

THE PERCEIVED INFLUENCE OF THE ALICE TRAINING PRINCIPLES  
ON SURVIVORS DURING A VIOLENT CRITICAL INCIDENT

by

Shawn William Collins

Liberty University

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

Doctor of Philosophy

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## ABSTRACT

According to the Federal Bureau of Investigations (FBI), since 2000, there has been a significant increase in active shooter events throughout the United States. The assailants frequently chose targets or establishments with the highest mortality rates, such as schools/universities, businesses, government agencies, houses of worship, and healthcare facilities. Alert, Lockdown, Inform, Counter, and Evacuate (ALICE) is part of Navigate360's collection of active assailant preparedness solutions, which teaches civilians how to protect themselves during Violent Critical Incidents (VCIs). The problem addressed in this study was the lack of available research regarding the effectiveness of courses, such as ALICE's Active Shooter Response training, on participants' perception of self-efficacy and the successful utilization of the principles during an actual VCI. This transcendental phenomenological study aimed to understand the influence of ALICE-trained participants' self-efficacy in surviving an active shooter incident. The theories guiding this study were Albert Bandura's Self-Efficacy Theory (SET) (1977) and Social Cognitive Theory (1986). SET posited that one's self-confidence was the motivator for future performance. In the context of this research, if ALICE-trained individuals believed that they could successfully endure, their perseverance contributed to their ability to survive. Data collection incorporated interviewing survivors of active assailant incidents that previously attended the ALICE training. This research provided empirical data on the efficacy of ALICE principles in changing attendees' mindsets and how this change affected survival outcomes.

*Keywords:* FBI, ALICE, self-efficacy, Navigate360, Violent Critical Incidents (VCI), active shooter/assailant; Self-Efficacy Theory (SET)

## **Copyright**

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## **Dedication**

I dedicate this dissertation to my family for their support during my Doctor of Philosophy Degree and academic journey. Their patience, assistance, and encouragement were inspiring.

My wife, Julie, has kept me grounded throughout our marriage, even though I am sometimes not easy to live with. She showed me the importance of humility, taking things in stride, and forgiveness.

My daughter, Meghan, helped motivate me to persevere with many discussions about her educational trials and tribulations. Her brilliance and tenacity in overcoming her own adversity were contagious.

I offer a heartfelt dedication to my 23-year-old son, Taylor Michael, who was taken from this earth too soon on March 5, 2022. Although we had differences throughout the years, I loved him more than I ever told him. I miss his infectious smile and uncontrollable laughter when he thought something funny. While I cannot turn back time, I can strive to live my remaining years as a testament to his.

I would especially like to thank my mother, Rosemary, for her expertise and significant investment in proofreading all my assignments during this endeavor. This achievement would not have been possible without her support, oversight, and guidance.

## Acknowledgments

I thank my committee members for their unwavering support and leadership throughout this academic journey. I want to express my gratitude to my *Chair*, Dr. Angela Swan, for her steadfast support and academic direction. I also want to thank my *Reader*, Dr. Gary Killam, for his thorough critiques and evaluations of my research. Thank you both for your patience early on and your continued tutelage.

I would especially like to recognize the six exceptional individuals who participated in this study, trusting me with their most traumatic memories so that others can learn and live. This study would not have been possible without these brave men and women's willingness to share their stories. The world owes each of you a debt of gratitude for your contribution to this body of research. Hopefully, this study will catalyze future research on how people can protect themselves better and how to eradicate this phenomenon forever.

May God bless you, your families, and the victims and family members of those who never came home!

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## **List of Abbreviations**

Alert; Lockdown; Inform; Counter; Evacuate (ALICE)

ALICE Training Institute (ATI) (Presently known as a solution of Navigate360)

Central Connecticut State University (CCSU)

Department of Education (DOE)

Department of Homeland Security (DHS)

Drive-by-shooting drills (DBS)

Eastern Michigan University (EMU)

Federal Bureau of Investigation (FBI)

Federal Emergency Management Agency (FEMA)

Identification Number (ID)

Institutions of Higher Education (IHE)

Institutions of Higher Learning (IHL)

Marjory Stoneman Douglas High School (MSDHS)

National Association of School Psychologists (NASP)

National Association of School Resource Officers (NASRO)

Quick Response (QR) codes

Self-Efficacy Theory (SET)

Social Cognitive Theory (SCT)

United States Department of Education (DOE)

University of Mississippi (UM)

Violent Critical Incident (VCI)

Virtual Reality (VR)

## CHAPTER ONE: INTRODUCTION

### Overview

This transcendental phenomenological study utilized empirical data to understand the impact that Alert, Lockdown, Inform, Counter, and Evacuate (ALICE) trained civilians' perceptions of self-efficacy had on their survival of an active assailant or 'violent critical incident' (VCI) (ALICE, 2022a). While there was no way of knowing where or when the next VCI would occur, programs such as ALICE presented participants with options-based training instead of the traditional static, passive response known by various terms, including 'Lockdown' and 'Code Red.' This research sought to determine the respondents' perception of how well prepared they were by the ALICE training principles and how well they performed during an event. Educating civilians on the multiple alternatives available to them during VCIs inspired them to decide how better to protect themselves and others instead of a misguided reliance on a single response option. The stated mission of ALICE centered on the belief that "individuals should be authorized and empowered to make their own life-saving decisions. Once empowered to make life-saving decisions, individuals must be trained in proactive response options, rather than a passive, mandated, one size fits all response" (ALICE, 2022f). In doing so, ALICE mitigated the number of potential targets available to offenders.

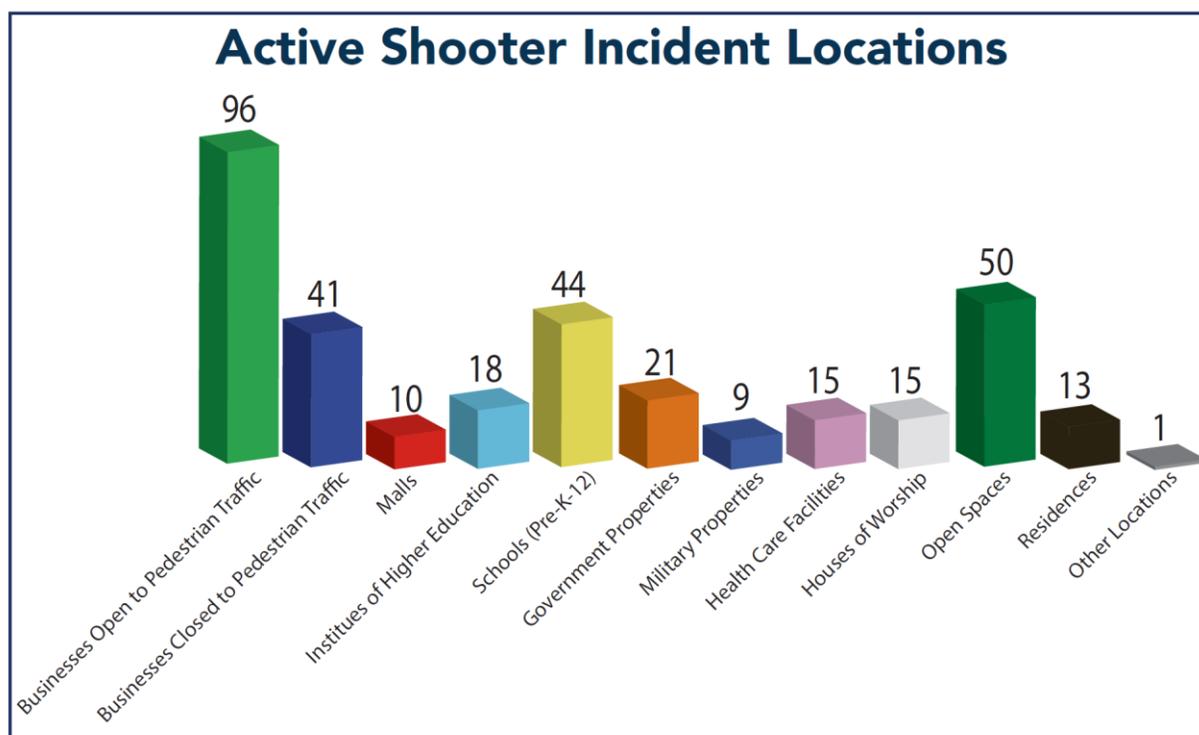
This research might assist the Navigate360 faculty, formerly known as the ALICE Training Institute (ATI), untrained civilians, and others who teach civilians how to protect themselves from active shooters. The study provided insight into the ALICE principles' intrinsic value in empowering civilians to take active measures to save lives. While successful training might only protect one life, this outcome would be immeasurable compared to the alternative because even minor improvements were steps in the right direction. This research could be the

stepping stone to sharing more inclusive knowledge about mass shootings and improving training that reduces mortality rates.

### **Background**

There has been a substantial increase in mass killings/shootings throughout the United States. The Federal Bureau of Investigation (FBI) publication *Active Shooter Incidents in the United States in 2020* reported a 100% increase in active shooter incidents in 2016 and a 33% increase in 2019 (FBI, 2021). The examination of this topic began by first establishing the criteria constituting an active shooter. The Department of Homeland Security (DHS, 2019) defined an *active shooter* as “an individual actively engaged in killing or attempting to kill people in a confined and populated area; in most cases, active shooters use firearms(s), and there is no pattern or method to their selection of victims” (p. 3). Researchers recently modified the term active shooter to reflect a change in methodology due to the nature of the incidents. Offenders frequently used other weapons (vehicles, knives, explosives) instead of solely relying on a firearm as an instrument to cause severe injury and death.

The new term, active assailant, was designed to account for all incidents of mass violence (Clumpner et al., 2017). Utilizing the same methodology as their four previous studies, the FBI publication *Active Shooter Incidents Twenty Year Review 2000 - 2019* identified thirty incidents in 2019 where one or more offenders engaged in the killing or wounding of people by mass violence (FBI, 2021a). These staggering statistics were a significant sample of the 333 documented active shooter/assailant events since the first one recorded in 2000 (FBI, 2021a).

