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THESIS

**PREPARE TO FIGHT:
IS THE NATIONAL ACTIVE-SHOOTER RESPONSE
MODEL DUE FOR AN UPGRADE?**

by

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September 2020

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RESPONSE MODEL DUE FOR AN UPGRADE?**

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ABSTRACT

Documenting and analyzing the lessons learned from emergencies are essential to improve the training designed to save lives. The goal of this thesis was to examine actual active-shooter events, training models for the response to active shooters, and emergency drills to determine whether the current training model of Run, Hide, Fight is sufficient or needs revision. This study of historical emergency training examined human responses to frightening situations, analyzed past active-shooter events, evaluated the tactics and strategies of shooters, and measured the effectiveness of the current training. The study found that active-shooter training may be more effective if instructions highlight the importance of constant situational assessment with an emphasis on the fluidity of the incident. Response decisions should change as the event evolves and dictates an appropriate response. Moreover, the evolution of decisions made during the event may increase the survivability rate. The Run, Hide, Fight model is effective, but increasing the importance of constant situational awareness and adaptive decision-making within the training program is recommended. The delivery of active-shooter training should focus less on linear progression—first run, next hide, and then fight—and more on what the situation dictates to be the best response.

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TABLE OF CONTENTS

I.	INTRODUCTION.....	1
A.	RESEARCH QUESTION	2
B.	LITERATURE REVIEW	2
1.	Primary Human Responses in Frightening Situations: Fight, Flight, or Freeze	2
2.	Can Human Reactions in Life-Threatening Situations Be Altered or Taught?	3
C.	RESEARCH DESIGN	6
D.	ORDER OF CHAPTERS.....	7
 II.	 EMERGENCY DRILLS	 9
A.	HISTORY OF SCHOOL TRAINING, DRILLS, AND LEGISLATIVE ACTS	9
B.	DEBATE OVER NEED VERSUS PSYCHOLOGICAL HARM	11
C.	FREQUENCY OF DRILLS.....	16
D.	METHODOLOGIES OF TRAINING AND LEARNING THEORY	18
E.	RISK AND LIABILITY	21
F.	CONCLUSION	23
 III.	 ACTIVE SHOOTER CASE STUDIES: BEFORE AND AFTER RUN, HIDE, FIGHT TRAINING	 25
A.	COLUMBINE HIGH SCHOOL	25
1.	Controversies.....	26
2.	Outcomes	28
B.	VIRGINIA TECH.....	28
1.	Controversies.....	29
2.	Outcomes	31
C.	SANDY HOOK	31
1.	Controversies.....	32
2.	Outcomes	32
D.	SEATTLE PACIFIC UNIVERSITY	33
1.	Controversies.....	33
2.	Outcomes	34
E.	PULSE NIGHTCLUB	34
1.	Controversies.....	35
2.	Outcomes	35

F.	MARJORY STONEMAN DOUGLAS HIGH SCHOOL	36
1.	Controversies.....	36
2.	Outcomes	36
G.	CONCLUSION	37
IV.	EVALUATION OF RUN, HIDE, FIGHT	39
A.	ORIGINS OF RUN, HIDE, FIGHT	39
B.	TRAINING THAT EVOLVED FROM RUN, HIDE, FIGHT	43
1.	Australia.....	43
2.	Canada	46
C.	ARGUMENTS AGAINST RUN, HIDE, FIGHT.....	48
D.	CONCLUSION	53
V.	TACTICS OF ACTIVE SHOOTERS AND FIRST RESPONDERS	55
A.	RUN: SHOOTING STATIC VERSUS MOVING TARGETS.....	55
B.	HIDE: COVER VERSUS CONCEALMENT	57
C.	FIGHT: DEFENDING ONESELF IN A VIOLENT ENCOUNTER.....	58
D.	TRAIN: REALITY-BASED SCENARIOS FOR LAW ENFORCEMENT	60
E.	CONCLUSION	62
VI.	SUMMARY AND CONCLUSION	65
A.	SUMMARY OF FINDINGS	65
B.	RECOMMENDATIONS.....	67
1.	Standardize Training.....	68
2.	Eliminate the Use of Fake Weapons in Training	68
3.	Encourage Individuals to Reassess the Situation	69
C.	NEED FOR FURTHER STUDY	70
D.	CONCLUSION	70
	APPENDIX A. RUN, HIDE, FIGHT OUTLINE.....	71
	APPENDIX B. ESCAPE, HIDE, TELL OUTLINE	73
	LIST OF REFERENCES	75
	INITIAL DISTRIBUTION LIST	85

LIST OF FIGURES

Figure 1.	Run, Hide, Fight.....	41
Figure 2.	Escape, Hide, Tell	45
Figure 3.	Active Shooter Incidents in the United States from 2000 to 2018	49
Figure 4.	Scenario Training Assessment and Review Model	61
Figure 5.	Updated Run, Hide, Fight Model.....	69

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LIST OF ACRONYMS AND ABBREVIATIONS

ALICE	Alert, Lockdown, Inform, Counter, Evacuate
DHS	Department of Homeland Security
OSHA	Occupation Safety and Health Administration
OODA	Observe, Orient, Decide, Act (Loop)
RCMP	Royal Canadian Mounted Police
SAFE	School Action for Emergencies
SWAT	Special Weapons and Tactics
VARK	Visual, Aural, Read/Write, Kinesthetic

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EXECUTIVE SUMMARY

A rise in active shooter events over the last few decades has necessitated emergency training to save lives, and the national Run, Hide, Fight model has become the standard training for active shooter events in schools and companies. Studies of human behavior—particularly during previous active shooter situations—contributed to the development of the initial model. Once the training content was delivered, actual shooting incidents began to test the model’s usefulness. Nevertheless, the model has gone many years without change. The focus of this thesis was to further evaluate the current model to determine whether it is still practical and relevant, given events since its development.

An assessment of active shooter events since the model’s development was a logical choice in determining whether its training methodology saved lives. As dynamic shooter events occur outside the United States, many other countries have adopted similar training methods with some variation on the Run, Hide, Fight model. Those cases were studied, too, as new information from case studies might lead to recommendations to update the current U.S. model. Evaluating other countries’ lessons learned and modifications to training was helpful in gleaning methods that might be better than those in the United States.

An analysis of the global adaptation of Run, Hide, Fight revealed that studying the firearm tactics and training of law enforcement and the military could aid in the adjustment of civilian responses during fluid situations such as active shootings. For instance, knowing that a moving target is harder to shoot and hit than a static target becomes essential. Realizing there is a difference between cover and concealment is vital. The knowledge that it is all right to fight when faced with a life-or-death situation is crucial. Researching effective training methodologies, past and present, rendered guidance on recommendations made within the thesis.

Research findings indicate that the most critical piece in training to survive an active shooter situation is to use the current model of Run, Hide, Fight—but not in a linear fashion. The current model is memorable, which is helpful during a frightening situation.

However, the study discovered that a continuous assessment of the situation, varying between the modes of Run, Hide, Fight, allows the active shooter event to dictate the path of response, which can save lives. Understanding that *running* does not have to be the first response, that *hiding* does not need to follow running, and that *fighting* is not the last resort is vital. Perhaps the only way to survive an active shooter event is to first fight or hide or run. Maybe it is a combination of two or three modes that vary in order but allow for fluid decision making as dictated by the situation. Training people on the method of continuous situational assessment and awareness may improve strategy and tactics, thereby increasing survivability.

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I. INTRODUCTION

After the 2012 mass shooting at Sandy Hook Elementary in Connecticut, the Department of Homeland Security and the Houston Police Department developed a video and training model for schools, businesses, and other entities called “Run, Hide, Fight,” which provides response options based on the circumstances of the event. People can run or leave the area if it is safer to do so, hide or lockout the assailant, or be prepared to fight the shooter by any means they have available—a coffee cup, a chair, a fire extinguisher, or even a stapler.¹ This a la carte approach to active shooter response also addresses the particular needs and capabilities of the potential victims.

Run, Hide, Fight replaced the earlier guidance to shelter in place, which assumed that a shooter would not enter a classroom or other space to pick off victims huddled helplessly together. It still may not be the best approach, however. Recent data show that shooters are more likely—and readily able—to create more death and injury when they meet no resistance. In other words, the latest trends and analysis suggest that *fighting* should not be the last resort. Perhaps, then, if the training for staff, students, and the community changes to stress intervening or fighting—even before hiding—in an active shooter, emergent threat, or mass-shooting event, lives can be saved. Maybe the training should change entirely.

Being able to assess this national program and taking a critical eye to see whether there is a need for change might not only alter the training but also save more lives. Looking beyond school drills and training given to teachers and students is also imperative, as we know that active shooter events occur in many venues and environments. Focusing on the training, in itself, could expand the depth of understanding the choices that are available for all. It is vital to recognize that human behavior and responses are not solely synonymous with school settings—knowing that people learn differently and that individuals can be taught to reassess situations may ultimately save their lives.

¹ Ready Houston, “Run, Hide, Fight: Surviving an Active Shooter Event,” July 23, 2012, YouTube, video, 5:55, <https://www.youtube.com/watch?v=5VcSwejU2D0>.

A. RESEARCH QUESTION

How has the national model for citizen training in response to active shooter incidents evolved, and what recommendations for improvement can be made for the future?

B. LITERATURE REVIEW

This literature review explores the primary human responses to frightening situations. Specifically, it examines the psychological and physiological reactions of fighting, fleeing, or freezing, focusing primarily on studies about human behavior during potentially life-threatening circumstances to better understand whether those reactions can be altered or changed through training.

1. Primary Human Responses in Frightening Situations: Fight, Flight, or Freeze

Research suggests that when encountering a frightening event, humans and animals react by fighting, fleeing, or freezing. Studies have shown that the sympathetic and parasympathetic areas of the brain protect humans from life-threatening situations. Research suggests there is no choice in how individuals react to these events. As neurobiologist Karin Roelofs states, “ In stressful situations . . . most people tend to fall back on primary ‘freeze-fight-flight’ tendencies and have great difficulty controlling their actions or shifting flexibly between passive freezing and active fight-or-flight.”² Roelofs’s study emphasizes that this impulse is automatic—individuals cannot control their reactions outside of fighting, fleeing, or freezing—but it is only one side of the debate.

While other scholars believe that people do not choose their responses to scary situations, they surmise there is deep-rooted reasoning for the particular reactions. They argue that some individuals may want to fight while some people may decide to flee, and others may stop and freeze. The research points to a variety of outside influences, past

² Karin Roelofs, “Freeze for Action: Neurobiological Mechanisms in Animal and Human Freezing,” *Philosophical Transactions of the Royal Society B: Biological Sciences* 372, no. 1718 (April 2019): 1, <https://doi.org/10.1098/rstb.2016.0206>.

experiences, and an unconscious survival mode, which some call the “reptile brain.”³ Some researchers believe that the fight-or-flight response is an underlying survival mechanism, assisting individuals with understanding what is happening and allowing them to react as quickly as possible to deadly situations.⁴ Others accept that science is uncertain, contending that researchers still do not fully understand, nor have they examined, the reasoning for individuals’ responses.⁵

Scientists have long debated which response will become the most prominent or most likely to emerge given the situation. According to Leon Seltzer, the freeze response seems to have the most considerable lack of understanding in science. He states that trauma “adds a crucial dimension to how you’re likely to react when the situation confronting you overwhelms your coping capacities and leaves you paralyzed in fear.”⁶ In other words, memories of past trauma can cause someone to revert to those events, causing that person to freeze once more to survive. While some psychologists accept that this stress coping mechanism causes individuals to freeze, arguments persist that this phenomenon is relatively unmapped in humans.⁷ This dichotomy of opinion continues to fuel the discussion and research.

2. Can Human Reactions in Life-Threatening Situations Be Altered or Taught?

None of the research found has yielded a definitive way to predict the behavior of individuals in frightening situations, as cited above. Still, scholars agree that they can analyze an individual’s behavior after the event. Some researchers believe they can predict

³ Sandra Palmer, “Leaders: Own Your Alligator Brain,” *Public Manager* 42, no. 3 (Fall 2013): 68–70.

⁴ “Understanding the Stress Response,” Harvard Health Publishing, May 1, 2018, <https://www.health.harvard.edu/staying-healthy/understanding-the-stress-response>.

⁵ Emmanuel J. Rupia et al., “Fight-Flight or Freeze-Hide? Personality and Metabolic Phenotype Mediate Physiological Defence Responses in Flatfish,” *Journal of Animal Ecology* 85, no. 4 (2016): 927–37, <https://doi.org/10.1111/1365-2656.12524>.

⁶ Leon F. Seltzer, “Trauma and the Freeze Response: Good, Bad, or Both?,” *Psychology Today*, July 8, 2015, <https://www.psychologytoday.com/blog/évolution-the-self/201507/trauma-and-the-freeze-response-good-bad-or-both>.

⁷ Roelofs, “Freeze for Action.”

responses in life-threatening conditions through a variety of tests.⁸ Some studies suggest that previous experiences dictate how people respond, although personality may also be a factor in how individuals react to life-threatening situations.⁹ Much of the research has been documented through experiments using animals and extrapolating human behavior from the findings. For example, in a study about flatfish published in the *Journal of Animal Ecology*, Emmanuel Rupia et al. determined that “shy individuals adopted a passive ‘freeze-hide’ response by reducing their oxygen consumption rates (akin to shallow breathing) whereas bold individuals adopted an active ‘fight-flight’ response by increasing their rates of respiration.”¹⁰ This study emphasizes that for humans, the more timorous an individual, the more likely he is to freeze or hide in eminent situations; conversely, the braver the individual, the more likely he is to fight back or run away. These animal studies lead to the question of whether humans can train or pivot their natural reaction to something different, which may save lives.

Those who study the stress response and leadership, like author Sandra Palmer, believe there are many skills that individuals can practice to move out of the standard stress responses of fighting, fleeing, or freezing into what is known as *mindfulness*. The saying “practice makes perfect” asserts that the more training or practicing that occurs, the better someone will learn a skill. Research suggests that this same concept can be applied to frightening situations. According to Harvard Health Publishing, individuals can counter an undesirable stress response, such as freezing, through a variety of exercises that may produce what is called a “relaxation response.”¹¹ Moreover, approaches such as visualizing peaceful things, focusing on a trigger word, or even breathing deeply can combat negative stress responses.¹²

⁸ Saskia B. J. Koch et al., “The Role of Automatic Defensive Responses in the Development of Posttraumatic Stress Symptoms in Police Recruits: Protocol of a Prospective Study,” *European Journal of Psychotraumatology* 8, no. 1 (January 2017), <https://doi.org/10.1080/20008198.2017.1412226>.

⁹ Norman B. Schmidt et al., “Exploring Human Freeze Responses to a Threat Stressor,” *Journal of Behavior Therapy and Experimental Psychiatry* 39, no. 3 (September 2008): 292–304, <https://doi.org/10.1016/j.jbtep.2007.08.002>.

¹⁰ Rupia et al., “Fight-Flight or Freeze-Hide?,” 927.

¹¹ Harvard Health Publishing, “Understanding the Stress Response.”

¹² Harvard Health Publishing.

Other studies have shared similar ideas for changing or choosing reactions by being mindful of triggers or situations. For example, many recently developed leadership courses promote this idea through mindfulness training, teaching leaders to become aware of their ability to choose and react in stressful situations.¹³ Palmer expresses, “We can develop the capability to choose our actions in the microseconds after our survival reactions have been triggered.”¹⁴ Her ideas contrast those of prior scholars concerning the ability to control responses while developing the skill to choose the reaction.

Other researchers accept that the human brain can be trained to act in a specific way during perceived life-threatening events. Drawing from existing neuroscience, Theresa Kestly suggests that “although sympathetic fight/flight/freeze behaviors are usually considered negative because they narrow the range of behavioral responses to challenging situations, in the case of play co-opting this branch, active play positively builds resilience by broadening possible behaviors and by providing a context in which we can learn to manage high-arousal states.”¹⁵ Given this assertion, if humans can practice through role-playing to react purposefully, they can alter their innate responses.

Following this premise, research and studies have indicated that the more someone trains or drills in reacting to these situations, such as active shooter events, the more the individual is empowered and knowledgeable about what to do to avoid injury or death.¹⁶ This realization is why police exercises have entered the realm of scenario-based training. Allowing officers to practice in a real-life environment while still being in a safe space enables them to process possibly frightening events, make decisions, learn, and make mistakes without consequence. The literature does support the idea that practicing the response to emergencies is beneficial and can save lives, which also explains the various

¹³ Steven J. Bell, “Learning from Crucible Moments: Lessons in Crisis Leadership,” *Library Leadership & Management* 33, no. 2 (2019), ProQuest.

¹⁴ Palmer, “Leaders.” 68.

¹⁵ Theresa A. Kestly, “Presence and Play: Why Mindfulness Matters,” *International Journal of Play Therapy* 25, no. 1 (January 2016): 14–23, <https://doi.org/10.1037/pla0000019>.

