⁷⁸ Associated Press, “Johnson Pleads Guilty to Theft, Drug Charges,” KATV7 News, 8 Oct. 2008. Available: http://usatoday30.usatoday.com/news/nation/2008-10-08-johnson-plea_N.htm?csp=34.

⁷⁹ “The Killer at Thurston High: Who is Kip Kinkel?” *Frontline*, PBS. Available: <http://www.pbs.org/wgbh/pages/frontline/shows/kinkel/kip/cron.html>.

⁸⁰ Dave Cullen, “The Depressive and the Psychopath,” *Slate.com*: 20 April 2004. Available: http://www.slate.com/articles/news_and_politics/assessment/2004/04/the_depressive_and_the_psychopath.html.

⁸¹ *Ibid.*

Eric Harris, with a history of mental illness, was the motivating force behind this devastating attack. He was described in the FBI's report as a "sociopath" who wrote about crashing planes into New York City. Columbine was the fourth-deadliest school massacre in U.S. history after the 1927 Bath School bombing, 2007 Virginia Tech killings and 1966 University of Texas murders.

According to the National School Safety Center, the last decade of the 20th century recorded 240 school-related murders.⁸²

The first mass murder in an educational environment of the new millennium in the United States was reported on Wednesday, January 16, 2002, when a recently dismissed law student, Peter Odighizuwa, described as a "time bomb waiting to go off," opened fire with a .380 caliber semiautomatic pistol at Appalachian School of Law in Grundy, Virginia, killing three and wounding three others.⁸³ When the 43-year-old Nigerian left the building where the shootings took place, he was subdued by students. Mr. Odighizuwa was determined to be incompetent to stand trial. After three years of treatment, he pled guilty to the murders and was sentenced to three life sentences plus 28 years. He is not eligible for parole.

On Tuesday, October 29, 2002, Robert Flores, a nursing student at the University of Arizona in Tucson and a Persian Gulf War veteran described as an expert marksman, armed himself with five handguns and 200 rounds of ammunition and killed three of his professors who had given him failing grades before killing himself.⁸⁴

On Monday, March 21, 2005, Jeff Weise, 16, a student at Red Lake High School on the Chipewa Indian reservation in Red Lake, Minnesota, killed his grandparents and then went to school that day with three handguns. He killed seven fellow students. The

⁸² National School Safety Center Report, 2–25, <https://docs.google.com/viewer?a=v&pid=sites&srcid=c2Nob29sc2FmZXR5LnVzfG5zc2N8Z3g6MTI5ZDNmOGRIMmI0MzRhZA>.

⁸³ Thomas J Lueck, "3 Slain at Law School: Student is Held," *New York Times*, 17 Jan 2002. Available: <http://www.nytimes.com/2002/01/17/college/coll17SHOO.html>.

⁸⁴ M. Broder, "Arizona Gunman Chose Victims in Advance," *New York Times*, 30 Oct 2002. Available: <http://www.nytimes.com/2002/10/30/us/arizona-gunman-chose-victims-in-advance.html>.

rampage shooting continued for 10 minutes with students pleading with the gunman to stop before the shooter committed suicide.⁸⁵

On Monday, October 2, 2006, Charles Carl Roberts IV, a truck driver “angry at God” armed with a rifle, shotgun and handgun and 200 rounds of ammunition, entered a one-room school house in Lancaster County, Pennsylvania. He ordered the teacher, several parents and 15 male students to leave the building. He told the 11 female students to line up against the blackboard. When troopers arrived he became agitated and demanded they leave the property immediately. When they hesitated, he immediately began shooting the young girls, killing five and wounding five others in the third school shooting in six days.⁸⁶ When police were finally able to enter the barricaded school, Roberts killed himself.

On Monday, April 16, 2007, Seung-Hui Cho, a student armed with two hand guns, killed 32 people and wounded 20 others on the campus of Virginia Tech.⁸⁷ The incident was a multiple location assault scenario committed by a lone gunman representing a well-planned, coordinated and executed attack. Cho killed himself before being engaged by the police. Lessons from this incident are applicable to the prevention and response of school violence in educational environments. This incident is described and analyzed in detail in a subsequent chapter of this thesis.

On Friday, December 7, 2007, Mathew Murray, 24, killed two people and injured two others at a missionary school in Arvada, Colorado. Twelve hours later he then walked into the New Life Church in Colorado Springs 70 miles away and fatally shot two more people and injured three others, before he was shot by a woman who volunteered at the church.⁸⁸ He later died of a self-inflicted gunshot wound.

⁸⁵ Associated Press, “High School Spree Leaves 10 dead,” Fox News, 22 March 2005. Available: <http://www.foxnews.com/story/0,2933,151085,00.html>.

⁸⁶ “Fifth Girl Dies after Amish School Shooting,” CNN, 3 Oct. 2006. Available: <http://www.cnn.com/2006/U.S./10/02/amish.shooting/index.html>.

⁸⁷ “Mass Shootings at Virginia Tech: Report of the Virginia Tech Review Panel.”

⁸⁸ Maria Newman and John Holusha, “Man Committed Both Colo. Shootings Police Say,” *New York Times*, 10 Dec. 2007. <http://www.nytimes.com/2007/12/10/us/10cnd-shoot.html>.

On Thursday, February 14, 2008, Steven Kazmierczak, a former graduate student at Northern Illinois University, opened fire in a university lecture hall, killing five people and injuring more than 20.⁸⁹ Kazmierczak killed himself prior to the arrival of police. Lessons from this event are illustrative because the perpetrator had an extensive prior history of mental illness that appeared to be in remission for several years. He was described by faculty as benevolent. A few months before the attack, he appeared to close friends to be unraveling. This incident will be summarized and analyzed in detail in a subsequent chapter of this thesis and was the fourth school shooting within a one-week period.⁹⁰

On Wednesday, February 10, 2010, Amy Bishop, a biology professor at the University of Alabama in Huntsville with a doctoral degree from Harvard University, opened fire during a faculty meeting, killing three people and injuring three others. Five of the victims were other faculty members.⁹¹ Ms. Bishop had previously been denied tenure at the university. This was not the professor's first killing. In 1986, after a family argument, she shot and killed her brother, claiming it was an accident. She fled the home and was found by police several miles from the scene still carrying the weapon. Bishop was also questioned in an attempted bomb plot.⁹² After admitting her guilt, Bishop was still required to stand trial. The proceedings lasted for 20 minutes before the jury found her guilty. She was sentenced to life in prison without the possibility of parole.

On Tuesday, February 23, 2010, Littleton, Colorado was again the location for a third school shooting and the second at Deer Creek Middle School when a 32-year-old

⁸⁹ "College Shooter's Deadly Rampage Baffles Friends," MSNBC, 16 Feb. 2008. Available: <http://www.msnbc.msn.com/id23171567/%20>. <http://www.cbc.ca/world/story/2008/02/15/illinois-shooting.html>.

⁹⁰ On Tuesday, February 12, 2008, a 14-year-old boy shot a 15-year-old boy in a classroom at E.O. Green Junior High School in Oxnard, Calif. The victim died at the hospital. On Monday, February 11: A 17-year-old shot and critically wounded a student during gym class at Mitchell High School in Memphis, Tennessee and on Friday, February 8, 2008: A nursing student opened fire at the Louisiana Technical College in Baton Rouge, killing two students before killing herself.

⁹¹ Shaila Dewan, Stephanie Saul, and Katie Zezma, "For Professor, Fury Just Beneath the Surface," *New York Times*, 21 Feb. 2010. Available: <http://www.nytimes.com/2010/02/21/us/21bishop.html?pagewanted=all>.

⁹² Ibid.

male, Bruco Strong Eagle Eastwood, who was earlier seen walking around the school and later found to have been planting ammunition around the school for later use, opened fire with a rifle in the parking lot and injured two students. He was tackled by David Benke, a teacher, who held him until police arrived.⁹³ Eastwood was found not guilty by reason of insanity of attempted first degree murder but was found guilty of weapons possession. He will stay in a state mental hospital until declared sane.⁹⁴

On Tuesday, December 14, 2010, Clay Duke, an ex-convict with an attitude and a gun, who claimed his wife was unfairly fired from the Panama City, Florida school district, attended a public school board meeting. During the sparsely attended meeting, Mr. Duke got up to speak and began brandishing a gun. As Mr. Duke spoke and moved menacingly around the room, Ginger Littleton, a middle-aged school board member, approached the gunman from behind and attempted to disarm him as the other hostages sat idly by. Mr. Duke knocked Ms. Littleton to the floor and fired several shots at the school board members but missed them. When the police attempted to engage Mr. Duke, he killed himself. The entire incident was caught on video.⁹⁵

On Monday, February 27, 2012, Thomas M. Lane III, a 17 year old former student at Chardon High School in Chardon, Ohio entered the school cafeteria at 7:30 a.m. armed with a .22 caliber hand gun and began shooting. Lane shot 5 students, three of whom later died. He was chased into a wooded area and apprehended by two teachers. The shooter is alleged to have posted warnings of his impending act on Twitter.⁹⁶

⁹³ Carlin DeGuerin Miller, "David Benke, Hero Teacher: Hailed for Tackling Gunman, Says He Hoped He Would be Ready," CBS News, 25 Feb 2010. Available: http://www.cbsnews.com/8301-504083_162-6239395-504083.html?tag=contentMain;contentBody.

⁹⁴ Steven K. Paulson, "Bruco Eastwood, Colorado School Shooter, Will not Serve Time in Prison," *Huffington Post Denver*, 10 November 2011. Available: http://www.huffingtonpost.com/2011/11/10/bruco-eastwood-s_n_1086407.html.

⁹⁵ "School Board Shooting: Clay Davis Turns Gun on Himself after Confrontation," *CNN*, 15 Dec 2010. Available: <http://www.cnn.com/2010/CRIME/12/16/florida.meeting.shooting/index.html?iref=allsearch>.

⁹⁶ John Caniglia, "T. J. Lane, Accused in Ohio School Shooting Described as Quiet, Smart, No Outcast" *The Plain Dealer*, 6 March 2012. Available: http://blog.cleveland.com/metro/2012/03/lake_academy_students_recall_q.html.

On Monday, April 2, 2012, One L. Goh, 43, a former student at Oikos University, a small Christian school of nursing college in Oakland, California, killed seven people and injured three. Mr. Goh had previously been expelled from the school for poor performance. About 35 students were in the single-story building when the shooting began. Five died at the scene and two others expired at the hospital. In a jailhouse interview a few days later, Mr. Goh apologized for his killing rampage, which he said he did not remember. He is currently awaiting trial.⁹⁷

On Friday, December 14, 2012, Adam Lanza, 20, killed his mother at home and then proceeded to Sandy Hook Elementary School in his mother's car with three of her firearms: A .223 caliber Bushmaster rifle and two hand guns. Upon arrival, he forcibly entered the school and opened fire killing 26 people including 20 students and six faculty members and injuring two others. Lanza killed himself prior to the arrival of police.⁹⁸

C. CONCLUSION AND DATA ANALYSIS OF MASS MURDERS IN EDUCATIONAL ENVIRONMENTS

This compendium was developed through the examination of over 100 incidents of school shootings identified through Internet searches, media reports, official government reports and private compendiums.⁹⁹ As a fairly representative sample of all mass murders that occurred in the United States between 1853 and 2012, it allows us to observe some commonalities.¹⁰⁰

School shootings are overwhelmingly perpetrated by males (98.9 percent). Just three of 26 incidents of extreme violence in schools were perpetrated by females and one of 18 (.05 percent) of mass murders were committed by a female perpetrator. These

⁹⁷ "Oakland Shooting: One Goh 'Deeply Sorry about Rampage,'" *The Telegraph*, 12 April 2012. Available: <http://www.telegraph.co.uk/news/worldnews/northamerica/9199033/Oakland-shooting-One-Goh-deeply-sorry-about-rampage.html>.

⁹⁸ James Barron, New York Times, "Nation Reels after Gunman Massacres 20 Children at School in Connecticut," December 14, 2012, <http://www.nytimes.com/2012/12/15/nyregion/shooting-reported-atconnecticutelementary.school.html?gwh=68E20CE3653F19EBA592305F9D444DE8/>.

⁹⁹ *Active Shooter: Recommendations and Analysis for Risk Mitigation*. New York City Police Department (2010).

¹⁰⁰ Mass murder for research purposes is defined as three or more dead victims.

results are consistent with other studies.¹⁰¹ The greatest number of victim fatalities occurred when the perpetrator(s) combined firearms and improvised explosive devices regardless of the devices' effectiveness. Such instances account for 55 deaths, representing 37 percent of all mass murder deaths in educational environments. Perpetrators of school shootings armed themselves with multiple weapons in 30 percent (8 of 26) of the instances. Rifles alone were used for mass murders in the majority of the cases (58 percent) until 1989 (7 of 12 incidents) when semiautomatic pistols replaced rifles as the weapon of choice 15:1. A note about weapons: reporting about weapons in school shooting attacks is often inaccurate and inconsistent.¹⁰² Media reports do not often include specific information about weapons and when they do the reports often confuse rifles and shotguns, semiautomatic weapons, "machine guns" and "assault weapons."¹⁰³

The results of this analysis and a comparison with other studies reveal specific steps officials can under-take to prevent active shooter events from occurring in educational environments and potentially mitigate the devastating consequences and increase the survivability should an event unfold.¹⁰⁴ Legislation, planning and preparation may have the biggest impact in reducing incidents of school violence and mitigating their effects, as discussed later in this paper.

Although the sample size for mass murders in educational environments is limited, fully 50 percent of all incidents of extreme violence in the United States since 1927 were committed by people 18 years old or younger and in all of these incidents (100 percent) the perpetrator was armed with a gun. In 35 percent of these mass murders, the perpetrators were younger than 18 and also used a firearm. Many of these characteristics are highlighted on the case studies discussed below.

¹⁰¹ *Active Shooter 4*, Study found 8 of 202(2 percent) active shooter incidents in U.S. were perpetrated by females.

¹⁰² *Ibid.*, 7.

¹⁰³ *Ibid.*

¹⁰⁴ "Your Response to an Active Shooter: Safety Tips," UCPD and UCLA, 2008.

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IV. DETAILED CASE STUDIES

A. VIRGINIA TECH AND NORTHERN ILLINOIS UNIVERSITY

Case studies offer valuable lessons and may perhaps illuminate ways to prevent attacks on college campuses. While there have been more than a dozen shootings on college campuses that resulted in mass casualties of three or more fatalities since 1990, the following case studies of the 2007 Virginia Tech college campus murders and the 2008 Northern Illinois University mass murders represent of the most deadly and significant incidents of extreme violence in educational environments over the past five years. These cases were selected not only for their high death tolls but also for the fact that they had a considerable impact on university campuses across the country and underscore the meticulous planning and preparation undertaken by most perpetrators. These two incidents alone caused the violent death of 37 people on U.S. college campuses within 10 months.

Located on a plateau between the Blue Ridge and Allegheny mountain ranges, Virginia Polytechnic and State University (Virginia Tech) is a public land grant university in Blacksburg, Virginia. Featuring undergraduate, graduate and terminal degrees in a wide range of academic fields and disciplines, Virginia Tech is well known for its engineering and sciences programs. The university has over 30,000 full time students, 7,000 employees and more than 1,000 visitors on campus every day. The campus includes 131 noncontiguous buildings spread over 2,600-acres. Virginia Tech has a full-time police department consisting of 53 sworn police officers and shares jurisdiction with the Blacksburg Police Department and Montgomery County Sheriff's Office.¹⁰⁵ The Virginia Tech Police Department enjoys an excellent relationship with the Virginia State Police, the Federal Bureau of Investigation, and the Bureau of Alcohol, Tobacco, Firearms and Explosives.¹⁰⁶

¹⁰⁵“Police Department at Virginia Tech,” College homepage. Available: http://www.police.vt.edu/VTPD_v2.1/chief.html.

¹⁰⁶ *Report of the Review Panel*, 11.

On April 16, 2007, Seung Hui Cho was a disturbed and angry fourth year undergraduate student at Virginia Tech when he went into a murderous rampage, killing 32 people on campus in a multiple location targeted attack.¹⁰⁷ With a history of mental illness and despite federal law prohibiting it, Mr. Cho was able to purchase two semiautomatic firearms, as well as several extended magazines and hundreds of rounds of ammunition.

Mr. Cho exhibited signs of mental illness since early childhood. Born with serious health problems in Seoul, South Korea, he and his family immigrated to the United States in 1992, when he was eight-years old. He was raised in Fairfax County, Virginia after the age of nine. Mr. Cho's middle school and high schools provided services to address his mental health problems, and his parents participated by providing private psychiatric counseling services. In 1999, after the Columbine High School murders, his teachers in middle school observed homicidal and suicidal ideation in his writings and recommended counseling, which he received.¹⁰⁸

When Mr. Cho started at Westfield High School in the Fall Semester of 2000, he was placed in an Individual Educational Program due to emotional problems and social awkwardness and continued in therapy through his junior year. He received good grades in high school, kept his counseling appointments, exhibited no behavior problems and made no threats.

Mr. Cho graduated from Westfield High School with honors in June 2003, and against the advice of his parents and counselors, decided to go to Virginia Tech. Parents and counselors thought the school was too large and were concerned that he would not receive the individual attention he needed.

Mr. Cho's history of mental illness at Virginia Tech did not emerge until his junior year, when serious problems begin to surface.¹⁰⁹ Both his sister and his dormitory

¹⁰⁷ *Report of the Review Panel*, 11.

¹⁰⁸ *Ibid.*, 21.

¹⁰⁹ *Report of the Review Panel*, 22.

suitemates noticed odd and disconcerting behavior. Mr. Cho's sister noted that the frequency of his writing had changed, and he was withdrawn. His suitemates witnessed aggressive displays of behavior that included stabbing a carpet repeatedly with a knife during a party. His poetry professor, Nikki Giovanni, was concerned about violence in his writing and inappropriate classroom behavior. Professor Giovanni related her concerns in writing to the department chair, Lucinda Roy, who removed him from class, referred him to counseling services and tutored him individually with the assistance of another professor.

Dr Roy encouraged Mr. Cho to attend counseling sessions and when he refused she notified Mary Ann Lewis, the Associate Dean of Liberal Arts and Human Sciences, as well as the Division of Student Affairs, the Cook Counseling Center, the Schiffert Health Center, the Virginia Tech Police Department, and the College of Liberal Arts and Human Sciences. Mr. Cho was discussed at the university's Care Team Meeting that reviews student issues.¹¹⁰

In November 2005, a female student at the university filed a formal complaint with the university police department about Mr. Cho's annoying behavior. An officer from the Virginia Tech Police Department (VTPD) interviewed Mr. Cho and referred him to the Office of Judicial Affairs, the school's disciplinary system. Following this interaction, Mr. Cho called the Cook Counseling Center and was triaged over the telephone.¹¹¹

As more people became aware of Mr. Cho's interaction with police, more instances of odd and inappropriate behavior came to light. Over the next two weeks, his bizarre behavior continued. He missed a scheduled appointment at the Cook Counseling Center and once again police were alerted.

On December 13, 2005, VTPD took Mr. Cho into custody, instructed him to have no further contact with a female student who complained of his behavior and took him

¹¹⁰ *Report of the Review Panel*, 11.

¹¹¹ *Ibid.*, 22.

for mental health screening at the New River Valley Community Services Board. Mental health professionals there evaluated him as a threat to himself and others. A local magistrate issued a detaining order, and Mr. Cho was transported to the Carilion St. Albans Psychiatric Hospital for an overnight commitment and a mental health evaluation.¹¹²

On December 14, 2005, Mr. Cho was evaluated by two mental health professionals at the hospital, an independent psychologist and a staff psychiatrist, both of whom determined that he was no longer a danger to himself or to others. At a commitment hearing, a special justice magistrate ruled in accordance with the mental health professionals, and following the psychiatrist's recommendation, ordered him to receive outpatient counseling. Mr. Cho was again triaged by the Cook Counseling Center for the third time in 15 days.¹¹³

No action was ever taken by the Cook Counseling Center, Division of Student Affairs, Schiffert Health Center, Virginia Tech Police Department, the College of Liberal Arts and Human Sciences, the Care Team, the special justice magistrate or Carilion St. Albans Psychiatric Hospital to follow up on Mr. Cho.¹¹⁴

During the spring and fall semesters of 2006, several of Mr. Cho's professors became aware of numerous instances of inappropriate and violent themes in his writing assignments, some remarkably similar to the events that eventually unfolded on April 16, 2007. In September, Professor Lisa Norris, one of his professors, inquired of Mary Ann Lewis, the Associate Dean of Liberal Arts and Human Sciences about Mr. Cho, but Ms. Lewis found no record of mental health issues or police reports. She failed to remember the 2005 and 2006 instances in which she was notified¹¹⁵ Professor Norris encouraged Mr. Cho to go to counseling, but he declined.

¹¹² *Report of the Review Panel, 23.*

¹¹³ *Ibid.*

¹¹⁴ *Ibid.*

¹¹⁵ *Report of the Review Panel, 24.*

During the spring 2006 semester, Mr. Cho purchased two semiautomatic pistols, a .22 caliber Walther P22 and a 9mm Glock Model 19. The store initiated the required background checks that should have barred the purchases but failed to discover his history of mental health problems. He also purchased six extended ammunition magazines and hundreds of rounds of ammunition.

In March 2006, Mr. Cho practiced with his newly purchased firearms at a local pistol range and on April 14, 2007, an Asian male was observed chaining the doors shut at Norris Hall. It was later determined that Mr. Cho may have been practicing there as well.

On April 16, 2007, Mr. Cho rose early and was seen by a suitemate on his computer. He left his dorm at approximately 5:30 a.m. and was seen outside and appeared to be awaiting access to West Ambler Johnson Hall at 6:45 am. Although his university mailbox was located in this dormitory, he did not have access privileges until 7:30. After he gained access to the building, he eventually went to the fourth floor. At about 7:15 a.m., he encountered Emily Hilscher, a student and resident of the dorm who had just been dropped off at the dorm by her boyfriend.¹¹⁶ Mr. Cho shot Hilscher in her room and then shot Ryan Christopher Clark, a resident assistant, who may have been alerted to Hilscher's distress by loud noises emanating from her room, which was next to his own. Both students died of their wounds.¹¹⁷

Mr. Cho then returned to his dorm to change out of his bloody clothes.

The preceding events triggered a series of premature and flawed decisions by university officials that were based on assumptions, conjecture, insufficient evidence and inadequate facts. Residents of West Ambler Hall initially reported to police that a student had merely fallen out of bed, albeit a high bunk bed. This grossly inaccurate and inadequate description of the event did not convey the sense of urgency necessary to save lives and apprehend the perpetrator, which is critical in the initial minutes of a homicide

¹¹⁶ *Report of the Review Panel*, 11.

¹¹⁷ *Ibid.*, 25.

and no doubt delayed police response, as well as the deployment of advanced life-saving resources. Several minutes later, upon the arrival of police, they discovered that two people were actually shot and requested additional medical and police resources. A friend of Ms. Hilscher arrived at her room between 7:30 and 8:00 a.m. and told police that Ms. Hilscher was frequently dropped off early Monday mornings by her boyfriend, who was a student at a nearby university. She also reported that Ms. Hilscher's boyfriend was an avid gun enthusiast. This information triggered a manhunt for Ms. Hilscher's boyfriend as the likely killer, not as an important witness or even as a person of interest. This intellectual and investigative laziness resulted in not only the fact that the murder investigation was misdirected, but misinformation was being continually disseminated to the law enforcement community and the Virginia Tech Policy Group, a university decision-making authority. Considerable resources were expended in the search for Ms. Hilscher's boyfriend, as well as the mobilization of tactical personnel for the execution of search warrants and his arrest.¹¹⁸

At 9:00 a.m., Mr. Cho mailed a package from the Blacksburg Post Office whose contents were not to be revealed for two days until it arrived at NBC News in New York. The package contained pictures of Mr. Cho holding weapons and a rambling—only sometimes intelligible—1,800-word manifesto and video clips expressing rage at his oppressors. Mr. Cho also mailed a letter to a Virginia Tech professor with whom he had previously argued.¹¹⁹

Between 9:15 and 9:30 a.m., Ms. Hilscher's boyfriend was taken into custody during a car stop off campus, and campus administration sent an email message to the university community advising them that there had been a shooting in a dormitory on campus. Around the same time, Mr. Cho was seen in the vicinity of Norris Hall, a multilevel classroom building on campus.

¹¹⁸ *Report of the Review Panel*, 26.

¹¹⁹ *Ibid.*, 25.

Once inside Norris Hall, Mr. Cho chained three out of four building access doors closed. The fourth could not be secured with a chain and was subsequently the door used by police to gain access to the building.

At about 9:40 a.m., Mr. Cho began shooting in a classroom on the second floor of Norris Hall. For the next 11 minutes, Mr. Cho walked back and forth unimpeded from classroom to classroom, shooting faculty and students. The first police officers arrived at Norris Hall within three minutes of the initial 911 call but could not gain access to the building. They were seen running back and forth between doors. Attempts by police to shoot doors open failed, until finally they arrived at the one door not secured with a chain and shot out the ordinary locking mechanism, and thus gained access to the building. While still on the second floor of Norris Hall, Mr. Cho fatally shot himself in the head before police had an opportunity to engage him.

By 9:51 a.m. Cho had killed 30 people in Norris Hall and wounded 17. He expended 174 rounds of ammunition.