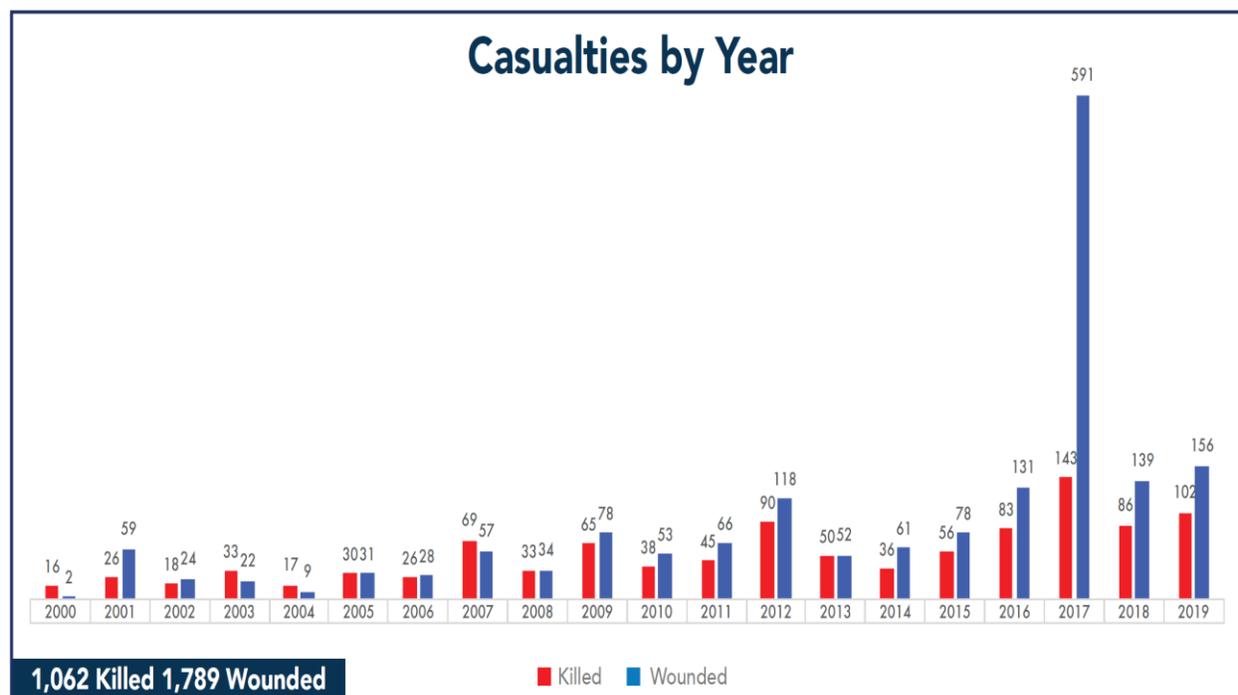
**Figure 1.**

**Note.** 333 Active Shooter Incidents in the United States Between 2000-2019: Location of Incidents, adapted from *Active Shooter Incidents Twenty Year Review 2000 – 2019* (FBI, 2021a, p. 7).

The United States Secret Service (2020) recently published *Mass Attacks in Public Spaces – 2019*, which provided significant insight into the locations where these incidents occur. As noted in Figure 1, frequent targets of these mass violence incidents included businesses, health care facilities, open spaces, houses of worship, government properties, schools/universities, and other establishments where mortality rates would be highest (FBI, 2021a). In 2019 alone, these incidents included three schools, 15 areas of commerce, 11 open spaces, two military bases, and two houses of worship (United States Secret Service, 2020). One alarming statistic from the review of thirty-four active assailant incidents in 2019 was that VCIs

happened more frequently at businesses (n = 15) and open spaces (n = 11) than at any other location (United States Secret Service, 2020). This fact was significant because citizens might falsely believe these incidents only occurred on school campuses due to the emphasis on school shootings in the media. School-aged children frequently conducted active assailant drills to prepare for the worst; however, these statistics showed that working adults were far more at risk.

Subsequently, the *Active Shooter Incidents 20-Year Review, 2000-2019* (FBI, 2021a) emphasized that in the 20 years since Columbine, there were 333 VCI incidents resulting in a staggering 2,851 casualties. The study further demonstrated an increasingly disturbing trend in the number of incidents occurring annually, from one in 1999 to an average of 28 incidents from 2017 to 2019. Initially, the FBI reported only 305 incidents but later determined that some events that met its established criteria were overlooked. After a thorough review, the FBI (2021a) identified 28 additional active shooter/assailant incidents. Figure 2 visually represents the overwhelming number of civilian fatalities over the past twenty years and notes the exceptionally discouraging, drastic increase during 2017: 138 deaths and 591 injuries resulting from active assailants (FBI, 2021a). This number was three times more than any previous year's totals and provided a sobering example of why civilians must be better prepared (FBI, 2021a). Barr (2018) credited three incidents, the Pulse Night Club (49 killed/53 wounded), Route 91 Harvest Festival (59 killed/489 wounded), and the First Baptist Church (Sutherland Spring) (26 killed/20 wounded), with the significant spike in casualties.

**Figure 2.**

*Note.* 333 Active Shooter Incidents in the United States Between 2000-2019: Casualty Breakdown Per Year. Adapted from *Active Shooter Incidents Twenty Year Review 2000 – 2019* (FBI, 2021a, p. 23).

Names that were once unknown by many Americans, such as the Pulse Nightclub, Marjory Stoneman Douglas High School, Tree of Life Synagogue, Robb Elementary School, and The Covenant School, were brought to the forefront because of senseless violence. These most recent incidents and their predecessors elicited strong emotions among most Americans, including victims and their families of fear, loss, disgust, and anger. Awada et al. (2021) discovered that even participants who experienced active assailant incidents in Virtual Reality (VR) demonstrated significant psychological and emotional responses, including increased heart

rate and arousal. The researchers stressed that during VCIs, victims might become overwhelmed with stress and anxiety, causing problems with their decision-making and overall performance.

This study benefited those victimized by these acts and anyone who might find themselves in similar situations in the future. The study measured the impact of a course offered by Navigate360 entitled Alert, Lockdown, Inform, Counter, and Evacuate (ALICE) Active Shooter Response among survivors of VCIs. The research recognized that these courses seek to instill a form of self-preservation in a time of crisis and teach the importance of response strategies associated with targeted violence. More specifically, the research enhanced previous criminal justice studies on the effectiveness of similar training courses in preparing individuals to protect themselves from and survive actual VCI events.

### **Situation to Self**

This researcher's desire to prepare individuals to better respond effectively to VCIs inspired the topic of this study. While there were many anecdotal accolades surrounding various forms of active assailant training, such as ALICE, this study sought to study the performance of ALICE-trained survivors empirically. The research was based on epistemology, utilizing a pragmatic ideology for its foundation. Creswell and Poth (2016) characterized pragmatism as focusing on research outcomes rather than antecedent circumstances. Pragmatism concentrates on research's 'what' and 'how' (Cresswell & Poth, 2016). Rather than focusing on the methods utilized, pragmatism used a problem-centered approach that focused on the issue and the inquiries surrounding the problem.

Just as a parent should never have to bury their child, a teacher should never have to grieve the loss of a student. This scholar endured this responsibility, personally and professionally, ten times throughout his career. Concerning this study, the researcher worked in

law enforcement for over 28+ years and trained personnel (civilian and law enforcement) for the past 22 years. Not only had this researcher pondered missed opportunities to instill life lessons for his son, who committed suicide, but he also missed chances to provide better survival lessons for his former students who died in the profession. These life experiences fueled this researcher's desire to protect others from harm, including VCIs, and to ensure that the efficacy of training was founded on empirical data, not just anecdotal accolades.

### **Problem Statement**

The problem addressed in this study was the limited research regarding the effectiveness of active shooter/assailant courses, such as the ALICE Active Shooter Response, on participants' perception of self-efficacy and the impact that this newly acquired belief in one's abilities has on performance during an actual VCI. In researching teachers' self-efficacy upon implementing ALICE principles in Mississippi High Schools, Rider (2015) determined a significant correlation between individuals who actively participated in hands-on drills and their preparedness to react to a VCI. Floyd et al. (2000), as cited in Ford and Frei (2016), defined *efficacy* as "the belief that the adaptive response will work, that taking the protective action will be effective in protecting the self or others" (p. 441). Kula (2019) pointed out the importance of students grasping the purpose of training in his article, *Civilian Active Shooter Training - The Power of WHY*. He said, "Fear can be a great motivator, but paralyzes some; not an option in an active shooter incident. Not understanding WHY you are training is pointless" (Kala, 2019, para. 6). Providing citizens with a greater understanding of past events and how to protect themselves and their loved ones was the key to practical training.

Kula (2019) shared similar sentiments with Kepp (2018), who re-evaluated the current focus on active shooter training programs and stressed:

To counteract threats effectively, law enforcement and emergency management agencies must not only engage their communities but also educate them on the potential threats and what they can do to prevent and respond to these attacks. Where communities are empowered, they can contribute positively to developing strategies to counteract threats. (p. 129)

The absence of adequate emergency response and preparation associated with active assailant incidents supported the rationale behind this type of training, according to Ellies (2015).

Lemieux (2014) noted no substantial evidence of having armed personnel at any of the 73 studied events that would significantly mitigate the losses. Lemieux's statistical review observed that only 17% of the incidents were resolved by armed law enforcement officers using lethal force against the assailant. It stressed that this action only occurred after significant bloodshed. Additionally, an FBI (2014) study of 160 incidents between 2000 and 2013 determined that the carnage ended in 69% of the cases in five minutes or less. The FBI study also determined that 13.1% of the incidents concluded after the intervention of unarmed citizens, not law enforcement. With such incidents' rapid onset and conclusion, there often existed little time for intercession from law enforcement or armed personnel. As such, those present at the time must, at the very least, consider taking matters into their own hands to mitigate the outcome. By empowering participants, the course enabled attendees to make their own decisions during critical moments where even a slight hesitation could result in injury and loss of life.

### **Purpose Statement**

Prior research by Snyder (2014) solely focused on the influence of two self-paced active assailant courses on 126 undergraduate college students. The author concluded that "the potential byproduct...is a reduction in the lethality of future attacks in both on-campus and off-campus

environments" (Snyder, 2014, p. 11). Snyder noted that his study of 'positive resilience' type active assailant courses helped bridge empirical research gaps. This transcendental phenomenological research aimed to expand on the previous topic by examining the lived experiences of active shooter survivors. This research provided empirical data on the effectiveness of ALICE training principles in changing attendees' mindsets and how this change affected survival outcomes. If better-educated individuals with the knowledge of protecting themselves, in turn, gained self-confidence and transferred this knowledge, the expected outcome should be fewer victims of mass violence incidents.