¹⁶ Brenda Wands, “Active Shooter: Are We Complacent?,” *American Association of Nurse Anesthetists Journal* 84, no. 6 (December 2016): 388–89.

drills, including fire, earthquake, lockdown, and active shooter drills, within the educational setting.

C. RESEARCH DESIGN

The objective of the research was to explore whether the current national model of Run, Hide, Fight for active shooter response is acceptable as written or could be modified to improve survivability. The literature review confirmed the natural human phenomena of fighting, fleeing, or freezing during life-threatening situations, such as active shooter situations, when this type of training is critical. This thesis assesses the following programs:

1. Run, Hide, Fight;
2. Alert, Lockdown, Inform, Counter, Evacuate (ALICE); and
3. Other global models currently in use for active shooter incidents that mimic Run, Hide, Fight.

The analysis of data from the program evaluations showed emerging patterns that might reflect a more effective level of response as well as uncovered the rationale behind these programs' response strategies in order of priority. An evaluation of these programs clarified the model developers' designs while addressing the question of whether Run, Hide, Fight is still viable or needs training improvements.

Training programs generally evolve through lessons learned from preceding events. Thus, this thesis has incorporated case studies of past incidents, focusing primarily on school shootings that contributed to the development of current Run, Hide, Fight training. These case studies include shootings at Columbine High School, Virginia Polytechnic Institute and State University, and Sandy Hook Elementary School. The thesis consists of thorough reviews of the after-action reports of each of these incidents. Secondary data, both qualitative and quantitative, from events before the development of Run, Hide, Fight have been analyzed to understand the foundation of the program fully. This thesis has also analyzed some active shooter events following the training's development to determine whether additional lessons came out of the situations to adapt to a possible new training model. These events include shootings at Seattle Pacific University, Pulse nightclub, and

Marjory Stoneman Douglas High School. Each event has revealed controversies and outcomes that help shape training and drills.

Understanding shooting tactics was also necessary, as the shooter's movements can also determine the responses of the targeted person. Assessing those maneuvers of both military and police firearms trainers offered a unique perspective of how innocents within the event can use strategy to survive. Evaluating those approaches yielded considerations of how the training could change to save lives.

This combined information defined how individual responses during an active shooter event have evolved and illustrated varying levels of survivability. It also allowed for an in-depth look at human reactions in frightening situations—and how to possibly train movement that can increase survival rates. From this information, the following recommendations were evaluated:

1. The current model of Run, Hide, Fight should remain the same;
2. The priority order of Run, Hide, Fight needs to change; or
3. Active shooter survival training needs to morph into something different to save more lives.

D. ORDER OF CHAPTERS

Chapter II presents the history of school emergency drills to see how they have evolved over the years. It assesses the need for training versus the possible psychological harm that training can cause as well as state mandates for drill frequency. Finally, it explores learning modalities, the use of learning theory in emergency drills, and the risk and liability associated with training for emergencies.

Chapter III highlights active shooter events in the United States that have shaped the understanding and training of these fluid situations. The case studies of shootings at Columbine High School, Virginia Tech, Sandy Hook Elementary, Seattle Pacific University, Pulse nightclub, and Marjory Stoneman Douglas High School address the timelines, controversies, and lessons learned from each event.

Chapter IV evaluates the current national model—Run, Hide, Fight—looking at the reasons behind its development as well as some comparative training that has evolved from it globally. The chapter also exposes the arguments against the model and its controversies.

Chapter V assesses the tactics of law enforcement and military shooting to see whether there are lessons learned about movement and the use of cover and concealment. These tactics might correlate with assisting victims during an active shooter event. The chapter also explores the right to defend oneself in a violent encounter and concludes with law enforcement training tools that might enhance positive decision-making skills in civilians.

Chapter VI includes a summary of findings, recommendations that stem from the research, and suggested areas of future study.

II. EMERGENCY DRILLS

Evaluating the reasons schools and businesses use emergency drill training requires an exploration of the drills' origins. There is an extensive history of school training and exercises for emergency events, as well as legislative acts supporting the need for additional resources and training in schools. Critics question whether this type of training, especially in schools, psychologically harms children and adults by scaring them unnecessarily. But given that drills have saved lives, the need to conduct them is evident. State and federal requirements show this need for mandated drill exercises in schools.¹⁷ Provided that drills will occur, it is essential to train individuals, so they retain specific skills and can perform the necessary acts both during an exercise and in a real-life event. Research shows that there are different methodologies for training and learning theories for effective presentation and delivery of various types of emergency drills. There are also differing opinions on the appropriate frequency of emergency training and exercises in the school setting, as well as how risk and liability play into emergency drilling.¹⁸

This chapter looks at what has shaped the history of emergency drills, including active shooter survival. It dissects the substantive debate over whether emergency drills generally cause psychological harm or the benefit of knowing how to survive outweighs that concern. Then, it explores the reasoning behind the frequency of these drills, the methodologies used to teach adults and children, and the risks and liability for schools and businesses in conducting emergency drill training, specifically active shooter drills.

A. HISTORY OF SCHOOL TRAINING, DRILLS, AND LEGISLATIVE ACTS

Emergency drill training has been conducted in schools since the mid-1800s and has focused primarily on fires. Research suggests that drills originally came about because students or staff were injured when they did not know how to respond in an emergency. For example, an errant fire alarm that sounded at a school in New York City in 1851 caused

¹⁷ Wash. Rev. Code § 28A.320.125 (2019), <https://app.leg.wa.gov/rcw/default.aspx?cite=28A.320.125>.

¹⁸ "Emergency Training," University of British Columbia, accessed June 20, 2020, <https://srs.ubc.ca/emergency/emergency-training/>.

children to leave in a panic, resulting in the deaths of 40 students and injuries to several others.¹⁹ Word of the tragedy spread throughout America, prompting many schools and teachers to begin practicing fire drills to prepare students to exit schools in an orderly, calm fashion to reduce potential injuries. Traditionally, whether during fire drills or crisis plans, schools have naturally taken the lead in providing training to students for safe evacuation and proper response during emergencies to ensure the resolution of any disorganization.

Historically, Congress and the Department of Education have assisted schools by guiding plan development and training recommendations. For example, the “duck-and-cover” campaign of the mid-1950s was designed to teach children what to do in the event of a nuclear bombing.²⁰ In 1994, during President Clinton’s term in office, Congress enacted the Educate America Act, which identified eight goals. One goal specifically focuses on school safety: “By the year 2000, every school in the United States will be free of drugs, violence, and the unauthorized presence of firearms and alcohol and will offer a disciplined environment conducive to learning.”²¹ Shortly thereafter, Congress enacted the Safe and Drug-Free Schools and Communities Act and the Gun-Free Schools Act.²² The development of additional literature by the government expanded the education and proactive measures schools should implement regarding possible acts of violence. The Department of Education released its *Guide to Safe Schools* following the Thurston High School shooting in Oregon in 1998. It includes strategies such as detecting early warning signs of troubled youth that could be indicators of violence, getting resources to the youth

¹⁹ Melissa Allen Heath et al., “History of School Safety and Psychological First Aid for Children,” *Brief Treatment and Crisis Intervention* 7, no. 3 (August 2007): 206–23, <https://doi.org/10.1093/brief-treatment/mhm011>.

²⁰ *Duck and Cover* (Archer Productions, 1951), <https://archive.org/details/DuckandC1951>.

²¹ National Education Goals, 20 U.S.C. § 5812 (2015), <https://www.govinfo.gov/content/pkg/USCODE-2015-title20/html/USCODE-2015-title20-chap68-subchapI-sec5812.htm>.

²² “Safe and Drug-Free Schools and Communities Act – U.S. Department of Education,” Office of Juvenile Justice and Delinquency Prevention, accessed November 17, 2019, https://ojjdp.ojp.gov/sites/g/files/xyckuh176/files/pubs/gun_violence/sect08-i.html; Martin J. Dunn, “Security Solutions: Knowing Legislation,” *American School and University*, June 1, 2002, <https://www.asumag.com/fire-amp-life-safety/security-solutions-knowing-legislation>.

in crisis, developing a prevention and response plan, and responding to emergencies to ensure safety.²³

The repertoire of school drills would forever change in 1999, when the Columbine High School shooting shook America. In the post–Cold War era—up until that time—nuclear bomb drills as well as earthquake and tornado drills were the norm in U.S. schools. Since 1999, school lockdown drills have become the model for preparedness and the practice for school environments preparing students and faculty in the event of an active shooter. According to the National Center for Education Statistics, engaging students and staff in lockdown drills occurred in 95 percent of American public schools in 2019.²⁴ According to the Education Commission of the States, which conducted a 50-state audit, “at least 42 states require schools to conduct safety or security drills in state statute or regulation. Other states may require drills through handbooks, guides, or other rules.”²⁵

Learning from past emergencies is imperative when developing new strategies for drills to save lives. The national Run, Hide, Fight model, developed in 2014, came about from examining past events to give individuals options to survive such situations. Evaluating more current events vis-à-vis this model could shape future emergency drill training for active shooter situations.

B. DEBATE OVER NEED VERSUS PSYCHOLOGICAL HARM

Examining the training and drills delivered to children and adults to survive emergency events is imperative. These drills can be alarming as they force individuals to face scenarios in which they have to do *something* to survive the emergency. Opinions vary about whether these types of exercises cause more psychological harm than good to those

²³ K. Dwyer, D. Osher, and C. Warger, *Early Warning, Timely Response: A Guide to Safe Schools* (Washington, DC: Department of Education, 1998), <https://www.air.org/resource/early-warning-timely-response-guide-safe-schools>.

²⁴ “Fast Facts: Violence Prevention,” National Center for Education Statistics, accessed July 30, 2020, <https://nces.ed.gov/fastfacts/display.asp?id=54>.

²⁵ Heidi McDonald and Zeke Perez Jr, “50-State Comparison: K-12 School Safety,” Education Commission of the States, February 25, 2019, <https://www.ecs.org/50-state-comparison-k-12-school-safety/>.

caught in these situations. The debate over whether the need for preparation outweighs the risk of psychological damage is unpalatable to some.

There are varying opinions about training students and staff in how to handle an active shooter situation. Experts debate which methods are most effective—including live action, realistic scenarios, lecture-based learning, or perhaps the least desirable option, no training in what might be an appropriate response in these events. The most consistent method of instruction today for active shooter drills is the nationally accepted Run, Hide, Fight model. However, some question its effectiveness in saving lives. More importantly, there is debate over whether this method of training is causing harm to individuals—in some cases, scaring them to the point of nightmares from discussions of violent incidents—and whether it is a moral obligation to address these situations. Nevertheless, the training gives people involved in these events options for a response when faced with danger.

The dispute about whether these types of drills are causing a level of psychological harm for children and adults participating in them is not new. At the height of the Cold War, children in school from the 1950s through the 1970s were taught to hide under their desks in the event that the Soviet Union dropped a nuclear bomb on the United States. While there were no atomic strikes during this time, studies suggest that students and faculty of the era experienced some level of psychological harm. Fear of these types of attacks caused severe anxiety and trauma, compounded by the standard duck-and-cover drills. According to author Stephanie Buck, children growing up in the Cold War era were scared of a catastrophic nuclear attack. She points to studies at the end of the 1950s in which “60 percent of American children reported having nightmares about nuclear war.”²⁶ According to Buck, “In the 1960s, 44 percent of children in one survey predicted a serious nuclear incident. By 1979, 70 percent of interviewees the same age felt sure of an attack.”²⁷ The constant drilling appeared to compound the worry and anxiousness that children of this era would not survive childhood due to the threat of a nuclear attack, with students

²⁶ Stephanie Buck, “Fear of Nuclear Annihilation Scarred Children Growing up in the Cold War, Studies Later Showed,” *Medium* (blog), August 29, 2017, <https://timeline.com/nuclear-war-child-psychology-d1ff491b5fe0>.

²⁷ Buck.

drawing scenes at school of mass deaths and mushroom clouds. According to James Alan Fox, a criminologist at Northwestern University who studies mass shootings, “On those days when we did the drills, I’d go home and lie awake thinking about what that’d really be like. . . . I’m not sure those drills were worthwhile.”²⁸ Post–Cold War nuclear-bomb drills were replaced with earthquake and tornado drills.

Since the Columbine High School shooting in 1999, lockdown drills have become the model for preparedness and continue as a practice for school environments attempting to prepare students and faculty in the event of an active shooter. According to the National Center for Education Statistics, 95 percent of public schools in the United States engage students and staff in lockdown drills, and 35 states mandate such drills.²⁹ As these drills occur, many in the psychology field believe that the damage done to students and staff is similar to that of duck-and-cover drills of the Cold War–era and that drills are not necessarily effective nor standardized.

The likelihood that students and staff will experience an actual event in their lifetime should also be weighed against the possible impact of the psychological effects caused by participating in drills. Brian Malte with the Center of Health Journalism amplifies this concern:

It’s true that gun violence is at epidemic proportions in America. But while the deadliest and most horrific public shootings break our hearts and stoke our outrage, the truth is that we are preparing children for an event that more than 99% will never experience—while creating a source of potential trauma for 100% of children trembling under their desks.³⁰

In December 2014, the National Association of School Psychologists and the National Association of School Resource Officers developed a guide with recommendations for schools conducting drills for active shooters and other armed assailants. Among the guide’s

²⁸ Joshua Kirsch, “Most Active Shooter Drills Are Worthless and Traumatic,” *Fatherly*, May 1, 2018, <https://www.fatherly.com/health-science/active-shooter-drills-traumatize-kids-safety/>.

²⁹ National Center for Education Statistics, “Fast Facts: Violence Prevention.”

³⁰ Brian Malte, “How Active Shooter Drills in Schools Are Traumatizing Our Children,” *Center for Health Journalism*, September 18, 2019, <https://www.centerforhealthjournalism.org/2019/09/17/active-shooter-drills-schools-are-traumatizing-our-children>.

numerous considerations is the concern that drills might cause psychological harm to students and staff, but the writers acknowledge that the exercises are crucial to mitigating harm. The guide highlights the need to balance the potential impact on the participants with enhanced preparedness. Furthermore, it recommends that the number of active shooter drills coincide with the design of the training to minimize trauma—thus requiring additional research.³¹

If drills are a best practice, the issues then become how many exercises should occur and how they should be presented or practiced. According to Elizabeth Chuck with NBC News, “There is hardly any research on the drills’ effectiveness, and while there are some federal recommendations, there is no standard template for schools to follow in terms of how to do them, how often to conduct them and how to explain them to students of different ages.”³² Given this lack of guidance, many are concerned that active shooter drills have become too violent, increased in intensity, and incorporated fake weapons and munitions to make scenarios more realistic. Continuing her story, Chuck adds, “Over the past two decades, the drills have ramped up in intensity—with some schools going so far as to use fake blood and fire blanks at students. A drill . . . at an Indiana school prompted outrage when teachers were shot execution-style with pellet guns, leaving them injured.”³³ This type of “live-action” scenario training is not an isolated instance or concern. George Pierpoint with BBC News states, “An increasing number of schools are opting to conduct more intense drills involving masked men carrying fake guns and students playing the role of victims covered in fake blood.”³⁴

³¹ National Association of School Psychologists, *Best Practice Considerations for Schools in Active Shooter and Other Armed Assailant Drills* (Bethesda, MD: National Association of School Psychologists, 2017), <https://www.nasponline.org/resources-and-publications/resources-and-podcasts/school-climate-safety-and-crisis/systems-level-prevention/best-practice-considerations-for-schools-in-active-shooter-and-other-armed-assailant-drills>.

³² Elizabeth Chuck, “Active Shooter Drills Are Scaring Kids and May Not Protect Them. Some Schools Are Taking a New Approach,” NBC News, April 14, 2019, <https://www.nbcnews.com/news/us-news/active-shooter-drills-are-scaring-kids-may-not-protect-them-n992941>.

³³ Chuck.

³⁴ George Pierpoint, “Have US School Shooting Drills Gone Too Far?,” BBC News, March 31, 2019, <https://www.bbc.com/news/uk-47711020>.

Others have the opinion that active shooter drills should not even occur, proposing that they only add to the isolation of an individual's psyche and fear, thus causing more harm than good. "Active shooter drills and installation of metal detectors also may reinforce society's existing struggles with interpersonal connections," says Laurel Williams from the Baylor School of Medicine. She underscores that a focus on improving children's social interconnectivity with others—rather than emphasizing an unpredictable world where people do not feel welcome and safe—can mitigate psychological damage.³⁵ Some go even further, suggesting that being uncomfortable is good enough a reason not to engage in such drills and that students and staff should be allowed to opt out. An article by District Administration, even though it champions active shooter drills, espouses the individual's right to choose not to participate in emergency drills if she feels uncomfortable or scared. The commentary emphasizes that someone who opts out of the drill could still learn the exercises through learning materials or a counseling session in a more intimate, calmer setting.³⁶ While this recommendation is a reasonable step to prevent additional trauma to students and staff facing active drills, one might question its effectiveness.