B. NORTHERN ILLINOIS UNIVERSITY

On the western edge of the I-88 corridor, an hour's drive west of Chicago, Northern Illinois University is located in Dekalb, Illinois. Dekalb is a small midwestern city well known as a manufacturing and agricultural community with a population of 45,000 residents. For more than a century, Northern Illinois University has helped nurture and support the manufacturing community through research, education and outreach. Originally a teachers' college, NIU today offers advanced degrees in business, law, engineering and education. The university has a diverse graduate and undergraduate population of 23,000 students and 4,500 faculty and staff personnel.¹²⁰ The campus is in an urban environment and includes 756 acres and 64 buildings. The Northern Illinois University Department of Public Safety consists of approximately 50 sworn police

¹²⁰ School is 47 percent white, 26 percent black, 16 percent Latino, 4 percent Asian, 3 percent mixed, 4 percent other. "Northern Illinois University," *Big Future*, The College Board. Available: <https://bigfuture.collegeboard.org/college-university-search/northern-illinois-university>.

officers and is supplemented by the City of Dekalb Police Department, Dekalb County Sheriff's Department and the Illinois State Police.

On February 14, 2008, Steven Kazmierczak was a confused, anxious and depressed graduate student at the University of Illinois in Champlain when he entered Cole Hall, a lecture hall at Northern Illinois University, and opened fire on 120 students taking a geology class in Ocean Sciences, killing five and wounding 21. Mr. Kazmierczak was well known to the NIU community, having received his bachelor's degree there, graduating Summa Cum Laude two years prior. His last shot was to kill himself.

Mr. Kazmierczak had struggled with mental illness since childhood. Suspicious that he may have a learning disability or attention deficit disorder at an early age, teachers described him as having difficulty concentrating, behaviorally careless and impulsive.¹²¹ With a disturbing history of inappropriate behavior from an early age, he was institutionalized at the age of 16 after a suicide attempt. Mental health professionals described him as anxious, depressed, obsessional, angry, paranoid, suicidal and schizophrenic.¹²²

Born in Elk Grove, Illinois in 1980, Mr. Kazmierczak was a chronic underachiever throughout his primary and secondary school years. Evidence suggests he was not only a bully, but he was often bullied by other students during his early school years. His later writings, teachers noted, contained themes of violence and inappropriate behavior. His family reported that their early request that he receive a mental health evaluation was denied.¹²³

Mr. Kazmierczak was a disruptive force within the family. Verbally abusive and physically threatening, he was a significant source of familial chaos and disorder. He experienced an intense rivalry and lifelong enmity with his sister, and the relationship

¹²¹ John G. Peters, President, "Report of the February 14, 2008 Shootings at Northern Illinois University," Northern Illinois University, 2010. 21.

¹²² Peters, "Report of February 14, 2008 Shootings," 21.

¹²³ Ibid.

with his mother was described as “openly conflicted and confrontational.”¹²⁴ His father was described as uninvolved in the affairs of the family, although present in the home.

Mr. Kazmierczak had frequent contact with the police for minor violations but was never arrested. At the age of 13, he and a friend constructed a crude improvised explosive device out of household chemicals and detonated it on the front porch of a neighbor. The device caused no damage and no charges were filed. He and this same friend were taken into custody for trespassing on commercial property, but no charges were filed. Prodded by his father, he was a reluctant informant in a narcotics investigation for the Elk Grove Village Police Department, which resulted in the arrest of this same friend, who then threatened to kill him.¹²⁵

Mr. Kazmierczak had frequent mental health interventions, having exhibited continued behavioral problems throughout his childhood and adolescence.¹²⁶ His condition noticeably worsened in 1997 when he was 16 years old. He experienced chronic anxiety and depression resulting in seven suicidal gestures within 14 months and nine suicidal gestures for which he was institutionalized before he turned 18.¹²⁷

After graduating from high school in June of 1998, his family had become so afraid of Mr. Kazmierczak’s abusive and unpredictable behavior that they refused to allow him in their home. While he was institutionalized for yet another suicide attempt, they had him placed in a voluntary residential treatment program. It was while there that he was diagnosed with Schizoid Personality Traits, Schizoaffective Disorder and Psychosocial Stressors.¹²⁸

While at the residential treatment program, despite being heavily medicated, Mr. Kazmierczak was a chronic behavior problem and experienced auditory hallucination, paranoia, severe social impairments and obsessional rituals. He chronically abused

¹²⁴ Peters, “Report of February 14, 2008 Shootings,” 21.

¹²⁵ *Ibid.*, 22.

¹²⁶ *Ibid.*, 23.

¹²⁷ *Ibid.*

¹²⁸ Peters, “Report of February 14, 2008 Shootings,” 24.

marijuana while in treatment and gained weight, at one point weighing more than 300 pounds. He lived day-to-day, contemplating suicide.¹²⁹ Mr. Kazmierczak stopped taking his medication, continued to abuse marijuana and violated other “house” rules, but before he could be transferred to a secure mental health institution for being noncompliant, he left.

Mr. Kazmierczak held a variety of jobs for very short periods of time until behavioral issues arose, and he was asked to leave or was fired. One job he left voluntarily, stating it was physically too demanding for him.

Three weeks after Mr. Kazmierczak turned 21 years old and nine days after the terrorist attacks of 9/11, he joined the United States Army on September 20. A few months after enlisting, it was discovered Mr. Kazmierczak had falsified his application and denied having an extensive mental health history. He was placed in an Army hospital for evaluation and subsequently released from his commitment. He was returned to his home of record on February 14, 2002, six years to the day before his deadly rampage.

In August 2002, Mr. Kazmierczak enrolled as an undergraduate student at Northern Illinois University while working at a Marathon Gas Station. He lived in one of the residence halls and was considered strange and weird by fellow students. Soon he began to focus intently on his school work and became isolated from others. He was described as being “exceedingly conscientious and compulsive.”¹³⁰

Known as “Strange Steve” to his roommates, Mr. Kazmierczak studied the Virginia Tech and Columbine tragedies. When he was not studying, he was fond of watching violent, gruesome horror movies.¹³¹ He is said to have become interested in horror movies by watching them with his mother as a child. After the events of February

¹²⁹ Peters, “Report of February 14, 2008 Shootings,” 24.

¹³⁰ *Ibid.*, 25.

¹³¹ Abby Boudreau and Scott Zamost, “Secret Files Reveal NIU Killer’s Past,” *CNN Justice*, 13 Feb 2009. Available: http://articles.cnn.com/2009-02-13/justice/niu.shooting.investigation_1_shooting-rape-stein-kazmierczak-niu-student/3?_s=PM:CRIME.

14, 2008, and Mr. Kazmierczak had killed himself, his school mates claimed he was fascinated by extreme violence and mass murderers, such as Adolf Hitler, Ted Bundy and Jeffrey Dahmer.¹³²

Mr. Kazmierczak learned to function exceedingly well at NIU.¹³³ As a major in criminology, he studied prisons as a way of understanding America. He eventually became vice president of the American Correctional Association on campus and was mentored by a professor who studied rehabilitation in correctional settings. Mr. Kazmierczak tutored other students in statistics and did very well in his course work.

While a student, Mr. Kazmierczak co-authored an article with two of his professors and a fellow student published in the *Journal of Criminology and Public Policy* entitled “Self Injury in Correctional Settings: “Pathology” of Prisons or Prisoners?”

In May 2006, he graduated from NIU Summa Cum Laude with a 3.88 GPA and won the Dean’s Award for highest academic honors.¹³⁴

Mr. Kazmierczak’s mother died in September 2006 after a long battle with ALS. He had not been close to his mother for years, seemingly showed no emotion and told no one of her death.¹³⁵

In the fall semester of 2006, Mr. Kazmierczak started taking graduate-level courses in sociology at NIU but applied to graduate school at the University of Illinois at Urbana-Champaign because NIU had reduced faculty and course offerings in criminology. He stopped going to classes at NIU and started getting interested in guns.¹³⁶

On February 17, 2007, Mr. Kazmierczak bought a .45 caliber, semiautomatic, Glock handgun and on March 23 and 26, he bought a shotgun and another handgun from

¹³² David Vann, “Portrait of the School Shooter as a Young Man,” *Esquire*, 12 Feb 2009. Available: <http://www.esquire.com/features/steven-kazmierczak-0808-4>.

¹³³ Peters, “Report of February 14, 2008 Shootings,” 25.

¹³⁴ Vann, “Portrait of the School Shooter,” 2009.

¹³⁵ Vann, “Portrait of the School Shooter,” 2009.

¹³⁶ *Ibid.*

Moser Guns in Dekalb, Illinois.¹³⁷ He started going to a pistol range to practice shooting instead of going to classes. He failed all of his courses that semester.

On April 16, 2007, Seung Hui Cho killed 32 people on the campus of Virginia Tech. Mr. Kazmierczak was fascinated with Mr. Cho's preparation and planning and compared it to the planning and preparation used to prepare for the shooting rampage and mass murder committed by Dylan Klebold and Eric Harris at Columbine High School in 1999. He studied every detail: where and how Mr. Cho purchased his weapons, Mr. Cho's mental health history, Mr. Cho's photos, timing and planning. He discussed the fine points with friends and sent copies of Mr. Cho's writings to his girlfriend.¹³⁸ He subsequently wrote a paper "(No) Crazyies with Guns"¹³⁹ questioning the advisability of allowing people with a history of mental illness to purchase weapons.

In June 2007, Mr. Kazmierczak moved to Champaign, Illinois with his then, former girlfriend. They shared an apartment together, and it appears they both became aware that he was unraveling. Mr. Kazmierczak had not seen a mental health counselor in five years. He was irritable, picked fights with his former girlfriend and was obsessive about hand washing, checking doors, locks and stoves. He became anxious, worried and paranoid.¹⁴⁰

On August 3, 2007, Mr. Kazmierczak made an appointment at the McKinley Health Center on the campus of the University of Illinois in Champaign. He told the counselor that he was concerned about confidentiality and failed to disclose his significant history of mental health illness. He told the counselor he was only interested in receiving medication. She made an appointment for him to see a psychiatrist three days

¹³⁷ Peters, "Report of February 14, 2008 Shootings," 27.

¹³⁸ Vann, "Portrait of the School Shooter," 2009.

¹³⁹ Considered briefly as the title of this thesis.

¹⁴⁰ Vann, "Portrait of the School Shooter," 2009.

later.¹⁴¹ He left the clinic that day and bought a 9mm Sig Sauer semiautomatic hand gun from Tony's Guns and Ammo in Champlain, Illinois.¹⁴²

The psychiatrist observed "elements of social anxiety and obsessive/compulsive disorder" and prescribed Prozac.¹⁴³ A month later on September 4, 2007, he returned to see the psychiatrist, who noted that Mr. Kazmierczak was anxious, paranoid and worried. The doctor asked him if he were planning to kill himself or anyone else to which he responded he was not. The doctor increased the Prozac medication and added Xanax for anxiety.¹⁴⁴

The next week Mr. Kazmierczak started a new job as a corrections officer at the Rockville Correctional Facility. Although the record is deficient, it is not clear if the correctional facility at the time had policies in place requiring drug screening, a pre-employment psychological screening or a criminal background check. It is very clear, however, that Mr. Kazmierczak was taking prescription medication, had an extensive psychological history with a period of court-ordered confinement and several "scrapes" with the law as a juvenile. These factors did not prevent his employment and did not prevent him from being trained with a Remington shotgun.

After Mr. Kazmierczak quit his job as a corrections officer, the next few weeks were filled with bizarre behavior, even by Mr. Kazmierczak's standards. He wrote a hate-filled blog post directed at his friends and faculty members at Northern Illinois University, he stopped taking his prescription medication for anxiety, he sought sex from men and women on Craigslist and engaged in indiscriminate sex with multiple partners. He was considered by friends, as well as himself, to be out of control.¹⁴⁵ He emailed

¹⁴¹ Vann, "Portrait of the School Shooter," 2009.

¹⁴² Peters, "Report of February 14, 2008 Shootings," 27.

¹⁴³ Vann, "Portrait of the School Shooter," 2009.

¹⁴⁴ Ibid.

¹⁴⁵ Vann, "Portrait of the School Shooter", 2009.

photos of himself dressed as the gruesome “Jigsaw” character in the “Saw” movie series to friends and two days later had the “Jigsaw” character tattooed on his forearm.¹⁴⁶

On December 27, 2007, he purchased a .380 caliber semiautomatic Hi Point pistol from Tony’s Gun and Ammo.¹⁴⁷ Just before the New Year, Mr. Kazmierczak had begun to isolate himself from his friends and began preparations for his murderous rampage in February by purchasing weapons and ammunition and practicing his shooting skills with virtual weapons. On January 29, he called a Navy recruiter and said he would like to enlist. They discussed his previous discharge, and he was told he would have to pass a psychiatric exam.¹⁴⁸

On February 4, 2008, just ten days before the deadly attacks, he emailed a friend who asked about his plans for the weekend. Mr. Kazmierczak responded: ‘No I’m not busy. Just plotting world domination and all (sic)...’ He then asked his friend if he had heard about a recent mass murder referring to a man who killed five people execution-style in a botched robbery attempt.¹⁴⁹ Mr. Kazmierczak never disguised his fascination with extreme violence.

On February 4, 2008, he bought holsters, ammunition, tactical magazine pouches and magazines for his Glocks, and he continued to order ammunition from various sources. On February 6, he bought a Remington shotgun and on February 9, 2008, a 9mm Glock 19 semiautomatic pistol from Tony’s Guns and Ammo in Champlain.¹⁵⁰

On February 10, 2008, Mr. Kazmierczak began final preparations. He left Champaign in the afternoon for the three-hour drive to Dekalb. He checked into a hotel and after a few minutes checked out again. He checked into another hotel, paid cash and began making telephone calls to family and friends. He talked to his father and godfather and made plans to meet the next weekend to play chess. He bought his former girlfriend

¹⁴⁶ Vann, “Portrait of the School Shooter”, 2009.

¹⁴⁷ Peters, “Report of February 14, 2008 Shootings,” 27.

¹⁴⁸ Vann, “Portrait of the School Shooter,” 2009.

¹⁴⁹ Ibid.

¹⁵⁰ Peters, “Report of February 14, 2008 Shootings,” 27.

gifts including an iPhone, books, data cables, earrings and an engagement ring and called her to tell her he was sending her a package but not to open it until Valentine's Day.

He received a call from the Navy recruiter but said he was too busy to come into the office.¹⁵¹

On February 13, he went to the post office to mail his former girlfriend the package as promised with the return address: a pseudonym Robert Paulson, the name of a character from the movie *Fight Club* who attained greatness after death. The return address on the package was his former dorm room.¹⁵²

Just after 3:00 in the afternoon on Valentine's Day, February 14, 2008, Steven Kazmierczak entered Cole Hall through a rear stage door. He was interrupting the Ocean Sciences class just as the class was ending. He walked quickly to center-stage, paused briefly, raised and then fired the shotgun into a row of students. He fired three more times and then jumped down from the stage. He fired the shotgun two more times and then dropped it after reloading and drew a 9mm Glock. He walked calmly up one of the aisles as he repeatedly fired the 9mm. Forty-eight shots later, five students lay dead and 18 were injured. He then jumped back up onto the stage and fired once more, killing himself.

C. RECOMMENDATIONS: LESSONS LEARNED FROM DETAILED CASE STUDIES

It is sometimes easy after the fact to look at missed opportunities to prevent these attacks or to connect the dots afterwards and conclude that the events were predictable. For example, a university administrator at Virginia Tech had seen many similar cases and had several reports about Mr. Cho but never put the pieces together. Mr Cho's college roommate dismissed obvious mental derangement as youthful awkwardness and immature indiscretion. This kind of thinking led to many inaccurate judgments in retrospect.

¹⁵¹ Vann, "Portrait of the School Shooter," 2009.

¹⁵² Vann, Also excerpt from *Fight Club*: "His Name is Robert Paulson" [video file]. Available: http://www.youtube.com/watch?v=GCI_Plz5ekU "In death, a member of project mayhem has a name, his name is Robert Paulson, his name is Robert Paulson.

Police response to these events failed dreadfully. Inadequate planning and insufficient preparation resulted in countless deaths. Failure to prepare students and faculty about how to react and respond to active shooters and facilitate police interdiction strategies were notably absent. It may be unfair to scrutinize this aspect of these two events too closely because police response is inadequate in 95 percent of all active shooter events nationwide.¹⁵³

The medical examiners' response to identify victims was painstakingly slow for family members who were aware that it was likely their child or loved one was dead but did not have confirmation. Some waited three days after the Virginia Tech incident to receive official notification. Collaboration before such an event increases understanding among first-responders that can aid in identification and convey important information to those who need it.

These brutal and sadistic acts of extreme violence on college campuses were perpetrated by adult men about to embark on new chapters in their lives. Cho would have graduated from Virginia Tech in a few weeks, and Kazmierczak had recently graduated from Northern Illinois University and begun graduate school at the University of Illinois. Many had overlooked the obvious and long-term signs of suffering experienced by these young men. While much of their behavior foreshadowed the viciousness to come, family and friends felt powerless to intervene.

While these men must be held ultimately responsible for their actions, others are responsible as well. A society that allows people with extensive histories of mental illness and institutional commitments the ability to purchase firearms is responsible, as are the state and federal legislators who propose unthinking legislation swayed by failed arguments from lobbying groups. Also responsible are gun dealers who failed to conduct the requisite background checks, as well as the government officials who failed to

¹⁵³ *Active Shooter*, NYPD.

diligently administer policies that would have ensured that people with histories of mental illness and institutional confinement do not to have access to firearms.¹⁵⁴

The analysis of the Virginia Tech and Northern Illinois University case studies has revealed that we can do a much better job of preparing for these acts of extreme violence on college campuses.

FBI Director Robert S. Mueller said: “Our greatest weapon against terrorism is unity.”¹⁵⁵ The nature and gravity of school shootings requires constant attention to detail to insure that police are responsive to the needs of the communities they serve. Effectively engaging the whole of government for information and action is essential to successful law enforcement and community resiliency. This can be achieved by establishing School Assessment Teams (SAT) composed of police (commanders, supervisors, SRO and ESU personnel), educators (teachers, administrators and clerical personnel) and mental health professionals (social workers, psychologists, psychiatrists and counselors) as well as students, facility managers and staff. The evidence suggests a comprehensive policy of prevention, protection, response and resiliency are not only effective in preventing attacks and protecting educational environments, but also in saving lives and fostering a caring, nurturing and healing community environment after a devastating school assault.

As different as the foregoing incidents of extreme violence in educational environments appear, they each share four unique characteristics. All of the perpetrators in each of the scenarios experienced an intense reaction to a perceived grievance, all had previously expressed their grievance to others, including authorities, they were all knowledgeable about the weapons they used—indicating advanced training— and they each had assistance from someone else, albeit sometimes an unknowing co-conspirator.

¹⁵⁴ This point is made extensively by Mayors Against Illegal Guns, in their call for a federal policy to prevent “dangerous people” from gaining access to firearms. Available: <http://www.demandaplan.org/fatalgaps>.

¹⁵⁵ Robert S Mueller, “The Threat of Homegrown Terrorism,” Speech given 23 June 2006 at the City Club of Cleveland, Ohio. Available: www.2.fbi.gov/preesrel/speeches/mueller062306.htm.

In the next chapter, we review how international school shootings related to terrorism offer important insight for policy makers and police planners.

V. INTERNATIONAL SCHOOL SHOOTINGS RELATED TO TERRORISM

A. INTRODUCTION

International school shooting incidents related to terrorism offer important lessons for U.S. policy-makers. As we saw in the previous chapter, lessons learned from previous attacks are instrumental when planning and preparing for active shooter events on college campuses. Terrorism cases in Israel and Russia demonstrate that response preparedness is essential to save lives, and it may prevent further pain and suffering of American school children.

While many school shooters in the United States have expressed radical and sometimes even hateful political views, only three occasions rise to the level of terrorist attacks against schools experienced elsewhere in the world. The 1927 Bath School Massacre (38 dead), the 2007 Virginia Tech Murders (32 dead) and the December 14, 2012, Sandy Hook Elementary School Shootings (26 dead) are examples of incidents of horrific violence in this country that are comparable to the terrorist-led violence found elsewhere in the world.¹⁵⁶

Responding to terrorist events in educational environments requires highly skilled and motivated individuals. In the United States, it is not feasible to train military personnel to respond to every school shooting. Local police must be trained to collaborate with the community, interdict, respond, evaluate, adapt and end such an attack. Such planning prepares educational environments for the physical and psychological impacts

¹⁵⁶ The deadliest mass murder in an educational environment in the United States took place on May 18, 1927, in Bath, Michigan when Andrew Kehoe, 55, killed 42 people, mostly children. The incident is described in detail above.

On April 16, 2007, Seung-Hui Cho, a senior at Virginia Tech, armed with two hand guns killed 32 people and wounded 20 others on the Virginia Tech campus.¹⁵⁶ Cho killed two people in a dorm early that morning and later brought tools and equipment, along with the previously described weapons, to barricade himself and take dozens of hostages in a classroom building on campus. This was a multiple assault scenario committed by a lone gun man and represents an example of the level of potential violence from a well planned and executed attack that is common in terrorist attacks on schools.

of such events, encourages resiliency and aids first responders in understanding the skills and equipment that may be required for such outlier events.

By preparing for a terrorist attack, other school attacks will likely be more easily prevented, confronted and terminated. Terrorists use time to gain tactical advantage, therefore, quick and effective law enforcement response is essential. Training of educators and students is vital as well.

Lessons from the following international incidents are poignant to inform, prevent and respond to extreme violence in educational environments. The perpetrators in the following international case studies, representing well-planned, targeted school attacks, terrorized communities with advanced training and well-executed, military-like precision. Much like the Virginia Tech and NIU murders that had widespread impacts on college campuses across the country, these incidents demonstrate the importance of whole-of-government preparation and response. They also demonstrate the devastating effectiveness of multiple targeted attack locations and the confusion they inspire among first responders.

B. ISRAEL

On May 15, 1974, three members of the Democratic Front for the Liberation of Palestine (DFLP), a Palestinian terrorist group from Lebanon, armed with automatic weapons and hand grenades entered Israel through the Moshav Zar'it in Upper Galilee and embarked on a two-day reign of terror. Upon entering Israel, in an unsuccessful attempt to hijack a vehicle, they killed two Christian Arab Israeli female passengers. The driver escaped in the vehicle. Later, going door-to-door at 3 o'clock in the morning, the terrorists killed three members of a family, including a pregnant woman and a 4-year-old boy. They also shot a 5-year-old girl. The terrorists then went to the Netiv Meir elementary school in Ma'alot, Israel where they took 105 children and 10 adults hostage. They demanded the release of 23 Palestinian terrorists held in Israeli custody. In the evening of the second day of the siege, Sayeret Matkal, an elite division of the Israeli

Defense Forces' Golani Brigade, stormed the school. The terrorists immediately began executing the hostages, killing 25 people, including 22 children and injuring 68 others.

In response to this incident, the Israeli Defense Force bombed buildings and training bases of the DFLP and PLFP, killing 27 and injuring 138.¹⁵⁷

A subsequent official review of the Ma'alot incident, the Horav Commission, resulted in a recommendation that called for the establishment of a distinctive police antiterrorist response unit specializing in hostage and rescue operations.¹⁵⁸

The Sayeret Matkal, as part of the IDF, is a conscripted service. Most of the soldiers serve three and a half years and then are released from service.¹⁵⁹ They received little counterterrorism training. The Horav Commission, recognizing the extremely high level of expertise necessary for hostage rescue missions, recommended these situations be handled by the police, who spend considerably more time in service (the average minimum is 10 years) and can be trained to the necessary expert level. These recommendations eventually led to the development of the elite Yaman unit.

Yaman (special operations) police officers are typically military veterans who receive 12 months of basic training upon entering the police service. They receive specialized firearms training and counterterrorism training, which includes familiarity with structure and vehicle take over, dynamic entry, use of explosives, repelling, negotiation and dog handling.¹⁶⁰ Yaman's emphasis on speed, silence and skill are critical counterterrorism techniques for an effective response to terrorist hostage-taking situations in educational environments.¹⁶¹

¹⁵⁷ 1974 Dozens Die as Israel Retaliates for Ma'a lot, On This Day, BBC, http://news.bbc.co.uk/onthisday/hi/dates/stories/may/16/newsid_2512000/2512399.stm.

¹⁵⁸ Ami Pedahzur, *The Israeli Secret Services and the Struggle Against Terrorism*. New York: Columbia University Press (2009), 51. Available: <http://books.google.com/books?id=jhKCiqvUDkEC&pg=PA51&dq=Amos+Horev&q=Amos+Horev&hl=en#v=snippet&q=Amos%20Horev&f=false>.

¹⁵⁹ Ibid.

¹⁶⁰ Pedahzur, *The Israeli Secret Service*, 51.

¹⁶¹ Tad Nelson, former USA Navy/SWAT member. "Behind the Headlines, the Yamam and Israeli Kapap/CQB Training," Available: <http://www.usadojo.com/articles/behind-the-headlines.htm>.

Multiple assault locations are not a recent phenomenon, as some believed after the 2008 Mumbai incident, but rather were seen in the 1927 Bath School House Massacre, 1974 Ma'alot Massacre and 2007 Virginia Tech murders.¹⁶²

Thirty four years after the first school shooting in Israel, a Palestinian terrorist struck again, this time with different tactics.

On March 6, 2008, Alaa Abu Dhein, 26, a devote Muslim and resident of Jerusalem, entered the prestigious Jewish seminary, Mercaz HaRav Yeshiva in Jerusalem and opened fire with a Soviet-made assault weapon while students prayed. Armed with over 500 rounds of ammunition in extended magazines, he shot 19 students, killing eight. It was the deadliest attack on an Israeli school in 34 years. Witnesses said the killing rampage went on for 20 minutes before the gunman was killed by a former student and member of the Israeli Defense Force who lived nearby.