Compared to Snyder (2014), Gleich-Bope (2016) focused on K-12 school district employees' perception of ALICE principles once implemented. The author measured the effect the principles had on previous policies and procedures. Survey results from thirty-one school districts in thirteen states showed a significant correlation between newly acquired policies and practices associated with ALICE training principles and positive perceptions among participants about training effectiveness. Many respondent districts noted that they had already implemented ALICE principles or taken active measures to make the recommended changes.

Gleich-Bope (2016) noted that the United States Department of Education (DOE) 2013 released updated guidelines that supported using ALICE strategies and several other courses for school personnel. During most incidents, the DOE noted that law enforcement arrived after the shooting ended. It was essential for staff and students to receive training on surviving these incidents effectively. The DOE stressed that the time it takes for staff and students to orient, observe, and act during these incidents decreased significantly through repetitive training and preparedness. After a lengthy review of lessons learned from prior incidents, the DOE recognized that "No single response fits all active shooter situations; however, making sure each

individual knows his or her options for response and can react decisively will save valuable time” (p. 63).

Before attendance, all participants completed an online e-learning course that laid the ALICE principles foundation. The training consisted of presentations and practical scenarios that simulated active assailant events. The hands-on part of the instructor class comprised a two-day (16-hour) course that certified participants to take the material back to their respective agencies, businesses, high schools/universities, and houses of worship to teach ALICE end-users courses (4 hours) (ALICE, 2022a). The program's impact on participants received significant public praise, and the designers ensured the research empirically measured these accolades' effects. After attending the instructor course, Officer Chris Fisher stated:

As a 10-year veteran law enforcement officer, I have always had an issue with lockdown as a sole-source method for dealing with an active killer event. The ALICE-training I attended last week, showed the fallacy of lockdown as an only option with solid, irrefutable statistics and data. I can hardly wait to shout the message of the ALICE training program from the rooftops for all to hear! (ALICE, 2022d)

The course's primary lesson was that doing something to protect oneself and others is far better than doing nothing. Each scenario conducted during the training incorporated the use of empirical data. During each simulation, the instructor calculated the number of participants who were “shot” compared to "unharmed" participants. The cumulative results effectively illustrated that people who remain static, passive targets, suffered more casualties than those who chose other options.

**Table 1.****Table 1.** Responses, fatalities, and injuries in Norris Hall<sup>a</sup> at Virginia Tech.

Room number	Number of students present	Response	n (%)	
			Number of fatalities	Number of injuries
206	14	No active resistance on any entry.	10 (71.4)	2 (14.3)
211	19	First entry: Weak barricade of a single lightweight table placed in front of door that was pushed away by shooter. Second entry: No active resistance.	12 (63.2)	6 (31.6)
207	13	First entry: No active resistance. Attempted second entry: Strong barricade by multiple students using their bodies to keep door shut.	5 (38.5)	7 (53.8)
204	19	Strong barricade by professor using his body while students evacuated out of second-floor window.	2 (10.5)	9 (47.3)
205	12	Strong barricade of students using their feet to keep the door shut in conjunction with a lightweight table. No entry made into room.	0 (0.0)	1 (8.3)

Source: Mass Shootings at Virginia Tech (TriData, Division, System Planning Corporation, 2009).

<sup>a</sup>One student killed in hallway in Norris Hall; two students killed in West Ambler Johnston Hall.

**Note.** Response, Fatalities, and Injuries in Norris Hall at Virginia Tech. Adapted from “One size does not fit all: Traditional Lockdown versus multi-option responses to school shootings” (Jonson et al., 2018, p. 2).

A more relevant study by Jonson et al. (2018) focused on the paradigm between traditional Lockdown drills and ALICE’s options-based training. While using an Airsoft gun, researchers separated participants into two groups, law enforcement and non-law enforcement (civilians), and conducted various active assailant simulations. Jonson et al. (2018) determined that ALICE’s principles were significantly more effective than traditional Lockdown procedures in reducing the time to resolution and the number of ‘innocent victims’ shot during the scenarios. The researcher’s, citing the *Mass Shootings at Virginia Tech: Addendum to the Report of the Review Panel* (2009), further supported these findings, which provided empirical data collected

from the VCI (Table 1). The table, adapted from this secondary source by Jonson et al., noted that few to no classroom casualties took active measures, such as barricading the doors. Many students were killed/wounded in rooms with a traditional passive response (Jonson et al., 2018, p. 2). This study also measured the ALICE program's impact, similar to Gleich-Bope and Jonson et al.'s studies. However, this research focused solely on the survivability of ALICE-trained individuals.

This scholar's research relied on sample ALICE-trained subjects who survived a VCI by successfully utilizing the ALICE principles. As Jonson et al. (2018) noted, course participants come from all walks of life, including parents, law enforcement, government officials, K-12 teachers/administrators, college/universities, houses of worship, business, and healthcare professionals. The research sought to expand the limited knowledge available regarding the impact of such courses. This study aimed to determine the perceived influence of ALICE principles on survivors while also investigating the effectiveness of techniques used during an actual VCI. The study's results provided empirical data on how effective the ALICE principles were in changing the mindset of attendees and increasing survivability.

### **Significance of the Study**

The significance of this study was that it sought to determine the efficacy of ALICE principles in preparing civilians to survive active assailant incidents. Past research has focused on participants' perceptions of effectiveness upon completing the ALICE training. However, there was a lack of research on the performance of individuals who successfully used ALICE techniques and attributed their survival to the training. While anecdotal praise surrounding the use of ALICE existed, this research sought to interview ALICE-trained active assailant survivors to obtain first-hand accounts. The study collected data on survivors' lived experiences relating to

how participants 'felt' they performed and what techniques they utilized to stay alive. The study measured 1) respondents' perception of how well prepared they were by the ALICE training principles to respond and protect themselves during a violent critical incident and 2) how well they performed during an actual VCI.

### **Research Questions**

The participants' self-efficacy after training, evaluated in various contexts, was the primary focus of the existing research on active shooter training. The present literature supported the efficacy of utilizing active assailant courses, such as ALICE, to prepare civilians to defend themselves against active shooters. Researchers found a correlation between these courses and positive changes in participants' mindsets, including a sense of empowerment regarding survival (Snyder, 2014; Craig, 2022). Nevertheless, feelings of preparedness were vastly different from being able to perform. Consequently, this study's research questions concentrated on the effectiveness of the ALICE principle on survivors who lived through an actual incident.

The primary research question for this study was: What influence did the ALICE principles have on survivors' perceptions of their ability to protect themselves and others from harm during an actual VCI? This question emanated from the Self-Efficacy Theory (SET) in seeking the impact the ALICE principles had on survivors' mindsets during the event. The subsequent research question supported the primary question. It incorporated the query by further expanding on the topic of interest.

Sub-question A: How effective were ALICE-trained survivors in successfully utilizing the principles to protect themselves and others during an actual Violent Critical Incident? This question also emanated from the SET in seeking to measure the impact of ALICE principles on survivors' performance during the event. Bandura (1977) noted that "the stronger the perceived

self-efficacy, the more active the efforts” (p. 194). Peifer et al. (2020) found that individuals who received positive feedback after completing arithmetic problems had increased self-efficacy and greater performance than their counterparts who received no such encouragement. Similarly, Ackerman (2022) emphasized that a person's degree of belief in their abilities influences whether they think "erratically or strategically, optimistically or pessimistically" (p. 309). While previous research found positive correlations between training and participants' self-efficacy, the question remained, how well did the ALICE-trained individuals perform in real-time during an actual event?

### **Operational Definitions**

**Active Shooter/Assailant.** This study defined the term *active shooter/assailant* as:

An armed person(s) who uses any weapon to inflict severe harm or deadly physical force on others in public and continues to do so while having access to additional victims.

Examples of active assailant attacks include an active shooter incident, mass stabbings, explosives, vehicle-as-a-weapon, and fire-as-a-weapon. (Clumpner et al., 2017, p. 7)

**Alert.** Navigate360 (Formerly the ALICE Training Institute) defined *Alert* as “overcoming denial, recognizing the signs of danger, and receiving notifications about the danger from others. Alerts should be accepted, taken seriously, and should help make survival decisions based on circumstances” (ALICE, 2022b, para. 1).

**ALICE.** An acronym from Navigate360 comprised the following options-based responses: Alert, Lockdown, Inform, Counter, and Evacuate. Developed in 2001 by founders Greg Crane and his wife, Lisa, *ALICE* was the first options-based program for civilian response to active shooters (ATI, 2022e). Navigate360 later acquired ATI. It was just one aspect of products related to community safety programs. Media information from the ALICE website

stated that 5,548 educational districts, 3,055 businesses, 1,425 healthcare facilities, 5,100 law enforcement agencies, 893 governmental agencies, and 755 houses of worship had received the training (ALICE, 2022).

**Counter.** Navigate360 emphasized that *Counter* focused on “actions that create noise, movement, distance, and distraction with the intent of reducing the shooter's ability to shoot accurately” (ALICE, 2022b, para. 4). Citizens might be able to Evacuate, Lockdown + Barricade, or, as a last resort, take action to subdue the offender by diverting the attacker's attention away from their mission and toward other stimuli. *Counter* was described as an age-appropriate technique, not recommended for small children, that was an option of last resort when people must make split-second decisions to protect individual lives.

**Evacuate.** ALICE emphasized that *Evacuation* is the optimum choice if citizens can safely perform the process. As defined by Navigate360, "Evacuating to a safe area takes people out of harm's way and hopefully prevents civilians from having to come into any contact with the shooter" (ALICE, 2022b, para. 5). The assumption behind Evacuation was that people were in a position where they could move from one place to another safely to escape danger and that this option was the best one given the current situation. Individuals base their decision to Evacuate on stimuli and information received in real-time.