While most practitioners and scholars agree that active shooter drills should occur, some question whether the exercises are working against their original intention. Some have argued that the drills might provide would-be perpetrators with information on how the school will respond during an active shooter event. For example, past shooters seem to have used their knowledge of the school's fire drill practices to maximize the number of victims, shooting students as they evacuated the school. The Marjory Stoneman Douglas shooter was a possible example of this phenomenon. Knowing the standard lockdown procedures could help a shooter counteract those safety measures and use them against the

³⁵ Homa Shalchi, "Psychological Effects of Active Shooter Drills in Schools," Baylor College of Medicine, August 19, 2019, <https://www.bcm.edu/news/psychiatry-and-behavior/psychological-effect-of-active-shooter-drills>.

³⁶ Emily Ann Brown, "Realistic Active Shooter Drills Strengthen School Safety," District Administration, February 14, 2019, <https://districtadministration.com/active-shooter-drills-strengthen-school-safety/>.

community.³⁷ Adam Raymond contends, “The biggest concern for some experts, though, is that the vast majority of schoolchildren, whose classrooms will never come under attack, are left worse off after they’re made to seriously contemplate their deaths at the hands of a madman.”³⁸

Experts also debate if, when, and how active shooter or lockdown drills should occur in school settings. Concerns over the psychological effects on students and staff vis-à-vis giving them the tools to be prepared during these types of incidents are key to the argument. While some believe that the training has evolved to traumatizing levels, the majority of literature endorses the current national Run, Hide, Fight model as the best method for saving lives in these instances. The principal debate now is *how* to conduct active shooter survival training and *if* there are other alternatives or new ways of training that can be more effective at saving lives. The research concludes that there is no standardization with this training, which leaves open the possibility for damaging psychological effects or inconsistent methods that are questionable.

C. FREQUENCY OF DRILLS

While most believe that general emergency drills are beneficial and needed, schools, communities, emergency preparedness professionals, and legislative representatives have deliberated on the frequency of emergency drills given in school settings. According to Department of Education, “The more a plan is practiced and stakeholders are trained on the plan, the more effectively they will be able to act before, during, and after an emergency to lessen the impact on life and property.”³⁹ Given that people learn differently, the Department of Education recommends a variety of drills to

³⁷ Adam K. Raymond, “How Active Shooter Drills Became a Big (and Possibly Traumatizing) Business,” *Medium* (blog), September 16, 2019, <https://gen.medium.com/the-response-to-school-shootings-may-be-a-misfire-active-shooter-drills-teachers-students-6acb56418062>.

³⁸ Raymond.

³⁹ Department of Education, *Guide for Developing High-Quality School Emergency Operations Plans* (Washington, DC: Department of Education, 2013), 21, https://rem.s.ed.gov/docs/REMS_K-12_Guide_508.pdf.

add to the frequency debate, including traditional drills as well as functional, tabletop, and full-scale exercises.⁴⁰

Surprisingly, there are no specific requirements or standardizations from state to state or school to school on the number of drills needed to stay “compliant” or safe. Therefore, some state governments have enacted house bills to mandate how many emergency drills a school district holds, with most states having the requirement of one fire drill each month.⁴¹ In Washington state, House Bill 1216 directs schools to conduct one exercise each month from the following drill types: shelter-in-place, lockdown, evacuation, and earthquake.⁴² State governments have created mandates in Alabama, Minnesota, and Rhode Island to conduct lockdown drills several times per year. According to the Department of Education, some states require schools to hold other types of exercises:

- Shelter-in-place drills once per year (e.g., Arizona, Illinois)
- Duck, cover, and hold drills quarterly (e.g., California)
- Extreme weather drills twice per year (e.g., Alabama)
- Tornado drills quarterly (e.g., Arkansas) or yearly (e.g., North Carolina, Virginia)
- Earthquake drills monthly (e.g., Hawaii)
- Crisis response drills once per year (e.g., Delaware)
- Bomb drills twice per year (e.g., Georgia)
- Bus evacuation drills once per year (e.g., Illinois)
- Other states leave the prescription of drills entirely to the local or school district level (e.g., Florida, Colorado).⁴³

⁴⁰ Department of Education, 21.

⁴¹ “50 State Comparison: School Safety Drills,” Education Commission of the States, February 2019, <https://c0arw235.caspio.com/dp/b7f930005d8120a29e7e4ed0b971>.

⁴² “Drills (Required),” Washington Office of Superintendent of Public Instruction, accessed November 19, 2019, <https://www.k12.wa.us/student-success/health-safety/school-safety-center/z-index/drills-required>.

⁴³ Education Commission of the States, “School Safety Drills.”

While national best practices have encouraged monthly or yearly emergency drills, having state- and local-level expectations seems to be the norm to ensure that safety training occurs. These legislative enactments show that emergency drills are essential; they do save lives and are important enough to be mandated. This research confirms the need and regular frequency of active shooter survival drills. Knowing what to do in these frightening situations is a skill, and that skill needs to have continual practice.

D. METHODOLOGIES OF TRAINING AND LEARNING THEORY

Knowing what to do and how to do it during emergency drills is vital. Having the right kind of instruction on those exercises is key to ensuring that the individual will be able to act appropriately and efficiently during the drill. The presentation and delivery of school drills and training are an essential consideration because the training audience consists of both adults and children of all ages. Research shows that adults and children learn differently, which requires varying methodologies of teaching. A review of the literature represents several methodologies of instruction with two primary methods for presenting information to children and adults: pedagogy and andragogy.

Phillip Ozuah describes pedagogy as “the art and science of teaching children” and highlights several long-held assumptions about the methodology:

- Past learning experiences are not relevant
- Topics such as arithmetic and geography are centered around learning
- The student does not understand one’s learning needs
- A carrot-and-stick approach to learning can motivate individuals⁴⁴

As Ozuah contends, “Pedagogy is fundamentally a teacher-centered model, where the teacher determines what will be learned, how it will be learned, when it will be learned, and if it has been learned.”⁴⁵

⁴⁴ Philip O. Ozuah, “First, There Was Pedagogy and Then Came Andragogy,” *Einstein Journal of Biology and Medicine* 21, no. 2 (March 2016): 83, <https://doi.org/10.23861/EJBM20052190>.

⁴⁵ Ozuah, 83.

Teachers develop their signature style of pedagogy, divided into four categories: behaviorism, constructivism, social constructivism, and liberationism.⁴⁶ Behaviorism is the belief that the teacher is the sole authority figure, who uses modeling, lecture, writing, and repetition to teach. Eventually, students must exhibit what they have learned through demonstration. Constructivism leverages the knowledge students have in and out of the classroom as they reflect on experiences to enhance learning. Experiences may involve activities and projects that the students complete. Social constructivism is a combination of behaviorism and constructivism—both teacher-led and student-centered—and a collaborative method of teaching. Liberationism is student-centered, imparting a democratic atmosphere in the classroom where the class may decide topics and projects to further learning.⁴⁷ Regardless of the approach, teachers must realize children in different age groups learn differently, as their cognitive abilities vary.

Andragogy is the theory that adults learn differently from children, so the teaching style for adults is different. Joseph Kessels quotes Anderson and Lindeman's apt description of learning methodologies: "Pedagogy is the method by which children are taught. Demagogy is the path by which adults are betrayed. Andragogy is the true method of adult learning."⁴⁸ Kessels contends that Malcom Knowles was the reason for andragogy's popularity in the United States.⁴⁹ Knowles introduced adult learning theory in 1968, listing five specific assumptions about adult learners:

- Self-concept: Because adults are at a mature developmental stage, they have a more secure self-concept than children. This allows them to take part in directing their own learning.
- Past learning experience: Adults have a vast array of experiences to draw on as they learn, as opposed to children who are in the process of gaining new experiences.

⁴⁶ "What Is Pedagogy?," Tes, December 10, 2018, <https://www.tes.com/news/what-is-pedagogy-definition>.

⁴⁷ Tes.

⁴⁸ M. L. Anderson and E. C. Lindeman, "Education through Experience: An Interpretation of the Methods of the Academy of Labor, *Workers' Education Research Series 1* (1927): 2–3, quoted in Joseph W. M. Kessels, "Andragogy," in *The Routledge Companion to Human Resource Development*, ed. Rob F. Poell, Tonette S. Rocco, and Gene L. Roth (Abingdon, UK: Routledge, 2015), 14, <https://doi.org/10.4324/9780203386446>.

⁴⁹ Kessels, 14.

- Readiness to learn: Many adults have reached a point at which they see the value of education and are ready to be serious about and focused on learning.
- Practical reasons to learn: Adults are looking for practical, problem-centered approaches to learning. Many adults return to continuing education for specific practical reasons, such as entering a new field.
- Driven by internal motivation: While many children are driven by external motivators—such as punishment if they get bad grades or rewards if they get good grades—adults are more internally motivated.⁵⁰

Knowles's assumptions identify four principles for teaching adults:

- Adults learn through focusing on personal issues that are practical and relevant to their work and home life.
- Past experience can enhance adult learning.
- Allowing self-direction can improve the process of adult learning.
- Problem-solving rather than memorization should be the main focus of adult learning.⁵¹

In an article for the *Journal of Higher Education*, James Votruba argues the field of academia elevated andragogy to an established concept without validated and sufficient research or evidence of effectiveness. He says, “Pedagogy and adrogy [sic] are both appropriate and useful at different times and for different purposes with persons across the full age-range spectrum.”⁵² While it is understood that adults and children learn differently, there appears to be a disconnect in the distinction between pedagogy and andragogy and what is age-appropriate for each style. Thus, suitable learning methodologies for adults and children are still up for debate.

Research shows additional learning styles and methods exist beyond pedagogy and andragogy. Neil Fleming and Colleen Mills introduced the visual, aural, read/write, and

⁵⁰ Malcolm S. Knowles, “What Is Andragogy?,” in *The Modern Practice of Adult Education: From Pedagogy to Andragogy* (Englewood Cliffs, NJ: Cambridge Adult Education, 1970), 40–59, <https://pdfs.semanticscholar.org/8948/296248bbf58415cbd21b36a3e4b37b9c08b1.pdf>.

⁵¹ Knowles.

⁵² James C. Votruba, review of *Understanding and Facilitating Adult Learning*, by Stephen Brookfield, *Journal of Higher Education* 58, no. 5 (1987): 602–4, <https://doi.org/10.2307/1981795>.

kinesthetic (VARK) learning styles. Fleming and Mills argue that because each person processes learning differently, teachers must understand and adapt to one or multiple styles of VARK to ensure effective delivery of information.⁵³ Overall, various learning methodologies exist for adults and children. People may learn information differently, so for those who have the responsibility to teach or train students and staff to respond appropriately during emergencies—primarily when the emergency includes firearms—the significance cannot be overstated. Therefore, learning theory calls for innovation, flexibility, and standardization to ensure that active shooter survival training is effective.

E. RISK AND LIABILITY

Evaluating risk and liability is the cornerstone of any policy, procedure, or training designed to mitigate threats, including active shooter events. According to the Occupational Health and Safety Administration (OSHA), everyone has a right to a safe workplace, free from identifiable hazards that are fatally harmful to employees.⁵⁴ Despite that “right” to a safe workplace, the actual causes of risk and liability can be different in varying circumstances and environments. Looking at these origins as they relate to workplace violence and active shooter incidents—as well as how businesses and schools have attempted to mitigate risk through policies and training for staff, students, and community members—may reveal new information about what has worked in the past or what still works. Otherwise, if something does not work anymore, maybe a new way of training will emerge to alleviate additional risk.

Risk is a term that hails from the fields of finance, operations, perimeters, and strategy. Financial risk is self-explanatory; it involves anything that could affect monetary gains or losses such as the cost of claims and liability judgments. Operational risk is anything that could slow, increase, or delay the inner workings of an entity such as

⁵³ Neil Fleming, “The Nature of Preference,” VARK Learning Limited, accessed July 31, 2020, 3, <http://vark-learn.com/wp-content/uploads/2014/08/THE-NATURE-OF-PREFERENCE.pdf>.

⁵⁴ Suzanne H. Butch, “Emergency Management: Having a Plan,” *Medical Laboratory Observer* 49, no. 3 (March 2017): 34–35.

employee strikes.⁵⁵ Perimeter risk is more uncontrollable given weather or political change impacts. Strategic risk encompasses reputational hazards that can affect how the community views a particular entity.⁵⁶ The overarching need for any business is to look at enterprise risk as it relates to reaching the entity's objectives. With these definitions in mind, mitigation of these risks must occur, especially when an event such as an active shooter situation can affect all levels of risk. How to reduce those risks varies from place to place, but the more predictable the risk, the more capable an entity is to stop or mitigate it through policy, processes, or even training.

Active shooter events and workplace violence tend to be a concern, and any environment can be subject to risk. According to the National Safety Council, "Millions of American workers report having been victims of workplace violence. In 2018, assaults resulted in 20,790 injuries and 453 fatalities."⁵⁷ Consequently, many states now require employee training that mitigates the risk of workplace violence. In most cases, the training follows OSHA's guidance to foster a safe workplace. While OSHA does not have a specific requirement for workplace violence or active shooter mitigation training, California, Washington, New York, New Jersey, and Connecticut require healthcare employers to provide workplace violence training. These requirements are meant to protect healthcare workers, who are subject to workplace violence mostly by patients or family members of patients. Even with these trainings, workplace violence is still increasing. According to an article by *AlertFind*, the second-highest cause of fatalities in businesses is workplace violence.⁵⁸ Being part of this statistic could harm a corporation's reputation, negatively affect revenue, and deflate morale among workers. Some research suggests that 25 percent of all workplace violence still goes unreported, begging the question of whether the training

⁵⁵ "Operational Risk Management Training & Resources," Risk Management Association, accessed July 31, 2020, <https://www.rmahq.org/operational-risk/>.

⁵⁶ Matteo Tonello, "Strategic Risk Management: A Primer for Directors," Harvard Law School Forum on Corporate Governance, August 23, 2012, <https://corpgov.law.harvard.edu/2012/08/23/strategic-risk-management-a-primer-for-directors/>.

⁵⁷ "Assaults Fourth Leading Cause of Workplace Deaths," National Safety Council, accessed July 31, 2020, <https://www.nsc.org/work-safety/safety-topics/workplace-violence>.

⁵⁸ "2018 Workplace Violence Statistics: A Growing Problem," *AlertFind* (blog), August 7, 2018, <https://alertfind.com/workplace-violence-statistics/>.

or information that individuals are receiving is even valuable or helpful.⁵⁹ Those reasons alone call for adapting proper and understandable training that can curb those statistics.

Standardized training goes hand-in-hand with policy implementation that defines workplace violence and the consequence of introducing violence into the workplace. Of course, practice and policy alone will not mitigate all risks from workplace violence or active shooter situations. Looking at industry professionals to conduct security screenings and plans for departments, buildings, and venues will also assist in lowering risk. Threat assessment teams for schools are also a part of mitigating the risk.

F. CONCLUSION

The history of emergency drills in the United States and worldwide has demonstrated that those types of exercises are imperative to saving lives. Knowing what to do as well as how and when to do it, amid a frightening situation, needs to be “drilled” into an individual. As with any skill, repetitive practice is essential to master it. And for emergency drills, if children know their options and know how to perform the critical functions to survive, then all of the concerns about psychological harm, frequency, risk, and liability are moot. Furthermore, due to the fast-moving, fluid situations that active shooters bring, having that knowledge and understanding the choices needed to survive might mean the difference between living and dying.

⁵⁹ “2018 Workplace Violence Statistics.”

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III. ACTIVE SHOOTER CASE STUDIES: BEFORE AND AFTER RUN, HIDE, FIGHT TRAINING

Before the Columbine High School shooting in 1999, having active shooter drills at schools or businesses was not universal. After Columbine, active shooter events were no longer considered one-off incidents, so the United States had to mitigate the lives lost. Examining past events and evaluating them to better our understanding help us respond more appropriately to future events. This need for evaluation is especially true in the case of past active shooter events. Such research has assisted and improved law enforcement response, led to more robust security infrastructure measures and information sharing of potential threats among multi-disciplinary groups, and shaped student, staff, and individual training to survive these horrific events. It has led to our current national model of Run, Hide, Fight.

This chapter examines the cases of shootings at Columbine High School, Virginia Tech, and Sandy Hook Elementary. These horrific active shooter incidents were instrumental in recognizing the need for various safety measures and response tactics. Even more so, they brought to the forefront the need to reshape the training that students, staff, and individuals use in active shooter events. Examining similar events since the implementation of the national Run, Hide, Fight model is equally important in assessing whether the training is still relevant in its current form. The other case studies, after 2012, include shootings at Seattle Pacific University in 2014, Pulse nightclub in 2016, and Marjory Stoneman Douglas High School in 2018. These events teach us more about mindset and strategy as they offer unique examples of not only the human response to the shootings but also the evolution of shooters' actions.