Similar to the Columbine school massacre in the U.S. in 1999, the first police unit, which arrived within four minutes of the first report of the shooting, and two police detectives who arrived within nine minutes did not enter the Yeshiva, and instead awaited specially trained officers. Although Abu Dhein left no statement describing his motive, speculation exists that the massacre came in response to violence in Gaza. Hamas praised the attack but denied responsibility.¹⁶³¹⁶⁴ The official Israeli government response to this school shooting was somewhat muted, angering many Israelis: Ehud Olmert, Israel's Prime Minister called the attack "horrible" and the Knesset speaker called for demolition of the terrorist family's home. Yuli Tamir, Israel's Education Minister, was forced to leave a condolence visit at the yeshiva two days after the attack when she was verbally

¹⁶² While school shootings may not be typically viewed as terrorist acts, they are remarkably similar. Schools are frequent targets of terrorists in foreign countries, and official government reaction is similar. Also, after 9/11, airport security officials strived to profile violent extremists and Congress voted to allow pilots to carry guns to protect the plane. After a string of school murders in the late 1990s, school administrators attempted to profile (identify) dangerous students and considered arming teachers. One difference, however, is that school terror in the U.S. is based on adolescent rage, not religious fervor.

¹⁶³ "Gunman Kills Eight in Attack on School in Jerusalem," *New York Times*, 6 March 2008. Available: http://www.nytimes.com/2008/03/06/world/middleeast/06cnd-mideast.html?_r=1.

¹⁶⁴ "Gunman Kills 8 in Jerusalem Jewish College," Reuters, 6 March 2008. Available: <http://www.reuters.com/article/2008/03/07/idUSL07359144>.

attacked by youths outside the school for what was seen as the government's inadequate response.¹⁶⁵ Mr. Olmert was told he was not welcome at the school.

Israel is a notable case study that demonstrates that certainty, severity and celerity can deter school terrorist attacks. In 1970, a PFLP terrorist attack on a school bus in Avivam resulted in a swift and severe response by Israel, culminating in the bombing and then patrolling of southern Lebanon.¹⁶⁶ When Palestinian terrorists attacked a school four years later, the response was not only swift and severe, it had enduring consequences. The Horav Commission inspired long-term change in terms of policy and tactics and sent a clear message of certainty and celerity that school terrorist attacks would be punished. There was not another school terrorist attack in Israel for 34 years, suggesting that the implemented changes were effective.

In 2002, Palestinian terrorists again attacked a school when a bomb in a cell phone detonated at Hebrew University in Jerusalem, killing nine students. Again, the response was swift, severe and certain. Israeli authorities rounded up more than a dozen Hamas terrorists in response to this attack.¹⁶⁷ This incident took place only six years before another school attack (Mercaz HaRav) in Israel, resulting in the deaths of eight people. Given the dissimilarities with the Mercaz HaRav terrorist attack and the others, a lone gunman versus a group of terrorists, it is difficult to make comparisons or draw specific conclusions. But it will be interesting to determine if the public's perception that the official government response was inadequate was viewed similarly by terrorists. The question: was the response sufficient to deter future attacks and terrorist activity in schools in Israel?

¹⁶⁵ "Neta Sela, Itzik, Destroy Mourning Tent, Home of Jerusalem Terrorist," YNet News, 10 March 2008. Available: <http://www.ynetnews.com/articles/0,7340,L-3517507,00.html>.

¹⁶⁶ Early in the morning on May 22, 1970 in Avivim, in Upper Galilee, nine school children and three adults were killed in a terrorist attack when heavily armed Palestinian gunmen from the PFLP ambushed the school bus they were riding in. Two bazooka shells were fired at the bus, causing it to crash. The terrorists then surrounded the bus shooting the first, second and third graders trapped inside. Israel responded to this event by shelling four Lebanese villages, killing 20 people and injuring 40. The Israeli Defense Force also began patrolling southern Lebanon as a result of this attack.

¹⁶⁷ Israeli police responded to this incident by arresting 15 members of Hamas in East Jerusalem and Ramallah who are said to be responsible for eight similar attacks that killed 35 people.

C. RUSSIA

On September 1, 2004, heavily armed insurgents seized Middle School Number One in Beslan, North Ossetia, in a disputed area of southern Russia, not far from Chechnya. It was the first day of school; so many parents had taken their children to school for opening day ceremonies.¹⁶⁸ At about 8:45 a.m., approximately three dozen terrorists arrived at the school in multiple vehicles armed with automatic weapons, grenades, sniper rifles, night vision equipment, gas masks, improvised explosive devices and silencers.¹⁶⁹ When the armed terrorists entered the school, they immediately began shooting. In less than 20 minutes, they seized more than 1,000 hostages, including children, teachers, parents and grandparents. They forced the hostages into the gym and a small adjacent courtyard. Many of the intended hostages were able to escape and some who were trapped inside the cavernous building were able to hide. A school security guard and an off-duty police officer immediately engaged the terrorists and exchanged gunfire but were quickly killed. They were, however, able to kill one terrorist.¹⁷⁰ Twelve people died in the initial attack.¹⁷¹ By 9:05 a.m. 1,181 hostages, mostly children, were seized.

The group's leader, known as "Khuchbarov," established control of the school and is said to have killed fellow terrorists who balked at his orders.¹⁷² Although many of the details of the siege are still in dispute, Chechen insurgent leader Shamil Basayev, who was not at the school, claimed responsibility for the attack, saying a unit from the terrorist group Salakin Riadus Shakhidi (Chechen Martyrs) was responsible for carrying out his orders. The terrorists were made up of mostly Chechen and Inguish men and women and

¹⁶⁸ Giduck, *Terror at Beslan, A Russian Tragedy with Lessons for America's Schools*, Bailey, Co.: Archangel Group (2005).

¹⁶⁹ Many terrorists had already infiltrated the crowds of first-day well wishers.

¹⁷⁰ Giduck, *Terror at Beslan*, 115.

¹⁷¹ *Ibid.*, 116.

¹⁷² C. J. Chivers and Steven Lee Myers, "Insurgents Seize School in Russia and Hold Scores," *New York Times*, 2 Sept 2004. Available: <http://query.nytimes.com/gst/fullpage.html?res=9E02E0DB1231F931A3575AC0A9629C8B63&sec=&spn=&pagewanted=1>.

some who were Arab. The Chechen and Ingush guarded the hostages and the interior perimeter, while the Arabs—due to language difficulties—were assigned to the outer perimeter and building entrances.

Once inside the school, the terrorists cut off all outside communication by taking the hostages' cell phones. They quickly deployed explosives throughout the school, connecting them to pressure release (“dead man switch”) detonation devices. Three explosive devices were strung menacingly over the hostages' heads across the gym and connected to the basketball hoop backboards.¹⁷³ The main entrances to the school and gym were booby-trapped with improvised explosive devices.

On the morning of the first day, 16 men and older boys were segregated in an adjacent room to the gym and executed. Over the course of the siege, at least 21 men and boys were killed in this manner.

The terrorists told the hostages “We came here to die with you.”¹⁷⁴ The terrorists were accused of bizarre and brutal acts of torture and rape.¹⁷⁵ Russian authorities insist the terrorists never made any formal demands.¹⁷⁶ The hostage takers also declared a “hunger strike” and insisted their hostages participate. Children became sick, faint and hysterical when they were denied food and water for more than two days.

Local police, Soldiers, Special Forces operators and local armed citizens and militia members surrounded the school, creating a “nervous standoff” that continued for three days.¹⁷⁷ Some of the militia members outside were armed with Rocket Propelled Grenades (RPG) and machine guns.

¹⁷³ Giduck, *Terror at Beslan*, 121.

¹⁷⁴ *Ibid.*, 118.

¹⁷⁵ *Ibid.*, 119.

¹⁷⁶ *Ibid.*

¹⁷⁷ C. J. Chivers and Steven Lee Myers, *NY Times*.

The leader of South Ossetia, a disputed region of Georgia, desirous of rejoining Russia and willing to do anything to help his neighbors to the north, sent battle hardened troops, weary from fighting the Georgians, to establish control.¹⁷⁸

The local Beslan police, supplemented by the Vladikavkaz police, a neighboring police department, attempted to establish control and secure the perimeter around the school but were outgunned and outnumbered by local militia men, who would not move.¹⁷⁹

Government troops began to arrive and despite President Putin's pledge not to storm the school, Russia's elite Alpha and Vypel, Counter Terrorism and Special Forces units, began to arrive and assemble at the Beslan Culture Center, which was being used as the command post, 200 meters from the school.

A few hours into the siege, the terrorists delivered a video tape of the conditions inside the school to the officials outside.¹⁸⁰ Government officials said the tape was blank, but a video tape of the terrorists and hostages inside the school made it onto television worldwide. When a communications link was established, hostage negotiators were baffled by the terrorist's refusal to make demands.

President Putin, who had returned from vacation on the Black Sea in Sochi, Russia 550 km away from Beslan had tried to establish that he was in command of the situation but refused to compromise his own policy against negotiating with terrorists.¹⁸¹ Putin dispatched the Interior Minister and FSB director to the scene, although no one recalls seeing either one. The president of North Ossetia, Aleksandr Dzasokhov also claimed that he was in command of the situation.¹⁸²

¹⁷⁸ Giduck, *Terror at Beslan*, 127.

¹⁷⁹ Ibid.

¹⁸⁰ They accomplished this by tossing the tape out of a window.

¹⁸¹ Giduck, *Terror at Beslan* 129.

¹⁸² Ibid., 131.

Throughout the crisis, the greatest single obstacle to the tactical deployment of the Alpha and Vypmel teams were the huge crowds of onlookers outside the school, many of whom were armed and many of them who were drunk.¹⁸³ The crowds provoked the terrorists at every opportunity. Some even fired shots at the school, which contained their loved ones and scores of children. Fights broke out among the onlookers and a raucous, alcohol-fueled atmosphere pervaded the assembly.¹⁸⁴

The terrorists continued to fortify the school and establish positions throughout the day. As night fell, hostages were ordered by the terrorists to throw the dead bodies out of the windows.

The next day the Alpha and Vypmel teams trained for their counter assault. Negotiations were sporadic: some hostages were unexpectedly released while others continued to be executed.

The crowds around the school prevented a surprise attack by the elite troops due to their enthusiastic cheers. The third day began with the terrorists firing shots out of the school's windows at the police officers, soldiers and civilian onlookers who were assembled outside, some of whom were shot.¹⁸⁵ Bystanders refused to move away.

The terrorists agreed to allow officials to remove the dead and decomposing corpses thrown out of the windows over the course of the three-day siege. As the officials entered the courtyard, and the terrorists continued to retrieve the dead from inside the school and throw the bodies out of the windows, a huge blast erupted from inside the school. Both sides, believing they were duped by the agreement to remove the corpses, panicked, as did the hostages who started jumping out of the windows. What later turned out to be an accidental detonation of two terrorist bombs resulted in a full activation of the terrorists' counter assault plans. The Russian troops outside opened fire, Alpha snipers began to take out any terrorist seen through a window, and armed civilians and

¹⁸³ Giduck, *Terror at Beslan*, 125.

¹⁸⁴ *Ibid.*, 131.

¹⁸⁵ *Ibid.*, 144.

militia men opened fire as Alpha and Vypel assault teams vainly attempted to assemble and then enter the school. Many of the members of the Alpha and Vypel Teams were killed when they were shot in the back by bystanders as they entered the kill zone. Those that were able to enter the school were forced to fight every step of the way against a heavily armed, fortified and “medicated” enemy.¹⁸⁶ Fighting was close combat, no more than 4 to 5 feet away and hand to hand at many points.¹⁸⁷ Some of the terrorists were able to escape to nearby houses where military troops tracked and killed them. Other terrorists continued to flee throughout Beslan. Fighting continued for hours as firemen battled fires while being shot at in hostile combat environments.

The last terrorist died at 11:20 p.m., 12 hours after the fighting began. Three hundred and thirty civilians were killed including 172 children. Eleven soldiers from Alpha and Vypel were also killed. Thirty-one of approximately 49 terrorists were killed and only 17 of those were ever identified.¹⁸⁸ The school’s inferno rendered certainty and closer examination impossible.¹⁸⁹

Many strategic errors occurred during the Beslan siege and each had cascading tactical consequences. Faulty intelligence, a dismissive, “it won’t happen here” mentality and an over reliance on cultural mores prevented more diligent planning before the first day of school.¹⁹⁰

The Russian government had been monitoring the Islamist militant separatist movement in Chechnya for many years, particularly since the 2002 Nord-Ost Moscow theater hostage crisis that killed 129 hostages and 39 attackers. The theater crisis, also occurring during President Putin’s regime, was a very similar attack by 30 to 50 rebels that lasted for two and half days. The Russian government ended that siege on the third day, equally un-artfully, by pumping an unknown noxious gas into the theater’s

¹⁸⁶ Terrorist autopsies revealed the ingestion of likely fatal doses of narcotics.

¹⁸⁷ Giduck, *Terror at Beslan*, 165.

¹⁸⁸ Ibid, 172.

¹⁸⁹ Ibid.

¹⁹⁰ There were rumors that a terrorist siege was planned.

ventilation system just before commencing their assault. Many of the deaths were related to the noxious fumes, as well as gunfire.

Inadequate leadership at the national and local level resulted in deficient direction, inferior tactics, and failure to establish control. No one knew who was in charge. The Russian President (Putin) claimed to be in charge, although, so did the president of North Ossetia, (Aleksandr Dzasokhov). Putin claimed to have sent two representatives, but no one recalls seeing them at the scene or the command center. Local leaders were unable to gain control of the spectators, much less the crisis situation. Even military leaders were impotent in exercising control of the scene.

The best trained operators cannot operate to their potential in uncontrolled environments. The failure of civil authorities to establish and maintain control of the inner and outer perimeters of the Beslan School siege was a major setback and ultimately led to the loss of dozens, if not scores of innocent lives. Alpha and Vypfel Teams are among the best trained special operators in the world. They enjoy a world renowned reputation for their extraordinary skill, courage and precision, accomplished through a ceaseless routine of training, preparation and planning. Had they been able to execute within hours rather than days of the initial siege, it is likely that they would have saved countless lives.

The lawlessness of the on-lookers resulted in many deaths. Armed and drunken militia members contributed immeasurably to the terrorists' objectives. Their refusal to move out of harm's way and to disarm themselves was bad enough, but they also shot at the school building housing children and loved ones, alerting the rebels to counter assaults, and ultimately and senselessly killed Alpha and Vypfel rescuers.

D. CONCLUSIONS, RECOMMENDATIONS AND IMPLICATIONS OF SCHOOL SHOOTINGS AS TERRORIST EVENTS

Responding to international terrorist events in educational environments requires highly skilled and motivated individuals. Lessons learned from international school shooting events reveals the level of complexity planning necessary to prevent and

respond to politically motivated terrorist attacks. Planners must conduct realistic security assessments necessary to determine the schools vulnerability, identify multiple evacuation routes, designate hiding places that offer both cover and concealment, engage whole of community concepts that include faculty, staff including porters and custodians, and students. School administrators and police officials should jointly consider credentialed based access control policies and devices, closed circuit television to ensure the video feeds are available to first responders and a communications infrastructure to allow real time messaging. Training school officials in response options as outlined by the Department of Homeland Security when an active shooter is in the vicinity of a school is paramount. Life saving alternatives such as Run, Hide and Fight, or Evacuate, Hide and Take Action are excellent protocols to train and implement when an active shooter situation arrives. Training several key members of the schools administration and the police how to use the CCTV system is critical.

VI. A PUBLIC HEALTH APPROACH TO FIREARM LAWS AND THE REDUCTION OF EXTREME VIOLENCE

A. FIREARMS LAWS AND THE PREVENTION OF SCHOOL VIOLENCE: A PUBLIC HEALTH APPROACH

Ready access to powerful firearms played a key role in amplifying the death and destruction detailed in the previous case studies. Regulation of firearms is controversial in the United States. However, a public health approach to school violence prevention strategies to reduce firearm-related injury and death represents a potentially effective starting point. Such an approach involves both behavior-oriented and product-oriented methods.¹⁹¹

The Center for Disease Control (CDC) reports that the source of guns used in school-related violent death is most frequently obtained from the perpetrator's home (37.5 percent), or the home of a family member or friend (23 percent), suggesting that behavior-oriented approaches to prevent firearm-related homicides and suicides, such as gun control and gun safety training techniques, may be effective in preventing school violence. Behavior-oriented approaches have rarely been empirically tested, but these techniques include firearms safety training, pediatric counseling, firearms avoidance training, and legislative restrictions on children's access to firearms. Another behavior-oriented approach, suggested by the CDC to reduce school-related gun violence, is the secure storage of firearms.

Product-oriented approaches, such as changing the design of firearms to make their use by unauthorized persons more difficult if stolen or obtained illegally, are also suggested. Safety features, such as trigger locks, grip safety devices, loaded chamber indicators and magazine disconnect devices are designed to reduce unintentional firearm discharges. Emerging biometric technologies are designed to prevent unauthorized

¹⁹¹ Without guns, planned and premeditated school shootings are very different events.

persons from firing or discharging a firearm. CDC finds similarities between firearm design changes and the beneficial effects of child poisoning prevention devices and motor vehicle safety programs.¹⁹²

Based on the successful efforts to reduce motor vehicle-related deaths, the CDC recommends a multifaceted approach to reduce firearms-related deaths and injuries. Education about the risks and benefits of gun ownership and possession of firearms, mandatory safe use strategies and safe gun storage are among CDC's top recommendations.¹⁹³ The CDC also suggests that legislative efforts to restrict access to firearms by children and regulate the safe storage, training, transport and use of firearms are important as well. The CDC reports a disproportionate impact of homicides with firearms on black people compared to white people. The age-adjusted death rate for firearms for black males (66.4 per 100,000) is three times higher than for white males (20.7 per 100,000).¹⁹⁴

B. THE EFFECTS OF MASS SHOOTINGS

At this writing, it is impossible to determine if the recent shooting murders of 26 people, mostly elementary age school children, in Newtown, Connecticut on December 14, 2012 will have any lasting impact on increasing public pressure on policy-makers to adopt long-term policy changes. The effects of mass shootings on efforts to pass effective gun laws have been negligible in recent years. After a recent performance venue shooting in Aurora, Colorado, in which 70 people were shot, 58 of whom were wounded and 12 who died, the public outcry was especially muted. Media reports indicate the alleged shooter, James E. Holmes, bought an AR-15 assault rifle, 2 semiautomatic .40 caliber

¹⁹² "Source of Firearms Used by Students in School-Associated Violent Deaths-United States, 1992-1999" Center for Disease Control, Morbidity and Mortality Weekly Report: 7 March 2003. Available: <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5209a1.htm>.

¹⁹³ A recent finding by the CDC indicates the presence of a firearm in the home increases the risk of suicide five times, and the risk of homicide three times the rate of residences without firearms. Available: <http://www.nytimes.com/2012/07/25/us/other-states-and-other-times-would-have-posed-obstacles-for-gunman.html?pagewanted=2&pagewanted=all>.

¹⁹⁴ Division of Violence Prevention and Division of Unintentional Injury Prevention, National Center for Injury Prevention and Control; Office of Analysis and Epidemiology, National Center for Health Statistics, CDC, 1991.

handguns, a shotgun, large-capacity ammunition magazines and 6,000 rounds of ammunition. The assault weapon was banned by federal legislation up until 2004 when the legislation expired and the ammunition was purchased virtually anonymously on line.

The Aurora shooting occurred on July 20, 2012, in the midst of a U.S. Presidential campaign. Both major political party candidates expressed sadness about the deadly rampage, but neither expressed any interest in reviewing, evaluating or changing gun laws. Both major party candidates, President Barack Obama and former Massachusetts's Governor W. Mitt Romney supported assault weapon bans in the past.¹⁹⁵

Firearm-related deaths are positively correlated with the rate at which high school students carry weapons on school property.¹⁹⁶ Daniel W. Webster, codirector of the Johns Hopkins Center for Gun Policy and Research, found in a study published in 2009 that comprehensive regulation, oversight of gun dealers and state regulation of private sales of handguns were each associated with lower rates of diversion of firearms to criminals.¹⁹⁷ The availability of guns is an important factor in school shootings and gun control clearly keeps guns away from children.

A few days after the deadly shooting in Aurora, in an editorial published on July 25, 2012 in the *New York Times*, Nicholas Kristof, an editorial columnist, wrote about the dearth of gun legislation and suggested a tactic to reduce gun violence consistent with the CDC's efforts to reduce motor vehicle fatalities.¹⁹⁸ Mr. Kristof wrote that in our highly regulated society of fire codes, emergency exits, auditorium occupancy limits, movie rating systems, and wheel chair accessibility provisions, we are protected against most potential catastrophes except firearms and high-capacity ammunition magazines. He cleverly noted that we protect children from violence in movies but not in theaters and

¹⁹⁵ Nicholas Kristof, "Safe from Fire, but Not Guns," *New York Times*, 25 July 2012, Available: http://www.nytimes.com/2012/07/26/opinion/kristof-safe-from-fire-but-not-gone.html?_r=0.

¹⁹⁶ Richard Florida, "The Geography of Gun Deaths," *The Atlantic*, 13 Jan 2012. Available: <http://www.theatlantic.com/national/archive/2011/01/the-geography-of-gun-deaths/69354/>.

¹⁹⁷ Daniel W Webster, Jon S Vemick, and Maria T. Bulzacchelli, "Effects of State level Firearm Seller Accountability Policies on Firearm Trafficking," *Journal of Urban Health*, July 2009. Available: <http://rd.springer.com/article/10.2007/s11524-009-9351x>.

¹⁹⁸ Kristof, Safe from Fire but Not Guns, A25.

argued that if traditional efforts at gun safety are not politically feasible we should pursue a public health effort to mitigate their harm. Mr. Kristof cites auto safety as one of the great successes of public health. Since many car accidents involve speeding and intoxication, offenders are prosecuted, but society also requires seat belts, air bags, graduated driver's licenses for inexperienced drivers and better traffic engineering techniques for roads and intersections. These efforts have resulted in record low traffic fatality rates according to the National Highway Traffic Safety Administration.¹⁹⁹ Mr. Kristof writes that the NRA will resist sensible gun legislation to protect the public health, but he also believes NRA members are much more reasonable than their organization's leadership. He suggested background checks for all gun transfers, not just gun purchases, letters of recommendation for all potential gun owners, and restrictions on high-capacity gun magazines, among other initiatives. This writer would additionally recommend mandatory semi-annual firearms safety training similar to the requirements for police officers and other public safety officials who regularly carry firearms.

C. INJURY PREVENTION RESEARCH

David Hemenway, Professor of Health Policy at the Harvard School of Public Health and Director of Harvard's Injury Control Research Center and Youth Violence Prevention Center, has pointed out the advantages of treating gun violence as a consumer product safety issue and public health problem. Guns are used to kill almost 80 people per day and wound almost 300 more people every day. Mr. Hemenway argues that if any other consumer product had a similar disastrous effect, the public response would be outrage. Yet, when it comes to guns, it is accepted as a natural consequence of American culture.²⁰⁰ In his book "Private Guns, Public Health," Mr. Hemenway demonstrates how a public health approach that emphasizes prevention over punishment is effective in

¹⁹⁹ "Traffic Safety Facts-Crash Stats," U.S. Department of Transportation, National Highway Traffic Safety Administration: Sept 2010. Available: <http://www-nrd.nhtsa.dot.gov/Pubs/811383.pdf>.

²⁰⁰ Kristof, *Safe from Fire, but Not Guns*, 2012.

reducing gun violence, just as a similar paradigm was used to successfully reduce incidents of infectious disease, car accidents and use of tobacco products.²⁰¹

Since antiquity, human injuries and accidents were regarded as unavoidable. With the advent of the modern age, environmental risk factors have become more apparent. In the 1960s and 70s, federal regulations improved traffic safety, consumer product safety, occupational safety and environmental protection.

William Haddon Jr., MD, a public health physician and the first director of the National Highway Traffic Safety Administration, who is considered the founder of modern injury prevention research, urged public health professionals to focus on changing the product rather than attempting to change human behavior.

Dr. Haddon developed the “Haddon Matrix” to help researchers and policy makers determine how best to prevent injury. The “Haddon Matrix” is composed of three sequential (temporal) phases to study injury: The Pre-Injury Phase, The Injury Phase, when energy is transferred to an individual, exceeding the body’s tolerance to absorb it, and The Post-Injury Phase, when the body attempts to restore homeostasis and repair the damage. These phases are then combined with traditional public health risk factors (host, agent, physical and social environments) to illustrate possible interventions to reduce the incidence of injuries.

The Haddon Matrix has been used successfully for many environmental and social justice issues. Automobile safety faced vehement opposition from vehicle manufacturers, similar to the opposition from the gun manufacturers’ lobby today. It was through the collective resolve of the American Medical Association and American College of Surgeons, as well as through the scientific research published in the Journal of the American Medical Association, that the National Highway Safety Administration was created. The CDC calls the improvements in motor vehicle safety a “twentieth century public health achievement.”²⁰²

²⁰¹ David Hemenway, *Private Guns, Public Health*. University of Michigan (2004). Available: <http://www.Press.umich.edu/titleDetailLookInside.do?id=17530>.

²⁰² *Ibid.*, 17.