**Inform.** Navigate360 defined the purpose of *Inform* as “to continue to communicate information in as real-time as possible if it is safe. Armed intruder situations are unpredictable and evolve quickly, which means that ongoing, real-time information is key to making effective survival decisions” (ALICE, 2022b, para. 3). Inform employed real-time information to keep citizens apprised of the assailant's location so they could make an informed decision regarding their response.

**Lockdown.** Originating from drills used by the Los Angeles Unified School District as far back as the 1960s to protect children from external school threats, Lockdown methods evolved over the years, eventually utilized for internal threats such as active shooters/assailants (Hendry, 2015). This term was now synonymous with measures by people to secure themselves inside locations to avoid severe harm and death from internal and external threats. They involved closing blinds or shades, turning off lights, locking and securing doors, staying away from windows, huddling all occupants in ‘safe corners,’ and remaining quiet. Dr. Barnes, the Office of Emergency Services and School Operations coordinator, described their inception as "protective actions, where the building itself is used to shield students from exposure to bullets and other hazards" (Hendry, 2015, p. 6).

For this study, ALICE enhanced *Lockdown* included proactive barricading of entry points with available items like desks, cabinets, and chairs to harden the location. In doing so, the time it took for an active assailant to gain entry increased, while the ability for the assailant to harm the occupant(s) decreased. “If evacuation is not a safe option, barricade entry points into [the] room in an effort to create a semi-secure starting point” (Bauer, 2021, para. 7). The Lockdown + Barricade model decreased the likelihood of harm to occupants and provided precious time for law enforcement officers and other forms of assistance to arrive. Statistics showed that the previous belief that most incidents end in less than five minutes is untrue. The United States Secret Service (2020) reported that in 2019 only 47% of the VCIs lasted less than five minutes, 15% lasted 5-14 minutes, and 38% lasted 15 minutes or more. The empirical data demonstrated that every minute counted, and those occupants could employ various tactics to slow down or deter the assailant.

**Self-Efficacy.** *Self-efficacy* refers to how confident individuals respond effectively to danger (Schwarzer & Warner, 2013; Bandura & Adams, 1977). It involved confidence that one could mitigate the threat of an active assailant and survive (Holland, 2019). This study defined *self-efficacy* as the participant's perceived ability to appropriately respond to active assailant incidents using ALICE's options-based principles. It was this self-perception that directly dictated the type of response from individuals. Individuals with low self-efficacy were less likely to take active measures to protect themselves instead of reverting to passive responses, such as a traditional Lockdown.

**Violent Critical Incident.** Navigate360 (ALICE, 2022a) defined *Violent Critical Incidents* (VCIs) as “man-made forms of violent disaster, including active shooter, violent intruder, mass shooting, terrorism, workplace violence, and other unexpected tragedies” (para. 1). This term was used by Navigate 360 interchangeably with the more popular definitions such as active assailant, active intruder, active killer, and active shooter.

### Summary

Prior research suggested that teaching participants to survive and help others stay alive was the significant benefit of active assailant training (Kapucu & Khosa, 2013; Morris, 2014; Pitts, 2018). This study concentrated on individuals who attended ALICE's Active Shooter Response courses. The training's primary objective was to teach students how to protect themselves from being victimized during an active shooter incident. Through the design and implementation of the ALICE Active Shooter Response course, Navigate360 recognized that citizens must possess a form of self-preservation during times of crisis to increase their chances of survival. This study added to the research by examining the efficacy of the ALICE principles

in action through first-hand accounts from ALICE-trained survivors of VCIs. The study aimed to measure the ALICE principles' impact on survival during a real-life event.

## CHAPTER TWO: LITERATURE REVIEW

### Overview

This phenomenological study aimed to determine the perceived influence of ALICE principles on survivors while also investigating the effectiveness of techniques used during an actual VCI. This literature review summarized pertinent information about self-efficacy, the correlation between various training methods and self-efficacy, and, more specifically, the relationship between the ALICE principles and one's confidence in protecting themselves during a VCI. The literature review scrutinized previous empirical efforts to measure the influence of self-efficacy on performance. The study highlighted past researchers' findings and provided further insight into the effectiveness of ALICE's options-based response protocols among survivors during actual incidents.

### Theoretical Framework

Bandura's Social Cognitive Theory (SCT) (1986) examined self-efficacy, an individual assessment of perceived capabilities related to completing tasks or performance. SCT posited that behavior was a collaborative interaction of behavioral, personal, environmental, and cognitive factors. Expanding upon the foundational principles of SCT in his study, *What is Self-Efficacy Theory?*, Ackerman (2022) described the four sources of Bandura's self-efficacy beliefs:

1. Mastery experiences
2. Vicarious experiences
3. Verbal persuasion
4. Emotional/physiological states (para. 5)

According to Bandura (2006), appraisal of one's self-efficacy was relative to the difficulty the individual perceived they could overcome. "Efficacy expectations determine how much effort people will expend and how long they will persist in the face of obstacles and aversive experiences. The stronger the perceived self-efficacy, the more active the efforts" (Bandura, 1977, p. 194). According to Ackerman (2022), mastery of experiences, the most potent source of self-efficacy, requires successful proficiency in tasks and encounters through practical contact and observation for an individual's confidence to increase. In contrast, failure during these events resulted in a decrease in their perceived abilities. The author emphasized that a person's degree of belief in one's abilities influences whether they think "erratically or strategically, optimistically or pessimistically" (p. 309).

Schwarzer (2014) echoed similar thoughts, stressing that "if people believe they can take action to solve a problem instrumentally, they become more inclined to do so and feel more committed to this decision" (Preface). Sutton (2001) described the Self-Efficacy Theory (SET) as a subset of Bandura's SCT that identifies the two essential elements of behavior, an individual's perception of self-efficacy and outcome probabilities. Self-efficacy was described as a self-sufficient quality, according to Ackerman (2022), in that one's desire to succeed and the accomplishment of challenging goals boosts one's confidence. "When people actually can see themselves coping effectively with difficult situations, their sense of mastery is likely to be heightened" (Maddux, 2012, p. 13). This 'tangible evidence' of successful completion increased one's self-efficacy.

This study sought to determine if the ALICE principles assisted in instilling a sense of self-belief in participants upon completion of the training. Additionally, the research examined whether it could attribute this change in mindset and the techniques taught to the subject's

survival during an active assailant incident. The belief that people can actively influence experiences was paramount to the SET and SCT. Ng and Lucianetti (2016) discovered that a decrease in a person's angst and fear over the performance of a task directly correlated to an increase in confidence. These factors were relevant to the current study in that a person who does not possess self-confidence in protecting themselves may hesitate or fail to act. As a result, their performance might falter, possibly causing them to become seriously injured or killed during a VCI. However, an individual desensitized to stress through training might be able to think more clearly and make informed decisions when seconds count.

### **The Impact of Self-Efficacy on Human Performance**

In the title, *Perceived Self-Efficacy and Phobic Disability* (Williams, 1992), as cited in Schwarzer (2014), the author noted that self-efficacy addressed one's belief in performing and maintaining a prescribed course of explicit and mental activities. In conducting studies on phobias, including one's perception of danger, the researcher further emphasized a strong correlation between self-efficacy and behavior. In his research, self-efficacy was the dominant predictor of behavioral change. Williams stated that increases in self-efficacy were directly related to successful coping with phobias among the studied individuals. "Their accuracy in predicting behavior is not a mere methodological artifact, and the efficacy perceptions cannot be easily explained in terms of other factors" (Schwarzer, 2014, p. 174).

In researching the relationship between feedback and performance, Peifer et al. (2020) found empirical evidence that positive guidance enhanced an individual's self-efficacy, which improved a subject's perception of competency in completing a prescribed task. Researchers provided a sample of 134 participants with mental arithmetic tasks to complete and provided various levels of feedback ranging from constructive, normative, and no formal responses. After

participants reviewed their input from the first session, they performed the second set of tasks. The participants then answered questionnaires specifically designed to assess self-efficacy. Those who received encouraging feedback regarding their execution had greater self-efficacy and overall performance, whereas respondents who received no feedback saw a notable decrease.

Cherry (2020) emphasized that individuals possessing enhanced self-efficacy were more successful than those with self-doubt. Through mastery of experiences, individuals can overcome obstacles and strengthen their confidence in their abilities. This self-belief was essential to instill a sense of perseverance and certainty that one can achieve set goals. A higher degree of self-efficacy, obtained through successfully completing a task, could assist individuals in navigating through life's many challenges, reducing stress and increasing performance (Cherry, 2020).

Akhtar (2008) pointed out that several psychologists rated the importance of self-efficacy above a person's ability regarding favorable outcomes. The author stressed, "To have a resilient sense of self-efficacy requires experience in overcoming obstacles through effort and perseverance" (para. 5).

Similarly, Zaki et al. (2019) sought to determine whether training programs to improve self-efficacy enhance participants' performance. The authors sampled 384 Pakistani banking employees due to the financial sector experiencing an exponential increase in competition. The study posited a positive correlation between self-efficacy and employee performance. The findings suggested that self-efficacy was enhanced through training programs and positively correlated to increased employee performance (Zaki et al., 2019). Neither of the three previous studies specifically addressed active assailants; however, their combined findings regarding the impact of training on self-efficacy lent credibility to this author's research questions. Would

instruction in ALICE training principles increase participants' perceived abilities to protect themselves and others during VCIs?

### **Evolution of Violent Critical Incidents**

With the evolution of VCIs involving other weapons, a new term was necessary to account for instances where the assailant was not armed with a firearm and used other means to cause casualties. Clumpner et al. (2017) provided the conceptual definition of an active assailant that incorporates the standard term active shooter criteria while accounting for this change in methodology. The new meaning was synonymous with many other terms previously used to describe mass casualties at the hands of an offender(s), such as ALICE's (2022a) definition of Violent Critical Incidents (VCIs).

In their review of the data surrounding 105 active shooter incidents involving businesses between 2000 and 2015, Hunter Martaindale et al. (2017) discovered that fifty-five percent of the incidents ended before the arrival of law enforcement. The researchers noted that civilians took active measures to protect themselves in many cases, such as fleeing and barricading, thus limiting available targets for the offenders. The researchers also reported several instances where likely victims acted and physically subdued the offender. The quick response of individuals was essential to mitigating further casualties. The authors stressed that businesses must take proactive steps to train their personnel, including educating employees that it is right to defend themselves if their lives depend upon it.