A. COLUMBINE HIGH SCHOOL

On April 20, 1999, two students entered Columbine High School in southern Jefferson County, Colorado. They systematically killed 12 of their fellow students and one

teacher, as well as injured 25 others, before turning the guns on themselves.⁶⁰ The original intent of these two perpetrators was to blow up their school with homemade propane bombs placed under cafeteria tables, causing a rush of students to exit the buildings.⁶¹ However, when the bombs failed to detonate, the two shooters entered the school and began a shooting rampage inside.⁶² They started in the school cafeteria and then went to the school library, where students hid under desks as they were advised to do by staff members.⁶³ It was reported that the shooters walked on top of the tables, as well as around the room, taunting and shooting the hiding students. They went through the science area before returning to the cafeteria to try to detonate the propane bombs by shooting at them and eventually throwing a pipe bomb at one, causing a fire.⁶⁴ The two shooters ended their spree 49 minutes later by returning to the library and committing suicide together.⁶⁵

1. Controversies

From 2000 to 2010, America saw significant shifts in emphasis on homeland security awareness. the War on Terror began following the events on 9/11. The three 24-hour cable news stations that emerged—CNN, Fox, and MSNBC—would elevate and elongate the media coverage of tragic events.⁶⁶ The emergence of these stations would enhance the coverage of future school shootings as well as heighten general societal curiosity, especially in the years after Columbine.

⁶⁰ Glenn W. Muschert and Ralph W. Larkin, “The Columbine High School Shootings,” ResearchGate, June 2007, 28, https://www.researchgate.net/publication/254348823_The_Columbine_High_School_Shootings.

⁶¹ William Erickson, *The Report of Governor Bill Owens’ Columbine Review Commission* (Denver: Columbine Review Commission, May 2001), <https://schoolshooters.info/sites/default/files/Columbine%20-%20Governor’s%20Commission%20Report.pdf>.

⁶² Muschert and Larkin, “The Columbine High School Shootings.”

⁶³ Jefferson County Sheriff’s Office, *Final Report on the Columbine High School Shootings* (Golden, CO: Jefferson County Sheriff’s Office, 2000).

⁶⁴ Erickson, *Report of Governor Bill Owens’ Columbine Review Commission*.

⁶⁵ Jefferson County Sheriff’s Office, *Final Report*.

⁶⁶ Kasey Cordell, “The News Coverage of Columbine Helped Turn the Tragedy into an International Phenomenon,” *5280: Columbine: 20 Years Later*, April 2019, <https://columbine.5280.com/the-news-coverage-of-columbine-helped-turn-the-tragedy-into-an-international-phenomenon/>.

The media covered the Columbine shooting incident as it unfolded, and gave the American people access to see police tactics, as well as the students' and staff's response and reactions. Police tactics at the time required first responders to create a perimeter to ensure that the perpetrators would not escape, as well as aid in the evacuation of students and staff. What people saw on the television was police on the scene, standing outside and not entering the school, while the gunfire reverberated in the school. Police at that time called Special Weapons and Tactics (SWAT) to respond, so specially trained officers could neutralize the shooters.⁶⁷

As for training students and staff in the schools, lockdown drills were becoming more regular, and individuals were being taught to stay away from doors, find a corner away from windows or hide under desks, and be quiet. Training for those at the schools was relatively passive in the wake of these events. According to Adam Raymond, a writer for *Medium*, the instruction “typically call[ed] for teachers to lock their doors, turn off the lights, and huddle students together in a corner, playing cards or reviewing multiplication tables until . . . given the all-clear.”⁶⁸ However, they did not have training for what to do if someone entered their space.

Columbine also identified issues regarding individuals freezing, as well as hiding, especially in the library. The research and after-action report found that students during the active shooter event hid under the desks in the library.⁶⁹ This choice was consistent with the training they knew from emergency drills but ultimately led to their being easy, soft targets for the perpetrators to shoot, which ultimately resulted in their injury or death.⁷⁰ While they were near the shooters, would their lives have been spared, or injuries lessened, if they had run or even fought back to stop their assault?

⁶⁷ Keily Linger, “Analysis of the Police Response to Mass Shootings in the United States between 1966 and 2016” (master’s thesis, University of Albany, 2018), https://scholarsarchive.library.albany.edu/cgi/viewcontent.cgi?article=1000&context=honorscollege_etc.

⁶⁸ Raymond, “Active Shooter Drills.”

⁶⁹ Jefferson County Sheriff’s Office, *Final Report*.

⁷⁰ Jefferson County Sheriff’s Office.

2. Outcomes

As far as school security was concerned, at the beginning of 2000—after Columbine—more money was allocated for school security, including more armed officers and metal detectors in schools. Schools created locked buildings with check-in procedures to push visitors and students through identified entry points. In an article for CNN, John Sutter observed, “In the wake of the tragic shootings at Columbine High School, some schools across the country turned themselves into near-fortresses.”⁷¹ During this time, many schools used technological measures such as metal detectors and security cameras, as well as implemented other security processes, to keep students and staff safe. Those processes included hiring school resource officers, checking student identification, and searching backpacks.⁷²

Columbine also affected how law enforcement responded to and entered active-shooter situations—they were no longer trained to surround the building and wait until SWAT arrived. As Steve Albrecht describes it, “From that day forward, law enforcement said, ‘No more!’ and altered their tactics and training. When these incidents happen today, officers and deputies arrive quickly, grab their long rifles, form a fast entry plan, and go inside in teams of two to six, with the intent of engaging and stopping the shooter.”⁷³

The training of students did not necessarily change from the standard lockdown procedures that schools had already implemented. If anything did change in this area, it was that more schools were mandating lockdown drills. Columbine highlighted the need for ensuring that students know emergency drill expectations when a lockdown occurs.

B. VIRGINIA TECH

On April 16, 2007, a college student at Virginia Polytechnic Institute and State University shot and killed 32 individuals, while injuring another 29 staff and students,

⁷¹ John D. Sutter, “Columbine Massacre Changed School Security,” CNN, accessed July 31, 2020, <https://www.cnn.com/2009/LIVING/04/20/columbine.school.safety/>.

⁷² Sutter.

⁷³ Steve Albrecht, “The Truth behind the Run-Hide-Fight Debate,” *Psychology Today*, August 25, 2014, <http://www.psychologytoday.com/blog/the-act-violence/201408/the-truth-behind-the-run-hide-fight-debate>.

before killing himself. At the time, it was the deadliest mass shooting in the United States.⁷⁴ The shooter first fatally shot a resident and resident advisor in one of the residence halls on campus, before mailing his plans, a DVD, and photographs to NBC News in New York City.⁷⁵ Then, he continued his assault on campus, heading to Norris Hall, room 207. There, the shooter killed the professor and then started killing the students sitting in the front row, reloading his weapon once. Students hid under desks to “shield themselves” because, at the time, their emergency procedure had trained them to hide under desks.⁷⁶ The shooter left the room, and the other available students barricaded the door. Next, he headed into the stairwell and then into room 206 and 204, killing and injuring more students and staff who had hid and tried to barricade themselves.⁷⁷ In room 211, more students decided to block the door, but the shooter was able to enter and shoot students who were still sitting at their desks or hiding beneath them. The attacker then committed suicide in room 211, as police entered the hall.⁷⁸

1. Controversies

According to the after-event review, many departments on campus had been concerned about the would-be shooter, yet no one shared that information with the authorities—a disturbing discovery.⁷⁹ Research shows that multiple entities had expressed confusion about whether they could share pertinent information on individuals who posed a threat to others or themselves. This lack of education on information-sharing hampered

⁷⁴ Amy Tikkanen, “Virginia Tech Shooting,” *Encyclopædia Britannica*, accessed March 6, 2020, <https://www.britannica.com/event/Virginia-Tech-shooting>.

⁷⁵ TriData, *Mass Shootings at Virginia Tech: Addendum to the Report of the Review Panel* (Arlington, County, VA: System Planning Corporation, 2009), <https://scholar.lib.vt.edu/prevail/docs/April16ReportRev20100106.pdf>.

⁷⁶ “Timeline: A Morning of Horror at Virginia Tech,” *Virginian-Pilot*, April 19, 2007, https://www.pilotonline.com/news/article_e362457b-0df8-56f3-ac6a-142ac1ebfcf0.html.

⁷⁷ “Timeline.”

⁷⁸ “Timeline.”

⁷⁹ Virginia Tech Review Panel, *Mass Shootings at Virginia Tech: Report of the Virginia Tech Review Panel* (Richmond: Virginia Tech Review Panel, 2007), <https://scholar.lib.vt.edu/prevail/docs/VTReviewPanelReport.pdf>.

their ability to act timely and with complete information.⁸⁰ These findings hindered intelligence sharing of concerning and illegal behaviors of the shooter, which could have assisted in more resource recommendations and additional student sanctions that could have limited the shooter's access to the residence halls and the school.

Other reviews of this shooting found that an Emergency Policy Group had to weigh in on sending an emergency alert about the urgent safety issue, thus stalling the university police department's ability to broadcast an immediate warning to campus.⁸¹ Consequently, by the time Virginia Tech's administration sent out a safety alert, notifying staff and students about the gunman on campus, the incident was over.⁸²

After the shooting, it was a concerning discovery that many students did not know what to do in an active shooter situation. While Virginia Tech did have an emergency operations plan, its procedures did not include a firearm scenario—nor did it have a robust practicing or drilling plan for emergencies. Thus, many students reverted to what they had learned from their days in secondary education: the lockdown drill. Although the Department of Education had produced guidance for emergency management in K-12 schools, the review panel agreed that the same recommendations were not as easily applied to the uniqueness of university and college campus settings.⁸³ Knowing what to do or realizing that perhaps running and not hiding could have saved lives was a real lesson learned. Maybe, if the students in some of the classrooms had run, they would not have been trapped in the school with the perpetrator. Perhaps, if the students had fought back against the shooter, more lives could have been saved.

⁸⁰ Michael Leavitt, Alberto Gonzales, and Margaret Spellings, *Report to the President on Issues Raised by the Virginia Tech Tragedy* (Washington, DC: Department of Health and Human Services, 2007), https://www.justice.gov/archive/opa/pr/2007/June/vt_report_061307.pdf.

⁸¹ Frank Green, "Virginia Tech Shootings Spurred Campus Safety Measures," *Richmond Times-Dispatch*, April 10, 2017, https://www.richmond.com/news/virginia-tech-shootings-spurred-campus-safety-measures/article_22bc0a06-419b-5322-982b-55667bcc84cb.html.

⁸² "Timeline."

⁸³ Leavitt, Gonzales, and Spellings, *Report to the President*.

2. Outcomes

There were many lessons learned following the Virginia Tech shooting in 2007. It was the recommendation that schools start to create threat assessment teams or behavior intervention teams. These teams would share data among multi-disciplinary groups at schools to identify and mitigate possibly concerning or threatening behavior by students, staff, and community members who might enter their space.⁸⁴ Creating these types of teams to recognize and stop these active threats before they occurred was essential. According to the director of the National Center for Campus Safety, the event at Virginia Tech brought to light the need to align campus safety partners, share pertinent information about threats on campus, streamline communications to the campus community, and coordinate with other entities from city, county, state, and federal agency partners.⁸⁵

This event also led to more aggressive lockdown procedures and training for students and staff. The review panel agreed that implementing and practicing a safety plan for the full campus community would be challenging. This community would include not only students but also staff, parents, guests, and safety partners who would respond to such events. The panel emphasized the need for student education and engagement while acknowledging the needs and training of the continuously changing student body.⁸⁶

C. SANDY HOOK

On December 14, 2012, a prior student who was then an adult, entered Sandy Hook Elementary School in Newtown, Connecticut, and killed 26 people and injured two before committing suicide.⁸⁷ Before going to the elementary school, the attacker shot and killed his mother at his home. Then, at the school, the attacker shot his way through a window and killed the principal and school psychologist.⁸⁸ The gunfire from this assault broadcast

⁸⁴ TriData, *Mass Shootings at Virginia Tech*.

⁸⁵ Green, "Shootings Spurred Campus Safety Measures."

⁸⁶ Leavitt, Gonzales, and Spellings, *Report to the President*, 16.

⁸⁷ Connecticut State Police, *After Action Report of the Connecticut State Police: Newtown Shooting Incident* (Middletown: Connecticut State Police, 2013), <https://portal.ct.gov/-/media/DESPP/DSP/CSPAARpdf.pdf>.

⁸⁸ Connecticut State Police.

over the school's intercom system, and "in accordance with previously established lockdown protocols, teachers immediately took steps to attempt to safeguard their students, concealing them in closets or bathrooms and barricading doors with furniture or with their own bodies."⁸⁹ The shooter continued the assault, killing a teacher, an education aide, a behavioral therapist, and multiple children. In one classroom, after killing the teacher, the suspect killed children huddled and hiding in a closet. As police entered the building, the shooter committed suicide.⁹⁰

1. Controversies

Before the Sandy Hook shooting, schools taught staff and students to go on lockdown, get away from the doors, and huddle in a corner out of sight, as previously noted in other case studies. There was no mention in the lockdown training of running or fighting. According to John Bacon, a writer for *USA Today*, the shooter "walked past the classroom of Kaitlin Roig, who had hidden her students in a bathroom, and into the classroom of substitute teacher Lauren Rousseau, where he fatally shot Rousseau, a special-education teacher, and all 14 children as they huddled in fear."⁹¹ If teachers had taken the students into an area where they could escape or be accessible to fight, rather than followed the strict lockdown guidelines, might they still be alive today?

2. Outcomes

The Sandy Hook Elementary shooting in 2012 emphasized the need to expand training for students and staff beyond going on lockdown or huddling to include the modes of *running* and *fighting*. Just months before the shooting, in August 2012, the City of Houston developed Run, Hide, Fight training—based on the Department of Homeland Security's guidance in the 2008 Active Shooter Awareness Program. Under this guidance,

⁸⁹ Michael Ray, "Sandy Hook Elementary School Shooting," *Encyclopædia Britannica*, accessed March 6, 2020, <https://www.britannica.com/event/Newtown-shootings-of-2012>.

⁹⁰ Sandy Hook Advisory Commission, *Final Report of the Sandy Hook Advisory Commission* (Hartford: Sandy Hook Advisory Commission, 2015), https://sardaa.org/wp-content/uploads/2015/03/Sandy_Hook_final_report.pdf.

⁹¹ John Bacon, "Report: Teacher Tried to Divert Shooter," *USA Today*, December 16, 2012, <https://www.usatoday.com/story/news/nation/2012/12/16/newtown-shootings-gunman-soto-details/1772791/>.

the primary goal was to evacuate. If that was not possible, then the second priority would be to hide out. The last resort was for the individual to “take action against the active shooter.”⁹² This training became the national model for active shooter survival and was wholly adopted by the Department of Homeland Security.⁹³

D. SEATTLE PACIFIC UNIVERSITY

On June 5, 2014, a Mount Terrace resident and non-student entered Otto Miller Hall at Seattle Pacific University after fatally shooting a student and injuring another outside. Once inside, the attacker aimed his shotgun and shot another student in the chest. Front office worker and student Jon Meis observed the attacker reloading, ran at him with personal pepper spray, and sprayed the attacker twice in the face.⁹⁴ Meis took the gun away from the attacker and held him down on the ground with another student’s assistance. They kept the attacker subdued until police arrived on scene.

1. Controversies

Before the shooting event, the suspect had visited Seattle Pacific University and was given a private tour by two students who attended the school. The attacker later admitted that while touring Otto Miller Hall, he had looked for escape routes he could take after his attack.⁹⁵ During the investigation, the attacker admitted to scoping out the school, making sure that students were using the building he had planned to target, and having back-up weapons for further use.⁹⁶ He also admitted that he showed his weapon to several students, who either did not believe the weapon was real or did not take him seriously. The attacker stated that he decided to shoot his victims because “he felt they each disrespected

⁹² Department of Homeland Security, *Active Shooter: How to Respond* (Washington, DC: Department of Homeland Security, 2008), https://www.dhs.gov/xlibrary/assets/active_shooter_booklet.pdf.

⁹³ “Active Shooter,” Department of Homeland Security, accessed July 30, 2019, <https://www.ready.gov/active-shooter>.

⁹⁴ Lynsi Burton, “Man Who Disarmed SPU Shooter: ‘I Was Kind of in Shock,’” *Seattle Post-Intelligencer*, October 11, 2016, <https://www.seattlepi.com/local/crime/article/Man-who-disarmed-SPU-shooter-I-was-kind-of-in-9965151.php>.