When applied to preventing firearm injuries, the Haddon Matrix presents 10 injury control strategies. The Pre-Injury prevention phase presents opportunities to: (a) Prevent the initial creation of the hazard by prohibiting gun purchases by dangerous and potentially dangerous people (convicted violent felons and the mentally ill), requiring background checks before gun purchases, and prohibiting the manufacture of certain types of dangerous firearms (manufacturing standards). (b) Reduce the amount of hazard through the production of less lethal weapons for self-protection and prohibiting the manufacture of dangerous ammunition and extended magazines. (c) Prevent the release of hazards that already exist by requiring safes, lock boxes and trigger locks, as well as child-proof firearms, smart guns and magazine safeties, banning firearms from locations that serve alcohol, and incarcerating violent firearm offenders.

The Injury Phase presents opportunities to: (a) Improve secondary prevention components, through modification of the rate or spatial distribution of the hazard by requiring gun registration; (b) improve gun tracing and gun identification; separate the hazard in time and/or place from the person to be protected by requiring waiting periods to prevent impulsive violent actions; (c) install weapons detectors at performance venues, schools, stadiums and other areas where large groups of potential victims gather; (d) arrest chronic gun violators, batterers and other violent persons and remove their firearms; (e) impose a barrier between the hazard and the person to be protected by providing bullet resistant vests; offer bullet resistant barriers for high-risk individuals, such as the Pope and other officials; store clerks and taxi drivers; (f) modify surfaces to reduce injuries by redesigning bullets to reduce injury severity; (g) redesign firearms to reduce the rate of fire, and muzzle velocity; strengthen the resistance of people who may be injured by providing training, treatment and counseling to people with repeated victimizations; (i) train people in nonlethal and less-than-lethal self defense; and (h) promote self defense and personal security.²⁰³

The Post-Injury Phase includes tertiary components to rapidly detect and limit damage, improve emergency medical and law enforcement response, provide rapid

²⁰³ Hemenway, *Private Guns, Public Health*, 2004.

air/ground transport for victims, improve emergency room triage and expedite appropriate medical treatment, assure prompt incarceration of firearm offenders and initiate long-term reparative actions such as improve rehabilitation, improve counseling for victims of gun violence, assure accessibility of workplace and other areas to those disabled by firearms.

D. PUBLIC AND OFFICIAL REACTIONS

The Reverend Jesse Jackson called the attack in Aurora, Colorado “not just an incident but part of a pattern...” and views it “...as the rise of domestic terrorism.”²⁰⁴ Jackson, who witnessed the assassination of the Reverend Martin Luther King Jr., on April 4, 1968, continued “I am convinced this kind of access to weapons emboldens international terrorists.”²⁰⁵

After the Virginia Tech shooting on April 16, 2007, in which 32 people were killed and 23 wounded by a previously diagnosed mentally ill individual, Congress enacted legislation that requires states to share the names of mentally ill people with the National Instant Background Check System (NICS) for buying guns. This law was created to prevent mentally ill people with a mental health record in their own state from crossing state lines to purchase firearms (state’s already share criminal background information). The deadline for complying with the law was January, 2011, though gun-control advocacy groups estimate more than a million files are missing nationwide, as discussed below.²⁰⁶

After six people were murdered and 13 others wounded, including Rep. Gabrielle Giffords, in Tucson, Arizona in November 2010, President Barack Obama made an appeal to the American people to reform gun laws. Mr. Obama suggested enforcing the current legislation, particularly states’ compliance with legislation to populate NICS. He

²⁰⁴ Ryan Parker, “Jesse Jackson says Theater Shooting is Act of “Domestic Terrorism,” *The Denver Post*, 26 July 2012. Available: http://www.denverpost.com/theatershooting/ci_21164367/jesse-jackson-says-theater-shooting-is-act-domestic?source=pkg.

²⁰⁵ Ibid.

²⁰⁶ Associated Press, “Few States Follow Mental Health Gun Law,” *Salon.com*, 18 Feb. 2011. Available: http://www.salon.com/2011/02/17/mental_health_gun_law/.

also suggested making the system more accurate, comprehensive and consistent.²⁰⁷ The Justice Department then set up a series of meetings with gun rights activists and gun control advocates to put aside “stale policy debates” and enter “a new discussion.” The NRA declined to meet with the president.²⁰⁸ This was viewed by many as a sign of disrespect for a president who had expanded gun rights. It also might be viewed as a statement of disdain for the well-being and safety of the American public.²⁰⁹

E. CURRENT DATA COLLECTION TECHNIQUES OBFUSCATE THE FACTS

In the United States there are many challenges to evaluating the effectiveness of firearms laws on reducing violence. Information about firearms is collected to regulate firearms transactions from federally registered firearm dealers, not to track firearms or their use, and this information is limited to protect the privacy of firearm owners.²¹⁰ Additionally, some of the data sources for violent outcomes that are most readily available and widely used for research are of questionable value because of substantial underreporting.²¹¹

There are some emerging opportunities to determine whether existing gun laws are an effective means of reducing violence, however. The FBI’s National Incident Based Reporting System and the CDC National Violent Death Reporting System will link multiple data sources on violent deaths to provide comprehensive information databases linking death certificates.²¹² Currently data is limited to only a few states. Keeping guns

²⁰⁷ “President Obama, We Must Seek Agreement on Gun Reforms,” *Arizona Daily Star*: 13 March 2011. Available: http://azstarnet.com/article_011e7118-8951-5206-a878-39bfb9dc89d.html

²⁰⁸ Jackie Calmes, “NRA Declines to Meet With Obama on Gun Policy,” *New York Times*, 14 March 2012. Available: http://nytimes.com/2011/03/15/us/politics/15guns.html?_r=1.

²⁰⁹ “Talking About Guns,” *New York Times*, 18 March 2011. Available: <http://www.nytimes.com/2011/03/17/opinion/17thu1.html>.

²¹⁰ Firearm Owners Protection Act of 1986 (P.L. 99-308, 99 Cong., 2d Sess., 100 Stat.449-461) Forbids federal government from establishing a federal registry of firearm owners.

²¹¹ Robert A. Hahn, Oleg Bilukha, et al., “Firearms Laws and the Reduction of Violence, A Systemic Review,” *American Journal of Preventive Medicine*, 2005. The examples provided are UCR data sets.

²¹² CDC Violence Prevention, January 2013. Available: <http://www.cdc.gov/violenceprevention/nvdrs/index.html>.

out of the hands of the mentally ill is just one component of reducing school violence. The other is providing mental health treatment to those who need it.

F. THE SECOND AMENDMENT

Recommending reasonable federal firearm policies in America requires an understanding of the context and history in which such policy has been set. Any discussion of this topic must logically begin with the United States Constitution.

Discussions about gun policy often include conversations about the rights granted by the Second Amendment. The Second Amendment was adopted to protect the right of the people in each of the states to maintain a well-regulated militia.²¹³ It reads: “A well regulated Militia, being necessary to the security of a free State, the right of the people to keep and bear Arms, shall not be infringed.” Special interest and gun advocacy groups often omit the first thirteen words, and many Americans believe that the Second Amendment provides for the right of private gun ownership. The historical record, however, was clear until recently. In a recent ruling by the United States Supreme Court in 2008 in the case, *Washington, D.C., et al. vs. Heller*, the court held that the Second Amendment protects an individual’s right to possess a firearm unconnected to military service. This case also attached a right of self defense within the home. Neither of these assertions is supported by the historical record, however, as is discussed below.

In *Heller*, the Supreme Court did clarify, however, that the right to bear arms is not absolute. The court ruled that states could set restrictions and put regulations in place. *Heller* is likely to be reversed because it is not based on historical or legal precedent.²¹⁴ The Second Amendment focuses on state militias. Due to the distrust of a centralized

²¹³ Supreme Court of The United States, *District of Columbia, et.al. v. Dick Anthony Heller*, 554 U.S. 2008, Stevens, J. Dissenting, 68.

²¹⁴ Justice Stevens wrote in his dissent, joined by Justices Souter, Ginsberg and Breyer, that: “Until today, it has been understood that legislatures may regulate civilian use and misuse of firearms so long as they do not interfere with the preservation of a well regulated militia,” (p 45) In Justice Breyer’s dissent, with whom Justice Stevens, Justice Souter and Justice Ginsberg joined, he wrote: “The majority’s conclusion is wrong for two reasons. The first reason in that set forth by Justice Stevens-namely that the Second Amendment protects militia related, not self defense related interests,” “The second independent reason is that the protection of the Amendment provides is not absolute. The Amendment permits government to regulate the interests that it serves,” (.1)

government, members of the Continental Congress, who adopted the Articles of Confederation in 1777, specified that every state “shall always keep up a well regulated and disciplined militia, sufficiently armed and accrued.” It did not include any provision for the individual right to bear arms.²¹⁵

When the U.S. Constitution was adopted in 1776, each state had its own militia composed of ordinary citizens serving part time. The purpose of the militia was to secure the state from internal and external threats, such as riots and invasions.

Many Americans claim the Second Amendment provides for the rights of individuals to keep and bear arms. There is little support for this argument in the historical record. The Magna Carta of 1215 and the Petition of Rights of 1628, from which the Bill of Rights is derived, did not include any provisions for it. Neither did the 17th Century English jurist and judge, William Blackstone, nor philosopher and physician, John Locke, known as the Father of Classical Liberalism. The writings of Blackstone and Locke, both of whom wrote extensively about constitutional traditions and natural rights, respectively, provide considerable evidence for the collective interpretation as opposed to the individual interpretation of the Second Amendment. Blackstone equated the idea of individuals employing private force as “productive of anarchy” and “equally fatal to civil liberty as tyranny itself.”²¹⁶²¹⁷ Locke emphasized the importance of the social contract. When an individual enters civilized society, he said, he gives up such power.

The historical record of the drafting of the Second Amendment provides little support for the individual rights theory. The Constitutional Convention in Philadelphia was called to order due to the fears that a weak national government under the Articles of Confederation would be incapable of resisting a foreign invasion or suppressing civil disturbances. The Federalists who dominated the convention wanted a strong central

²¹⁵ Alexander DeConde, *Gun Violence in America: The Struggle for Control*. Boston: Northeastern University Press (2001). 154.

²¹⁶ David Hemenway, *Private Guns, Public Health*. University of Michigan (2004). 154.

²¹⁷ Heyman, *Natural Rights and the Second Amendment*, 2000, 258.

government, including a well-trained, disciplined and regulated standing army. The Anti Federalists, after they were resoundingly defeated, drafted 14 proposed amendments to the Constitution. A few of these were later incorporated into the Bill of Rights word-for-word, but many were not, including the right to fish in navigable waters, kill game and bear arms for self defense. The Federalists were, however, willing to assure the anti federalists that the national government would not disarm the states militias. James Madison wrote the first draft of the Second Amendment, which read: “A well regulated militia, composed of the body of the people, being the best security of a free state, the right of the people to keep and bear arms shall not be infringed; but no person religiously scrupulous shall be compelled to bear arms.”²¹⁸ Clearly referring to the states’ militias, the people, not individuals, have the right to bear arms.²¹⁹ Much of the debate that followed this drafting of the Second Amendment concerned the interpretation of conscientious objectors’ exemption from the obligation to bear arms for the militia. Nowhere does the public record suggest a debate concerning the private or individual right to bear arms.²²⁰²²¹ The Second Amendment debate revolved around the idea of limiting the power of the national government to disarm the states militias. Many Americans at the time feared standing armies, having been surrounded by British troops for decades. They hoped a well regulated militia, composed of private, part-time citizens, would eliminate the need for a substantial military establishment.²²² The Anti-Federalists feared the national government would eliminate the militias and thus leave them at the mercy of the federal government.

The Second Amendment debate also included the role of the militias in the suppression of civil unrest and the level of government (federal or state) that would have authority to empower them. There was no plan for an armed citizenry independent of

²¹⁸ Hemenway, *Private Guns, Public Health*, 155.

²¹⁹ This interpretation is consistent with the historical record in the constitution “We the people...” and current prosecutorial practice describing “The People of the State of (blank) vs. (defendant),”

²²⁰ Paul Finkleman, “A Well Regulated Militia:” *The Second Amendment in Historical Perspective*. *Chicago-Kent Law Review* 76, 195–236, 2000.

²²¹ Hemenway, *Private Guns, Public Health*, 155.

²²² *Ibid.*

government. While many states' constitutions that were enacted during the Revolutionary War endorsed the right of revolution, their intent was to provide for revolt against foreign powers. Our Founding Fathers did not advocate such a right for their own democratic republic but rather an orderly transfer of power every two years.²²³²²⁴

Colonial history also offers important examples of the kinds of gun regulations Federalists and Anti Federalists were comfortable with at the time and that were consistent with “the right to keep and bear arms.” New York, Philadelphia and Boston all restricted firing a gun within city limits. Philadelphia required a “governor’s special license” to discharge a gun or fireworks. Many cities and towns regulated gun powder, still a necessary component of an operable firearm, which in fact prevented as a practical matter carrying a loaded firearm into any building. A Dictionary of the English Language 1751 (4th Edition 1773) at the time defined “bear arms” as military servitude.²²⁵

The federal courts have consistently ruled that the Second Amendment concerns a well regulated militia, with the exception of one case which was later reversed.²²⁶ Before the Heller Case, the Supreme Court last ruled on the Second Amendment in 1939, when they held that the Second Amendment was “to insure the viability of state militias.”²²⁷ The Supreme Court has consistently denied certiorari to reopen the issue, but it has also consistently let stand lower court rulings consistent with the view that the Second Amendment does not convey the right to individual gun ownership.

²²³ David Hemenway, *Private Guns, Public Health*, University of Michigan, 2004, 155.

²²⁴ Paul Finkleman, “A Well Regulated Militia”: The Second Amendment in Historical Perspective. *Chicago-Kent Law Review* 76, 195–236, 2000

²²⁵ *Washington, D.C., vs. Heller*, 554US (2008) Breyer dissenting, 4–7.

²²⁶ *United States vs. Emerson*, 270 F.3d 203 (5th Circuit 2001) a federal judge in Texas held in a domestic violence case that the Second Amendment protects an individual’s right to keep and bear arms. Although reversed at the superior court level, two of the justices wrote in their opinion—irrelevant with respect to the outcome of the case—that the Second Amendment did protect an individual’s right to bear arms.

²²⁷ *United States vs. Miller*, 307 U.S. 174 [1939] the Supreme Court ruled: “In the absence of any evidence tending to show that possession or use of a shot gun having a barrel length of less than eighteen inches in length at this time has some reasonable relationship to the preservation or efficiency of a well regulated militia, we cannot say that the Second Amendment guarantees the right to keep and bear such an instrument,”

The American Civil Liberties Union, which is arguably the strongest supporter of the Bill of Rights in America, supports the constitutionality of the right to bear arms as a collective, not an individual, right designed to protect the states' rights to maintain a militia.²²⁸

The American Bar Association, a nationally recognized organization of attorneys with more than 4,000 members, also maintains the collective-rights view that the Second Amendment supports states' rights to maintain a well regulated militia.²²⁹

The Constitution can be amended, and the courts can reinterpret the law, but courts have consistently found that the U.S. Constitution does not prevent sensible firearm regulations.²³⁰

The Supreme Court in *Heller* did hold that the Second Amendment right is not unlimited stating: "The Court's opinion should not be taken to cast doubt on longstanding prohibitions on the possession of firearms by felons and the mentally ill, or laws forbidding the carrying of firearms in sensitive places such as schools and government buildings."²³¹

G. SCIENTIFICALLY BASED FIREARMS POLICY

The evidence strongly suggests that in order to reduce the devastating impact of extreme violence in educational environments, a policy of regulation is needed that supports a public health approach to gun violence and strictly enforces NICS

²²⁸ ACLU Policy 47 states: "The ACLU agrees with the Supreme Court's long-standing interpretation of the Second Amendment that the individual's right to bear arms applies only to the preservation or efficiency of a well regulated militia. Except for lawful police and military purposes, the possession of weapons by individuals is not constitutionally protected."

²²⁹ American Bar Association, 1999: "Few issues have been more distorted and cluttered by misinformation than this one. There is no confusion in the law itself. The strictest gun control laws in the nation have been upheld against Second Amendment challenge... Yet the perception that the second Amendment is somehow an obstacle to Congress and state and local legislative bodies fashioning laws to regulate firearms remains a pervasive myth... As lawyers, representing the legal profession, and as recognized experts on the meaning of the Constitution and our system of justice, we share a responsibility to "say what the law is" The argument that the Second Amendment prohibits all State or Federal (sic) regulation of citizens' ownership of firearms had no validity whatsoever,"

²³⁰ Hemenway, *Private Guns, Public Health*, 160.

²³¹ *Washington, D.C., vs. Heller*, 554US (2008) Breyer dissenting.

requirements, regular training and licensing requirements for firearm safety. Richard Florida conducted a study that suggests that states that have stricter gun laws have fewer firearm-related deaths.²³² In 2007, 10.2 of every 100,000 Americans were killed with a firearm. States with strict gun laws, such as Hawaii, New York and New Jersey had 2.6, 5.0 and 5.2 deaths per 100,000 people, respectively. Jurisdictions with relatively lenient gun laws like Louisiana and Mississippi had 20.2 and 18.5 deaths per 100,000 people, respectively.²³³

The National Instant Criminal Background Check System, or NICS, saves lives and protects people by preventing guns and explosives from being purchased by dangerous and violent individuals. It also ensures the timely transfer of firearms to eligible gun owners

Mandated by the Brady Handgun Violence Prevention Act of 1993 and launched by the FBI in 1998, NICS is used by federally licensed gun dealers (Federal Firearms Licensees) to instantly determine whether a prospective buyer is eligible to buy firearms or explosives. Before handing the gun over to the customer, a Licensee must call the FBI or to other designated agencies to ensure that the customer does not have a criminal record or a history of involuntary custody in a mental health facility. More than 100 million such checks have been made in the last decade, leading to more than 700,000 denials.

NICS is located in Clarksburg, West Virginia at the FBI's Criminal Justice Information Services Division. Providing service to Federal Firearms Licensees in 30 states, five U.S. territories, and the District of Columbia, the NICS requires completion of the Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF) Form 4473. Licensees can contact the NICS Section via telephone or Internet through the NICS E-Check

²³² Richard Florida, "The Geography of Gun Deaths," *The Atlantic*, 13 Jan 2012. Available: <http://www.theatlantic.com/national/archive/2011/01/the-geography-of-gun-deaths/69354/>.

²³³ Ibid.

System to request a background check with the descriptive information provided on the ATF Form 4473. NICS is customarily available 17 hours a day, seven days a week, including holidays.²³⁴

H. RECOMMENDATIONS FOR A PUBLIC HEALTH APPROACH

Training requirements for gun owners should be consistent with current state law for others who regularly carry firearms—police officers. Gun advocates often state their reason for carrying a firearm is for personal safety. Understanding the psychological and physiological influences during a gunfight is critical. Rapid heart rate, breathing and shortness of breath are just three common symptoms police officers report after a gunfight. Add to these physiological symptoms, the fog of confusion, mental alertness, tunnel vision and intensity of awareness that is often reported by people in combat. Gun owners must be trained, qualified and confident to use such weapons. Guns are tools and people who want to carry them must be adequately trained to use them safely.

Liability is an important consideration for gun owner training as well. Understanding of legal limits, authorities and implications of actions is essential. Training should also be consistent with qualification standards for the particular weapon owned. Semiautomatic hand guns owners should have to qualify twice a year, long gun and shotgun owners once a year and other semiautomatic long guns (e.g., AR-15, MP-5) should be restricted for law enforcement and military use only. If such a restriction is not politically viable, training for these weapons must be quarterly, as it is with law enforcement officers.

Gun owners who do not qualify for a particular weapon should be required to surrender it until qualified.

²³⁴ Federal Bureau of Investigation website. Available: <http://www.fbi.gov/about-us/cjis/nics>.

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VII. MENTAL HEALTH, PATHOLOGY AND THE PREVENTION OF SCHOOL VIOLENCE

Individuals and organizations must be able to intervene in order to protect the safety of others and to assist troubled students.

A. PREDICTABLE VIOLENCE

Violence is often unpredictable, but studies have shown clearly that in the majority of school shooting incidents the shooter at some point has offered an explicit verbal warning. The American Medical Association estimates that nearly 50 percent of school-related homicides are perpetrated by students who displayed some type of warning sign prior to the violent event, including threats, boasts, violent stories and predictions.²³⁵ The individual may also show signs of depression, low tolerance for frustration, or a lack of resiliency when confronted by stressful situations. The individual may even criticize previous school shooters for their failure to inflict more casualties.²³⁶ In over 75 percent of school shootings, other students knew beforehand about the troubled student's planned event. The warning signs include direct threats, verbalizing a wish to kill, and bringing a weapon to school.²³⁷ The violent student may exhibit bizarre thoughts, delusions, hallucinations, paranoia and other disrupted mental processes, such as schizophrenia, as well as other mental disorders that have their initial onset in the late teens and early twenties.

Physical warning signs of violent behavior include the student's prior history of physical assault, bullying and being the victim of bullying, and possession of weapons.

²³⁵ American Medical Association, "School Associated Violent Deaths in the United States 1994–1999," *Journal of the American Medical Association* 286–21, 2001, 2695–2701.

²³⁶ O'Toole, *The School Shooter*.

²³⁷ Amy Harmon, "Internet Gives Teenage Bullies Weapons to Wound from Afar," *New York Times*, 26 Aug 2004. Available: <http://www.nytimes.com/2004/08/26/us/Internet-gives-teenage-bullies-weapons-to-wound-from-afar.html?pagewanted=all&src=pm>.

The violent student may also have a history of anger, rebelliousness, irritability, substance abuse, social isolation and withdrawn behavior.²³⁸ The student may also have a history of torturing animals.

Identifying violent students in educational environments before they act requires collaboration among university, mental health and law enforcement officials.²³⁹ Threat assessment in a campus setting involves evaluating the level of threat, assessing the student's capability of carrying out the threat and determining an effective course of action.²⁴⁰ The U.S. Secret Service (USSS) identified six key principles for evaluating a student's likelihood to engage in extreme violence at school. These markers include verbal, behavioral and physical indicators, such as loss of temper, history of violence, vandalism, or risk-taking behavior, carrying a weapon, and drug and alcohol use.²⁴¹ The USSS supports the assertion that violence is predictable and rarely spontaneous; knowledge about the student, coupled with specific environmental and behavioral indicators, can prevent violence. Information about the student, personality characteristics, family, school and social dynamics is essential. The USSS recommends that the information about the student must be reliable and verifiable and based on objective, observable facts from multiple sources. The USSS National Threat Assessment Center conducted a study of school shootings and found that 34 percent of school shooters had a mental health evaluation prior to the attack and 17 percent had been diagnosed with a mental health or behavioral disorder prior to the attack.²⁴²

Statistics reveal that firearms were the leading mechanism for homicide among males age 10 to 24 and that the homicide rate for youth in this age group was highest for

²³⁸ Amy Harmon, "Internet Gives Teenage Bullies Weapons to Wound from Afar," *New York Times*, 26 Aug 2004. Available: <http://www.nytimes.com/2004/08/26/us/Internet-gives-teenage-bullies-weapons-to-wound-from-afar.html?pagewanted=all&src=pm>.

²³⁹ O'Toole, Internet Gives Teenage Bullies Weapons to Wound from Afar.

²⁴⁰ FBI Law Enforcement Bulletin, Addressing School Violence, May 2011. Available: http://www.fbi.gov/stats-services/publications/law-enforcement-bulletin/may_2011/school_violence.

²⁴¹ "Warning Signs of Youth Violence," American Psychological Association, Psychology Help Center. Available: <http://www.apa.org/helpcenter/warning-signs.aspx#>. 3.

²⁴² "Campus Attacks," United States Secret Service. Available: <http://www.secretservice.gov/ntac/CampusAttacks041610.pdf>.

black males (55.5), more than three times higher than the next larger group, Hispanics (17.3) and 23 times higher for white males.²⁴³ One in 12 high school students is threatened or injured with a weapon each year and young people 12- to 24-years-old face the highest risk of being the victim of violence.²⁴⁴ The American Psychological Association has conducted a significant amount of research on violence and has developed 22 indicators of future violence.²⁴⁵

B. CONFIDENTIALITY VS. SAFETY

When does a psychiatrist have a duty to report a threat? There is a fine line between confidentiality and safety. Art Caplan, head of the New York University Langone Medical Center's Division of Medical Ethics, believes the first requirement is certainty that harm is imminent. However, Professor Paul S. Applebaum, Director of Columbia University's Center for Law, Ethics and Psychiatry, maintains that "people exaggerate psychiatrists' ability to predict (violence)."²⁴⁶ Noting the distinction between people who make threats and people who pose threats, Mr. Applebaum believes the mental health profession is extremely vigilant about inquiring about aggressive histories and thoughts about harming others to determine just how firm, willful and carefully planned these ideas are and how likely they are to be carried out.²⁴⁷

C. SCHOOL THREAT ASSESSMENT TEAMS

Most college and university mental health organizations' disclosure policies are guided by the Tarasoff Rule, a landmark California case for therapist-patient confidentiality.²⁴⁸ It is based on a 1976 school-related homicide at the University of

²⁴³ Youth Violence, Available: http://www.cdc.gov/violenceprevention/youthviolence/stats_at-a_glance/hr_male.html.

²⁴⁴ "Warning Signs of Youth Violence," APA.

²⁴⁵ Ibid.

²⁴⁶ Paul S. Applebaum, *Brian Lerher Show*, WNYC: 31 July 2012.