Like most districts throughout the United States, schools in Florida traditionally held fire drills monthly yet only had active assailant training once a year, if at all. Massasoit Community College (2017) noted that the last school-related fire deaths occurred 64 years ago at Our Lady of the Angels Catholic school on December 1, 1958. However, the number of students killed by

active assailants continued to increase annually, questioning why school districts spent so much time preparing for fires that might never happen yet did little to train faculty, staff, and students to protect themselves from VCIs.

The horrific events of February 14, 2018, which resulted in 34 casualties (17 deaths/17 injured) in Parkland, Florida, catalyzed the formation Marjory Stoneman Douglas High School (MSDHS) Commission. Holland (2019) noted that the MSDH shooting was the deadliest VCI incident at a high school in U.S. history, further compelling the necessity for active measures to protect the nation's children. The Commission, among other things, focused on the significant lack of active assailant training. The MSDHS Commission's report (2019) determined a considerable lapse in active assailant training throughout Florida. The Commission recognized the lack of preparedness and aggressively sought to mitigate future incidents. Among other recommended changes, the MSDHS report sets specific criteria for future active assailant drills, including mandating their frequency as often as traditional fire drills.

During the Marjory Stoneman Douglas VCI, the assailant never entered the classrooms, shooting helpless victims in the hallways and through windows in the classroom doors (Seabrook, 2018). This fact refuted past research by Lexington Insurance that no assailant had ever breached a locked door during a VCI, claiming that Lockdown was exclusively critical for survival (Green, 2016). The shooter's actions during the MSD incident demonstrated the need for a paradigm shift focusing efforts away from reliance on locked doors and drawing attention to the need to instruct other techniques to protect oneself. Bonanno and Levenson (2014) recommended a multi-layered security measures approach that included drilling students on VCIs; however, they expressed concern that these changes could negatively affect students. The researchers noted that many active assailant school incidents lasted less than 15 minutes. Doherty

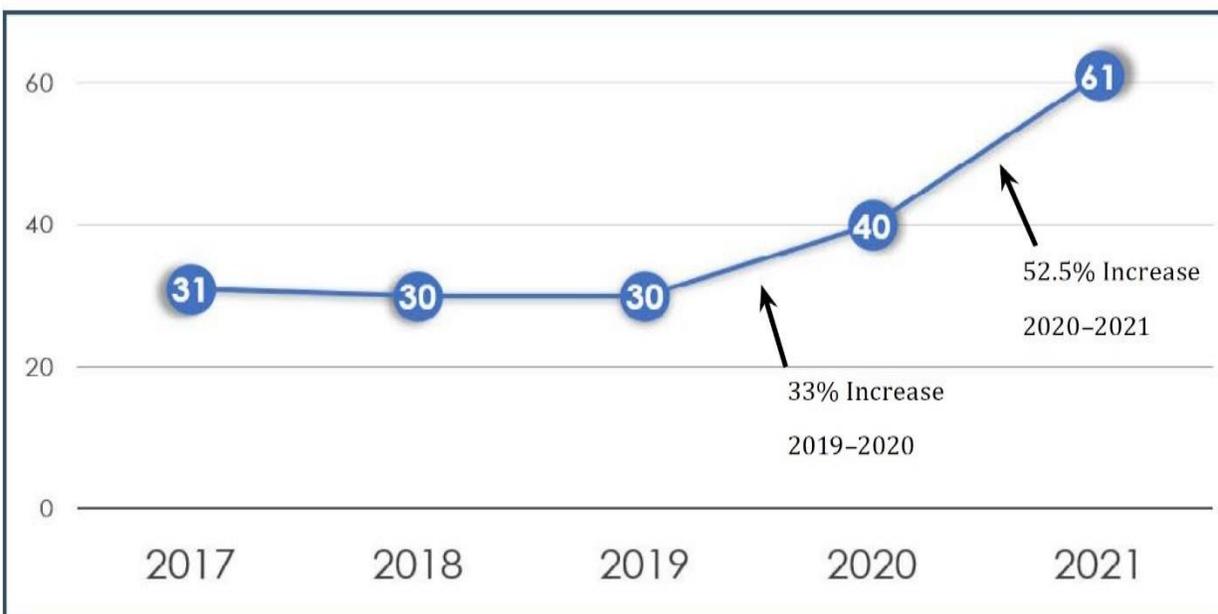
(2016) echoed similar concerns, pointing out that the assailant entered through the front door in approximately 74% of the VCIs, leaving little time to react. Unless law enforcement personnel such as School Resources Officers (SROs) were on-site, taking active measures to protect others falls to oneself.

The early information surrounding the Uvalde, Texas VCI, which occurred on May 24, 2022, brought context to the claims that any action plan was subject to human intervention and error. Jankowicz et al. (2022) reported that the suspect stood outside unencumbered for at least 12 minutes before entering the school, randomly shooting at people and the building. According to the FOX TV Digital Team (2022), a teacher may have unintentionally propped a door open that the shooter subsequently used to access the building. Furthermore, the Resource Officer assigned to the school was not on campus and drove past the shooter upon his arrival after hearing the 911 call (FOX TV Digital Team, 2022). Additionally, law enforcement personnel decided to wait and not make entry, believing that the suspect had barricaded himself in an empty classroom and that the immediate threat to teachers and students had subsided (Fox TV Digital Team, 2022). Goodman (2022) reported that “more than a dozen of the 33 children and three teachers originally in two classrooms remained alive during the 1 hour and 17 minutes from the time the shooting began inside of the classrooms to when four officers made entry” (para. 4).

Jankowicz et al. (2022) emphasized the alarming fact that the shooter accessed Robb Elementary even though the school district reportedly had a comprehensive plan to subvert such actions, including a resource officer and utilizing Lockdown. While future insight into the exact cause of the senseless killings might take months or even years, law enforcement's cornucopia of errors and questionable decision-making might have led to the second-deadliest school shooting

in U.S. history. Only the tragic events at Sandy Hook Elementary (27 victims) ten years earlier had more victims than the Uvalde VCI shooting (21 victims). The incident was a heartbreaking reminder that civilians might be left to protect themselves and others during VCIs for a significant amount of time, even with the best intentions and prior planning.

**Figure 3.**



*Note.* Incident Statistics: Active Shooter Incidents 2017-2021. Adapted from *Active Shooter Incidents in the United States in 2021* (FBI, 2022, p. 3).

Ergebnight and Hubbard (2012) noted that the average resolution time for active assailant incidents at Institutions of Higher Education (IHE) throughout the United States was 12.5 minutes. In contrast, the researchers pointed out that the average response by law enforcement to VCIs was 18 minutes. In these valuable minutes, people must be prepared to take active measures to protect themselves until first responders arrive. The stark contrast between incident resolution time and law enforcement response time highlighted the alarming fact that

civilians might be alone and must fend for themselves for an estimated five minutes and 30 seconds.

The FBI's (2022) most recent publication, *Active Shooter Incidents in the United States in 2021*, further highlighted the probability of involvement in a VCI. The study noted a shocking surge in active assailant incidents, illustrated in Figure 3, with a 52.5% increase in VCIs between 2020 and 2021 and a staggering 103.33% increase between 2019 and 2021. During this period, 30 active assailant incidents occurred in 2019 compared to the record-setting 61 incidents in 2021. While the number of casualties decreased slightly over time, from 156 wounded/102 killed in 2019 to 140 wounded/103 killed in 2021, the number of recorded VCIs more than doubled (FBI, 2021). This current data and the already identified rise in resolution time confirmed by studies like Ergenbright and Hubbard (2012) demonstrated the need for effective empirically validated methods to mitigate the continued loss of human lives.

### **Impact of Active Shooter/Assailant Training**

Whitney (2017), a civilian with no law enforcement experience, sought to determine the effectiveness of active assailant options-based training. The author focused on tactics and decision-making training from the military and law enforcement that could be modified and taught to elementary-aged students and teachers to help them protect themselves during VCIs. The author's findings were adamant about empowering civilians to defend themselves. Whitney emphasized, "By recognizing options-based approaches as an acceptable strategy, school systems have the potential to increase the likelihood of survival dramatically. Lockdown should be an option, not THE solution" (p. 100).

Gleich-Bope (2016) narrowed previous research on active assailant courses by focusing on ALICE use throughout a K-12 school district. In contrast to this study, which seeks

participants' perceptions upon completion of the ALICE instructor class, Gleich-Bope measured the perceptions of teachers and staff after the program's implementation. Overall, the research resulted in positive feedback from teachers and staff, who considered the training invaluable (Gleich-Bope, 2016). The author noted that some schools only verbally train teachers and staff on ALICE principles throughout the district, while others elected to incorporate the scenarios taught in the instructor class. Gleich-Bope wondered if the absence of simulations led to a lack of understanding among those who did not experience the training scenarios.

In 2016, Ford and Frei (2016) conducted a similar study to the current research; however, instead of reviewing a practical training course, researchers sought to measure the influence of different message mediums (text, emails, and tweets), as well as the content of the message provided to students. Also, Ford and Frei studied the effects of watching an active assailant training video on participants' self-efficacy. Understanding that the research found no correlation between the message and the participant's self-efficacy was essential. In contrast, Ford and Frei noted a significant increase in the self-efficacy of individuals who viewed the video. Since the ALICE class contains e-learning videos, presentations, and practical active assailant exercises, this author posited that combining these methods would drastically increase participants' self-efficacy. Ford and Frei provided a foundation to measure the impact of the current research.

Hendry's (2015) study pointed to the substantial amount of fire safety drills conducted in schools throughout the United States for events that rarely happen, compared to the infrequent training for VCIs. Additionally, the author provided insight into the origins of Lockdown, noting that they were merely suggestions and never officially recommended for use. By design, the drive-by-shooting drills (DBS) addressed increased external threats within the Los Angeles Unified School District in the 1970s and '80s (Hendry, 2015). However, unknown parties

inadvertently modified the response method over the years to address internal threats without data to support this change. The author emphasized how counterintuitive Lockdown was for VCIs, and one needed to do more to prepare students and faculty to survive these incidents.