⁹⁵ Kelsey Mallahan, “Timeline: Seattle Pacific University Shooting,” NBC Seattle, June 14, 2016, <https://www.king5.com/article/news/local/timeline-seattle-pacific-university-shooting/281-244056933>.

⁹⁶ Mallahan.

him when he approached them with his shotgun.”⁹⁷ Could this event have been stopped if someone reported the perpetrator’s behavior promptly? Did fighting the shooter save lives?

2. Outcomes

The aftermath of the Seattle Pacific University shooting highlights the importance of practicing emergency drills and emphasizes the Run, Hide, Fight method in the emergency preparedness response.⁹⁸ If Meis had not utilized the tactics of spraying the attacker with pepper spray, taking away his gun, and immobilizing him, who knows how many more victims would have died or been incapacitated. This event highlights the *fight* portion of Run, Hide, Fight—even though, at the time, Meis could have run or hidden instead. Fighting most likely saved lives at Seattle Pacific University because the gunman had intended to hurt more people, as evident from his trying to reload his weapon after firing it at students.⁹⁹ Others also came to Meis’s aid, so running toward the shooter and stopping him saved lives.

E. PULSE NIGHTCLUB

On June 12, 2016, a man entered Pulse nightclub in Orlando, Florida, and initiated the worst mass shooting in the United States in 25 years, killing 49 people and injuring 53. At the time of the shooting, Pulse nightclub was hosting a Latin-themed event with more than 300 patrons in attendance.¹⁰⁰ Once gunfire erupted, Pulse nightclub’s Facebook page posted, “Everyone get out of pulse and keep running.”¹⁰¹ During this event, many patrons scattered and ended up in bathrooms and other areas in the club to hide. Janiel Gonzalez, who was at the club that night, stated, “People were screaming ‘Help me, help me, I’m

⁹⁷ Russ Walker and Kelsey Mallahan, “Student Used Pepper Spray to Take Down Seattle Campus Shooter,” *USA Today*, June 15, 2016, <https://www.usatoday.com/story/news/nation-now/2016/06/15/student-used-pepper-spray-take-down-seattle-campus-shooter/85958970/>.

⁹⁸ “Active Shooter/Armed Threats,” Seattle Pacific University, accessed June 13, 2020, <https://emergency.spu.edu/campus-emergency-procedures/active-shooterarmed-threats/>.

⁹⁹ Walker and Mallahan, “Student Used Pepper Spray.”

¹⁰⁰ “Orlando Nightclub Shooting: How the Attack Unfolded,” BBC News, June 15, 2016, <https://www.bbc.com/news/world-us-canada-36511778>.

¹⁰¹ BBC News.

trapped!’ . . . People were getting trampled. There was no clear exit sign at the club, so we didn’t know which door to take or where to go.”¹⁰² Those in the bathrooms found they were trapped and either ended up as hostages or were blasted out by police tactics that created an exit. Eventually, the suspect was killed in a firefight with police.

1. Controversies

An off-duty officer who had been working at Pulse nightclub that night ended up engaging in a gunfight with the suspect. Many individuals who were injured played dead or hid in restrooms, texting loved ones.¹⁰³ They had no escape route once in the bathrooms. Given the number of individuals at the venue, there were only a few exits from which to retreat. One of the doors had been perpetually locked and needed unlocking by an employee before patrons could escape.¹⁰⁴ First responders had to blow holes in the walls of the club to rescue those trapped in places where they could not escape.

2. Outcomes

At this venue, most people in attendance knew only of the front entrance as an egress. If people had been trained to identify simple exit strategies before enjoying a fun night or in areas where they congregate, more people might have known how to escape the nightclub—rather than hide in areas with no outlet. Many identified the restrooms as a place to hide, which allowed the shooter to contain multiple people in a small space. This strategy allowed the shooter to take advantage of “firing multiple rounds into those gathered inside restrooms.”¹⁰⁵ Perhaps choosing areas that allowed for easier escape would have proven advantageous and lifesaving.

¹⁰² BBC News.

¹⁰³ Ariel Zambelich and Alyson Hurt, “3 Hours in Orlando: Piecing Together an Attack and Its Aftermath,” National Public Radio, June 26, 2016, <https://www.npr.org/2016/06/16/482322488/orlando-shooting-what-happened-update>.

¹⁰⁴ “For Your Safety: Lessons Learned from Pulse Nightclub,” WBTV Charlotte, June 14, 2018, <https://www.wbtv.com/story/38429076/for-your-safety-lessons-learned-from-pulse-nightclub>.

¹⁰⁵ WBTV Charlotte.

F. MARJORY STONEMAN DOUGLAS HIGH SCHOOL

On February 14, 2018, a student, who had been expelled for disciplinary reasons, entered Marjory Stoneman Douglas High School, armed with an AR-15. The school staff knew of this student's past disciplinary issues and tried to initiate a lockdown once he was seen on school grounds, but it was too late.¹⁰⁶ The suspect started shooting on the first floor and proceeded to the second and third floor, shooting individuals. Within six minutes, he had shot and killed 17 people and injured 17 more.¹⁰⁷ The shooter used tactics such as slipping out of the school and blending in with other students, which allowed him to get away from the school grounds. He was later found a couple of miles away from the school by officers and taken into custody.¹⁰⁸

1. Controversies

The shooter used strategies to make the student population more vulnerable. For example, he set off the fire alarm so that students would funnel out of their classrooms, making them easier targets. The shooter's firing through doors was tactically advantageous as he knew that the drills at the high school involved "students . . . huddling in classrooms behind locked doors."¹⁰⁹ Other issues showed that officers assigned to the school district had failed to intervene during the event, with one officer running away from the gunfire instead of running toward it.

2. Outcomes

As there have been more school shootings, it has been incumbent upon school districts to ensure that school safety policies are in place and practiced. While Marjory

¹⁰⁶ "Teen Gunman Kills 17, Injures 17 at Parkland, Florida High School," History, last modified February 13, 2020, <https://www.history.com/this-day-in-history/parkland-marjory-stoneman-douglas-school-shooting>.

¹⁰⁷ Jeremy Engle, "Learning With: 'Parkland: A Year after the School Shooting That Was Supposed to Change Everything,'" *New York Times*, February 14, 2019, <https://www.nytimes.com/2019/02/14/learning/learning-with-parkland-a-year-after-the-school-shooting-that-was-supposed-to-change-everything.html>.

¹⁰⁸ Audra D. S. Burch and Patricia Mazzei, "Death Toll Is at 17 and Could Rise in Florida School Shooting," *New York Times*, February 14, 2018, <https://www.nytimes.com/2018/02/14/us/parkland-school-shooting.html>.

¹⁰⁹ Burch and Mazzei.

Stoneman Douglas High School invested in perimeter fencing and surveillance cameras, it also shared information, which led to a fast lockdown of the campus.¹¹⁰ Incidentally, it also trained the shooter in navigating the tactics used to thwart an active shooting event. In using the false fire alarm, the suspect did not need to enter any space to find targets, as they were in plain view in the halls and classrooms.¹¹¹ The sheriff's office also instituted language in its policies that mandates officers intervene during such events.¹¹²

G. CONCLUSION

It is imperative to examine our history to uncover why processes and policies are in place while scrutinizing them for evidence of lessons learned. Unfortunately, catastrophic, fluid events have only helped to determine the best way to save lives after the fact. Before active shooter events came to mainstream media, school districts and businesses had lockdown language, which morphed into a philosophy of using security measures to safeguard buildings. The national Run, Hide, Fight model was developed out of these philosophies in 2012. As the United States is the frontrunner in active shooter events worldwide and with this training evolving out of the best ideas from U.S. security experts, it is important to see whether those best practices have changed.

In looking at active shooter events after Run, Hide, Fight came to be, there is evidence that altering the training might make it more useful and save more lives. Criminals in these situations are also adapting their tactics to make their plight more destructive. It is vital that this training is scrutinized to make it more adaptable to any situation—rather than make it linear and structured—so individuals can be more strategic in their survival. These case studies stress that training individuals for these types of events is essential—with the

¹¹⁰ Mark Keierleber, “Lessons from Parkland: 6 Big Things We’ve Learned About Student Safety, School Security, and Resilience since the Tragic 2018 Massacre,” *The 74*, February 13, 2019, <https://www.the74million.org/lessons-from-parkland-6-big-things-weve-learned-about-student-safety-school-security-and-resilience-since-the-tragic-2018-massacre/>.

¹¹¹ Carolyn Berk, “A Lesson in School Emergency Planning from the Parkland School Shooting,” *RAVE Mobile Safety* (blog), January 24, 2019, <https://www.ravemobilesafety.com/blog/a-lesson-in-school-emergency-planning-from-the-parkland-school-shooting>.

¹¹² Kalhan Rosenblatt, “Broward County Officials Change Shooting-Response Policy after Lessons Learned in Parkland School Massacre,” *NBC News*, December 26, 2018, <https://www.nbcnews.com/news/us-news/broward-county-officials-change-shooting-response-policy-after-lessons-learned-n952036>.

knowledge that they have choices and that continuously re-evaluating those choices might save their lives.

IV. EVALUATION OF RUN, HIDE, FIGHT

The current active-shooter emergency drill method requires an evaluation to ensure that the instruction is still relevant to saving lives. Looking at past case studies allows for learning and evolving the training to best serve our population. As noted in Chapter III, the Sandy Hook shooting in Connecticut shaped the current national model of active shooter training—from the standard lockdown to Run, Hide, Fight. This chapter assesses the current model and compares it to training in other countries, as active shooter events are a global security issue. Learning from other situations or even through different lenses can aid in making training methodologies stronger and more relevant. Moreover, by investigating concerns and flaws with Run, Hide, Fight, this chapter considers whether improvements should be made to the training.

A. ORIGINS OF RUN, HIDE, FIGHT

The first drills in the United States began with standard fire drills in structures that could combust rapidly because individuals, especially students, did not know what to do or how to get out of a burning building without chaos ensuing or people getting injured or killed. While these drills have saved lives worldwide over the years, the United States gradually added different exercises for natural and human-made occurrences. These exercises have included everything from post-war bomb drills, to earthquake and tornado drills, to lockdown and active shooter drills.

In the aftermath of several active shooter events, the Department of Homeland Security (DHS) developed brochures, booklets, pocket guides, and websites dedicated to training citizens in how to respond to these situations. In the early days of informational material, the standard training was to evacuate, hide out, and take action.¹¹³ In the United States, it has morphed into the mantra-like training of Run, Hide, Fight for its citizens.

The many lessons learned from Sandy Hook led to ways for those caught in an event to fight to save their lives if the perpetrator entered their safe space. DHS created an

¹¹³ Department of Homeland Security, *Active Shooter: How to Respond*.

additional training piece within lockdown procedures it touted as a last resort if confronted: *fighting back*. Thereafter, Run, Hide, Fight was created and made available to everyone.¹¹⁴ With this training, DHS and the Houston Police Department created a video by the same name, which depicts a gunman coming into a professional office and shooting in the business environment at patrons and employees. It paints the picture of the method of training—Run, Hide, Fight—so visual learners can understand the methodology behind the practice and what it means.

The premise behind this campaign is to let people know they have choices. The training is in priority order. They can run or get out if they can safely leave their area. They can hide or lock an attacker out if they cannot run or leave their space safely. And if someone comes through their door with a weapon, they need to be prepared to fight or knock the attacker out with whatever means they have—a coffee cup, a chair, a fire extinguisher, or even a stapler.¹¹⁵ While the *fight* portion tends to be a foreign concept for most, who have never had to defend themselves physically, it tends to be eye-opening and empowering as well. Albrecht quotes former President Obama’s perspective on the training:

Let me be clear. We do not teach the three steps of the Run-Hide-Fight concept to kids in K-12 schools. We certainly teach them the Run and Hide parts, following the directions of their teachers or other qualified adults on campus, to help them evacuate safely or shelter in place (most often in their locked classrooms), until the police arrive to engage the shooter.¹¹⁶

The president went on to say that the intent of the training was not to have younger students engage armed perpetrators but to train the adults to fight back, which has saved lives.¹¹⁷ For college campuses and universities, the students and staff that receive this training possess all of these tools. Figure 1 illustrates considerations for each of the Run, Hide, Fight options.

¹¹⁴ Department of Homeland Security, “Active Shooter.”

¹¹⁵ Ready Houston, “Run, Hide, Fight.”

¹¹⁶ Albrecht, “The Truth behind the Run-Hide-Fight Debate.”

¹¹⁷ Albrecht.

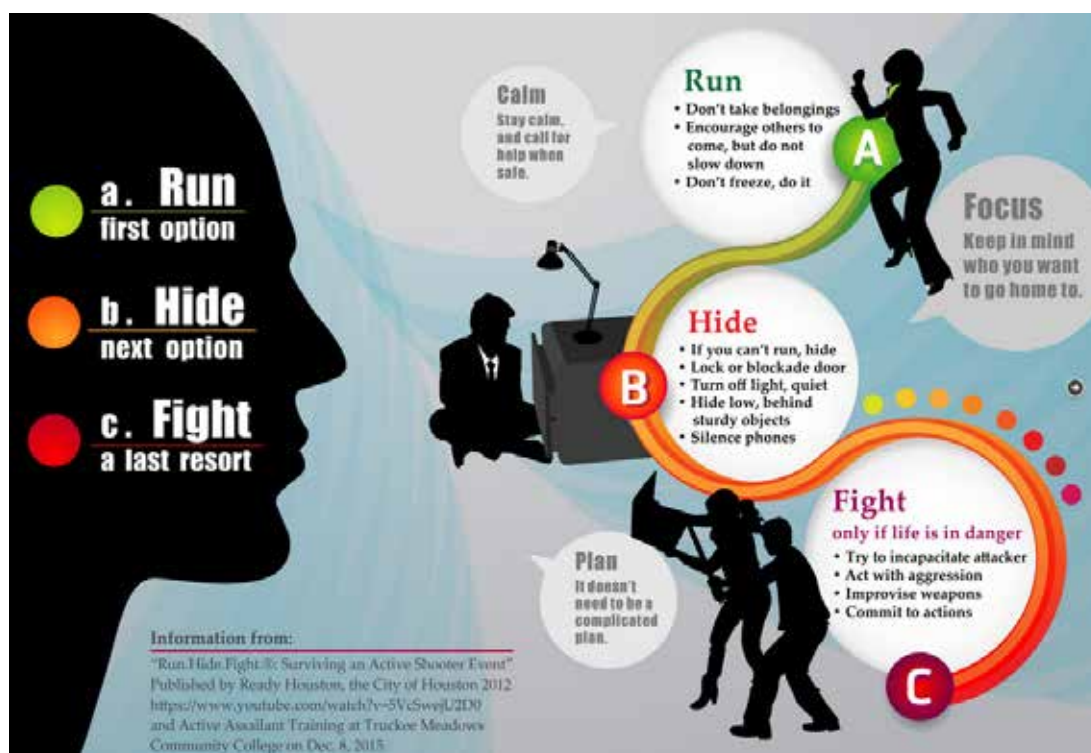


Figure 1. Run, Hide, Fight¹¹⁸

The information DHS provides on this subject, which also includes training for first responders, is widely distributed and advertised. The government supports this effort through multiple legislative actions to attempt to reduce gun violence in the United States.¹¹⁹ The following guides have come from other U.S. government agencies to support this effort:

- Guide for Developing High-Quality Emergency Operations Plans for Houses of Worship
- Guide for Developing High-Quality Emergency Operations Plans for K-12

¹¹⁸ Source: Patricia Bouweraerts, "First, Stay Safe at Work—Safe from an Active Assailant," *Workplace Story* (blog), February 10, 2016, <http://workplacestory.com/first-stay-safe-at-work-safe-from-an-active-assailant/>. See Appendix A for a full outline of the training.

¹¹⁹ Department of Homeland Security, *Progress Report on the President's Executive Actions to Reduce Gun Violence* (Washington, DC: Department of Homeland Security, 2013), <https://www.dhs.gov/publication/progress-report-presidents-executive-actions-reduce-gun-violence>.

- Guide for Developing High-Quality Emergency Operations Plans for Institutions of Higher Education
- Fact Sheet: “Training First Responders and Schools on Active Shooter Situations”
- Fact Sheet: “Emergency Management Planning”

Originating from this government training and information, numerous private businesses train not only schools but also company employees, as school and workplace violence is a significant concern and has created a niche for training in the capitalist United States. These companies have turned the government’s Run, Hide, Fight training into other training lessons for profit. The ALICE Training Institute—ALICE is short for alert, lockdown, inform, counter, and evacuate—is one of the largest of these businesses. ALICE training instructs individuals and offers software solutions and threat assessment management to combat any possible active threat.¹²⁰ Other for-profit companies tout the ability to develop policies and procedures that can make schools safer during these scary events. According to Guardian Defense, one of these companies, “They possess the qualifications to develop emergency lockdown procedures, providing feedback for drills, changing policies to improve police response to schools.”¹²¹

Overall, in the United States, many entities are attempting to train and combat active shooter situations to save lives. Because the United States has the lion’s share of these events, it makes sense for more comprehensive training deliverables and marketing to happen here. Run, Hide, Fight is an understandable, digestible training model. While other countries may not have the number of active shooter events annually that the United States has witnessed in the homeland, some still have adopted this training method to keep their citizens safe.