²⁴⁷ "Patient-Doctor Confidentiality Versus Public Safety," *The Take Away with John Hockenberry and Celeste Headlee*, 31 July 2012. Available: <http://www.thetakeaway.org/2012/jul/31/patient-doctor-confidentiality-versus-public-safety/>.

²⁴⁸ Ibid.

California at Berkley. Prosinjit Podder was a graduate student who became enamored with Tatiana Tarasoff, a student at a nearby community college. When Ms. Tarasoff rejected Mr. Podder's advances, he became depressed and sought treatment at the university health clinic. During counseling sessions, Mr. Podder expressed his intent to harm Ms. Tarasoff. The therapist notified campus police but did not notify Ms. Tarasoff, who was subsequently killed by Mr. Podder. The court ruled in *Tarasoff vs. Regents of the University of California* (17Cal.3d425 [1976]), that Universities have a duty to protect and notify victims and authorities over the duty to protect patients' confidentiality.²⁴⁹ Specifically the ruling states: "that a patient poses a serious danger of violence to others...he (the counselor) bears a duty to exercise reasonable care to protect the foreseeable victim of that danger."²⁵⁰ In 1985, the California legislature codified the Tarasoff Rule, which was extended by subsequent cases to further erode psychotherapeutic confidentiality.²⁵¹

Tarasoff is a California case, not a federal case, and therefore, other states are not bound by it. After Tarasoff, however, many states mandated a duty to warn.²⁵² The American Psychological Association recommends that when a therapist determines a patient represents a serious danger of violence to another person, the therapist has an obligation to "use reasonable care to protect the intended victim against danger."²⁵³

Twenty-seven states imposed a duty to warn: Arizona, California, Delaware, Idaho, Indiana, Kentucky, Louisiana, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, New Hampshire, New Jersey, Ohio, Oklahoma, Pennsylvania, South Carolina, Tennessee, Utah, Vermont, Washington and

²⁴⁹ "Patient-Doctor Confidentiality Versus Public Safety," *The Take Away with John Hockenberry and Celeste Headlee*, 31 July 2012. Available: <http://www.thetakeaway.org/2012/jul/31/patient-doctor-confidentiality-versus-public-safety/>.

²⁵⁰ Charles Patrick Ewing, "Tarasoff Reconsidered," *American Psychological Association Monitor on Psychology* 36-7, July 2005, 112. Available: <http://www.apa.org/monitor/julaug05/jn.aspx>.

²⁵¹ *Ibid.*

²⁵² Jennifer L. Martin, in private correspondence to this researcher, 1 August 2012. Used with permission.

²⁵³ "A Matter of Law: Psychologists' Duty to Protect," 2005. Available: [http://www.search.apa.org/search?query=duty to notify](http://www.search.apa.org/search?query=duty%20to%20notify).

Wisconsin while nine others: Alaska, Connecticut, Florida, Illinois, New York, Oregon, Rhode Island, Texas and West Virginia, only give the therapist permission to warn. The other 13 states have no definitive Tarasoff Rule.²⁵⁴

California has some of the toughest restrictions for gun ownership by the mentally ill. In California, someone held for 72 hours at a mental health facility for observation is barred from owning a gun for five years, and a person who threatens someone during a counseling session, or in front of a psychotherapist, can temporarily lose their right to buy a gun. California clearly places an onus of responsibility on psychotherapists to be diligent by asking questions about concerning and threatening behavior and reporting positive findings to authorities.

When assessing a particular person's likelihood to engage in violent behavior, predictions more likely to be accurate when a substantial number of variables (personal history of violence, verbal threats and a means to carry out those threats, etc.) are considered. Mental health workers must deal with threats of suicide and violence regularly as a part of their daily work. Professional ethics in mental health counseling recognizes that each client is unique, demanding flexibility, not rigidity, with respect to confidentiality.²⁵⁵ Patient confidentiality is important but not at the expense of public safety. Therapists and mental health counselors have an array of mechanisms to facilitate safety and information-sharing and should not be constrained by law or professional ethics to protect likely victims of violence.

D. SCHOOL ASSESSMENT TEAMS

School Threat Assessment Teams on college and university campuses are a relatively recent phenomenon that has received widespread attention, most notably since the 2007 Virginia Tech mass murders. Colleges and universities, leveraging workplace violence studies conducted by the U.S. Postal Service and others during the 1980s, have

²⁵⁴ Paul B. Herbert, JD, MD. The Duty to Warn: A Reconsideration and Critique, *J Am Academy Psychiatry Law* 30:417–24, 2002. <http://www.jaapl.org/content/30/3/417.full.pdf>.

²⁵⁵ *Ibid.*

implemented threat assessment teams to review reports and other indicators from students, faculty and staff to identify erratic, disturbing and disconcerting behavior, such as threats and acts of violence by individuals within the academic community. This was not their original intent. School assessment teams were originally formed in higher education in the early 1990s to identify frustrating processes and potentially violent students, including those who exhibited suicidal or homicidal tendencies.²⁵⁶ School assessment teams are systems of people communicating with one another to identify and solve problems; this concept is explained further later in this paper.

Ursula Delworth, a former professor of counseling at the University of Iowa, wrote a seminal threat assessment monograph in 1989, known as the Delworth Model.²⁵⁷ In it, Professor Delworth explained the rationale for using a threat assessment team: “All campuses have or should have some system in place for handling the discipline or judicial problems and the psychological problems of students. The issue often becomes one of insufficient coordination, inadequate information flow and lack of a shared process.”²⁵⁸ The monograph outlines the various stages necessary to implement a threat assessment team, including: forming the team, defining members’ roles and responsibilities, conducting assessments of students’ behavior, evaluating various interventions and collecting relevant data.²⁵⁹ There are three essential components of the Delworth Model: Formation of a threat assessment team, a defined assessment process for channeling students into the most appropriate resource, and intervention with the student concerned.²⁶⁰ This model is unique compared to other threat assessment team

²⁵⁶ Dr. Gene Deisinger, Director Threat Management Services and Deputy Chief of Police at Virginia Tech. Available: <http://www.npr.org/templates/story/story.php?storyId-124007555>.

²⁵⁷ Ursula Delworth, “Dealing with the Behavioral and Psychological Problems of Students, New Directions for Student Services,” 1989. 45.

²⁵⁸ *Ibid.*, 9.

²⁵⁹ John Dunkle, Zachary B. Silverstein, and Scott L. Warner. “Managing Violent and Other Troubling Students: The Role of the Threat Assessment Teams on Campus,” *Journal of College and University Law* 34–3, 586–635. Available: http://www.campusthreatassessment.org/images/uploads/instructor_resources/Dunkle_Warner_Silverstein_mep.pdf.

²⁶⁰ *Ibid.*, 592.

models because it specifies the team members (faculty specialties, safety and health professionals), articulates the roles and responsibilities of each member, provides a pragmatic diagnostic tool for team members to use to assess students of concern, and guides team members in connecting students to the most appropriate resource.²⁶¹ The issues confronting colleges and universities since 1989 have evolved and have become increasingly complex, but the Delworth model still provides a useful framework for developing and implementing a threat assessment team.²⁶²

E. EVOLUTION OF SCHOOL ASSESSMENT TEAMS

Recognizing that no one source has all the information necessary to form a coherent and comprehensive profile of an individual and resolve complex problems to mitigate risk, school assessment teams consist of members from the campus mental health services, campus security, student services, legal counselors, and student judicial disciplinary committee. These connectors represent an integrated multidisciplinary approach to providing objective information and solving complex problems.

While many colleges and universities claim to have threat assessment teams, the research is inconclusive about how effective they are, especially when trying to determine when, how often and at what level threat assessment teams actually meet and make recommendations. Some school assessment teams represent little more than paper plans. Before the July 20, 2012 mass killings in Aurora, John E. Holmes, the alleged shooter, sought treatment at the University Health Center while a graduate student at the University of Colorado at Denver (he withdrew from the university on June 10, 2012). University Chancellor Don Elliman, refusing to discuss specifics after citing privacy

²⁶¹ John Dunkle, Zachary B. Silverstein, and Scott L. Warner. "Managing Violent and Other Troubling Students: The Role of the Threat Assessment Teams on Campus," *Journal of College and University Law* 34-3, 586-635. Available: http://www.campusthreatassessment.org/images/uploads/instructor_resources/Dunkle_Warner_Silverstein_mep.pdf.

²⁶² *Ibid.*, 592.

laws, said the school did all it could with regard to Holmes.²⁶³ In December 2011, following an outburst in a computer lab at Morgan State University, Baltimore City, MD, Alex Kinyua, a student, was evaluated by police and counselors who concluded he posed no threat. Months later, he was accused of killing a man and eating his heart and brain.²⁶⁴ In November 2011, following repeated confrontations with faculty members, students and campus police, Jared Loughner, a student, was suspended from Pima County Community College in Tucson, AZ, pending a mental health evaluation. He subsequently was arrested for killing six people and injuring 16 others in the assassination attempt on Congresswoman Gabrielle Giffords.²⁶⁵

F. HIGH-RISK INDIVIDUALS

A recent report released on October 25, 2012 by John Hopkins Bloomberg School of Public Policy, which examines policies and methods for reducing gun violence, synthesized a number of previous studies to compile a list of the best ways to reduce gun violence in America. These methods include: Prohibiting high-risk individuals from having guns and restricting easy access to guns with large capacity magazines. High-risk individuals in the report are identified as criminals, domestic violence perpetrators, youths, substance abusers and those who are mentally ill. The report also found that so-called “right to carry” do not reduce gun violence.

Federal law bars access to guns, if a court determines that someone is mentally ill, or if they have been involuntarily committed to a mental health institution. The National Instant Criminal Background Check System (NICS), mandated by the Brady Handgun Violence Prevention Act of 1993 and administered by the FBI, is a federal database with the names of mentally ill people barred from buying guns. NICS lacks millions of records

²⁶³ *Washington Post*. Available: http://www.washingtonpost.com/national/did-university-drop-the-ball-a-month-before-the-deadly-movie-theater-rampage-in-colorado/2012/08/03/2877eaf0-ddaa-11e1-8ad1-909913931f71_story.html.

²⁶⁴ “Did the University Drop Ball a Month Before the Deadly Movie Theater Rampage in Colorado?” *Washington Post*, 3 Aug 2012. Available: http://www.washingtonpost.com/national/did-university-drop-the-ball-a-month-before-the-deadly-movie-theater-rampage-in-colorado/2012/08/03/2877eaf0-ddaa-11e1-8ad1-909913931f71_story.html.

²⁶⁵ *Ibid.*

because many states have not submitted the required mental health records. Both Virginia Tech's Cho and Northern Illinois University's Kazmierczak should have been barred from buying guns had their names been submitted to NICS.

Since Mr. Cho's rampage in 2007, the state of Virginia has submitted more than 170,000 records of people with mental illnesses and Texas has submitted 190,000, but 21 other states have reported fewer than 100 records. The Government Accountability Office (GAO) examined why states are not submitting records.²⁶⁶ The Department of Justice reported that technological, legal, and coordination challenges hinder states' ability to make mental health records available.

GAO recommended that DOJ share best practices in making mental health records accessible to those making inquiries. GAO also examined the effectiveness of reward and penalty programs and how to best implement them. Technological barriers, like the switch from paper-based to digital computer systems, have been cited frequently as a common cause. Some states contend it violates their state laws to forward mental health records to the federal database. A few states are changing their laws in order to comply.

From 2004 to 2011, the total number of mental health records that states made available to the National Instant Criminal Background Check System (NICS) increased from 126,000 to 1.2 million, an 852 percent increase. To address the technological challenges, the Department of Justice (DOJ) provides assistance, such as grants and training. DOJ has also begun to encourage states to share their promising best practices at conferences, seminars and other forums, but it has not distributed such practices nationally, a step that could further assist states' efforts.

The vast majority of records made available to NICS are criminal records that cannot be readily disaggregated from other records in the databases checked by NICS. Unlawful drug use records are unavailable to NICS, as are records related to positive

²⁶⁶ "Gun Control: Sharing Promising Practices and Assessing Incentives Could Better Position Justice to Assist States in Providing Records for Background Checks," *GAO Highlights*, July 2012. Available: <http://www.gao.gov/assets/600/592451.pdf>.

drug tests by convicted felons, parolees and persons placed on probation. This information gaps remain an area of great concern.

On May 1, 2012, DOJ data revealed that 30 states were not making noncriminal records available, including mental health records. Several states raised objections about providing records without a court order while two states reported they did not have the centralized databases needed to collect and share these records. DOJ officials were unsure if the records, as currently configured, could reach the level of precision needed to serve as the basis for implementing the provisions.

Six states had mixed views on the extent to which the reward and penalty provisions of the 2007 act would provide incentives for them to make more records available.

G. CONCLUSIONS AND RECOMMENDATIONS

Colleges and universities share a collective burden and communal responsibility for the safety and security of all of their members. Creating an atmosphere of personal accountability and shared responsibility is the essence of safe communities. Theodore Roosevelt captured this sentiment when he said: “To educate a person in the mind but not in morals is to educate a menace to society.” This philosophy is also consistent with Aristotle’s admonition: “Educating the mind without educating the heart is no education at all.” Colleges and universities must do a better job educating students, faculty and staff about the importance of shared responsibility.

School Assessment Teams should have the power and authority to consider and address the entire universe of college life that negatively impacts students, faculty and staff. They should be led by the school president and evaluate programs, policies, sources of frustration and other parts of the system where people have a tendency to fall through the cracks or perform badly. They should listen to and address community members’ dissatisfaction with processes, constraints and policies, as well as take note of inappropriate and violent writing, fantasies and odd behavior.

Such a model program would begin during the college application and selection process when students are required to report substantive information about themselves, as well as information about their demeanor and attitudes. The program would continue through orientation, freshman and sophomore years and culminate with a senior project to assess the course and trajectory of one's life, career plans and strategies for the future. School assessment team programs would include writing workshops and counseling programs to provide insight and guidance into the development and nurturing of every student.

A program such as this may not eliminate violence on college campuses completely but in the words of the colorful, Italian legal reformer, Enrico Ferri (1856–1929), "it will reduce the number of delinquents to an irreducible minimum."²⁶⁷

²⁶⁷ Robert Bonn, *Criminology*. New York: McGraw Hill (1984). 103. Ferri also considered human beings "...puppet(s) of the forces of environment..." and stressed social and environmental factors over physical and biological factors stressed by Darwin, Beccaria and his mentor Cesare Lombroso.

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VIII. POLICE RESPONSE TO EXTREME VIOLENCE IN EDUCATIONAL ENVIRONMENTS

A. INTRODUCTION TO POLICE RESPONSE

On April 20, 1999, when Dylan Klebold and Eric Harris systematically shot and killed 13 people at Columbine High School in Littleton, Colorado, police leaders across the nation immediately realized that the policies and tactics guiding the emergency response to these situations were terribly flawed.²⁶⁸

When police first arrived at the high school, sheriff's deputies exchanged gunfire with the suspects outside of the school. The suspects, who were not injured, took cover by fleeing inside the school building. Officers requested additional units, established a perimeter and a command post and awaited specially trained tactical officers. Once safely back inside the high school, Klebold and Harris went on a murderous shooting rampage. They shot 34 more students, killing 10 students plus a teacher, who bled to death awaiting assistance, as more than 1,000 police officers assembled outside.²⁶⁹ The killers committed suicide before the tactical officers had engaged them.²⁷⁰

The Columbine tragedy triggered a fundamental shift in thinking and approach for law enforcement responding to an armed gunman actively shooting unarmed civilians.²⁷¹ Columbine prompted one of the largest and most sweeping changes in police training, operations and tactics: Active shooter tactical police training for patrol officers.²⁷²

²⁶⁸ P. Soloman Banda, Associated Press. "Shoot First: Columbine transformed police tactics," *PoliceOne.com*, 20 April 2009. Available: <http://www.policeone.com/active-shooter/articles/1812419-Shoot-first-Columbine-transformed-police-tactics/>.

²⁶⁹ "Columbine Shooting," *The Final Report*: 2006. National Geographic Channel. Available: <http://www.youtube.com/watch?v=5R80uTxQg6c&feature=related>.

²⁷⁰ Banda, Shoot First, 2.

²⁷¹ Dave Smith, "Columbine, Green Bay and War fighting," *PoliceOne.com*, 2 Oct. 2006. Available: http://www.policeone.com/pc_print.asp?vid=1181169.

²⁷² Tracy Frazzano, "Local Jurisdictions and Active Shooters: Building Networks, Building Capacities," Master's Thesis, Naval Postgraduate School, 2010. 32.

This was not the first time a school shooting prompted law enforcement to reevaluate tactics. In 1966, Charles Whitman, armed with an arsenal of weapons, climbed to the observation deck atop the 27-story University of Texas Tower in Austin and fired unimpeded for 96 minutes, killing 14 people and injuring 32 others.²⁷³ Whitman's actions prompted law enforcement organizations nationwide to explore the adoption of military tactics and create Special Weapons and Tactics (SWAT) units.

Virginia Tech, the scene of another devastating school shooting in 2007, shifted the police paradigm once again and engaged the "whole of community" approach in the police response to active shooter incidents. The details of the Virginia Tech murders, as well as the rampage school shootings at Northern Illinois University, were covered in a previous chapter of this thesis.

B. TACTICAL POLICE RESPONSE

The history of police response to school shootings has become increasingly technical and complex. Since the University of Texas shootings and the development of police SWAT units, emergency service units, rescue units, as well as the availability of elaborate active shooter training, police response to school shootings has received considerable attention.

1. Special Weapons and Tactics (SWAT)

SWAT units, as the name suggests, brought a considerable higher level of skill, training, resources and equipment into the field of policing. While there are many different genres, these units essentially apply military tactics, techniques and precision to the police discipline. The officers also began to carry heavy weapons, long guns and shotguns, breaching tools and armor as part of their patrol equipment. As the special weapons teams evolved, they began to have less of a role in patrol operations and instead focused on training and responding to calls that required specialized skill-sets and equipment. When this became cost-prohibitive for many police departments, part-time

²⁷³ *Active Shooter: Recommendations and Analysis for Risk Mitigation*. New York City Police Department (2010), 128.

teams, often referred to as Mobile Response Teams (MRT), became more popular. MRT members carry specialized equipment in the trunks of their patrol vehicles and many units train two or three times per month.

2. Evolution of Emergency Service Units

Emergency Service Units were a natural progression of specialized response teams and constrained budgets that took on more of a technical, as well as a tactical role in responding to vehicle accidents, elevator emergencies and special rescue missions, such as jumpers, vehicle and construction accidents, and emotionally disturbed persons.

Due to the sometimes considerable delay in ESU response times, as policing strategies became more and more complex, patrol officers often needed and began to carry specialized training and equipment. Many began to carry, for instance, rudimentary breaching tools, such as knives, crow bars, sledge hammers, bolt cutters and wedges. Many police departments across the country also began arming patrol officers with shotguns and long guns, such as patrol rifles and carbines.

Columbine forced the evolution of patrol tactics once again. No longer could police idly stand by and wait for specialized police teams when a gunman was actively killing people. Active shooter training was initiated and quickly spread to all 50 states.

3. Active Shooters

Active shooter training is a response technique whereby responding patrol officers await the arrival of two or three fellow patrol officers, form an element, and tactically enter a location to stop the killing. Over the past decade, these tactics, training and policies have been refined considerably. Research has also indicated that the wait for other patrol officers to form an element may be too long as well. Studies reveal that less than two percent of school shootings end due to police action.²⁷⁴ Solo entry is the latest police tactic to be taught and utilized to thwart active shooters engaged in killing people.

²⁷⁴ *Active Shooter*, NYPD, 128.

Solo entry techniques teach police officers the requirements and skills necessary to engage an active shooter one on one. Solo entry officers must have an indication that the shooter is actively engaged in killing, that there are victims present and that immediate action is necessary to stop the killing of innocent people. Solo entry officers are trained to be on the lookout for multiple perpetrators, the potential for ambush and the likelihood of improvised explosive devices. Solo entry does not fit every active shooter scenario.

Since 90 percent of all law enforcement agencies nationwide have 50 or fewer sworn personnel, one or two officers may be the only ones working a particular shift or at a particular time. In order to respond effectively in those first critical minutes to save lives and stop the killing, police officers must immediately confront and neutralize the offender.²⁷⁵

4. Solo Active Shooter Training

Solo officer active shooter training usually consists of a variety of disciplines necessary to overcome the many operational challenges confronting the first responding officer. Noise, confusion, mass casualties and panic characterize the environment of an active shooter. Training objectives include not only eliminating the threat but necessary preparation and planning activities. These activities typically include developing a familiarity with the environment, building plans and physical barriers, vulnerability assessments, community engagement activities and provision of technology, such as smart phones for data, schematic and picture transmission.

Active shooter policies, procedures and regulations are administrative guidelines for responding police officers or the police department. The National Tactical Officers Association (NTOA) recommends that officers responding to an active shooter incident use any legal means at their disposal to engage the active shooter, including arrest, containment, and the use of objectively reasonable force to stop the suspect from killing

²⁷⁵ Robert Parker, "Active Shooter Training and Tactics," *The Tactical Edge*: Fall 2007. National Tactical Officers Association. 70.

and injuring others. The philosophy guiding police policy is that the active shooter must be stopped before s/he can take any more innocent lives. The first responding officer has a duty to use any legal means to accomplish this. The officer's duties, in order of importance, include: Stopping the active shooter who is actively killing, rescuing victims, providing medical assistance and preserving the crime scene. While it is important to provide medical assistance, it is the duty of law enforcement officers to protect innocent life by stopping the actions of an active shooter.²⁷⁶

Training for active shooter events includes room-entry techniques, building-clearing methods, victim rescue strategies and recognition of explosives and improvised explosive devices.

The tactics include formation of an element or Contact Team, likely to engage the active shooter. The team consists of up to four police officers (or deputies) in immediate pursuit of the active shooter. Their mission is to make contact with the active shooter as soon as possible and stop the active shooter by arrest, containment or the use of force. Subject to 360-degree vulnerability, the contact team must be cognizant of doors, windows and other building features likely to conceal the suspect. They will continue past victims and harmless distractions until the threat is eliminated but will note and relay to rescue teams the locations of victims.

Contingencies are discussed and recommended during training exercises should an officer become incapacitated due to injury or mental distress, such as observing the injury of a loved one, family member or friend.

5. Rescue Teams

The Rescue Team consists of the next arriving four officers (or deputies) who will locate and remove injured victims and direct uninjured victims to safety. Rescue team members must remain vigilant to the rapidly changing dynamics of the incident, and they too must remain cognizant that are subject to 360 degree vulnerability.

²⁷⁶ National Tactical Officers Association, Doylestown, Pennsylvania, www.ntoa.org.

If either team encounters a suspected explosive device, they must rely on their knowledge, skill and experience to determine if they should approach or bypass it. Reporting its type, location and other descriptive features is critical to the safety of all responding officers, including those on the scene and those yet to arrive. Barricades and other delaying features should be approached with extreme caution.

C. PROMISING APPROACHES TO ENHANCING A TACTICAL POLICE RESPONSE

There are several promising approaches on the horizon for enhancing police planning and response to extreme violence. Though not specifically created for school shootings, these preparations are clearly applicable and relevant and would undoubtedly be engaged should an active shooter event occur on a college or university campus, particularly if it were part of a larger attack or similar to the international terrorist school attacks described earlier.

One such method was proposed in a workshop hosted by the Department of Homeland Security.²⁷⁷

In the fourth quarter of 2010, 70 participants representing 16 state and local jurisdictions met in Monterey, California to develop a workshop series that would be useful for agencies developing plans for responding to a multiple targeted attack similar to the attack that occurred in Mumbai, India in November 2008. The object of the workshop was to delineate key objectives in police response capabilities, resources and authorities. The first priority was to identify available resources including grants, subject matter experts, and technical advice to address gaps in capabilities, resources and legal knowledge. Participants also sought to evaluate existing policies, plans and procedures to identify best practices. Workshop participants sought to stimulate new ideas that would encourage situational awareness and improve information sharing. Another key objective

²⁷⁷ Joint Counter Terrorism Attack Workshop (JCTAWS).

was to identify and improve joint first responder training to counter a complex attack. Also considered were opportunities to advance interoperable communications and participation by private sector partners.

The rationale for the workshops was to identify state and local governments' resources and preparedness levels in response to a complex situation similar to the 2008 Mumbai attack. That attack took place over several days and was carried out by small teams of well-armed, well-trained, and highly motivated individuals assaulting "soft targets." Such multiple target attacks can be extremely effective: The Mumbai attack killed 164 people. The seminars were conducted in venues across the country and highlighted a number of common challenges, specific to the host cities' ability to respond to a complex attack. The attack scenarios were tailored to the host city and were organized, coordinated, and involved multiple targets.

While these seminars highlighted a number of important and emerging trends, the discussion centered on: planning and coordination, training and equipment, communications, public-private sector participation, public messaging, intelligence and information sharing, legal and policy issues, and life support. These subjects explored throughout the homeland security enterprise mirror the areas of concern in preventing and responding to school shootings.

D. COMPREHENSIVE RESPONSE PLANS

Seminar participants discovered that municipalities lack comprehensive response plans to address and respond to complex attacks and fail to include college and university communities in their planning activities. The first step in preparing for such an event is a comprehensive, written, unified, multi-agency, complex attack response plan that accounts for multiple events at a variety of sites and one that considers the impact of multiple active shooters, Improvised Explosive Devices (IEDs) and resultant fires and extensive injuries and casualties. Participants found that many of the participating jurisdictions have emergency management plans that focus on natural disasters or singular incidents such as an individual active shooter or a suspected explosive device.