Like Gleich-Bope (2016), Rider (2015) sought to measure teachers' perception of active shooter preparedness in Mississippi high schools. However, her approach to active assailant training drills was dissimilar to Gleich-Bope's focus on ALICE. Rider's survey found a significant correlation between the number of active assailant drills in which teachers participated and their overall perception of preparedness. The more practice the teachers obtained while running the exercises, the greater their perception of successfully surviving a VCI (Rider, 2015). Rather than focusing on the impact of drills, Liu et al. (2015) sought association among faculty and staff as they related to a university's emergency procedures. Like Rider, Liu et al. noted substantial correlations between the university's current policies and participants' beliefs about effectively responding to a crisis.

Wands (2016) addressed the safety of nurses during active assailant incidents. Having been personally involved in an incident at a hospital, the author discussed the impact of training on hospital personnel. She credited the ingenuity of hospital staff in forming an active assailant program, as described in Weeks et al. (2014). Wands stressed that one must overcome complacency with confidence through practical training and drills. The author pointed out that this, in turn, would assist in promoting a culture of safety throughout the institution.

Before Pitt's (2018) study, Ellies (2015) sought to evaluate active shooter curriculums at Institutes of Higher Learning (IHL). The main conclusion of his research was that, because of the evolution of VCIs and the data presented, IHLs could not continue to rely on others to protect them. Ellies (2015) stressed that their personnel must realize they would be the first responders

to the incident, not law enforcement. Furthermore, to better prepare individuals to respond effectively, exercises must be conducted that provide participants with the knowledge to “intervene in active shooter incidents to save lives and bring a resolution to a crisis event” (Ellies, 2015, p.12).

Like the current study, Snyder (2014) sought to measure the influence of active shooter/assailant training on college students’ perceptions of safety. Snyder (2014) randomly selected students from a university and separated them into four groups:

1. A control group with no prior active assailant training
2. A group that completed a third-party active assailant course
3. A group that completed the DHS active shooter resilience course
4. A group that completed the third-party course and the DHS course

Using quantitative surveys, the author measured each group's sense of safety, fear, and resilience. While the findings did not demonstrate a significant decrease in the perception of anxiety among those surveyed, completion of the two active assailant courses correlated to a significant increase in students’ perception of safety and resilience (Snyder, 2014).

Eastern Michigan University (EMU) (2016) accentuated similar beliefs that “A trained individual will more likely not descend into denial, while the untrained will more likely not respond appropriately, descend into denial and helplessness, and may become part of the problem” (p. 4). The document further stressed that training assisted individuals in overcoming normalcy bias (a state in which people underestimate the likelihood and effects of a critical incident), reduces fear, and leads people to respond more quickly to critical incidents (EMU, 2016). Individuals taught situational awareness and how to think ahead regarding how they might react to an incident dramatically improves their chances of survival (EMU, 2016). An

earlier study by Fallahi et al. (2009) demonstrated the impact of normalcy bias on administration, staff, and students at Central Connecticut State University (CCSU) regarding their perceptions of the Virginia Tech active assailant incident occurring on April 16, 2007. Data collected from survey participants demonstrated that they were more concerned about being harmed off campus than on campus (Fallahi et al., 2009). According to Fallahi et al., the students reported that, although there was a significant chance that active assailant incidents like Virginia Tech would continue, the respondents believed that it was more likely on another campus than the CCSU campus.

Studying the behavior of crowds during mass emergency evacuations, Drury and Cocking (2007) stressed the importance of being prepared, including prior planning, clear instructions, and frequent practical drills. The researchers accentuated the importance of keeping crowds informed of critical information to avoid distrust and promote further panic among people. The authors emphasized that a mass event's 'shared social identity' often superseded social responsibilities and guidelines. This shared identity was essential to the success of the evacuations. The greater the shared identity, the stronger the evacuation behavior (Drury & Cocking, 2007). A notable contradiction posited by the researchers was that overbearing governmental responses might adversely affect the natural strength and ingenuity of the public, thus hindering their potential to save lives.

In studying the effects of gun laws on VCIs, Lemieux (2014) determined that the presence of more armed guards or citizens has no measurable impact. The author pointed out that only 17% of the incidents he studied resulted in the killing of the assailant by the police (Lemieux, 2014). This study has value because it demonstrates the necessity of giving civilians the freedom to manage their actions and make responsible decisions to safeguard themselves and

others. Although law enforcement's involvement was critical, civilians should not rely solely upon them to arrive in time to mitigate losses.

### **Self-efficacy and Active Shooter Incidents/Training**

McKenna et al. (2017) noted that awareness of self-efficacy was necessary to achieve goals. McKenna et al. stressed that "humans develop various levels of competence and employ them according to how they fit with their efficacy beliefs in response to different situations and in anticipation of future outcomes" (p. 57). Behavior was modified based on the perception to assist people in obtaining the desired outcome. The behavior would encompass actively responding to the threat using the ALICE principles to protect themselves and others from harm in case of a VCI. The desired outcome of the VCI would be the survival of the individual and the mitigation of any further casualties. Embry-Martin (2017) echoes similar thoughts, finding that teachers who received more active assailant training possessed higher self-efficacy than lesser-trained peers. During interviews with participants, the scholar discovered that the teachers in the study saw themselves as their students' first line of defense against intruders. "Training increases self-efficacy, and self-efficacy increases effort and perseverance" (Embry-Martin, 2017, p. 143). The author noted that even with increased stress associated with this type of training, teachers stated that it assisted them in feeling more prepared to react to a real VCI.

Holland (2019) studied employees' perception of self-efficacy to active assailant incidents at the University of Mississippi (UM). The author's research expanded on an earlier study by Mulvey (2018) that focused solely on students' perceptions at the same university. Although both studies sought to measure the reported differences in self-efficacy among males compared to females, they were relevant because they assisted in conceptual definitions of self-efficacy. Additionally, Holland supported the previous finding from Jones et al. (2014) and

Snyder (2014) regarding increased self-efficacy in individuals who received active assailant training. While the survey of 410 participants discovered a measurable increase, Holland noted that females reported significantly less perceived self-efficacy than their male counterparts. In the Jones et al. study of 225 Emergency Medical Service personnel, the researchers reported a 48% increase in participants' perception of being prepared for active assailant incidents after attending training. Snyder stressed that a lack of education, training, and preparedness for VCIs only benefits the success of the assailant. Bridging the gap between recognizing a VCI and implementing effective responses would only be successful through practical training (Snyder, 2014).

Compared to Holland (2019), Clark et al. (2019) studied the influence of active assailant training on civilian radiation therapy educators. The research measured the educators' perceived preparedness to protect themselves and their students from VCIs. Clark et al. found that those groups of educators whose institutions had clearly defined policies and procedures, and those who participated in active assailant drills, felt more prepared than those who had never attended the training. An earlier study by Landry et al. (2018) found similar effects to those of Clark et al. among caregivers at a healthcare facility. The authors emphasized that "having the appropriate knowledge to react decisively can potentially save the lives of patients, visitors, and health care workers" (Landry et al., 2018, p. 12). Research by Weber et al. (2018) mirrored the studies' results, as mentioned earlier; however, they sought to generalize their findings by studying the relationship between all types of natural disasters, not just active assailants. Weber et al. noted a significant correlation between preparedness and self-efficacy, recommending that educational institutions utilize programs that better prepare employees to respond to disasters, including active assailant incidents.

Wallace (2020) expounded on self-efficacy research focusing solely on the perceived effectiveness of active assailant preventive measures, referred to as *response efficacy*. The author took a holistic approach to the study by focusing on all efforts of a community to keep its citizens safe, including such items as drills, training, and background checks. A statistical review of 640 respondents demonstrated that current trends supported efforts to effectively empower people to prepare themselves for an active assailant through training. The greater a person's confidence in a particular response option, the more likely they would utilize such options during an incident. Additionally, the quantity of proactive organizational measures taken was strongly correlated to employee self-efficacy increases (Wallace, 2020). Wheeler (2018) noted that introducing a training goal containing a visualized positive outcome made participants more likely to focus on the objectives rather than their fears. If one concentrated more intensely on survival than injury or death, there was a greater likelihood of success.

In a study of civilian preparedness among 761 faculty from 14 public universities throughout Ohio, Wise (2021) found the strongest correlation among eight identified predictors was self-efficacy, followed by institutional planning and training. Wise's study focused on three primary training methods used for active assailant training, including asynchronous lectures produced by FEMA, the ALICE principles, and an online video produced by the Center for Personnel Protection and Safety. The scholar further noted that experiential (hands-on) training had a stronger correlation to faculty preparedness than passive instruction through video. Conversely, the use of the ALICE course would further correlate to an increase in participants' self-efficacy.

Feitel (2021) surveyed 74 faculty at a northeastern university to determine changes in self-efficacy before and after active assailant training. The researcher observed that regularly

practicing techniques helps the body overcome fight-or-flight responses during traumatic incidents. The author stressed the importance of options-based experiential training, like ALICE, in giving participants foundational mental images. These depictions assisted individuals in responding to 'if-then' scenarios focused on VCIs. The author suggested a need for standardization of training techniques yet stressed that it was better to be prepared than unprepared.

Nanassy et al. (2020) used similar techniques as Snyder (2014) and Feitel (2021) in researching self-efficacy; however, instead of focusing on active assailant courses, the researchers sought to determine the impact of a bleeding control course on high school personnel. The authors were interested in the effects of the Stop the Bleed course and how they may have contributed to the self-efficacy among personnel and school preparedness. Like Snyder and Feitel's findings regarding the positive impact of instruction, Nanassy et al. found that the training course increased participants' self-efficacy. Respondents reported feeling better prepared to respond to critical threats appropriately. The findings of Nanassy et al. echoed earlier conclusions from Latuska et al. (2019), in which the researchers focused on school nurses and reported similar effects on their confidence.

Pitts (2018) bridged the gap between active assailant exercises and their influence on participants' self-efficacy. The author utilized Bandura's (1977, 1986) Social Cognitive Theory to measure the impact of drills on faculty members at Institutions of Higher Learning (IHL) (Pitts, 2018). Bandura (1977) hypothesized that individuals' self-efficacy was a significant factor in coping with aversive situations. Pitts noted that allowing participants to see others 'survive' during simulations motivates them to follow suit. Pitts, citing Bandura's studies (1977, 1986), emphasized that "...the stronger an individual's perceived self-efficacy, the more determined,

effective, diligent, and successful the individual will be” (p. 32). Pitts found that survey participants who had more active assailant training were less frightened, more apt to take protective measures for themselves, and considered their options if one occurred, including mentally preparing for the actions they may take.