¹²⁰ “Home Page,” ALICE Training Institute, accessed February 27, 2020, <https://www.alicetraining.com/>.

¹²¹ “Active Shooter Training for Schools,” Guardian Defense, accessed February 27, 2020, <https://guardiandefenseplan.com/active-shooter-training-for-schools/>.

B. TRAINING THAT EVOLVED FROM RUN, HIDE, FIGHT

Over the last several decades, the United States and the world have observed multiple active shooter events to a pervasive level, not only in educational settings but also in areas such as open commerce, parks, festivals, shopping malls, houses of worship, camps, and movie theaters. As a result, there is a need for more emphasis on conducting emergency drills, for students as well as people who tend to congregate. It is imperative to train individuals in how to respond during active shooter incidents not only to increase their survivability but also to assist others—and to recognize the potential indicators associated with active shooters. Examining emergency drills in countries such as Australia and Canada is crucial for adapting lessons learned in the United States to make our response to these situations more effective. Additionally, a review of the training recommendations developed and supported by the respective governments is also essential.

1. Australia

Regarding the drill culture in Australia, standard fire and evacuation drills have been and continue to be typical for building occupants. For other types of emergency drills such as active shooter scenarios in Australia, it is not surprising that the majority of literature, studies, and research were developed by the United States, with some information originating from the United Kingdom. Data revealed that Australia had 14 active shooter incidents from 1975 to 2014, compared to 180 events from 2000 to 2014—a significantly shorter timeframe—in the United States, according to the Federal Bureau of Investigation.¹²² Australia benefits from lessons learned from previous events that might not have occurred on its home soil. Through data analysis, Australia developed its response and training to target large areas where people tend to congregate. Examining active shooter event data from Australia revealed that 64 percent of active shooter attacks occurred outdoors, with 36 percent of the attacks ending before police arrived.¹²³ Australia

¹²² “Then and Now: Comparing FBI Active Shooter Stats,” Gavin de Becker & Associates, accessed August 1, 2020, <https://gdba.com/active-shooter-stats/>.

¹²³ Gene Hodgins and Anthony Saliba, “Responding to ‘Active Shooter’ Incidents in Australia,” *Australian Police Journal* 69 (March 2015), https://www.researchgate.net/publication/281212459_Responding_to_%27Active_Shooter%27_Incidents_in_Australia.

used this information to develop information and training for its citizens on active shooter incidents that focuses on large event spaces, open areas, and locations.

Australia has a specific strategy for protecting crowded places from terrorism, which includes guidance to individuals to protect themselves in a large gathering space where acts of terrorism or ongoing threatening events might occur.¹²⁴ The country maintains, as a result of statistical data, that vulnerable locations typically targeted by terrorists include stadiums, shopping malls, and major events. Armed with this information, Australia uses a model that emphasizes “Escape, Hide, Act, See/Tell” or “Escape, Hide, Tell,” which mimics the United Kingdom’s version, “Run, Hide, Tell.” The Australian government has emphasized consistent information, which is available on the Australian Federal Police website, and directed individuals to protect themselves in an active shooter or terrorist event, as depicted in Figure 2.

¹²⁴ Australia–New Zealand Counter-Terrorism Committee, *Australia’s Strategy for Protecting Crowded Places from Terrorism* (Canberra: Commonwealth of Australia, 2017), <https://www.nationalsecurity.gov.au/Securityandyourcommunity/Pages/australias-strategy-for-protecting-crowded-places-from-terrorism.aspx>.



Figure 2. Escape, Hide, Tell¹²⁵

According to the Australian police, these steps are consistent with the type of advice it would disseminate to the public in the case of a “London-style attack”: “RUN—to a place of safety. Running is a better option than to surrender or negotiate. IF there’s nowhere to go, then . . . HIDE—Turn your phone to silent and turn off vibrate. Barricade yourself in if you can. TELL—the police by calling 999 when it is safe to do so” (original emphasis).¹²⁶

The documents that Australia provides regarding these events are readily available on their official government website. In addition to guiding what citizens should do, the information discusses police response, recovery, public information, crime scene investigations and activities, and business continuity. It is a comprehensive plan for how

¹²⁵ Source: “Escape. Hide. Tell,” Australian Federal Police, accessed August 1, 2020, <https://police.act.gov.au/safety-and-security/crowded-places/escape-hide-tell>. See full outline of the method in Appendix B.

¹²⁶ Rachel Olding and Tammy Mills, “Escape, Hide, Act, Tell: Australian Police Disseminate Advice for London-Style Attack,” *Sydney Morning Herald*, June 5, 2017, <https://www.smh.com.au/national/escape-hide-act-tell-australian-police-disseminate-advice-for-londonstyle-attack-20170605-gwkizn.html>.

the entire community will respond, which is helpful. It also shows the government's concern and support of emergency preparedness.

2. Canada

Canada is similar to Australia in that it does not have a large number of active shooter events and tends to use examples and data from the United States. Research indicates that dynamic shooter events in the United States differ vastly from those in Canada and the European environment. The fact that the United States has the most active shooter incidents is not disputed; however, getting accurate statistics, which vary from one country to another as a result of labeling incidents mass shootings, school shootings, or massacres, is difficult. As such, the large number of active shooter events in the United States allows for analysis of incident characteristics and possible trends as well as extraction of information to develop training methods worldwide. In other words, for Canada, the lack of data makes it difficult to infer any trend or development on this topic from an exclusively Canadian perspective.

Canada is more comparable to European countries than to the United States, given the number of active shooter incidents and the lack of clear trends. Additionally, Canada and Europe have restricted gun access as a reaction to active shooter situations, which may lend to fewer events overall. The United States, by contrast, tends to have more active shooter events and casualties, arguably because of the Second Amendment, as well as more access to guns and less access to mental health care for its citizens.

Nevertheless, Canada does participate in active shooter and lockdown drills in schools, conducting live, reality-based exercises to promote emergency preparedness. The standard lockdown procedures for Canada are as follows: "Lockdown. Lockdown. Lockdown. This one word repeated three times sets an entire school in motion. Lockdown initiates the clearing of hallways, the locking and barricading of doors, turning off lights, and students and teachers fall silent as they hide."¹²⁷ The Royal Canadian Mounted Police (RCMP) created a program called the School Action for Emergencies (SAFE) plan. SAFE

¹²⁷ Deidre Seiden, "Safety in Schools: Active Threat Exercise Promotes Readiness," Royal Canadian Mounted Police, April 3, 2017, <http://www.rcmp-grc.gc.ca/en/gazette/safety-schools>.

was launched nationally in Canada in September of 2007. Lockdown procedures set SAFE in motion, which is “a computer database that gives first responders instant access to everything from school contacts, floor plans, aerial photos, maps, lockdown procedures and other site-specific information, including tactical considerations like where first responders can set up posts.”¹²⁸ The plan is comprehensive for a response to emergency events, but there is very little information available to citizens on what they should do, except to lock down and hide.

The RCMP seems to be the only national entity in Canada that has information for conducting lockdowns or emergency threat response by first responders. Individual entities, however, support and market citizen training to survive an armed encounter. In Toronto, the police department in York encourages individuals to use “Run, Hide, Defend” in the case of an active shooter event, which mirrors Run, Hide, Fight. The Run, Hide, Defend training includes

- Running to safety, warning others of impending harm, and calling 911 when it is safe.
- If the individual cannot run safely, hiding is the next option while barricading areas and remaining silent.
- Defending yourself is the last option if running and hiding are not successful. Obtaining some form of non-conventional weapon is advised while working with others around to stop the attacker through fighting back.¹²⁹

While this training targets workspaces, it has yet to be adopted by primary schools in Canada as a national strategy. However, some universities in Canada have promoted the U.S. Run, Hide, Fight training among students and staff. The University of British Columbia is one such university. It has an online course for students and staff to fulfill, not to mention a well-developed website with additional safety information.¹³⁰

¹²⁸ Seiden.

¹²⁹ Farrah Merali, “‘This Could Be the Fight of Your Life’: New Program Shows How to Survive an Armed Attack,” CBC News, May 2, 2018, <https://www.cbc.ca/news/canada/toronto/yrp-run-hide-defend-1.4645662>.

¹³⁰ “Active Threat,” University of British Columbia, accessed August 7, 2020, <https://ready.ubc.ca/take-action/active-threat/>.

Examining and learning from other countries—as well as reviewing other programs to determine whether the United States is “the model” or needs to change course—is a smart way to adopt additional best practices. In the case of active shooter drills, the research indicates that Australia and Canada have modeled their mitigation programs mostly on the U.S. model. They also know that the United States has had a multitude of such events and that those statistics are not diminishing.¹³¹ One substantive difference in Australia’s and Canada’s training models is that they focus more on the *running* and *hiding* pieces, without highlighting the *fighting* aspect of the U.S. training. While this hesitation is understandable from a risk and liability perspective, this is a significant aspect of the training if a subject were to enter an area where citizens are hiding. All countries support and market this training; however, it seems that Canada has the least amount of information through government sites. Australia, by contrast, has several government sites that are easily navigable, and the information about what the government would like citizens and responders to do is clear and concise.

The one applicable difference in training the same or similar Run, Hide, Fight drills is that in Australia, there is less emphasis on a “priority order” of running, hiding, and fighting. Their Run, Hide, Tell model emphasizes the need to assess continuously and think about alternative ways to move and possibly fight or go back to the run option—if the shooter locates the individual. It brings about a more logical and fluid thinking with additional options that are not standardized in the Run, Hide, Fight model from the United States.

C. ARGUMENTS AGAINST RUN, HIDE, FIGHT

As with any strategy to save lives, some people will perish while adhering to the training, and experts will debate whether it is useful. The national Run, Hide, Fight model is no exception. There is no denying that active shooter situations in the United States are increasing. They are. Statistics from the Federal Bureau of Investigation show that exact

¹³¹ “Active Shooter Incidents: Topical One-Pagers, 2000–2018,” Federal Bureau of Investigation, accessed February 27, 2020, <https://www.fbi.gov/file-repository/active-shooter-one-page-summaries-2000-2018.pdf/view>.

trend.¹³² Figure 3 illustrates active-shooter events by year, from 2000 to 2018, with a noticeable increase over time.

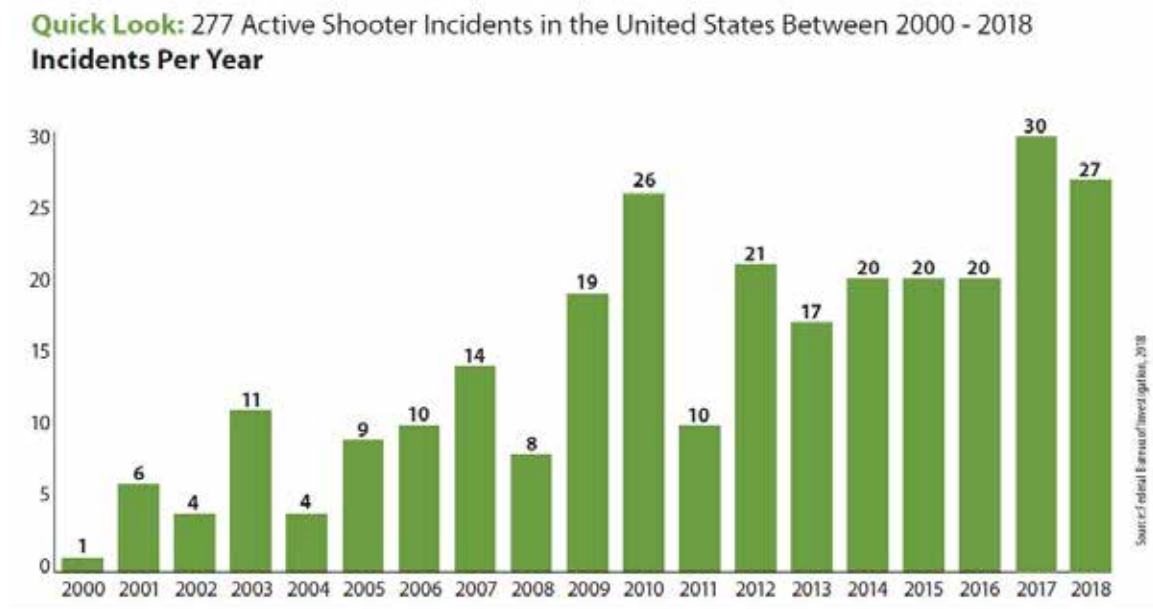


Figure 3. Active Shooter Incidents in the United States from 2000 to 2018¹³³

With that increase in active shooter events, people do perish. The question is whether the training that claims to save lives is sufficient, or does it need to be changed to increase survivability?

The argument against its current state is that Run, Hide, Fight is very linear in thinking and training. The training model shows this reality because it trains in a priority order format. The first priority is to *run*. If an individual cannot run away safely or does not want to run, the second priority is to *hide*. And if the perpetrator finds the hiding place, the individual needs to be ready to *fight* the assailant by any means or method, as this is the third priority. The training model does not allow for a person to move the priorities

¹³² “Quick Look: 277 Active Shooter Incidents in the United States between 2000–2018,” Federal Bureau of Investigation, accessed March 3, 2020, <https://www.fbi.gov/about/partnerships/office-of-partner-engagement/active-shooter-incidents-graphics>.

¹³³ Source: Federal Bureau of Investigation.

around before evaluating the previous priorities. Research concedes that running and hiding must first be unattainable before considering fighting, even though those decisions may be detrimental as an active shooter situation is fluid and dynamic, and can change continually.¹³⁴ Given that active shooter events are fluid, having the ability to change the course of training to adapt to these dynamics seems vital.

In some instances, people who had been subject to active shooter incidents and enacted the training exactly still did not survive. During the active shooting event at the Pittsburgh Tree of Life synagogue, for example, the model did not aid in saving lives, as some of the congregants hid inside a closet—as instructed—but with nowhere to run, they were found and killed by the assailant.¹³⁵ Examining this instance, might the congregants have survived if they had an escape route from their hiding place, being able to go back to the *run* priority because they continuously evaluated their choices? Should this idea of constant evaluation of the situation be added to the national model of Run, Hide, Fight training?

Other parts of the training, especially the fighting aspect, have been questioned not only in the United States but in other countries, too. In several instances, students have fought with assailants during an active shooter incident and lost their lives. For example, Riley Howell, a student at the University of North Carolina at Charlotte, tackled another student who had killed two and injured four during an April 2019 shooting spree on campus. Unfortunately, Howell was killed during the struggle to get the gun away from the assailant. In an interview with Fox News after the shooting, Charlotte-Mecklenburg Police Chief Kerr Putney stated,

“You’re either gonna run, gonna hide and shield, or you’re gonna take the fight to the assailant. . . . Having no place to run and hide, he did the last.” He [Putney] said that if Howell didn’t approach the gunman, he “might not have been disarmed. . . . Unfortunately, he gave his life in the process. But his sacrifice saved lives. . . . What he did was he took the assailant off his

¹³⁴ “Run Hide Fight: Pros and Cons,” *Alert Media* (blog), November 12, 2019, <https://www.alertmedia.com/blog/run-hide-fight-pros-cons/>.

¹³⁵ Stephen Bryen, “Run, Hide, or Fight: A Poor Strategy for an Active Shooter,” Jewish Policy Center, May 13, 2019, <https://www.jewishpolicycenter.org/2019/05/13/run-hide-or-fight-a-poor-strategy-for-an-active-shooter/>.

feet, and then the heroes that we have here were able to apprehend him from there.”¹³⁶

Another example occurred on May 7, 2019, when two individuals entered the K-12 STEM School eight miles from Columbine High School, armed with handguns. Three students, including student Kendrick Castillo, rushed one of the suspects and tackled him to the ground. In the struggle, the weapon went off several times and ultimately killed Castillo and injured another tackler. A school security guard apprehended the other shooter. Joshua Jones, one of the students who tackled the shooter, stated, “I had been taught—every time anybody ever talked about this kind of thing, they said, you know, get away, escape from the shooter and wait for the authorities to arrive. But in that moment, I just did what was best for me, and I’m sure everybody else in the room did the same thing.”¹³⁷ All three students are heroes for stopping these shooters from killing or injuring more students. The question is whether these students fought “correctly” as trained or there were other things they could have trained on to save not only their fellow students but their lives as well.