Each of the participants identified the need for a unified response plan that articulates the coordinated response of multiple jurisdictions, agencies, departments and resources.²⁷⁸

The workshop participants suggested a multi-agency unified response plan that establishes roles and responsibilities for command and control, communications protocols and procedures among all first responders. A unified response plan must take into account local, state and federal assets. Emergency planners may also want to consider the complex environment of a time-sensitive, multifaceted attack and ensure that plans highlight key decisions, agency leads or authorities with the responsibility for decision-making, the timing of these decisions, and how the decisions will be communicated and to whom. The aim is that these plans are jointly exercised with all responding departments and agencies.

The study also found current emergency plans provide a good foundation upon which cities can develop complex attack response plans. Comprehensive emergency management plans integrate police, fire, EMS, social services, and other agencies. A terrorism annex could be added to address multiple targeted complex attacks that include schools, colleges and universities as well as houses of worships, hotels and performance venues. All are soft targets and conducive to terrorist attacks. Other jurisdictions may also wish to consider evacuation procedures, public messaging and other protocols that would be well-suited for inclusion in a complex attack response plan.

E. COORDINATION CHALLENGES

The study discovered a myriad of coordination challenges that arise when multiple jurisdictions activate several command and Emergency Operations Centers at the same time during an emergency. Multi-agency response plans that clearly identify roles and responsibilities may address these complications through a pre-established and agreed-upon structure, as well as a location for the immediate standup of a Unified Command Center (UCC) that can serve as an Area Command Post to facilitate the management of resource requests coming from incidents at multiple locations.

²⁷⁸ Joint Counter Terrorism Attack Workshop (JCTAWS).

Participants found that jurisdictional leaders need clearly defined and tested roles and responsibilities during a complex attack. Decision makers from federal, state and local resources, who will likely play an important role during an emergency incident, will benefit from understanding each entity's policies, procedures and protocols. Regular coordination exercises can improve this understanding as well.²⁷⁹

Regularly scheduled joint exercises with coordinated responding agencies can also address priorities and key decisions, including identifying staging areas and establishing future and ongoing roles and responsibilities. Key community members and decision makers are called upon to do a lot. Many of these planning activities should be coordinated at regular, frequent and specific intervals, such as quarterly or semi annually, so that each participating member and decision maker knows scheduling requirements well in advance. The agenda should also include other related areas of responsibility such as natural disasters, and other smaller emergencies.

By addressing the high-risk, low-probability event, events that are more likely but present lower risk will be handled more smoothly.

F. EMERGENCY OPERATIONS CENTERS

Emergency Operations Centers (EOC), commonly used for natural disasters and special events, take time to be fully staffed and function optimally during an emergency. Participants noted that these centers need to be exercised and tested for no-notice events to ensure rapid start-up at optimal efficiency.

The seminar participants also recommended a singular, commonly understood, cross-jurisdictional credentialing system that would ensure that authorized public and private sector personnel would have access to law enforcement-controlled sites.

²⁷⁹ National Counter Terrorism Center, Department of Homeland Security, Federal Bureau of Investigation, Joint Counter Terrorism Awareness Workshop (JCTAWS), Phase I Report, January-December 2011. January 2012.

G. COMMON OPERATING PICTURE

During terrorist events, municipalities need the ability to quickly formulate a Common Operating Picture (COP) to assemble, assign and organize assets. Dispatchers and operations center personnel must be able to gather and assess attack site information, as well as monitor the availability and allocation of assets.

Geospatial COP tools help cities electronically track their assets and share information with partners. If accessible through an EOC, a COP enables leaders to make decisions more effectively. Multiple agencies may need access to the system.

Several cities were found to utilize commercial tools to develop a COP, as well as grant access to jurisdictions. Virtual Command Post and WebEOC are two examples of a web-based emergency operation centers used by many cities to share and manage information. A federal government-sponsored, no-cost COP tool is also available through the Homeland Security Information Network (HSIN).

Surveys of participants indicated that joint first responder training is a common concern across agencies. Police, Fire, and EMS require integrated training programs for a complex attack scenario in which services are delivered concurrently within a hostile operating theater.

The seminars found that while many agencies have jointly coordinated training programs, opportunities exist to expand joint training exercises, particularly among EMS and SWAT units.

They also found that while most cities regularly plan and train for traditional active shooter attacks, most training programs are designed to engage only isolated, singular, active shooters, rather than the challenges of confronting multiple well-trained and well-equipped attackers at more than one site. Each participating police department identified the need to train its patrol officers with enhanced active shooter training.

H. MULTI-ASSAULT COUNTER TERRORISM ACTION CAPABILITIES

Some jurisdictions were also found to be taking advantage of existing opportunities incorporating elements of other jurisdictions' Multi-Assault Counter Terrorism Action Capabilities (MACTAC) courses, anticipating that those trained will train others. Other jurisdictions worked with a curriculum development company to create their own multi-shooter course.

MACTAC is a training paradigm that ensures that multiple law enforcement agencies can assemble, organize and respond quickly as a team to confront extraordinary events in multiple locations with deadly force. As developed by the Las Vegas Police Department, MACTAC is a multiple modal police tactic that quickly adapts from a community policing model to a traditional police tactical team model to confront emerging threats through localized leadership and decentralized command and control operations. MACTAC incidents are extraordinary events that exceed conventional law enforcement capabilities, including terrorist attacks, active shooters, multiple improvised explosive devices, hostage situations, and heavily armed adversaries. MACTAC features ad hoc tactical teams for swift deployment and immediate execution, focusing on seamless interagency coordination.

The JCTAWS report found that many police departments do not issue advanced weapons and equipment. The departments that do have carbines for patrol officers do not have department-issued optics for their weapons.²⁸⁰ Each police department identified the need to have optics or magnifiers to mount on their weapons to engage attackers accurately from a safe distance. This argument notwithstanding, there is no safe distance to engage an active shooter or any armed adversary and few police officers are trained with weapons at greater than 25 yards, the equivalent of a "Hail Mary" pass in football. Police officers cannot be reasonably expected to perform techniques they are rarely trained to do.

²⁸⁰ Joint Counter Terrorism Attack Workshop (JCTAWS).

Another concern with this and other advanced tactical operations is the high level of physical fitness required by operators (police officers) to execute these techniques. Without a physical training regimen consistent with the required skill set, the value of these tactics and training is questionable.

Additionally, JCTAWS seminar participants determined that first responders (Police, Fire, and EMS) lack appropriate ballistic protection. Many participants stated a desire to use DHS funding streams to purchase optics and other equipment, but policies prohibit purchasing weapons or weapons' accessories with DHS grant funds.

FEMA's National Preparedness Division is coordinating with the Department of Defense's excess property program to develop a way of providing equipment that has been identified for responding to a multi-site complex attack.²⁸¹

First responders continue to face a myriad of challenges with radio communications, especially cross jurisdictional wireless communications among federal, state, regional, and local partners. Interoperability between multi-agency tactical teams and incident commands remains a critical issue.

A solution to this dilemma is well overdue. Jurisdictions have found the quickest and easiest way to address this matter is to provide key leaders pre-programmed radios with the channels used for communicating.²⁸² Another challenge is getting enough radios to the right places, at the right time and to the right leaders during a complex attack. When the foregoing strategy is implemented, this problem will be resolved. Tactical teams also need to develop a universal sign language that is trained and clearly understood by all members.

Seminar participants found that jurisdictions can benefit from training and exercising pre-established multi-agency and multiple site communications plans that can be implemented on short notice.

²⁸¹ Joint Counter Terrorism Attack Workshop (JCTAWS).

²⁸² Ibid.

They also found that a communications plan should account for up to six locations and address dedicated channels to talk back to dispatch centers. Each incident site should have a dedicated channel, so multi-agency responders can communicate directly with their Incident Command Post. A communications plan should also include contingencies in the event that networks are inaccessible.

First responders rely heavily on cellular telephone systems. For many, it is the primary method of contacting employees to report to work during an emergency. At the workshops, cellular service providers acknowledged that cellular systems will be overloaded and severely degraded in the initial hours of an attack.

Response plans must account for cellular service disruption or failure. Text messaging is more resilient and likely to work when voice services do not.

Cell Sites on Wheels (COWs) can provide additional cellular capacity, although they take considerable time to set up. The participants also suggested that appropriate officials obtain Government Emergency Telecommunications Service (GETS) and Wireless Priority Service (WPS) cards that will provide them with priority access on cellular networks.

Perhaps most closely aligned with one of the central concepts of this thesis is to include whole-of-the community engagement. In planning activities, the seminar participants discovered that jurisdictions are not fully aware of the depth and breadth of private sector capabilities that are available.

I. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS OF PROMISING PRACTICES

School shootings have driven the advancement of police tactics for years. Police tactics have evolved considerably since the first mass murder in an educational environment in 1966. Over the past 46 years, tactics, equipment, planning and preparation have improved dramatically. SWAT, ESU and Active Shooter techniques save lives and improve police performance. They also save police officers' lives.

Recommendations for local outreach to explain how to effectively develop and disseminate information and to help the public better understand its roles and responsibilities in preventing such events is an area of needed improvement. Engaging the public makes a difference. Community residents, students and employees, as well as local businesses offer important insights and untapped resources for police officers and police response strategies. They likely take the same route to work and school every day, eat lunch in the same areas and frequent the same stores. They know students and local people, and they are keenly aware of changes in people and environments. In short, they know their work environments better than anyone.

Police departments must emphasize strategies that improve communications with the communities they serve, as well as stimulate community awareness. When developing local active shooter programs and training officers, the community must be a part of the planning process and training activities. Embracing a sense of personal and civic responsibility and acknowledgement that law enforcement cannot do it alone are essential components of community safety. Community-oriented policing strategies are among the most effective measures of making students, faculty, staff and residents more comfortable talking to the police and engaging in public safety planning activities. University meetings and advisory committees give students, faculty, staff and residents a forum to express their concerns and proffer innovative ideas. Encouraging university community leaders, faith-based groups and community organizations to engage and participate in problem-solving activities that touch on themes broader than extreme violence is important as well. University public safety departments that solicit feedback have better opportunities to remain informed and improve the likelihood of success. Learning from past mistakes, tracking successes and areas for improvement stimulates community interaction and addresses future capabilities as well.

Resources for implementation of these recommendations could be provided through training grants provided by a consortium of Department of Homeland Security, Federal Emergency Management Administration and the Department of Education. Local resources can be provided by police departments through the current School Resource

Officers (SRO) program and supplemented by specially trained personnel and supervisors from Emergency Service, Emergency Operations and SWAT units. The combination of SRO and ESU personnel is not only an impressive and effective skill-set for all police officers but a force multiplier for budget-constrained police departments.

However, School Resource Officers are usually well-trained, affable and engaging police officers selected for their interpersonal, not their tactical skill. This is an unfortunate and sometimes deadly consequence of the current SRO program.

An important consideration in evaluating the response resources of tactical units is that if adversaries were to strike a school as part of a multiple targeted coordinated attack many police departments' response capability, including elite Emergency Service Units and SWAT teams, would be exhausted upon dispatch to the first or second event. The increased specialization of expertise within police departments contributes to the Paradox of Enrichment, meaning that as the ESU and SWAT teams become more and more specialized, they are enriched to the extent that duty not requiring their exceptional skill is viewed as unimportant and therefore a low priority. Competitive Exclusion occurs when patrol officers who are not as skillfully trained as ESU, but who are well trained to handle an array of situations and numerically much stronger than ESU and SWAT, are confronted with an armed adversary. In such a situation, they are unlikely to engage an enemy that may be easily be defeated at their skill level and will instead elect to call in back-up from the tactical units. This phenomenon has occurred before, recurring in the 1999 Columbine killings and 2008 Mercaz HaRav Yeshiva shooting, when innocent people were killed and wounded after the arrival of armed police officers who awaited specially trained tactical officers. This often results in a tremendous emotional burden on police officers who did not take immediate action and who often carry these scars for the rest of their lives.

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IX. IMPLEMENTING A STRATEGIC PLAN TO REDUCE EXTREME VIOLENCE IN EDUCATIONAL ENVIRONMENTS

A. ROLE OF THE PRESIDENT

Extreme violence in America must be addressed at the highest levels of government that have the clout to advocate and implement a clear agenda. This monograph recommends that the president of the United States assemble the necessary resources to address this pernicious problem. The president can do this by rallying the attention and conviction of the American people. Through academic rigor and scientific scholarship, the American public must be informed to understand the nature and extent of gun violence and the reasonable measures that can and must be advanced to prevent wonton violence and the senseless deaths of 30,000 Americans per year. Academia is well situated to fulfill a vital leadership role in this regard, similar to that of the American Medical Association 50 years ago when it championed automobile safety. The dismissive response by the NRA to the president's request for a meeting to discuss sensible gun policy following the Aurora shootings should not be met with political reprisal, but instead should be met with confidence, conviction and certainty that their unwillingness to discuss the problem will not prevent it from being rectified. The public must demand that Congress prioritize sensible gun legislation.

The president would direct the Department of Justice, Department of Education and the Department of Homeland Security to collaborate and craft competent policies that protect all Americans from the dangers of extreme violence, especially in educational environments. The president will direct the Center for Disease Control to conduct research and distribute this research widely across an array of disciplines.

The Department of Justice will convene its considerable resources under the leadership of the Attorney General to lead the FBI to identify trends and patterns of gun trafficking and criminal conduct involving firearms, with a focus on eliminating knowledge gaps. Alcohol, Tobacco, Firearms and Explosives will inspect and enforce regulations concerning firearm manufacturers, ammunition and magazine producers to

produce safer weapons and other products and provide details about the disposition, sale and transfer of such products. They will also audit gun sales everywhere guns are sold. U.S. Attorneys will be trained to prosecute cases and legislation enacted to close loop holes.

School shootings on college campuses are extremely complex events. They are described as “Black Swans,” a term popularized by author Nicholas Taleb that describes high-risk and low-probability events with tragic consequences that resist easy resolution. Although rare, often unpredictable and difficult to solve, they demand careful consideration and our full attention because they are deadly and devastating to victims, survivors, families, communities, and to society at large. Preventing these attacks is a matter of national security.

This thesis has examined an array of contributing factors that abet school shootings, as well as a number of realistic countermeasures to prevent such shootings in the future and to reduce the devastating consequences when they do occur. The complexity of school shootings requires that they be solved obliquely.²⁸³ Many of these contributing solutions and countermeasures require hard work and creativity on planning and preparation, as well as innovation and adaptability. They also require a fundamental shift in the paradigms governing our thinking about appropriate prevention and response strategies.

By far, the single most important factor in preventing and reducing school shootings is sensible gun legislation proposed by a public health approach to gun safety. A public health approach is a proactive community oriented method that focuses directly on prevention; eliminating the problem before something goes wrong. Specific recommendations that logically follow from this approach are outlined in the final section of this thesis.

²⁸³ Obliquely refers to a concept popularized by John Kay in his book *Obliquity: Why Our Goals Are Best Achieved Indirectly*. In it, Kay uses complexity theory to describe situations that suggest that directness blinds us to new information and alternative solutions.

As a profession, law enforcement must do a much better job at not just community outreach but community engagement. This engagement starts with recruitment and selection of only the highest caliber of police officer candidates who can contribute in a meaningful way to the success of the organization. The ideal candidate is a person who knows and understands human interactions and is resistive to the negative influences of policing that often creates barriers between people. Police candidates must understand the mission and meaning of “To Protect and Serve” and the consequences of public safety, which often comes at the officer’s peril. After hiring the right people, the right training is paramount to insure that all police officers at every rank have the requisite knowledge, skills and ability to effectively engage the communities they are sworn to protect and serve. Training must constantly evolve as threats and tactics change. Adequate supervision must be maintained to monitor performance and ensure compliance with the highest ideals of ethical, moral and professional standards.

Educators must closely examine the opportunities that exist for partnerships and embrace professional disciplines that are outside the realm of traditional academia—disciplines like counseling services, public safety, and security. Each can contribute to a better understanding, enhanced training and improved preparation for these terrible events. Educators must be innovative and open to divergent thinking and opportunities to engage others, and most of all, they must be transparent and accountable. School Assessment Teams must be authorized to examine a litany of policies, processes and people to prevent instances of extreme school violence.

Mental health professionals must investigate better opportunities to actively engage people in crisis and hold their engagement until the crisis is resolved. This requires advocating for resources, new policies, and better training. It also requires regular self-care among mental health professionals to reduce the incidence of depression and burn-out.

The best performers in music, art and sports continue to practice throughout their entire careers; this model should be embraced by educators, mental health and law

enforcement professionals. The correct approach to strategic implementation of recommendations to prevent and respond to school shootings requires three guiding principles described below.

B. ADOPTING A PUBLIC HEALTH APPROACH

A public health approach focuses exclusively on prevention. Public health approaches focus on a change in the environment to influence individual behavior. Gun violence in America is a public health epidemic and preventing it requires collective responsibility.

As David Hemenway notes, the public health community recognized that advocacy based on sound scientific evidence is essential for social justice issues to gain standing.²⁸⁴ Injury prevention is a public health priority.

A public health approach to gun violence, however, requires public and political support for collective responsibility similar to that mobilized for environmental concerns, anti-smoking campaigns, and vehicle safety. Public health solutions have historically relied on governmental action to defeat organized opposition: Although water borne illnesses were rampant in New York City in the 19th century, the construction of the New York City water supply was extremely controversial and strongly opposed by organized groups of land owners. In the 1950s and 60s, when it became clear that tobacco use had a deleterious effect on smokers' health, cigarette manufacturers strongly opposed limitations on tobacco use. As traffic fatalities sky rocketed in the 1950s and 60s, vehicle manufacturers fiercely opposed seat belts and other safety devices.

Rational public policy can work. Gun advocates have perpetuated a dichotomous world view that is both flawed and dysfunctional. They view the world as good and bad with only good guys and bad guys in it. To suggest a rational gun policy is to strip them of their guns. Because of this bipolar view, the gun lobby aims to create a society with virtually no firearm restrictions. This polarization results in irrational arguments that permeate the gun lobby. A public health approach aggregates rather than segregates and

²⁸⁴ Hemenway, "Private Guns Public Health," 10.

focuses on prevention rather than fault-finding. Scientific evidence suggests that a substantial number of murders, suicides and unintentional firearm-related injuries and death can be prevented with reasonable gun policies.²⁸⁵

A public health approach neither marginalizes nor stigmatizes any one group. Reframing gun violence as a medical issue focuses on preventing such tragedies through education, accountability, product safety and improved standards. A public health approach promotes a wide variety of social, environmental and individual interventions, disciplines and institutions. It uses science rather than belief and broadens the issue to focus on all firearm injuries and not solely on crime.

Perhaps most importantly, a public health approach emphasizes many reasonable and beneficial interventions that can reduce gun violence. It brings a pragmatic, scientific and objective medical model to research in order to find innovative and effective solutions to complex problems. Such a model replaces the fatalistic and complacent belief that nothing can be done to reduce firearm-related injuries and death.²⁸⁶

C. POLICE ENGAGEMENT: DEVELOPING OPERATIONAL ART

In order for the police to remain relevant and contribute in meaningful ways to the prevention and response to school shootings on college campuses, they must possess the capabilities, capacities and skill sets necessary to engage the community more deeply. No longer can police officers afford the either/or paradigm but must possess both interpersonal and tactical skill. Police commanders must ensure officers of every rank have the training and mental fortitude required to engage people and perpetrators.

Police commanders must also have the authority, capacity and capability to engage and solicit information and support from all sectors and members of the community. She/he must be realistic about the level of support, time constraints, competing demands and allegiances of community members. Police commanders must collaborate with colleagues, other agencies and jurisdictions, educators and mental health

²⁸⁵ Hemenway, "Private Guns Public Health," 10.

²⁸⁶ *Ibid.*, 25.

professionals to develop comprehensive strategies for public safety, prevention and response. Police commanders must advocate for and maintain training regimens that include all of the skill-sets required for twenty first century policing, including interpersonal dexterity and tactical proficiency in an array of complex settings and environments. The current paradigm of once or twice yearly firearm qualification cycles does not fulfill the requirements of survivability training necessary to develop these extraordinary skill-sets of engagement, well-being and tactical effectiveness.

Developing “operational art”²⁸⁷ in law enforcement is to cultivate the capability to transition away from binary law enforcement, the either/or concepts of policing, such as community police officer or tactical operations specialist and moving toward transitional identities.²⁸⁸ Organizations need to develop and support operational art through the development of policies and training programs that evolve as the law, threats and technology evolve. The current concept of managing one tactical situation at a time is no longer relevant and must be replaced with the extended capacity to influence multiple incidents in multiple locations simultaneously. Innovation and technology support these objectives. Operational art requires elegant choreography, sophisticated coordination, and intelligent information sharing.

Police officers must be confident in their training, capabilities and accomplishments. They must be given opportunities to engage and lead groups that take them beyond their comfort zones. Police officers must recognize the nuances and differences between an authority figure and community leader because their role is today more closely aligned with the latter than the former.

The degree of unpredictability of active shooter events on college campuses is extraordinary and can only be addressed through regular and frequent training

²⁸⁷ Tracy L. Frazzano, “Local Jurisdictions and Active Shooters: Building Networks, Building Capacities,” Monterey, CA Naval Postgraduate School (2010), 48.

²⁸⁸ These transitional identities do not impact the traditional roles performed by specialized experts. Emergency service remains a vital police function for activities that can be planned in advance, such as warrant execution and mental health orders where there is clearly pre-warning and safety in numbers, for everyone involved.

opportunities. University leaders must also understand their role and responsibility to better protect college communities through adequate resource allocation and training opportunities that can be leveraged against the natural role and tutorial settings of the university environment. All universities should share their commitment to education through tuition assistance, fellowships and grants with federal, state and local police officers with an emphasis on local issues. Creating a safe learning environment is everyone's responsibility.

The importance of training for unpredictable events cannot be overstated. Training is often one of the first casualties in difficult financial times. Training, however, must be woven into the very fabric of operations because it is essential to the effective functioning of police. Creative delivery of this training must be facilitated by labor and management agreement. Weaving training into daily blocks of patrol officers' activities may be challenging, but the rewards far exceed the costs in terms of lives saved, injuries averted and other potential consequences.²⁸⁹ Experienced and effective trainers must be shared and a bartering system developed between agencies to use talented trainers more efficiently.

D. IMPLEMENTATION STRATEGIES: PLANNING, PREPARATION AND COORDINATION ACTIVITIES NEEDED FOR EFFECTIVE POLICE RESPONSE

Educators, public safety professionals and community leaders are squandering opportunities to prevent horrific acts of extreme violence in educational environments and communities. Preparedness is derived by planning, which is critical to mobilizing resources when needed. Planning increases the opportunities to identify full spectrum resources to address the chaos, confusion and casualties caused by incidents of extreme violence in university environments. Leadership must display a willingness to share resources and cross-pollinate the threat environment with innovative and effective solutions to complex campus problems. Labor unions must take a leadership role in

²⁸⁹“Preventing Violence Against Law Enforcement and Ensuring Officer Resilience and Survivability,” VALOR. Available: http://www.valorforblue.org/Home/VALOR_Training.

providing their membership life-sustaining tactics through training. They must understand that people's lives are at stake, and they must do everything possible to ensure their members have the best training and latest survival strategies to confront these deadly threats at reasonable cost to universities and communities.

There is a very keen awareness that not even the largest universities and police departments can deal with incidents of extreme violence by themselves. Regional planning and resource allocation is essential across jurisdictions and disciplines.

Budget priorities evolve and are driven by what elected officials view as important at the community level. Community engagement must be viewed as an essential police function that solves problems and reduces costs. Police commanders are now necessary advocates for essential police-community services. Keeping their officers' current on the latest trends and sentiments in their community must be similarly prioritized. The added benefit of this method of police-community collaboration allows community concerns to drive and influence police training and preparedness activities that place the onus of responsibility where it rightfully belongs in a democratic republic, with the community and political leadership.

Federal and state funding for training exercises between schools and law enforcement has recently decreased.²⁹⁰ This is short-sighted, unfortunate and must be reversed because only through adequate planning and preparation of effective response techniques can communities lower the number of deaths and injuries caused by these incidents. Planning and preparation solves an array of complex problems. Implementation of the strategies suggested in this thesis and refined in the next chapter may be cost-neutral but are clearly not cost-negative. Further erosion of the fiscal commitment of federal and state government will come with risk to our nation's security.

²⁹⁰ Frazzano, "Local Jurisdictions," 48.

X. RECOMMENDATIONS – MAKING SURE: “IT WILL NEVER HAPPEN HERE”

A. PREVENTING EXTREME VIOLENCE

This thesis sought to answer a specific research question: Can institutions of higher learning better prepare to prevent and respond to school shootings and thus protect themselves from criminal acts of extreme violence? This thesis has shown that institutions of higher learning, in collaboration with other key community elements, can in fact reduce school shootings to an irreducible minimum. They can also reduce the devastating impacts of these tragic events—if they do occur—through more thorough and proactive planning, as well as the development of coordinated response techniques.

Building complex adaptive learning environments requires trust. Individuals, institutions and communities (2IC) responsible for the safety and security of university and college campuses must work better together to develop and implement policies to prepare, prevent, respond and survive acts of extreme violence. By creating a collaborative adaptive learning environment, students, educators, police and public officials jointly share responsibility for creating a safer community, increasing both connectedness and connectivity,²⁹¹ and thus, lowering a community’s level of anonymity, which is widely regarded as an attractive environment for crime and other malevolent acts.²⁹² These findings may be applicable to the community at large: Cities, towns and counties (parishes) because it is from the whole of community that the specific strategies are identified, defined and implemented.