Chuol and Dougherty (2018) sought to determine the impact of training on students' level of preparedness at the University of Southern California through a quantitative post-training questionnaire. While the authors primarily focused on Act Fast (active assailant video), their findings strongly supported using ALICE and other response to active shooter/assailant programs. The researchers noted a mindset shift in participants that led them to be far more proactive in their responses. While Chuol and Dougherty noted some subjectivity and ideological difference among various programs, they stressed that this training was essential due to its ability to save lives. The researchers emphasized that this type of training increased students' identification of gunshots, taught them how to keep calm during a VCI, instilled a survival mentality in participants, and instructed them on how to effectively take action to reduce the likelihood of an assailant being able to enter a room (Chuol & Dougherty, 2018).

Weeks et al. (2014) discussed the actions taken by staff and administrators to effectively address the issue of active assailants. The researchers reported, "The detailed training empowered nurses and their colleagues with knowledge and actions they could use to alert others" (p. 45). Recognizing the importance of this training, hospital staff developed Code Zero: Active Shooter to provide personnel with further education and practical experiences. Like many other literary samples in this review, this article ensured that civilians, regardless of age, gender, race, or profession, were adequately prepared to respond to VCIs. The Campbell Institute (2014) found similar data in dealing with risk, determining that individuals were more likely to utilize

protective measures when they believed an undesirable outcome was probable and perceived themselves as having the confidence and abilities to respond appropriately. Researchers noted essential findings in the perception of preparedness among individuals, the significance of the aftermath, and their self-efficacy were tied together.

Like Weeks et al. (2014), Morris (2014) also stressed the importance of simulation training for active assailants. Morris pointed out that "the benefit of simulation exercises is for participants to make mistakes and wrong assumptions in advance of real-life events in order to improve actions" (p. 242). The author cited Gary Klein's (1999) research that these drills could prepare people to make decisions during VCIs. Sitzmann and Yeo (2013) determined that self-efficacy was not an adequate measure of an individual's future performance but indicated past successes. Successful past performance was the foundation on which an individual builds greater confidence in one's ability. Completing active assailant exercises in which individuals, through their actions, survived and overcame VCIs was essential for an increase in self-efficacy. Schwarzer and Warner (2013) addressed the importance of self-efficacy relating to resilience. Increasing an individual's or group's self-efficacy helps them be more resilient in overcoming significant stressors, including VCIs. The authors stressed that "By activating affective, motivational, and behavioral mechanisms in taxing situations, self-efficacy beliefs can promote resilience. Self-efficacy, therefore, has sometimes been conceptualized as one component of resilience" (Schwarzer & Warner, 2013, para. 4).

A 2013 study by Kapucu and Khosa illustrated a positive correlation between training exercises and survey participants' perceptions of resiliency and preparedness. The authors reviewed various types of disasters, including VCIs, and determined that simulations were one of the most significant elements in ensuring individuals "face, manage, and respond to disasters

effectively" (Kapucu & Khosa, 2013, p. 32). These findings supported the current research that found a strong correlation between actively participating in assailant training and increasing the subject's perceived self-efficacy.

### **The Influence of Active Shooter/Assailant Simulations and Drills**

While traditional Lockdown might assist in mitigating incidents where individuals could secure themselves inside locations, the current training did nothing for those who found themselves out in the open during VCIs. Campbell (2018) cited a National Association of School Psychologists (NASP) and the National Association of School Resource Officers (NASRO) (2014) study finding active assailant drills were successful at teaching options that mitigate the effects of an active assailant. However, the NASP and NASRO cautioned against drills conducted improperly without considering the impact on participants. The author's study sought to determine if class participants noted any negative consequences from the exercises and whether this affected their perception of reacting and protecting themselves and others. Campbell cited the National Center for Education Statistics research, noting that Lockdown drills had increased nationally from approximately 46.5% of public schools in 2003-2004 to almost 94.6 % of public schools in 2015-2016. Adversaries touted the increase in drills saved lives; however, Campbell noted that the most significant deficiency in the current exercises was that they did not teach people what to do when facing an attacker.

NASP and NASRO (2021), in their updated guide, *Best Practice Considerations for Armed Assailant Drills in Schools*, cautioned schools and administrators about employing any simulations that imitate real-life incidents that could traumatize children. NASP and NASRO stated that drills built around options-based training were appropriate if the designer considered students' age, developmental levels, possible traumatic factors, and the campus layout. "The

threat perceptions of children are typically based on adult behavior, so effective drills include the presence of staff who inspire calm and confidence in students” (NASP & NASRO, 2021, p. 3). It echoes its earlier stance that these drills should not teach children to be heroes; instead, they should teach them how best to survive. NASP noted that no empirical evidence supported the use of 'sensory' drills and preferred non-sensory drills over simulations.

Hutchinson (2019) noted that the unknown impact and increased frequency of drills necessitated additional empirical studies to determine the costs and benefits of their implementation. Although utilized with good intentions, further research was essential to ascertain whether the impact benefits students and academic environments. The author sought additional empirical data that provided insight into whether these drills were beneficial without causing harm. Recognizing the importance of trauma when conducting assailant drills, ALICE (2021) started utilizing a Trauma-Informed Approach when dealing with school-aged children. This process guided educators in ensuring children's "physical, emotional, and mental health" (para. 2). The approach focused on the student's well-being. It suggested measures to be taken during training to reduce the possibility of exercise-induced trauma.

Realizing that active assailant events have evolved over the years and that firearms were no longer the only threat, Kepp (2018) suggested re-evaluating past training methods. The author emphasized the need for communities to be well informed about the precautions to take during such events to combat VCIs successfully, but she also acknowledged that there were no quick fixes. Kepp recommended, "Emergency managers and educators must work hard at developing and sustaining individual, organizational and public awareness, preparedness and resilience through adaptability, collaboration, and empowerment” (p. 130). The training of academia needs to be just as unique as the students and faculty (Kepp, 2018).

Rinder (2018) measured the perception of readiness of principals and assistant principals in ten Colorado Public High Schools. She determined that although most school principals were open to changes in how they received active assailant training, bureaucracy frequently limited the transition. Rinder pointed out that these individuals, by way of their role in the schools, were often the first responders to VCIs. While law enforcement would react, the faculty and staff involuntarily witnessed incidents where every second counts. The author emphasized that administrators must do more than go through the motions in training. By conveying a sense of urgency, these measures would provide a greater understanding of preparedness (Rinder, 2018). The researcher stressed that many of the principals surveyed supported further training; however, they noted several challenges, including limited resources and time constraints.

### **Contradictory Findings Regarding Alleged Trauma from Drills**

A recent study by Jonson et al. (2020), incorporating researchers from Seattle University, Northern Kentucky University, and Xavier University, contradicted the concerns expressed by NASP regarding trauma associated with active shooter drills in children. The researchers found that active shooter drills correlated to feelings of safety instead of dread or grief in children. This study specifically reviewed the impact of ALICE principles among a cohort of children in grades four through twelve. Researchers utilized two surveys, one for the fourth and fifth graders and a second for sixth through twelfth graders, to elicit feedback from students regarding their self-efficacy after ALICE training completion. The findings showed that 86% of sixth through twelfth-grade respondents either reported an increase in confidence and being prepared or no change as a result of training, whereas 95% of sixth through twelfth graders and 89% of fourth and fifth-graders indicated that they were just as safe or safer (Jonson et al., 2020). Dr. Cheryl L. Jonson et al. stressed in a security magazine article,

Contrary to what is frequently stated in the media about multi-option approaches, the results of this study show that, when compared to other standard crisis/emergency preparedness procedures, multi-option active assailant response programs did not leave students feeling more frightened after the training (pg. 653).

Dr. Melissa M. Moon highlighted the crucial importance of the study's findings. She emphasized that "when the media, parents, schools, researchers, and other stakeholders solely focus on the negative impacts of active assailant responses – without assessing potential positive impacts – an incomplete picture of the impact of these protocols is painted" (p. 654).

### **ALICE Principles in Action**

Expanding upon the concepts discussed by Kepp (2018), Kula (2019) emphasized that the instruction of civilians on how to respond to VCIs must be empowering, allowing them to realize that they can make a difference in a crisis. Kula best summarized the significance of active assailant drills, stressing that the "ability to overcome crisis is birthed from having been there before...in reality-based training" (p. 8). The ALICE course focused on these types of simulations while training. Students first filled the roles of 'innocent victims' and 'shooters' utilizing a Nerf gun as stimuli. After each scenario, the instructor conducted a lengthy debrief before the entire class. The instructor held this debriefing to evaluate the time to resolution and the number of 'casualties.' At the end of all scenarios, the instructor totaled the differences between resolution times and the number of casualties to provide participants with a detailed overview. The numbers illustrated the difference between civilians using traditional Lockdown and those utilizing the ALICE options-based response principles. Since this was an instructor class, participants broke into groups to develop their drills. Once completed, each group

presented their personally designed exercise in front of the class. The instructor suggested that groups share their outlines with others to leave the course with several prepared scenarios.

Notably, the events of October 20, 2018, in Springfield, Pennsylvania, bore witness to the effectiveness of ALICE principles during an actual VCI. A mother who had attended ALICE training through her school district was shopping at a local mall when shots rang out. She immediately reacted and evacuated her family away from danger safely. The teacher emailed her District Superintendent praising the prior ALICE training. In her testimonial, after surviving a VCI, the teacher wrote:

I just wanted to thank you for pushing the ALICE training, and for the safety drills that we had. They came in handy yesterday for myself and two of my boys. While at the Springfield Mall with my oldest and youngest sons, there was a shooting. Luckily, we were not in the immediate area of the shooting. I was able to evacuate my boys and inform others on our way out. I remained calm, which in turn helped my boys to remain calm as well. I really feel that the training and drills that we did helped me greatly in this situation. So, thank you, from the bottom of my heart. It was definitely useful and helpful. (ALICE, 2018)

The incident resulted in no casualties; however, it demonstrated ALICE's impact on her ability to respond effectively. The teacher's words described her self-efficacy from attending the training and learning the ALICE protocols.