Other voices on the topic agree that fighting back without the proper mindset can be detrimental. Some critics believe that Run, Hide, Fight fosters a victim or “herd” mentality.¹³⁸ If the first two parts of this training reinforce a non-aggressive mindset, expecting someone to fight if there is no other option is problematic. Affirming this assertion, Ariel Mannes writes, “The model is described by some as ignorant to the ways the human mind actually functions in flashbulb moments of crisis—all while instilling a linear thought path that forgoes improvisation and innovation, two factors that could quickly become key for one’s survival.”¹³⁹ Law enforcement and the military train to fight

¹³⁶ Nicole Darrah, “UNCC Shooting Victim Riley Howell ‘Saved Lives’ by Tackling Gunman, Police Say,” Fox News, May 1, 2019, <https://www.foxnews.com/us/uncc-riley-howell-saved-lives>.

¹³⁷ Phil Helsel, “Student Who Helped Subdue School Shooter Made ‘Split-Second’ Choice,” NBC News, May 14, 2019, <https://www.nbcnews.com/news/us-news/student-who-helped-subdue-colorado-school-shooting-suspect-made-split-n1005776>.

¹³⁸ Ariel Benjamin Mannes, “Exploring the ‘Run, Hide, Fight’ Debate,” Official Website of Ariel Benjamin Mannes, January 14, 2019, <https://arielbenjaminmannes.com/exploring-the-run-hide-fight-debate/>.

¹³⁹ Mannes.

back in moments of crisis. The option of watching a five-minute video, as opposed to attending an hours-long presentation, is still not enough time to adequately prepare civilians to fight for their lives or understand the trauma they may encounter during such a situation.

Other arguments to the Run, Hide, Fight training include the way the practice is inconsistent or interpreted differently from what was intended in some areas. While the training itself is pretty set within the Run, Hide, Fight priority, some entities have added additional components to the training that many have condemned. For instance, trainers have used the sound of gunfire or projectiles or shown actual footage of shootings to provoke an understanding of how an active shooter incident might happen.¹⁴⁰ These overzealous training methods may traumatize the individual more than help them. Educators say these tactics are traumatizing, both emotionally and physically, and not helpful in trying to prepare for an event that might not even occur.¹⁴¹

Perhaps it is not only a question of arguing about training standardization but also the ability to choose options based on the situation—rather than through the Run, Hide, Fight priority order model. Perhaps the training intends to give opportunities for those within the situation to choose any of the three actions at any time, but it just is not stated or fully understood that way. The appropriateness of the realism of the training is also in question. Is utilizing fake weapons to prod people to do something—to experience how the fight, flight, or freeze response works in the human brain—worth the trauma it can and has caused? Are there other ways to train purposefully to obtain the outcomes wanted, which include knowing one's options, choosing wisely and continually, and surviving the encounter?

¹⁴⁰ Evie Blad and Madeline Will, “‘I Felt More Traumatized Than Trained’: Active-Shooter Drills Take Toll on Teachers,” *Education Week*, March 24, 2019, <https://www.edweek.org/ew/articles/2019/03/24/i-felt-more-traumatized-than-trained-active-shooter.html>.

¹⁴¹ Blad and Will.

D. CONCLUSION

There is no doubt that the evolution of emergency drill training from lockdown to Run, Hide, Fight has enhanced survivability in active shooter events worldwide. Continual evaluation of training methods is essential to ensuring that the training combines the best practices and most effective approaches to increase survivability. Understanding how other countries have adapted the Run, Hide, Fight strategy to their needs and culture sheds light on some advantages that perhaps the United States can use. Also, acknowledging the concerns of others regarding this training can bring out other strategies that are beneficial to enhance our current training methods.

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V. TACTICS OF ACTIVE SHOOTERS AND FIRST RESPONDERS

When examining active shooter situations from around the world and conducting an analysis on how to survive such events, evaluating tactics used by shooters to engage targets is essential in deciding what to do as a victim. In these events, shooters may target individuals as they are running, hiding, or fighting, as discussed previously. This chapter dissects the Run, Hide, and Fight portions of training separately vis-à-vis target acquisition of the suspect, which may aid in the choices made by individuals caught in this situation.

How people move during an active shooter incident may influence their survivability. The movement of victims and survivors may also help determine whether the national Run, Hide, Fight model is in the best order for survivability, or if the training needs to be revised. If an individual is close enough to fight the perpetrator, then fighting for one's life may be the only option, and having the right mentality for engaging in a physical threat is also essential. Choosing to engage a shooter in a fight also has pros and cons for the individual during the event. Evaluating those decisions now may help align the training for dynamic shooter situations nationally.

A. RUN: SHOOTING STATIC VERSUS MOVING TARGETS

While examining shooter's tactics, whether law enforcement, military, or just gun enthusiasts, it is a common practice to shoot static or non-moving targets rather than moving targets. Most people trained in marksmanship tactics know that shooting static targets is the first step in learning how to hit the mark, and striking non-moving targets is much easier than moving ones. The fundamentals of shooting a firearm include proper stance, proper grip, sight picture acquisition, breathing control, smooth trigger pull, and understanding recoil. These are the first lessons of gun maneuvering and target shooting. All of these mechanics of shooting need to be understood, so the shooter can hit his intended target.¹⁴² With all of these "rules" just to fire a gun, it is easy to see that shooting

¹⁴² C. Parks, "How to Shoot a Pistol the Right Way," *Outdoor Methods* (blog), August 24, 2018, <https://outdoormethods.com/how-to-shoot-a-pistol/>.

a non-moving target would be more comfortable than shooting at a moving target. And, as with anything else, practice makes perfect when aiming to hit the intended target.

Even if the shooter is proficient in shooting at static targets, shooting moving targets takes additional skills or luck. Living targets tend to move, so additional marksmanship training for law enforcement, military, and others is essential. Not surprisingly, then, Cheng Lei et al. found that “compared with fixed targets, moving targets in weapon shooting can greatly reduce the hit rate.”¹⁴³ The military trains on shooting moving targets and equates it to skills called “tracking” or “trapping.” Tracking involves the moving of the rifle at a speed equivalent to the rate of the target. The shooter attempts to acquire and shoot at the intended target once it is in proper relation to the sight picture. This method tends to be less of an accurate way to hit the mark but is what less-experienced shooters tend to do. According to shooting expert Dennis Tueller, “The tendency is for us to stop swinging the gun with the target at the moment of firing, thus resulting in a shot going where the target was, instead of where it is going. In my experience, this lack of follow-through is the most common cause for missing shots at a laterally moving target.”¹⁴⁴ Trapping, on the other hand, is the method of holding the sight picture slightly in front of the object and firing when the object passes across the point of aiming sight.¹⁴⁵

Striking moving targets is challenging, even for the most experienced shooters. Training for experienced shooters involves the methods of trapping and tracking when engaging moving targets. The problem is that even the most highly trained individuals may miss moving targets. Tueller states that when it comes to officer-involved shootings,

These numbers will vary a bit from year to year, but the U.S. national average hit-ratio is about 1 out of 6, or roughly 15%. That is, for every six shots deliberately fired by officers during armed confrontations, only one of those six shots will hit its intended target. That means that 85% of the shots fired during these gunfights are hitting something other than the

¹⁴³ Cheng Lei et al., “Moving Target Defense Techniques: A Survey,” *Security and Communication Networks* (2018), <https://doi.org/10.1155/2018/3759626>.

¹⁴⁴ Dennis Tueller, “Why Train on Moving Targets?,” *Action Target*, accessed March 28, 2020, <https://www.actiontarget.com/products/why-train-on-moving-targets/>.

¹⁴⁵ Joel D. Schendel and Shirley D. Johnston, “A Study of Methods for Engaging Moving Targets,” *Human Factors: Journal of the Human Factors and Ergonomics Society* 25, no. 6 (December 1983): 693–700, <https://doi.org/10.1177/001872088302500606>.

intended target, often causing expensive property damage, injury, and sometimes death.¹⁴⁶

Especially in the hands of an inexperienced shooter, firearm accuracy in engaging and hitting moving targets would decrease. Research shows that slight positional changes could give the advantage to the mover, which might be crucial in winning the situation. Once action occurs, one's adversary is slower to make adjustments, giving the benefit to the mover.¹⁴⁷ This tactic shows that not only does movement provide the target the advantage, but the shooter must make equal adjustments, which makes target acquisition even harder. Conversely, for individuals in an active shooter situation who are moving or running, the shooter has less of a chance of hitting one's intended target, which might save an individual's life.

This strategy also correlates with how instructors train police officers when engaging a subject with a weapon. When officers are in a shooting situation, they want to move, so they are not targeted by the perpetrator. Moving allows more opportunities for the officer to observe and analyze the situation while also providing a non-static target, making it more difficult for the suspect to acquire. Considering this tactic as a strategy for subjects in active shooter situations could save lives.

B. HIDE: COVER VERSUS CONCEALMENT

When evaluating the Run, Hide, Fight method, it is vital to assess what it meant by *hiding*. Is the object to find a place where one can stay for the duration of the incident? Is the purpose of locating an impenetrable place, or is it just to ensure that the perpetrator does not see those hiding? In an active shooter incident, finding an appropriate place to hide from the situation is also imperative. Can one hide and then move? These are essential questions that research must evaluate to aid in saving lives in an active shooter situation.

¹⁴⁶ Tueller, "Why Train on Moving Targets?"

¹⁴⁷ Fred Leland, "Cover and Concealment!: Understanding and Utilizing These Tactical Basics," *Law Enforcement and Security Consulting* (blog), February 21, 2007, <http://www.lesc.net/blog/cover-and-concealment-understanding-and-utilizing-these-tactical-basics>.

When hiding, understanding cover versus concealment is necessary, and figuring out which one would be more advantageous for the situation is incredibly important. In law enforcement and military terms, “Cover is an obstacle that our adversary cannot shoot through. Concealment, on the other hand, is an obstacle that an adversary could shoot through but hides our exact location. Cover is usually concealment, but not always.”¹⁴⁸ An example would be bulletproof glass, similar to what is available in a bank or some convenience stores. While that glass provides cover and will stop bullets, it is not concealment because one cannot hide behind it. After all, it is see-through. According to a publication by the U.S. Marine Corps on scouting and patrolling, “Cover is protection from the fire of hostile weapons. Concealment is the protection from observation.”¹⁴⁹

Conversely, people can conceal themselves behind walls or doors in buildings, but bullets can still penetrate through material like sheetrock. While at times concealment may be advantageous to avoid the observation of a shooter, it might not be for all incidents. Having cover that stops bullets during an active shooter incident may be needed. Tactical officers believe that utilizing cover can prevent injury during a deadly force encounter because it stops bullets. They also think that concealment is a useful tool for concealing one’s location before and during a fight, which can aid in surprise tactics that will lend an advantage.¹⁵⁰ In the case of an active shooter situation, concealing one’s whereabouts or utilizing cover can buy time to allow one to escape and run away to safety after the perpetrator has left the area. The importance is to understand what cover or concealment to choose, as well as being able to re-evaluate the situation to move or stay put.

C. FIGHT: DEFENDING ONESELF IN A VIOLENT ENCOUNTER

Violence is always discouraged in contemporary society. Parents program self-control and pacifism into children at a young age. Moreover, most people have not experienced any type of physical altercations in their lives. While part of survival in an

¹⁴⁸ Leland.

¹⁴⁹ U.S. Marine Corps, *Scouting and Patrolling*, Marine Corps Warfighting Publication 3-11.3 (Washington, DC: Department of the Navy, 2015, 2000), <https://www.marines.mil/Portals/1/Publications/MCWP%203-11.3%20%20Scouting%20and%20Patrolling.pdf>.

¹⁵⁰ Leland, “Cover and Concealment!”

active shooter situation might include *fighting*, most people do not know how to fight, what that looks like, and whether it is acceptable for them to possibly hurt someone else. Tim Larkin, author of the book *When Violence Is the Answer*, opines,

Violence is a tool. It's not the right tool for most jobs, but there are some very few, very rare jobs you can't complete without it. When you need it, you will almost certainly have to use it yourself. You won't be able to call the police, or they won't get there fast enough, when you are facing a criminal who is using violence to take property, privacy, liberty or life from you.¹⁵¹

Knowing that one can use that tool to protect oneself or others is essential. Realizing that people have the inherent ability to use violence to fight back is empowering. Understanding that state and federal law allows the use of self-defense in situations where someone threatens death or bodily harm is also relevant and needed.

Others are concerned that they might be legally liable for any injury they cause, as well as any action they do not take. According to reports, Joseph LaRocca, who was a senior adviser for the National Retail Association, approached DHS about developing an active shooter program in the aftermath of the Westroads Mall shooting in Omaha, Nebraska, in December 2007. According to Glen Butler with Homeland Security Today, "Although safety of employees and customers was a primary reason, LaRocca admitted that his association's members were worried about the 'legal liability' they might face if they did not attempt to do something to protect others during a shooting incident."¹⁵² Choosing to defend oneself or others is not absolute. Answering these questions is vital in easing the minds of those who might use violence to put an end to an active shooter event. While state and federal law allows for the defense of self or others, it is the choice to do so that tends to be the sticking point. The lack of clarity or absolute determination to defend oneself tends to be the case even in active shooter events when the person's life is at stake.

¹⁵¹ Tim Larkin, *When Violence Is the Answer: Learning How to Do What It Takes When Your Life Is at Stake* (New York: Back Bay Books, 2017).

¹⁵² Glen Butler, "The Tipping Point: Time to Review 'Run, Hide, Fight,'" Homeland Security Today, January 14, 2013, <https://www.hstoday.us/columns/guest-commentaries/the-tipping-point-time-to-review-run-hide-fight/>.

Perhaps it is the training that can aid in this decision-making process. Lucinda Roy, a Virginia Tech professor and author of a book about the shootings, suggests that “we must empower ourselves to act before more children and teachers are forced to take cover while a young shooter hunts them down.”¹⁵³ Maybe the training can enhance that empowerment through simple discussions, table-top exercises, drills, and scenario-based training.

D. TRAIN: REALITY-BASED SCENARIOS FOR LAW ENFORCEMENT

Evaluating how law enforcement trains for frightening and violent situations can shed light on better ways to train others who have never experienced such incidents. Training officers who have not experienced fluid, scary events but need to act appropriately and safely is an evolving study. For years, law enforcement and the military have employed electronic and in-person scenario-based training to improve the decision-making skills of officers during fluid and violent situations. Most individuals entering law enforcement or the military do not have experience with extreme conditions, so giving them the ability to encounter a threatening situation through scenario-based training can start an accounting of pre-programmed responses.

Over the years, law enforcement and military personnel have used live scenarios to enhance training, not to mention electronic, scenario-simulating machines like the Firearms Training System or Multiple Interactive Learning Objectives system. These systems place the user in any type of situation to handle any level of force, including deadly force, utilizing the latest video technology. Having the opportunity to confront dangerous events—such as a person with a gun, a domestic violence investigation, or even a bomb scenario—in a safe learning environment is impactful. This type of training allows individuals to enhance their situational awareness abilities, which can in turn help them make life-saving decisions.

According to the Federal Law Enforcement Training Center, situational awareness is “being aware of what is happening around you in order to understand how information, events, and your own actions will impact your goals and objectives, both now and in the

¹⁵³ Butler.

near future.”¹⁵⁴ Situational awareness is only one of the eight survival factors that the center associates with its reality-based training scenarios. The other elements used in the Scenario Training Assessment and Review model are initial response, threat identification, scene control, proper force application, controlled arrest techniques, appropriate communication, and an articulate after-action review (see Figure 4).¹⁵⁵



Figure 4. Scenario Training Assessment and Review Model¹⁵⁶

Situational awareness training reminds trainees that assessing and analyzing the fluid situation can aid in decision-making skills, as well as the timeliness of those decisions. It encompasses the theory of Colonel John Boyd, commander of a fighter group in the

¹⁵⁴ Federal Law Enforcement Training Center, *Stress and Decision Making* (Washington, DC: Department of Homeland Security, 2011), https://www.fletc.gov/sites/default/files/imported_files/reference/research-papers/Stress-and-Decision-Making-04-06-12--Approved---Pulic-Release--508-Accessible.pdf.

¹⁵⁵ Federal Law Enforcement Training Center.

¹⁵⁶ Source: Federal Law Enforcement Training Center.

Korean War, called the observe, orient, decide, and act (OODA) loop.¹⁵⁷ The OODA loop is a method that law enforcement and military groups refer to in their training, but individuals must recognize this phenomenon in themselves.

The OODA loop represents the process through which humans react to a variety of stimuli encountered every day.¹⁵⁸ The first part of this process is to observe, which is processed mostly by one's sense of sight. Orienting focuses attention on the observed item or issue. The third part is deciding what to do about the focused observation. And the final piece is to act on that information. The reaction time to the situation or information depends on several factors, including a known stimulus, several stimuli, the denial of a stimulus or situation, and the emotional filter.¹⁵⁹

The more that law enforcement and military personnel train in unpredictable, fluid conditions, the greater the understanding of how to stop the delay of response time to the situation. This type of knowledge can also assist in training civilian individuals who may otherwise delay their reaction time to an active shooter situation, where seconds can save lives. Perhaps incorporating these realizations of how our brains work, as well as scenario-based training, will aid in stopping the human reaction of freezing, thus allowing for better decision-making skills.