Secondary questions answered in this thesis include the requisite level of preparation and planning activities necessary to actually prevent acts of extreme violence

²⁹¹ A term taken from Network Theory to describe associations that enhance the dependency among nodes in a network. Also referred to as density of links in a network. Ted G. Lewis, *Bak’s Sand Pile: Strategies for a Catastrophic World*. Williams, CA: Agile Press (2011).

²⁹² George I. Kelling and James Q. Wilson, “Broken Windows: The Police and Neighborhood safety,” *The Atlantic*: March 1982. Available: <http://www.theatlantic.com/magazine/archive/1982/03/broken-windows/304465/>.

on college campuses. These activities include prevention, protection, response and resiliency activities to reduce occurrences, as well as diminish the significant impacts of incidents when they do occur.

No two communities are exactly alike, nor any two jurisdictions precisely comparable. Therefore, each component must be tailored to local standards and capabilities, laws and regulations, cultures and techniques. Planning requires perseverance, dedication and hard work. Exploring universities to insure the right people are at the table will require determination. Commitment at the very top of the university hierarchy is essential. Police commanders, who have the most to gain and arguably the most to lose, must view this investment as an integral job component.

Some things can be changed immediately while others must be changed over time. Adaptability is the key. As threats, techniques, and capabilities change, so must individuals, institutions and communities. The most important components are to establish trust, direction and movement. Once a process is identified to establish direction, a strategy has been created. Implementing it in incremental steps requires honest conversations and hard work.

Tertiary questions included: What role does active shooter training and other types of advanced interdiction training for police, faculty, staff and students have in increasing survivability, organizational effectiveness and advancing the field of policing in the 21st century?

The prevention, protection, response and resiliency strategies suggested in this thesis are all iterative and interactive for community leaders, government officials, legislators, planners and responders. This collaboration results in a much more robust and resilient community focused on public safety.

Prevention begins with public and political support. Thorough planning and creative thinking about the causes and consequences of extreme violence on college

campuses results in better hazard reduction. Specific recommendations, implemented using the three approaches outlined in the last chapter, are detailed below.

By far the leading singular variable that would have the greatest impact on limiting school violence is prohibiting the possession of firearms from youth and for people of all ages while at school. As we have seen above, gun policy is currently driven by academic dishonesty, rhetoric and not by scientific information.²⁹³ A nation may well be judged by how well it protects its children.²⁹⁴ In terms of youth violence, the United States does very poorly. The United States has the highest death rate for children among the 25 richest nations in the world. The U.S. also has 17 times the homicide rate and ten times the firearm suicide rate²⁹⁵ of these countries.²⁹⁶ Keeping guns out of the hands of children appears to be of the greatest consequence.

All persons possessing firearms on a college or university campus should be required to register with the police, and those not authorized by law enforcement should be required to surrender their lethal weapons.

No one should be permitted to possess a firearm on campus, except specifically authorized, on-duty law enforcement personnel. The International Association of College Law Enforcement Administrators recommends police officers on college campuses should have a full range of use-of-force options including firearms. The Bureau of Justice Statistics reports 80 percent of public institutions and 40 percent of private colleges arm their police officers with deadly weapons.²⁹⁷ Because active shooters often use multiple sophisticated weapons, university police officers should have immediate functional

²⁹³ Hemenway, "Private Guns Public Health," 3.

²⁹⁴ Ibid.

²⁹⁵ The nonfirearm suicide rate is the same as the 25 richest nations.

²⁹⁶ Hemenway, "Private Guns Public Health," 4.

²⁹⁷ "Survey of Campus Law Enforcement," Department of Justice - Bureau of Justice Statistics: 1994–2005, 2004–2005.

access to a firearm to respond effectively.²⁹⁸ Unarmed police officers are of little value during a school shooting incident.

In the Supreme Court decision *District of Columbia, et al. vs. Heller*, No 07–290, the court held that the opinion of the court was “not to cast doubt on long standing prohibitions,” on the possession of firearms by felons or the mentally ill or laws forbidding the carrying of firearms in sensitive locations, such as schools and government buildings or laws imposing conditions and qualifications on the commercial sale of arms.

Legislatures at the federal and state level must be held politically accountable for providing access to firearms to dangerous people. Keeping guns out of the hands of criminals, the mentally ill and other dangerous and impulsive people through background checks for all gun purchases is important, but so is reducing the lethality of these weapons. One means is through technology available today that restricts the use of firearms only to those authorized to use them. Technology can also lower fatalities by reducing the muzzle velocity and rate of fire and reducing ammunition magazine capacity. Legislatures can alternatively prohibit the manufacture of certain types of excessively dangerous, unsafe and defective firearms, as well as certain types ammunition or simply restrict their sale to the military or police.

Establishing safe environments is essential to preventing gun violence. Creating a collaborative community of students, faculty, and staff as well as police and political leaders is vital. These communities must ensure that people who need help get help, and those seeking help are provided competent care. In all of the above cases, the perpetrator lacked a rational explanation for his/her actions. This finding is consistent with other studies that determined that in 50 percent of all mass murder incidents in schools and 75

²⁹⁸ Functional access includes not only the physical possession of an operable and loaded firearm but also the requisite training and demonstrated expertise required to use a firearm effectively in a combat situation.

percent of all school shootings the perpetrator indicated a prior willingness to commit the act with little or no rational justification.²⁹⁹

B. ESTABLISHING COLLECTIVE LEARNING

1. Role of the School Assessment Team

High-level administrative support for campus public safety is an absolute imperative. Colleges and universities must keep pace with the increased demand for the knowledge and skill sets necessary to prevent and respond to campus safety events. The nature of extreme violence requires the inclusion of university administrators, researchers, teachers, mental health experts, and public safety and security experts in order to have a depth of critical resources to research and disseminate information.

Universities should be incentivized to teach new skills and embed professors in public health and public safety organizations to conduct research and learn about the knowledge and training expertise needed in these complex learning environments.

Communities must develop programs and long-term strategies to share information and create true learning environments. These programs and strategies include School Assessment Teams, MACTAC and Joint Counter Terrorism Attack Workshop (JCTAWS).

As part of establishing these collective learning environments, School Assessment Teams should be created to analyze all manner and types of policies and problems and draw up competent solutions. The School Assessment Team, led by the college or university president, should be composed of specially selected and trained administrators, police officers, faculty, staff and students with specific expertise necessary to evaluate and solve complex problems. The School Assessment Team meets regularly to share information, discuss upcoming projects or changes in operations, curriculum standards, new policies or procedures, analyze threats, and develop mitigation strategies.

²⁹⁹ William S. Pollack, Ph.D., William Modzeleski, and Georgeann Rooney, *Prior Knowledge of Potential School-Based Violence: Information Students Learn May Prevent a Targeted Attack*. Washington: U.S. Secret Service and U.S. Department of Education (May 2008).

The School Assessment Team coordinates Active Shooter Awareness Workshops and other training and exercise opportunities. Active Shooter Awareness Workshops are training opportunities for police, educators and students. They engage the whole-of-community concepts, including police and school personnel, in a continuous dialogue and collaborative process of learning, knowledge transfer and information sharing. The police review existing policies, plans and procedures that will be used to respond to an active shooter event at a school with their civilian counterparts. Best practices and survival tactics are discussed. School Assessment Teams identify evacuation routes, designate sheltering locations and points of contact. Police trainers discuss with their civilian counterparts methods of communicating information about suspicious, unusual or dangerous activity. The police also train civilian employees about how to report emergency events, initial notifications, updates and important information that can guide and facilitate police response: Number of attackers, type of weapons, location and direction of attack. Police also provide facility specific information about how to contact the police, useful technology, how to remain in contact with the police, how to assist others in evacuation, procedures for cover and concealment and what to expect upon arrival of the police during an actual active shooter emergency. School employees who have the most intimate knowledge about the facility, such as school custodians, building engineers, and janitors provide the police with information about building plans, likely evacuation and escape routes, areas to hide and other critical information. They can also provide details about suspicious people and activities that the police may not be aware of. Active Shooter Awareness Workshops should be documented in properly formatted guidebooks and shared with other school officials to use as a response template to develop their own programs based on individual threats and vulnerabilities.

The School Assessment Team provides training and resources, as well as a back-flow information loop to university administrators such as: Admissions, to enhance the screening of applicants to identify personal adjustment issues, University Departments and Student Affairs, to expel students whose chances of academic success are remote, and professors, to encourage faculty members to deal effectively with problem students.

The team should provide faculty, staff and students information about available resources, while encouraging faculty members to set reasonable expectations of academic performance and ensure students have access to mental health counseling.

Student orientations are perfect opportunities for individuals, institutions and communities to develop bonds of trust, encouragement and enlightenment. Continuing this engagement throughout student's academic experience is crucial. Courses and components of courses in writing, philosophy, morality and ethics to teach and explore student's philosophical beliefs, thoughts and aspirations are not only keys in developing competent and engaged community leaders but also civic-minded members of society.

2. Role of the Police

Keeping police officers and campus security agents visible and accessible is an important part of the prevention strategy. Getting police engaged and responsible for the safety and security of their community by establishing trusting relationships, conversations, and information-sharing is a critical component of prevention. Police and security agents are great public relations people: They are smart, well trained and knowledgeable. Police commanders must guide and inform them to keep them relevant to the institution and the community.

Protection includes secondary prevention strategies and the foundation of competent response strategies. Protection components include: Requiring persons carrying firearms to register with campus police and securing weapons for those who are not authorized to have them, installing weapons detectors in strategic locations and performance venues where large numbers of people gather, arresting individuals violating the law, maintaining current data bases for domestic violence warrants, mental health orders and orders of protection, installing protective barriers in classrooms and other areas for likely victims to take cover and conceal themselves should an event occur, and training students, faculty and staff on how to respond if an active shooter attack takes place. These are just a few of the protective measures necessary for students, faculty and staff to remain safe and survive.

Police protective measures include the necessary training regimens for an effective school shooting interdiction program including prevention, protection, response and resiliency components. These include activities such as: Threat assessment training, community outreach and engagement, tactical response training, multiple jurisdictional and cross discipline planning conferences and the effective use of technology, canines and equipment.

3. Tactical and Training Considerations

The Department of Homeland Security will direct the Secret Service to identify trends in campus crime and safety, as well as compile a federal database in coordination with the Department of Education to assure the timely reporting of all violent crime on college campuses. The Secretaries of Homeland Security and Education will establish a task force to study all aspects of the extreme violence and develop competent solutions: training, education, further academic research. The Secretary of DHS will immediately direct the Department of Homeland Security Science and Technology to create a research apparatus with ATF&E to identify life-saving technologies to protect people and detect guns, pursue scientific research into gun safety and prevention strategies, and assemble coalitions of educators, medical and mental health professional to conduct this research.

It will be the responsibility of The Department of Education to coordinate, develop and collect information about educational programs and training assistance services to begin a training academy for educators, administrators, public and mental health professionals and public safety experts to join forces to develop localized resources to prevent, protect, respond and survive incidents of extreme violence on college campuses.

The Department of Education will lead ATF and Secret Service assessment efforts at developing high tech tools to prevent school violence. These assessment tools will aid in evaluating threats, deciding whether or not they are substantive, and create decision trees for appropriate response. They will also assist decision makers in

identifying and implementing safety plans tailored to specific school environments based on school size, culture and climate.³⁰⁰

The FBI will insure the NICS data is complete and entered in a timely manner.

Virtual training and “Pop-up Training” are novel approaches suggested for those perishable skills that must be practiced regularly to maintain capabilities.

Virtual training is Internet-based computer training, similar to flight simulators for pilots. Officers receive training in policies, such as firearm justification, use of force, force continuums, etc., and then they are confronted with an array of computer-based simulations. They must make split-second decisions based on knowledge and experience during the video training (shoot/don’t shoot) scenarios. Virtual training can be quite elaborate, using advanced simulators that can track hand and eye coordination and accuracy. Record keeping and officer improvement over time are important components of all training.

“Pop-up Training” is scenario-based training set in real world environments instead of classrooms. The most elaborate example proposed is pop-up active shooter training. This training features four firearms instructors, (two trainers and two safety officers), who establish an active shooter training gallery in an unused and contained public area. Two patrol officers from one or two jurisdictions are dispatched to the scene to simulate a response to an actual call for service. Upon arrival, they are safety checked and provided an hour of instruction with tactical simulated ammunition scenario-based components imbedded into the training hour. At the end of the training period, officers resume patrol. There are many opportunities in policing to find efficiencies in patrol operations; these efficiencies can yield life-saving training that is an important component of policing and must remain a top priority.

Officers must make a personal commitment to training. Fitness and wellness are critical components in health, professional performance and well being. Making good

³⁰⁰ School climate is identified as the level of respect that teachers and school administrators afford students, authoritarian and punitive disciplinary approaches and the student’s perception of fairness, in which students understand their rights in fostering an atmosphere where violence is unlikely.

decisions requires police officers to have the mental dexterity and physical fitness to rely on more than gross motor skills. More than just showing up when training is scheduled, officers must take the time necessary to physically and mentally prepare themselves and condition their bodies for the demands of police work.³⁰¹

Additional protection measures for schools include training and exercises that involve civilian personnel to help them survive an active shooter event, provide real-time information to responding officers, save others, and if possible, take action against the active shooter. Take Action, Take Cover and Take Back, and Run, Hide and Fight³⁰² are similar affirmative action plans to survive active shooter attacks.

Effective response requires knowledgeable police action, intelligently performed, by well-trained police officers, staff and students. In the event of an active school shooter event, police officers must be ready and willing to execute that training immediately and at considerable risk. By leveraging their participation and involvement with the School Assessment Team, the police possess the intelligence and information necessary to respond to an array of dangerous situations.

Resilience is assured when a crisis is averted. When a crisis cannot be prevented, good relationships increase the likelihood of positive outcomes and can restore equilibrium more quickly. Using whole-of-government concepts ensures a coordinated and compassionate response to victims and relatives. Understanding policy and techniques for various emergency responders and knowing the people providing the information is an important function of resilience. As a result, communications are

³⁰¹ Exercise and diet are extremely important for police officers to perform duty and survive active shooter events. The American College of Sports Medicine, an internationally recognized authority, recommends, aerobic exercise four times per week for 45 to 90 minutes duration per session. Aerobic exercise, elevating one's heart rate, includes walking, running, swimming, jogging, rowing, elliptical machine and tread mill training. Many personal trainers recommend an array of activities to focus on specific body parts and to break the boredom of continuous exercise. ACSM also recommends a minimum of two days (sessions) of anaerobic exercise (strength training) per week on nonconsecutive days. Strength training includes pushups, sit ups and pull ups targeting large muscle groups and connective tissue, such as back, chest, abdominals, quadriceps, ham strings, and gluteus.

³⁰² Ramit Plushnick-Masti, "Run, Hide, Fight: Houston Makes Workplace Shooting Survival Video," *The Huffington Post*, 2 August 2012. Available: http://www.huffingtonpost.com/2012/08/02/workplace-shooting-survival-video-run-hide-fight-houston_n_1734334.html.

trusted and better understood, people are more comfortable asking questions and getting the right information to the right people more quickly.³⁰³

C. HADDON’S MATRIX

The foregoing thesis recommends a whole-of-community based focus and an appreciative model of the strengths inherent in colleges and universities across the nation. Public health and public safety organizations must work together to build cohesive communities in law enforcement and academia to offer scholarship, information sharing, mentorships, and internships to create vibrant learning environments. The current learning deficit is real.

A public health approach to school shootings focuses on prevention. It is based on the work of Haddon and extended and clarified by Hemenway. It also leverages previous scholarship at the Center for Homeland Defense and Security by the work of Ted Lewis’s risk-based threat assessments, Tracy Frazzano’s multijurisdictional active shooter training and ongoing scholarship by Chris Bellavita defining the homeland security enterprise and its component features.

Planning, practice and response are inextricably interwoven and cannot be separated.

The School Assessment Teams agenda can be generated from Haddon’s Matrix, when it is applied to extreme violence in educational environments. While all the items may not initially appear to be within the jurisdiction of the School Assessment Team, a closer examination will provoke a keen awareness among the team’s members of the scope and complexity of school violence and what must be done about it.

Primary Prevention (Pre-Injury or Pre-Event Phase)

³⁰³ During the aftermath of the Virginia Tech murders, the state medical examiner utilized a highly regarded professional pathology standard known as a Victim Identification Protocol referred to as “VIP Identification.” During the family notification process when the media referred to a “VIP” identification, many incorrectly believed some victims were receiving preferential treatment. This was very hurtful to those who did not know what “VIP” meant. It took several days for family members to be informed of this distinction.

1. Prevent the initial creation of the hazard
 - a. Require background check for all persons prior to purchase of guns (advocacy and research)
 - b. Prohibit the manufacture of certain dangerous weapons (advocacy and research)
 - c. Prevent guns from being brought on to campus
 - d. Register all persons who possess guns and ensure these weapons are not carried on campus
 - e. Screen all students prior to admission for personal development and likelihood of academic success
 - f. Create opportunities for evaluative community engagement throughout the curriculum
 - g. Respond to persons concerns, complaints and frustrations
 - h. Create an environment that encourages learning from failure
 - i. Establish the university as a gun-free zone
 - j. Use technology to rapidly detect changes in the environment such as CCTV, SMART phones and gunshot detection technology.
2. Reduce the amount of hazard
 - a. Encourage police to engage the community and use less lethal methods
 - b. Prohibit manufacture of specific types of ammunition and large capacity magazines
 - c. Enact and enforce legislation that prohibits firearms in educational environments
3. Prevent the release of a hazard that already exists
 - a. Store firearms safely
 - b. Arrest and expel firearms offenders
 - c. Prohibit gun possession at any school event

d. Ban firearms from campus, classroom, and buildings.

Secondary Prevention (Injury or Event Phase)

4. Modify the rate of release or spatial distribution of the hazard
 - a. Require the registration of all firearms
 - b. Improve gun tracing and training
 - c. Take firearms out of the hands of criminals, mental ill persons and people with a history of exhibiting violent, angry outbursts
5. Separate in time and/or space the hazard and person protected
 - a. Require waiting periods for firearms purchases (advocacy and research)
 - b. Require reflection after conflict
 - c. Install weapons detectors at buildings, classrooms and other large venues
 - d. Arrest criminals and confiscate firearms
6. Create a barrier between the hazard and person to be protected
 - a. Provide bullet-proof vests
 - b. Install bullet-proof barriers
7. Modify structures and contact surfaces to reduce injury
 - a. Redesign bullets to reduce injury
 - b. Redesign firearms to reduce rate of fire and muzzle velocity
8. Strengthen the resistance of the person to the hazard
 - a. Provide active shooter training for responders and community
 - b. Provide counseling
 - c. Train people in self defense
 - d. Provide first responders access to video feeds and other information that can locate, isolate and eliminate the threat.

Tertiary Protection

9. Rapidly detect and limit damage
 - a. Improve law enforcement response to eliminate threat and prevent further injury and death
 - b. Improve emergency medical response training
 - c. Provide rapid transport for victims to emergency departments
 - d. Assure prompt arrest and incarceration for firearm offenders
 - e. Eliminate threat
10. Initiate immediate reparative actions
 - a. Improve physical rehabilitation for victims
 - b. Improve counseling for victims of violence
 - c. Assure accessibility of educational and work place areas to those disabled by firearms.
 - d. Return to normal operations

The Department of Education is well positioned to champion and lead this effort with the assistance of public health officials because there is currently no unified body of knowledge that examines extreme violence on school campuses. Public health officials, including The American Medical Association, Center for Disease Prevention and American College of Surgeons led the injury prevention efforts to interdict highway fatalities and injuries. This successful experience will be instrumental in preventing gun injuries and death.

EPILOGUE

On January 16, 2013, the president of the United States signed several Presidential Memorandum directing law enforcement, public health, education and mental health professionals to work better together to strengthen background checks for all gun sales and improve emergency preparedness.³⁰⁴ The president called for long-term research by engaging in public health research on the causes and prevention of gun violence stating in his remarks about the memorandum “we don’t benefit from ignorance.”

The Presidential action to reduce gun violence includes a ban on military-style assault weapons and high-capacity magazines. The memorandum encourages Congress to make it illegal for members of the public to possess armor-piercing bullets, advocates more tools and resources for law enforcement to prevent and prosecute gun crimes, and encourages research through the Center from Disease Control to look at the causes of gun violence.

The plan calls for Congress to help make schools safer by supporting up to 1,000 school resource officers and mental health professionals and ensure schools have comprehensive emergency management plans in place. The plan increases health care coverage to ensure that students and young adults can get access to the mental health treatment they may need.³⁰⁵ A summary of the plan is attached as Appendix A.

While this proposal is encouraging, it is only actionable with the consent, support and encouragement of the American people. As this paper has shown, with examples from the Highway Traffic Safety Administration and the American Medical Association, Congress is slow to react unless there is considerable public support for clearly defined actions.

³⁰⁴ Presidential Memorandum-Engaging in Public Health Research on the Causes and Prevention of Gun Violence, January 16, 2013, Available <http://www.whitehouse.gov/the-press-office/2013/01/16/presidential-memorandum-engaging-public-health-research-causes-and-pre-0>.

³⁰⁵ Now is the time, The President’s plan to protect our children and our communities by reducing gun violence, January 16, 2013. Available at <https://www.hsdl.org/?view&did=728771>.

It is perhaps the president's request for additional research that is most encouraging. No one study is definitive. It is only through the accumulation of information through research and sufficient understanding that true knowledge is gained. All studies, including this one, have inherent limitations. Refining this area of study to examine a broad cross section of causation and correlation ranging from mental health, to self defense, to non hand gun homicides are important.

Missing from most studies is the importance of gun training requirements. Fire arms are precision instruments. In the hands of expertly trained police officers, they can save lives, in the hands of a novice or one who has allowed once formidable skills to deteriorate they are instruments of death and disaster. Firearm proficiency is a perishable skill, one that requires regular and frequent training and mandatory qualification requirements that include legal justification and use of force training and psychological testing. Marksmen who show a psychological deficit or a propensity for violence should be banned from hand gun possession.

Author's Note: While this thesis focuses exclusively on school shootings as examples of extreme violence on college campuses, I would be remiss not to mention other more pernicious elements of extreme violence that occur much more frequently on college campuses across America. These include the sexual assault of women and bias crimes based on sexual orientation and gender identification. It is hoped through the knowledge, guidance and strategies contained in this thesis that the homeland security enterprise will recognize and seize opportunities to educate all members of academia and the public to address these, as well as other pervasive and prevalent acts of extreme violence.

BIBLIOGRAPHY

- “1996 Massacre in Dunblane School Gym.” *On This Day 1950–2005*. BBC Today. Accessed 24 February 2012. Available: http://news.bbc.co.uk/onthisday/hi/dates/stories/march/13/newsid_2543000/2543277.stm.
- “3 Die as Teen Romance Sours.” *The Seattle Times*, 26 November 26 1985. Accessed 4 Jan. 2013. Available: http://www.columbine-angels.com/School_Violence_1985–1986.htm.
- Active Shooter: How to Respond*. Washington: U.S. Department of Homeland Security (2008).
- Active Shooter: Recommendations and Analysis for Risk Mitigation*. New York City Police Department, Raymond W. Kelly, Commissioner, (2010).
- American Bar Association. Second Amendment, Standing Committee on Gun Violence, http://www.americanbar.org/groups/committees/gun_violence/resources/second_amendment.html.
- American Medical Association. “School Associated Violent Deaths in the United States 1994–1999.” *Journal of the American Medical Association* 286–21: 2001. 2695–2701
- “Amish School Shooting Still Testing Faith.” CBS News. Available: www.cbsnews.com/stories/2007/03/29/earlyshow/main2622842.shtml.
- Applebaum, Paul S. *Brian Lerher Show*, Crossing the Line, Interview with Paul S. Applebaum. WNYC, 31 July 2012. Available: <http://www.wnyc.org/shows/bl/2012/jul/31/>.
- Associated Press. “Few States Follow Mental Health Gun Law.” *Salon.com*, 18 Feb. 2011. Available: http://www.salon.com/2011/02/17/mental_health_gun_law/.
- . “High School Spree leaves 10 dead,” Fox News, 22 March 2005. Available: <http://www.foxnews.com/story/0,2933,151085,00.html>.
- . “Johnson Pleads Guilty to Theft, Drug Charges.” KATV7 News, 8 Oct. 2008. Available: http://usatoday30.usatoday.com/news/nation/2008-10-08-johnson-plea_N.htm?csp=34.
- . “Parole denied in school shooting.” *San Diego Union Tribune*, 9 June 2001. Available: <http://www.cyberspace7.btinternet.co.uk/idlm.htm>.

- Banda, P. Soloman. "Shoot First: Columbine Transformed Police Tactics." *PoliceOne.com*, 20 April 2009. Available: <http://www.policeone.com/active-shooter/articles/1812419-Shoot-first-Columbine-transformed-police-tactics/>.
- "Bath School Disaster." Wikipedia. Available: http://en.wikipedia.org/wiki/Bath_School_disaster.
- Barron, James. "Nation Reels after Gunman Massacres 20 Children at School in Connecticut," *New York Times*, December 14, 2012, <http://www.nytimes.com/2012/12/15/nyregion/shooting-reported-atconnecticutelementary.school.html?gwh=68E20CE3653F19EBA592305F9D444DE8/>.
- Bonn, Robert. *Criminology*. New York: McGraw Hill, 1984.
- Booth, Brandi, Vincent V. Van Hasselt, and Gregory M. Vecchi. "Addressing School Violence," *FBI Law Enforcement Bulletin*, May 2011. Accessed 1 August 2012. Available: http://www.fbi.gov/stats-services/publications/law-enforcement-bulletin/may_2011/school_violence.
- Boudreau, Abby, and Scott Zamost. "Secret Files Reveal NIU Killer's Past." *CNN Justice*: 13 Feb 2009. Accessed 15 Sept. 2012. Available: http://articles.cnn.com/2009-02-13/justice/niu.shooting.investigation_1_shooting-rape-steven-kazmierczak-niu-student/3?s=PM:CRIME.
- Broder, M. "Arizona Gunman Chose Victims in Advance," *New York Times*, 30 Oct 2002. Accessed 4 Jan 2013. Available: <http://www.nytimes.com/2002/10/30/us/arizona-gunman-chose-victims-in-advance.html>.
- Bronner, Ethan. "Other States, Other Times, Would Have Posed Obstacles for Gunman." *New York Times*, July 24, 2012, <http://www.nytimes.com/2012/07/25/us/other-states-and-other-times-would-have-posed-obstacles-for-gunman.html?pagewanted=2&pagewanted=all>.
- California Firearms Laws, 2007. California Department of Justice: Penal code section 12276. Accessed 22 July 2012. Available: <http://ag.ca.gov/firearms/forms/pdf/Cfl2007.pdf>.
- Calmes, Jackie. "NRA Declines to Meet with Obama on Gun Policy." *New York Times*, 14 March 2012. Accessed 4 Jan 2013. Available: http://nytimes.com/2011/03/15/us/politics/15guns.html?_r=1.
- "Campus Attacks." United States Secret Service. Accessed 4 Jan 2013. Available: <http://www.secretservice.gov/ntac/CampusAttacks041610.pdf>.

- Chivers, C. J., and Steven Lee Myers. "Insurgents Seize School in Russia and Hold Scores." *New York Times*, 2 Sept 2004. Accessed 14 Aug 2012. Available: <http://query.nytimes.com/gst/fullpage.html?res=9E02E0DB1231F931A3575AC0A9629C8B63&sec=&spon=&pagewanted=1>.
- "Chronology of Events." May 4 Task Force. Kent State University: April 1996. Accessed 25 Feb 2012. Available: <http://dept.kent.state.edu/may4/chrono.html>.
- "College Shooter's Deadly Rampage Baffles Friends." MSNBC: 16 Feb. 2008. Accessed 4 Jan 2013. Available: <http://www.msnbc.msn.com/id23171567/%20>
<http://www.cbc.ca/world/story/2008/02/15/illinois-shooting.html>.
- "Columbine Shooting." *The Final Report*: 2006. National Geographic Channel. Accessed 28 Feb. 2012. Available: <http://www.youtube.com/watch?v=5R80uTxQg6c&feature=related>.
- Crosby, Alex E., MD, MPH, LaVonne Ortega, MD, MPH, and Cindi Melanson, MPH. Centers for Disease Control and Prevention, National Center for Injury Prevention and Control, Division of Violence Prevention, Atlanta, Georgia. February 2011.
- Cullen, Dave. "The Depressive and the Psychopath." Slate.com, 20 April 2004. Accessed 22 July 2012. Available: http://www.slate.com/articles/news_and_politics/assessment/2004/04/the_depressive_and_the_psychopath.html.
- "Data Collection: Survey of Campus Law Enforcement Agencies." Department of Justice - Bureau of Justice Statistics: 1994–2005, 2004–2005. <http://bjs.ojp.usdoj.gov/index.cfm?ty=dcdetail&iid=247>.
- "Deer Creek was also Site of a Shooting in 1982." *Denver Post*, 24 February 2010. Accessed 20 July 2012. Available: http://www.denverpost.com/news/ci_14458475.
- Deisinger, Gene, Dr. Director Threat Management Services and Deputy Chief of Police at Virginia Tech. Accessed 4 Jan 2013. Available: <http://www.npr.org/templates/story/story.php?storyId=124007555>.
- Delworth, Ursula. Ed. "Dealing with the Behavioral and Psychological Problems of Students," *New Directions for Student Services*, Jossey Bass Inc Publisher, 1989. 45.
- Dewan, Shaila, Stephanie Saul, and Katie Zezma. "For Professor, Fury Just Beneath the Surface." *New York Times*, 21 Feb. 2010. Accessed 4 Jan 2013. Available: <http://www.nytimes.com/2010/02/21/us/21bishop.html?pagewanted=all>.

- “Did University Drop Ball a Month Before the Deadly Movie Theater Rampage in Colorado?” *Washington Post*, 3 Aug 2012. Accessed 4 Jan 2013. Available: http://www.washingtonpost.com/national/did-university-drop-the-ball-a-month-before-the-deadly-movie-theater-rampage-in-colorado/2012/08/03/2877eaf0-ddaa-11e1-8ad1-909913931f71_story.html.
- Division of Violence Prevention and Division of Unintentional Injury Prevention. National Center for Injury Prevention and Control; Office of Analysis and Epidemiology, National Center for Health Statistics, CDC, 1991.
- Dunkle, John, Zachary B. Silverstein, and Scott L. Warner. “Managing Violent and Other Troubling Students: The Role of the Threat Assessment Teams on Campus.” *Journal of College and University Law* 34–3: 586–635. Accessed 2 Aug 2012. Available: http://www.campusthreatassessment.org/images/uploads/instructor_resources/Dunkle_Warner_Silverstein_mep.pdf.
- Egan, Timothy. “Where Rampages Begin.” *New York Times*, 14 June 1998. Accessed 22 July 2012. Available: <http://www.nytimes.com/1998/06/14/us/where-rampages-begin-special-report-adolescent-angst-shooting-up-schools.html?pagewanted=all&src=pm>.
- Ellsworth, Monty J. ‘The Bath School Disaster: Text and Pictures’ Available: <http://www.msu.edu/~daggy/tbsd/tbsd-x.html>.
- Ewing, Charles Patrick. “Tarasoff Reconsidered.” *American Psychological Association Monitor on Psychology* 36–7: July 2005. 112. Accessed 4 Jan 2013. Available: <http://www.apa.org/monitor/julaug05/jn.aspx>.
- Fatal Gaps. Can Dangerous People Buy Guns in Your State? Demand a Plan, Mayors Against Illegal Guns. Available: <http://www.demandaplan.org/fatalgaps>.
- “Fifth Girl Dies after Amish School Shooting,” CNN: 3 Oct. 2006. Accessed 4 Jan 2013. Available: <http://www.cnn.com/2006/U.S./10/02/amish.shooting/index.html>.
- Fight Club: “His Name is Robert Paulson” [video file]. Accessed 15 September 2012. Available: http://www.youtube.com/watch?v=GCi_Plz5ekU.
- Finkleman, Paul. “A Well Regulated Militia: The Second Amendment in Historical Perspective.” *Chicago-Kent Law Review* 76:195–236. 2000.
- Firearm Injury in the U.S.* Firearm and Injury Center at Penn (2009). The University of Pennsylvania Health System. Accessed 15 Oct 2012. Available: <http://www.uphs.upenn.edu/ficap/resourcebook/Final%20Resource%20Book%20Updated%202009%20Section%201.pdf#page=7>.

Firearm Owners Protection Act of 1986 (P.L. 99–308, 99 Cong., 2d Sess., 100 Stat. 449–461).

“Fired Into a Group of Children.” *New York Times*, 9 April 1891. Accessed 18 July 2012. Available: <http://query.nytimes.com/mem/archive-free/pdf?res=9E00EFDE163AE533A25753C1A9629C94609ED7CF>.

Florida, Richard. “The Geography of Gun Deaths.” *The Atlantic*, 13 Jan 2012. Accessed 4 Jan. 2013. Available: <http://www.theatlantic.com/national/archive/2011/01/the-geography-of-gun-deaths/69354/>.

Fox, Cybelle, and David J. Harding. ‘School Shootings as Organizational Deviance’ *Sociology of Education* 78: 69–97, 2007

Frazzano, Tracy. “Local Jurisdictions and Active Shooters: Building Networks, Building Capacities.” Master’s thesis, Naval Postgraduate School, 2010.

Giduck, John. *Terror at Beslan, A Russian Tragedy with Lessons for America’s Schools*, Bailey, CO: Archangel Group (2005).

Guide for Preventing and Responding to School Violence. 2nd Edition. Alexandria, VA: U.S. Department of Justice, Bureau of Justice Statistics and the International Association of Chiefs of Police (2007).

“Gun Control: Sharing Promising Practices and Assessing Incentives Could Better Position Justice to Assist States in Providing Records for Background Checks.” *GAO Highlights*: July 2012. Available: <http://www.gao.gov/assets/600/592451.pdf>.

“Gunman Kills Eight in Attack on School in Jerusalem.” *New York Times*, 6 March 2008. Accessed 4 Jan 2013. Available: http://www.nytimes.com/2008/03/06/world/middleeast/06cnd-mideast.html?_r=1.

“Gunman Kills 8 in Jerusalem Jewish College.” Reuters, 6 March 2008. Available: <http://www.reuters.com/article/2008/03/07/idUSL07359144>.

Hahn, R. A., Oleg Bilukha, Alex Crosby, Mindy T. Fillilove, Akiva Liberman, Eve Moscicki, Susan Snyder, Faris Tuma, and Peter A. Brias. “Firearms Laws and the Reduction of Violence: A Systematic Review.” Task Force on Community Preventive Services. *American Journal of Preventive Medicine* 28: 2S1 (February 2005): 40–71. Available: <http://www.thecommunityguide.org/violence/viol-AJPM-evrev-firearms-law.pdf>.

- Harding, David G., Jal Metha, and Katherine Newman. "No Exit: Mental Illness, Marginality, and School Violence in West Paducah, Kentucky" 132–162 in *Deadly Lessons: Understanding Lethal School Violence*, edited by Mark H. Moore, Carol V. Petrie, Anthony Braga and Brenda L. McLaughlin, Washington, D.C.: National Academies Press (2003).
- Harmon, Amy. "Internet Gives Teenage Bullies Weapons to Wound from Afar." *New York Times*, 26 Aug 2004. Accessed 4 Jan 2013. Available: <http://www.nytimes.com/2004/08/26/us/Internet-gives-teenage-bullies-weapons-to-wound-from-afar.html?pagewanted=all&src=pm>.
- Hemenway, David. *Private Guns, Public Health*. University of Michigan, 2004.
- Herbert, Paul B. "The Duty to Warn: A Reconsideration and Critique." *Journal of the American Academy of Psychiatry and Law* 30, no. 2 (2002): 417–424. Available: <http://www.jaapl.org/content/30/3/417.full.pdf>.
- "History of the Brady Center." Brady Center to Prevent Gun Violence. Accessed 22 July 2012. Available: <http://www.bradycenter.org/about/centerhistory/bce1980s>.
- Homicide Rates Among Males Ages 10–24 Years, by Race/Ethnicity and Mechanism. United States, 2005–2007, Center for Disease Control. Available: http://www.cdc.gov/violenceprevention/youthviolence/stats_at_a_glance/hr_male.html.
- "How Prevalent is Gun Violence in America?" National Institute of Justice (26 October 2010). U.S. Dept. of Justice. Accessed 14 November 2012. Available: <http://www.nij.gov/topics/crime/gun-violence/welcome.htm>.
- Injury and Violence Prevention and Control. National Center for Injury Prevention and Control, CDC. Available: <http://www.cdc.gov/injury/wisqars/index.html>.
- "ISU Team Calculates Societal Costs of Five Major Crimes; Finds Murders at \$17.25 Million." Iowa State University News Service (27 Sept. 2010). Accessed 4 Jan 2013. Available: <http://archive.news.iastate.edu/news/2010/sep/costofcrime>.
- Kay, John. *Obliquity: Why Our Goals Are Best Achieved Indirectly*. New York: Penguin Press, 2011.
- Kelling, George L., and James Q. Wilson. "Broken Windows: The Police and Neighborhood Safety." *The Atlantic*, March 1982. Accessed 17 Nov 2012. Available: <http://www.theatlantic.com/magazine/archive/1982/03/broken-windows/304465/>.

- Kelly, Raymond W. Testimony before the Senate Committee on Homeland Security and Governmental Affairs: 2004. Available:
http://www.nytimes.com/2010/05/06/nyregion/06gun.html?_r=0.
- “The Killer at Thurston High. What Led a 15-Year-Old Boy to Kill His Parents and Two Classmates and Shoot and Injure 25 Others?” *Frontline*. PBS New York. Accessed 18 Oct. 2012. Available:
<http://www.pbs.org/wgbh/pages/frontline/shows/kinkel/>.
- : Who is Kip Kinkel?” *Frontline*. PBS. Accessed 31 December 2012. Available:
<http://www.pbs.org/wgbh/pages/frontline/shows/kinkel/kip/cron.html>.
- “The Kentucky Murder.” *New York Times*, April 29, 1854. Available:
<http://query.nytimes.com/mem/archivefree/pdf?res=9B07E3DC153DE334BC4151DFB266838F649FDE>.
- Klein, Jesse. *The Bully Society: School Shootings and the Crisis in American Schools*. New York and London: New York University Press, 2012.
- Koon, David. “A Boy Killer Speaks.” *Arkansas Times*, 4 December 2008. Accessed 22 July 2012. Available: <http://arktimes.com/arakansas/a-boy-killer-speaks/Content?oid=934386>.
- Kristof, Nicholas. “Safe from Fire, but Not Guns.” *New York Times*, 25 July 2012, Accessed 4 Jan. 2013. Available:
http://www.nytimes.com/2012/07/26/opinion/kristof-safe-from-fire-but-not-gone.html?_r=0.
- Krug, E. G., J. A. Mercy, L. L. Dahlberg, and K. E. Powell. “Firearm and Non Firearm-Related Homicide Among Children.” *Homicide Studies* 2 (1998):83–95.
- Lewis, Ted G. *Bak’s Sand Pile: Strategies for a Catastrophic World*. Williams, CA: Agile Press, 2011.
- Lueck, Thomas J. “3 Slain at Law School: Student is Held.” *New York Times*, 17 Jan 2002. Accessed 4 Jan 2013. Available:
<http://www.nytimes.com/2002/01/17/college/coll17SHOO.html>.
- Madden, Timothy J. “Sniper at High School Kills 3 and Wounds 11.” *St. Petersburg Times*, December 31, 1974. Accessed 20 July 2012. Available:
<http://news.google.com/newspapers?id=pQAOAAAIBAJ&sjid=hHkDAAAIBAJ&pg=5285,4047540&dq=anthony+barbaro>.
- Major School Shootings in the United State Since 1997*. Washington: Brady Campaign to Prevent Gun Violence (Updated 2/29/2012). Accessed 9 March 2012. Available:
www.bradycampaign.org.

- “Maniac Blows Up School, Kills 42 Mostly Children, had Protested High Taxes.” *New York Times*, 19 May 1927.
- Mass Shootings at Virginia Tech: *Report of the Review Panel Presented to Governor Kaine*. April 16, 2007, Commonwealth of Virginia (August 2007).
- Miller, Carlin DeGuerin. “David Benke, Hero Teacher: Hailed for Tackling Gunman, Says He Hoped He Would be Ready,” CBS News, 25 Feb 2010. Accessed 4 Jan 2013. Available: http://www.cbsnews.com/8301-504083_162-6239395-504083.html?tag=contentMain;contentBody.
- Mueller, Robert S. “The Threat of Homegrown terrorism.” Speech given 23 June 2006 at the City Club of Cleveland, Ohio. Accessed 4 Jan. 2013. Available: www.2.fbi.gov/preesrel/speeches/mueller062306.htm.
- Muschert, Glenn W. “Research in School Shootings.” *Sociology Compass* 1–1 (September 2007): 60–80.
- National Counter Terrorism Center. Department of Homeland Security, Federal Bureau of Investigation, Joint Counter Terrorism Awareness Workshop (JCTAWS), *Phase I Report, January-December 2011*. January 2012.
- National Instant Criminal Background Check System. Federal Bureau of Investigation, Available: <http://www.fbi.gov/about-us/cjis/nics>.
- National Tactical Officers Association. Doylestown, Pennsylvania, www.ntoa.org.
- Nelson, Tad. “Behind the headlines, the Yamam and Israeli Kapap/CQB Training.” Accessed 14 Aug 2012. Available: <http://www.usadojo.com/articles/behind-the-headlines.htm>.
- Newman, Maria, and John Holusha. “Man Committed Both Colo. Shootings Police Say.” *New York Times*, 10 Dec. 2007. Accessed 4 Jan 2013. Available: <http://www.nytimes.com/2007/12/10/us/10cnd-shoot.html>.
- “Northern Illinois University.” *Big Future*. The College Board. Accessed 13 September 2012. Available: <https://bigfuture.collegeboard.org/college-university-search/northern-illinois-university>.
- O’Toole, M. E. *The School Shooter: A Threat Assessment Perspective*. National Center for the Analysis of Violent Crime. Quantico, VA: Federal Bureau of Investigation (1999).

- “Oakland Shooting: One Goh ‘Deeply Sorry About Rampage.’” *The Telegraph*, 12 April 2012. Accessed 17 Oct. 2012. Available: <http://www.telegraph.co.uk/news/worldnews/northamerica/9199033/Oakland-shooting-One-Goh-deeply-sorry-about-rampage.html>.
- Parker, Robert. “Active Shooter Training and Tactics.” *The Tactical Edge*, Fall 2007. National Tactical Officers Association. 70.
- Parker, Ryan. “Jesse Jackson says Theater Shooting is Act of “Domestic Terrorism.”” *Denver Post*, 26 July 2012. Accessed 4 Jan. 2013. Available: http://www.denverpost.com/theatershooting/ci_21164367/jesse-jackson-says-theater-shooting-is-act-domestic?source=pkg.
- “Patient-Doctor Confidentiality Versus Public Safety.” *The Take Away with John Hockenberry and Celeste Headlee*: 31 July 2012. Accessed 1 Aug. 2012. Available: <http://www.thetakeaway.org/2012/jul/31/patient-doctor-confidentiality-versus-public-safety/>.
- Paulson, Steven K. “Bruco Eastwood, Colorado School Shooter, Will Not Serve Time in Prison.” *Huffington Post Denver*: 10 November 2011. Accessed 17 Oct. 2012. Available: http://www.huffingtonpost.com/2011/11/10/bruco-eastwood-s_n_1086407.html.
- Pedahzur, Ami. *The Israeli Secret Services and the Struggle Against Terrorism*. New York: Columbia University Press (2009).
- Peters, John G., President. “Report of the February 14, 2008 Shootings at Northern Illinois University.” Northern Illinois University: 2010.
- Plusshnick-Masti, Ramit. “Run, Hide, Fight: Houston Makes Workplace Shooting Survival Video.” *The Huffington Post*, 2 Aug 2012. Accessed 24 Sept. 2012. Available: http://www.huffingtonpost.com/2012/08/02/workplace-shooting-survival-video-run-hide-fight-houstaon_n_1734334.html.
- “Police Department at Virginia Tech.” College Homepage. Accessed 6 Sept. 2012. Available: http://www.police.vt.edu/VTPD_v2.1/chief.html.
- “Police Search for Motive in School Shooting.” CNN: 25 April 2003. Accessed 4 Jan. 2013. Available: <http://edition.cnn.com/2003/U.S./Northeast/04/24/school.shooting/index.html>.
- Pollack, William S., William Modzeleski, and Georgeann Rooney. *Prior Knowledge of Potential School-Based Violence: Information Students Learn May Prevent a Targeted Attack*. Washington, DC: U.S. Secret Service and U.S. Department of Education (May 2008).

- “President Obama: We Must Seek Agreement on Gun Reforms.” *Arizona Daily Star*, 13 March 2011. Accessed 27 July 2012. Available: http://azstarnet.com/article_011e7118-8951-5206-a878-39bfb9dc89d.html.
- “Preventing Violence Against Law Enforcement and Ensuring Officer Resilience and Survivability.” VALOR. Accessed 1 Jan 2013. Available: http://www.valorforblue.org/Home/VALOR_Training.
- “Release Bid Denied for Mass Killer.” *Los Angeles Times*: 4 Dec 2003. Accessed 4 Jan. 2013. Available: <http://articles.latimes.com/keyword/edward-charles-allaway>.
- “Report of the Governor on Medical Aspects of the Charles J. Whitman Catastrophe.” *Houston Chronicle*: 8 Sept 1966. Accessed 20 July 2012. Available: <http://alt.cimedia/statesman/specialreports/whitman/findings.pdf>.
- Report to the President on Issues Raised by the Virginia Tech Tragedy*. Washington: U.S. Department of Health and Human Services, U.S. Department of Education, and U.S. Department of Justice (June 2007).
- “Rifleman Slays Five at School.” *Washington Post*, January 18, 1989. 1.
- Rittel, Horst W. J., and Melvin M. Webber. “Dilemmas in a General Theory of Planning,” *Policy Sciences*, June 1973, Volume 4, Issue 2, 155–169.
- Rule, Ann. *The Stranger Beside Me*. New York: Signet Books, 2000. Book Notes. Accessed 15 Aug 2012. Available: <http://en.wikipedia.org/wiki/Special:BookSources/978-0-451-20326-7>.
- “School Board Shooting: Clay Davis Turns Gun on Himself after Confrontation.” *CNN*, 15 Dec 2010. Accessed 4 Jan. 2013. Available: <http://www.cnn.com/2010/CRIME/12/16/florida.meeting.shooting/index.html?iref=allsearch>.
- Second Amendment, Gun Control, American Civil Liberties Union, January 17, 2013. Available: http://www.aclu.org/racial-justice_prisoners-rights_drug-law-reform_immigrants-rights/second-amendment.
- Sela, Neta. “Itzik: Destroy Mourning Tent, Home of Jerusalem Terrorist.” *YNet News*, 10 March 2008. Accessed 4 Jan. 2013. Available: <http://www.ynetnews.com/articles/0,7340,L-3517507,00.html>.
- Smith, Dave. “Columbine, Green Bay and War fighting.” *PoliceOne.com*: 2 October 2006. Accessed 28 Feb. 2012. Available: http://www.policeone.com/pc_print.asp?vid=1181169.

- Smith, Nicole M. "The Quiet Custodian." Hearst Journalism Awards Program: 2007. Accessed 20 July 2012. Available: http://www.hearstfdn.org/hearst_journalism/competitions.php?type=Writing&year=2007&id=1.
- "Source of Firearms Used by Students in School-Associated Violent Deaths-United States, 1992–1999" Center for Disease Control, Morbidity and Mortality Weekly Report: 7 March 2003, Accessed 23 July 2012. Available: <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5209a1.htm>.
- Stephens, Ronald D. The National School Safety Center, *School Associated Violent Death*, 1992.
- "Talking About Guns." *New York Times*: 18 March 2011. Accessed 4 Jan. 2013. Available: <http://www.nytimes.com/2011/03/17/opinion/17thu1.html>.
- "Traffic Safety Facts-Crash Stats." U.S. Department of Transportation, National Highway Traffic Safety Administration: Sept 2010. Accessed 27 July 2012. Available: <http://www-nrd.nhtsa.dot.gov/Pubs/811383.pdf>.
- Troughton, Christopher D. Prepared Response, A Mitigation Strategy to Prepare School Communities for School Shooters, University of Connecticut, Capstone Project, August 15, 2011.
- "25 Years after School Bombing, Wyoming Town Remembers Story of Survival." *Billings Gazette*, 16 May 2011. Accessed 21 July 2012. Available: http://billingsgazette.com/news/state-and-regional/article_c50c0569-aa7e-56ac-8e1e-42a9fd55f34a.html.
- "Upstate Youth in Sniper Trial a Suicide." *New York Times*, 2 Nov 1975. Accessed 20 July 2012. Available: <http://query.nytimes.com/mem/archive/pdf?res=F60C12FC3F55167A93C0A9178AD95F418785F9>.
- U.S. Court of Appeals. *United States v. Emerson*, 270 F.3d 203 (5th Circuit 2001), October 16, 2001.
- U.S. Supreme Court of the United States. *District of Columbia, et al. v. Dick Anthony Heller*, 554 U.S. 2008.
- U.S. Supreme Court of the United States *v. Miller*. 307 U.S. 174 [1939] 307U.S.174, *United States v. Miller et al.* No. 696, Argued March 30, 1939, Decided May 15, 1939. Available: <http://caselaw.lp.findlaw.com/scripts/getcase.pl?court=us&vol=307&invol=174>.

- Vann, David. "Portrait of the School Shooter as a Young Man." *Esquire*, 12 Feb 2009. Accessed 15 Sept. 2012. Available: <http://www.esquire.com/features/steven-kazmierczak-0808-4>.
- "Warning Signs of Youth Violence." American Psychological Association, Psychology Help Center. Accessed 4 Jan. 2013. Available: <http://www.apa.org/helpcenter/warning-signs.aspx#>.
- Washington Post*. Accessed 4 Jan. 2013. Available: http://www.washingtonpost.com/national/did-university-drop-the-ball-a-month-before-the-deadly-movie-theater-rampage-in-colorado/2012/08/03/2877eaf0-ddaa-11e1-8ad1-909913931f71_story.html.
- Webster, Daniel W., Jon S Vemick, and Maria T. Bulzacchelli. "Effects of State Level Firearm Seller Accountability Policies on Firearm Trafficking." *Journal of Urban Health*, July 2009. Accessed 26 July 2012. Available: <http://rd.springer.com/article/10.2007/s11524-009-9351x>.
- "Your Response to an Active Shooter: Safety Tips." University of California Police Department and University of California at Los Angeles, 2008. www.ucpd.ucla.edu/2008/activeshootersafetytips.pdf.

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