E. CONCLUSION

When examining the Run, Hide, Fight training, analyzing tactics of shooters, law enforcement professionals, and military experts can be advantageous to aid in choosing the best path to survival. From shooting strategies, knowing that even the most proficient shooters have trouble acquiring a target on the move is essential when needing to decide whether running is the right option in an armed situation. Likewise, understanding how hiding takes the form of either cover or concealment is important. Realizing that if hiding

¹⁵⁷ "The OODA Loop: How to Turn Uncertainty into Opportunity," *Taylor Pearson* (blog), August 2, 2017, <https://taylorpearson.me/ooda-loop/>.

¹⁵⁸ Tracy A. Hightower, "Boyd's O.O.D.A Loop and How We Use It," *Tactical Response*, accessed May 18, 2020, <https://www.tacticalresponse.com/blogs/library/18649427-boyd-s-o-o-d-a-loop-and-how-we-use-it>.

¹⁵⁹ Hightower.

is the option, an individual must determine the best hiding method while understanding the need to reassess the situation. Finally, comprehending that if the incident came to it, fighting is an option to consider without the worry of liability to save a life. The primary outcome of the analysis of this training is to reassess the situation continuously, knowing that the landscape of the situation is fluid. Changing course or choices between running, hiding, or fighting at any time during the incident not only is expected but could also save a life through that understanding. Perhaps this addition of continually reassessing throughout the event could be added to the national training model.

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VI. SUMMARY AND CONCLUSION

Throughout the research conducted, several determinations and findings were not surprising, yet others were enlightening. As with the warning label on a toaster not to place it in a bathtub, there are reasons that emergency drills came into existence. Drills for schools and businesses occur because of past incidents in which people did not know what to do and perished. Evaluating past practices can aid in the development of training to educate and save lives in emergencies. The research illustrates this for fire, tornado, earthquake, and lockdown drills. For active shooter drills, humans have learned from the past to shape our future in understanding and responding to these types of events. The United States has led the charge and developed the Run, Hide, Fight training as a result of past tragedies. This training is also the model employed by many countries around the world, as the United States has experienced the majority of these events. Conducting this type of research can aid in continuing to learn from incidents since the inception of Run, Hide, Fight.

While going through frightening situations, there are natural bodily responses that occur at the necessary level of human survival. Fighting, fleeing, or freezing can occur in all individuals when encountering a startling situation. While these are natural phenomena, research shows that humans can train themselves out of the instinctual reaction to something, thus giving them other surviving alternatives. There are different schools of thought regarding training or not training for a frightening situation. Still, research shows that knowledge, understanding, and practicing emergency drills are necessary and have become legislatively mandated due to the realization that experience is power and can save lives.

A. SUMMARY OF FINDINGS

How administrators or instructors conduct the training varies and is part of the controversy in emergency drill training, especially when it comes to active shooter drills. Research verifies that individuals learn differently, so it is essential that the teaching of the exercises varies. Understanding the difference in learning styles will only enhance the

ability to train individuals fully to save more lives. The research has also revealed that training that frightens individuals intentionally is not helpful or productive. Furthermore, there needs to be some form of standardization of training to enhance the learning environment and retention.

Several case studies before and after the development of Run, Hide, Fight highlighted the human response to the situation. Columbine illustrated that hiding and not moving or fighting was costly to some. It also highlighted the shooter's tactics of movement that could have been countered by individuals in the school if they had continually reassessed the situation. The Virginia Tech and Sandy Hook shootings showed the same outcomes. Those two studies also brought to light the important fact that if one chooses to *hide* then there needs to be an escape outlet to ensure the ability to *run* or *fight*. The Seattle Pacific University shooting showed that if there is an opportunity to fight, then quick decisiveness can save lives. The Pulse nightclub shooting again demonstrated the need to be situationally aware and not to hide in locations where there are no escape routes. Finally, the Marjory Stoneman Douglas shooting showed that with evolving training in schools or businesses, shooters are becoming savvier at thwarting detection and creating higher body counts, thus proving that the training given needs to be updated to provide for the fluidity of response to these events.

Initially, it was easy to understand the reasoning behind the Run, Hide, Fight model. The training, however, reads like a linear method, having a priority order of run first. If there is an avenue to move and escape, then that is the priority. If running is not an option, hide. Finding an object or room where the shooter will not discover those hiding is the second priority. If the perpetrator identifies the hiding spot, fighting for one's life is the last alternative. Run, Hide, Fight was developed in the aftermath of tragic circumstances where hiding—or going to lockdown—was the only training given at the time. It made sense. It was easy to remember. It was an “if-then” model that individuals could understand.

The problem with this method is that it is not clear whether individuals can change the priority order and hide first or fight first, depending on the situation. This assertion is proven by the research before and after the development of the Run, Hide, Fight method.

In past incidents before and even after the construction of Run, Hide, Fight, individuals froze and hid when running or fighting could have saved their lives. Did they know that they had choices? Did they fall back on the lockdown procedure because they had no continued training in Run, Hide, Fight? Or did they feel they could pick only one choice and had stick with it? Moreover, is Run, Hide, Fight the best method of training to give individuals when it is not standardized? Furthermore, if a person hides, have they been trained that they need an outlet to escape and run or be able to fight, if the opportunity presents itself?

Globally, some countries shape their training after the American Run, Hide, Fight model. Australia promotes a Run, Hide, Tell model, which leaves out *fighting* as a main component. However, it also has a caveat in its training that emphasizes the need to continually reassess the situation to ascertain whether to change the choice of mode. This additional piece to the training is so crucial for people to understand and could be a model for the United States to emphasize within the Run, Hide, Fight model.

While looking at police and military tactics to shooting, DHS can learn much from their tactics of initiating movement, using cover and concealment, and knowing that constant evaluation of the situation is necessary for survival. The research found that running away from a dangerous situation when being targeted was more survivable, with the least likelihood of being hit by a bullet. The research also showed that cover and concealment are different and need to be understood by civilians.

This information and the case studies have led to recommendations to update the current model. Movement plays a key role in target acquisition, as does the utilization of good cover and concealment while continually evaluating the situation. Civilians also need to understand that when fighting for their lives, it is okay to use force in any manner. These findings are all brought together by knowing how to change up the training, so the mind will continually assess and not freeze.

B. RECOMMENDATIONS

Understanding that each active shooter event is different, as are each active shooter and their tactics, is an important acknowledgment. It is equally important to recognize that

each individual in the situation as a victim is diverse and can respond differently. Training individuals to become situationally aware and decisive during a frightening event is challenging. Law enforcement and military personnel train continually to ensure that proper decision making occurs during dynamic, violent situations. Ordinary civilians do not get those opportunities and are not exposed to those types of situations regularly.

1. Standardize Training

The research concludes that there is a need to standardize the training, which includes training people to continually scan the environment to alter the choices made if needed to survive. The research has shown that getting out of the idea that this training is static and linear could greatly enhance survivability rates. The training should emphasize that choices depend on the individual and the situation. Therefore, the national Run, Hide, Fight training should include the information that a running target is harder to hit than a static target; that changing mindsets and continually scanning the situation to look for alternative choices of action is key to survival; and that one decision does not preclude individuals from making additional choices to keep them safe. Administering standardized training that has this type of information can inform the individuals who may someday encounter these events.

2. Eliminate the Use of Fake Weapons in Training

The research concludes that there is a need to rid the training of the idea that civilians can learn while being shot at by ConSim weapons or Nerf guns. This type of training does nothing more than cause trauma to individuals in the training environment. Nor does it aid in helping civilians understand the Run, Hide, Fight method, or what choices could or should be made and when. Run, Hide, Fight is still applicable. It is easy to remember, much like Stop, Drop, and Roll, so keeping the training is essential. Perhaps just adding a similar statement within Run, Hide, Fight, much like Australia's training, would be enough to enhance people's understanding of the varying options.

3. Encourage Individuals to Reassess the Situation

This recommendation might mean that DHS updates the national Run, Hide, Fight model with the following statement: While any of the options to run, hide, or fight are available to choose at any time during an active shooter event, individuals should continually reassess the situation and make choices that aid in their safety. Figure 5 depicts the suggested revisions to the model.

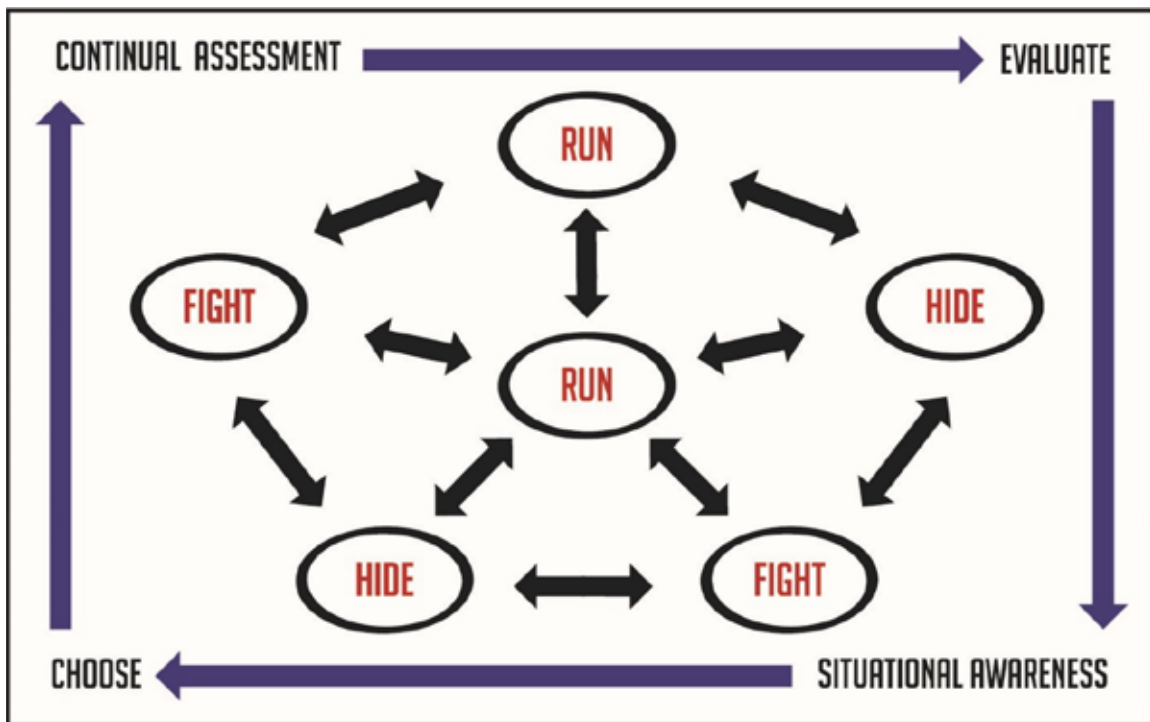


Figure 5. Updated Run, Hide, Fight Model¹⁶⁰

If civilians understand that they have choices, as well as know the research behind what those choices are, their decision making is more informed. If they know there is a need for continual reassessing of the situation, which may mean a different course of action during an event, it could save their lives. Being trained more thoroughly in situational and

¹⁶⁰ This framework was conceived by the author based on the research.

environmental awareness could aid in individuals' getting out of the possible freeze mode to make educated choices that promote survivability.

C. NEED FOR FURTHER STUDY

Given that people learn differently, future studies could address alternatives to regular classes or internet learning for active shooter situations. Perhaps the use of computer-aided trainers, such as the Multiple Interactive Learning Objectives system that police departments use, could aid in the decision-making process for civilians while in a safe environment. Future studies should evaluate how effective these scenario-based training systems are as training tools for an active shooter situation from the victim's perspective. Working toward a tool that places the victim in a scenario that requires continual scanning and choice-making within a Run, Hide, Fight event could assist in preventing the freeze mechanism and enhance awareness and survivability in active shooter situations.

Further research will need to happen through the evaluation of additional active shooter case studies from this point forward. Assessing training methods that purport to save lives ensures that any lessons learned are applied continually. History has shown that evaluating past occurrences can lead to new ideas that promote survival.

D. CONCLUSION

Enhancing the ability of individuals to survive active shooter situations is a critical study. Because dynamic shooting events are only increasing in the United States, training and educating individuals for these situations is essential to increase survivability. While the United States is the leader in the development of the Run, Hide, Fight model, improving the understanding or probable intent of the training in a thoughtful manner can save additional lives. From lessons learned, this thesis has shown that merely altering the practice to include the continual assessment of the situation, emphasizing that choices can change within the situation, is vital to further empowering individuals in these situations to stand the best chance of survival.

APPENDIX A. RUN, HIDE, FIGHT OUTLINE

The following outline appears on the Department of Homeland Security's civilian webpage for active shooter response:

During

RUN and escape, if possible.

- Getting away from the shooter or shooters is the top priority.
- Leave your belongings behind and get away.
- Help others escape, if possible, but evacuate regardless of whether others agree to follow.
- Warn and prevent individuals from entering an area where the active shooter may be.
- Call 911 when you are safe, and describe shooter, location, and weapons.

HIDE, if escape is not possible.

- Get out of the shooter's view and stay very quiet.
- Silence all electronic devices and make sure they won't vibrate.
- Lock and block doors, close blinds, and turn off lights.
- Don't hide in groups- spread out along walls or hide separately to make it more difficult for the shooter.
- Try to communicate with police silently. Use text message or social media to tag your location, or put a sign in a window.
- Stay in place until law enforcement gives you the all clear.
- Your hiding place should be out of the shooter's view and provide protection if shots are fired in your direction.

FIGHT as an absolute last resort.

- Commit to your actions and act as aggressively as possible against the shooter.
- Recruit others to ambush the shooter with makeshift weapons like chairs, fire extinguishers, scissors, books, etc.
- Be prepared to cause severe or lethal injury to the shooter.
- Throw items and improvise weapons to distract and disarm the shooter.

After

- Keep hands visible and empty.
- Know that law enforcement's first task is to end the incident, and they may have to pass injured along the way.
- Officers may be armed with rifles, shotguns, and/or handguns and may use pepper spray or tear gas to control the situation.
- Officers will shout commands and may push individuals to the ground for their safety.
- Follow law enforcement instructions and evacuate in the direction they come from, unless otherwise instructed.
- Take care of yourself first, and then you may be able to help the wounded before first responders arrive.
- If the injured are in immediate danger, help get them to safety.
- While you wait for first responders to arrive, provide first aid. Apply direct pressure to wounded areas and use tourniquets if you have been trained to do so.
- Turn wounded people onto their sides if they are unconscious and keep them warm.
- Consider seeking professional help for you and your family to cope with the long-term effects of the trauma.¹⁶¹

¹⁶¹ Department of Homeland Security, "Active Shooter."

APPENDIX B. ESCAPE, HIDE, TELL OUTLINE

The following outline appears in the Australia–New Zealand Counter-Terrorism Committee’s *Active Armed Offender Guidelines for Crowded Places*:

Escape: The priority is to remove victims from close proximity to the offender.

Occupants of crowded places should consider evacuating the site if it is safe to do so. People should leave behind most belongings and determine the safest escape route before beginning to move. Maintaining situational awareness and making good use of available concealment or cover while moving is also important.

Hide: If unable to safely evacuate, shelter in place, ensuring people take advantage of available concealment or cover from offender.

If safely evacuating the venue is not possible, occupants of crowded places should attempt to hide in a secure area where they can lock the door, blockade the entrance with heavy furniture, cover windows, turn off lights and remain silent. Mobile phones or other personal electronic devices should also be turned to silent. Avoid congregating in the open.

If the option of hiding is adopted, individuals should continually re-assess the situation and their opportunities to safely evacuate or better secure themselves within the premises. They may also need to consider options to incapacitate the active armed offender in the event they are located. This can include using or throwing available objects or using aggressive force when confronted. Such action should only be taken as a last resort and in order to protect life.

Tell: The more information people can pass on to the police or owners and operators the better, but NEVER at the expense of an individual’s own safety or the safety of others.

If it is safe to do so information should be provided immediately to the police via 000. People passing on information to law enforcement may be asked to remain on the line and provide any other information or updates that the operator requests. Consideration should always be given to providing information and advice to others who may be unfamiliar with the site, the nature and extent of the threat, or what they should do to remain safe.¹⁶²

¹⁶² Australia–New Zealand Counter-Terrorism Committee, *Active Armed Offender Guidelines for Crowded Places* (Canberra: Commonwealth of Australia, 2017), 10–11, <https://www.nationalsecurity.gov.au/Media-and-publications/Publications/Documents/active-armed-offender-guidelines-crowded-places.pdf>.

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