A study by Jonson et al. (2018) added empirical validity to many of Navigate360's claims regarding ALICE's options-based training effectiveness. Researchers compared participant performance during VCI drills utilizing traditional Lockdown techniques to the ALICE principles in the classroom and open-air locations. A non-law enforcement role player

chosen by the instructor in each class was to portray the active shooter and engage available ‘targets’ using an airsoft gun. The researcher recorded and analyzed the number of ‘victims’ shot and the time to resolution. The study found a significant decrease in the time of the incident when utilizing ALICE principles compared to traditional Lockdown. Also, the use of ALICE’s options-based techniques resulted in the shooting of fewer participants during the simulations.

**Table 2.**

**Table 1.** *Average Time to Resolution and Percent Shot for Traditional Lockdown and Multi-Option Response in Classroom and Open Areas*

<b>Response</b>	<b>Average Time to Resolution</b>	<b>Average Percent Shot</b>
Traditional Lockdown in Classroom	195.77 seconds	74%
Multi-Option Response in Classroom	16.31 seconds	25%
Traditional Lockdown in Open Area	168.31 seconds	68%
Multi-Option Response in Open Area	8.00 seconds	11%

*Note.* Response, Average Time to Response, Average Percentage Shot (Lockdown vs. Multi-option). Adapted from “Putting multi-option active assailant response to the test, Table 1.” (Jonson et al., 2019, para. 19).

Jonson et al. (2018) demonstrated the substantial influence ALICE training principles play on participants' abilities to defend themselves from VCIs, as summarized in Table 2 by Jonson et al. (2019). Jonson et al. noted that the mean number of casualties documented during simulated Lockdown drills in classrooms was 74% and 68% in open areas. In sharp contrast, the mean number of victims recorded during the implementation of ALICE principles was only 25% in classrooms and 11% in open spaces. Additionally, there were significant differences in

resolution times and Lockdown (168.31-195.77 seconds) compared to ALICE (8 -16.31 seconds). This data demonstrated the sheer impact that the programs had in reducing casualties and resulting in a speedier conclusion, thus saving lives (Jonson et al., 2019). Scenario-type training identified inconsistencies between listed procedures and potential human performance in the presence of a VCI (Dorn, 2018). According to Dorn (2018), participants' insecurity would increase if they cannot use the options taught in simulated exercises to react appropriately when their survival is in danger. Organizations and academia could better protect their staff and patrons by identifying deficiencies and instilling confidence.

On January 18, 2017, in West Liberty-Salem, Ohio, staff and students successfully dealt with an active attacker on campus by utilizing the options-based training provided by the ALICE Training Institute. Two staff members tackled the shooter allowing students and employees to Evacuate the school by breaking classroom windows. The assailant wounded two students, but no other fatalities occurred. The West Liberty-Salem School Superintendent, Kraig Hissong, praised the school's response and attributed their swift reaction to quickly ending the incident. Hissong discussed the positive outcome: "I would like to thank my staff and students who did what they were trained to do today, which was to follow the ALICE protocols" (ALICE, 2017, para. 4). This incident served as another pertinent illustration of ALICE principles in action (ALICE, 2017).

### **Detractors and Scholarly Defense of ALICE Techniques**

The article by Trump (2019), *In Support of Lockdown: Options-Based Active Shooter Training is a High-Risk and High-Liability Proposition in a K-12 School Setting. Effectively Implemented Lockdowns Do Not Create Target-Rich Environments*, questioned much of Jonson et al. (2018) findings. Trump claimed that the earlier study was based on loosely interpreted

statistics because ALICE trained the three researchers. Trump stated that a proper Lockdown saves lives and that a poorly selected options-based response could result in the subject's death. While not explicitly claiming bias by Jonson et al., Trump called for further independent research that incorporated the use of K-12 students in the scenarios. The author also emphasized that children (K-12) should not utilize options-based responses, explicitly calling into question the use of Counter, which he described as 'fighting techniques.' On its website, ALICE (2022c) stated that it does not teach 'fighting skills' and that using Counter by age-appropriate participants was a personal choice when other options were not feasible.

ALICE Training teaches the skills need[ed] to "Counter" an attacker's ability to shoot accurately. We teach the use of noise, movement, distance, and distractions to make shooting accurately very difficult, and if appropriate, teach a swarm technique to take back control as a last resort. All recommendations and training are conducted at age and ability-appropriate levels. (Para. 2)

The Federal Emergency Management Agency (FEMA) (2020) supported a similar position as ALICE, declaring that the Department of Homeland Security's (DHS) 'Fight' category in its 'Run, Hide, Fight' instruction was an option of last resort used to disrupt the shooter. After further review, the Trump article appeared to base the information on speculation and opinion with little empirical evidence to support the stance. The author acknowledged the lack of academic research on options-based training programs like ALICE.

Barton (2020) expressed similar concerns, suggesting that ALICE may have overstated the impact of its training on participants during 18 VCIs in which the company took credit for saving lives. Barton conceded that interviews among ALICE-trained individuals who survived active assailant incidents first-hand gave high praise for the training; however, he pointed out

what he believed was a lack of empirical data supporting the course. The author pointed out that, among the incidents detailed on the ALICE website, many of the responses of trained civilians could have been mistaken for those of untrained people in similar situations using common sense. According to Barton, whether interviews with trained survivors demonstrated ALICE's self-efficacy was unclear.

Jonson et al. (2019) pointed out that ALICE principles supported Lockdown when Evacuation was not feasible; however, they recommended that people go a step further and barricade doors to increase the assailant's required efforts to reach them, thus slowing the subject's actions. The authors emphasized that much of the information was, at best, anecdotal and that there was no empirical evidence to support the efficacy of the single response option, Lockdown. The researchers compared the options-based training implemented by fire safety personnel to that of ALICE concerning individuals' proximity to the events. The first choice in any fire and VCI was to Evacuate the location if individuals could do it safely. If unable to do so, students had alternatives, such as remaining low to the ground and using items to barricade themselves from the fire or shooter (Jonson et al., 2019). The researchers noted that the well-known slogan if one were to catch on fire, 'Stop, Drop, and Roll,' was equivalent to counteracting the effects of the fire. Compared to ALICE's Counter, educators taught individuals to address an active assailant's attack if there were no other alternatives.

Educating civilians on available options instilled preparedness and self-confidence, which may, in turn, increase their chances of survival (Jonson et al., 2019). The researchers recognized that more data was essential to substantiate one stance over another. Jonson et al. suggested that researchers empirically conduct further studies incorporating the psychological impacts of active

assailant drills on participants. ALICE courses utilized a threefold methodology to prevent trauma:

1. Employing curricula that meet the diverse cognitive, behavioral, and developmental needs of students
2. Offering resources for students who may have special considerations and need an alternate safety training option
3. Using multi-option response training that empowers students to participate in their survival, reducing anxiety and building confidence (Jonson et al., 2019, para 9)

In the article, *Kanawha Students Receiving Controversial New Training to Counter School Shootings*, Charleston Gazette-Mail reporter Ryan Quinn (2022) quoted Dr. Peter Blair, the executive director of the Texas State University Advanced Law Enforcement Rapid Response Training Center. Dr. Blair pointed out that,

Civilians stopping shooters is even more common in school settings. To suggest that people shouldn't think about it or that it shouldn't be addressed or talked about is irresponsible. We have stories that don't turn into massacres because people did something. (Quinn, 2022, para. 54-55)

Quinn also addressed hypercritical criticism from various groups about ALICE's use of Counter, cautioning that one should only use it as a last resort. In addition to the condemnation of Counter, the article cited critics who believe that traditional Lockdown suffices and that Evacuation might cause individuals to flee safe locations.

In the article, *Officials Hail Hero Students in Seattle Pacific University Shooting*, Johnson (2014) further supported the position that quick responses by civilians during VCIs can have a significant impact. On June 5, 2014, several students at Seattle Pacific University grabbed

hold of a subject armed with a shotgun and knife while forcibly taking him to the ground, keeping him restrained until authorities could arrive. Although the article did not explicitly identify the students' techniques, the descriptions of their actions were consistent with the 'swarm' technique taught by ALICE under the Counter option. The article demonstrated the effectiveness of similar techniques and illustrated how quickly unarmed civilians can stop a VCI without any casualties.

The findings of three non-published dissertations further supported the theory that ALICE principles influenced participants' confidence. Dain (2015) examined staff and parents' perceptions of school preparedness on several topics, including whether an increase in confidence correlated with implementing the ALICE principles. The author conducted an extensive study utilizing a perceptive survey by sampling 841 parents and 2,235 staff members of a Kansas City K-12 school district. According to data collected, elementary school staff and parents were more assured of the ALICE implementation than their middle and high school counterparts. The findings revealed that staff and parents were confident in the ALICE training, believing it resulted in safer schools.

Dagenhard (2017) studied the perceptions of high school principals instructed on the ALICE principles over the past three years via an electronic survey. The scholar received responses from 98 principles spread throughout 22 states nationwide. Dagenhard reported a 99% satisfaction rate from respondents, with principles strongly endorsing the training as beneficial to their schools and a 100% endorsement for using ALICE at other public schools. Dagenhard summarized her research, emphasizing that principles perceived ALICE principles as "effective and perceived to limit casualties in the event of an active shooter" (p. 72).

Most recently, Craig (2022) focused on the perceptions of preparedness among elementary school staff attending ALICE training. The class consisted of a half-day of ALICE-based scenarios that law enforcement officers conducted. The researcher utilized a pre-survey before attendance and followed up with a post-survey upon completion of the end-user course. Craig found a measurable increase in the self-efficacy of the 170 participants who responded to the pre and post-surveys upon completing the ALICE training. The researcher noted that ALICE courses effectively guided participants through the mastery of experiences by utilizing scenarios to instill the principles and techniques (Craig, 2022).

The researcher noted a strong correlation between participation in the training and increased participants' sense of empowerment and confidence in their abilities in addressing an active assailant incident. One of the most notable responses by a participant summarized this newly acquired confidence. The anonymous quote from Participant 99 stated,

The most valuable aspect of training is that we now have options. The traditional lockdown scenario was very eye-opening as I felt like I was a sitting duck. I feel empowered that I can barricade or evacuate depending upon my location to the situation. (Craig, 2022, p. 92)

The data further demonstrated a decrease in the anxiety of staff responses from pre and post-surveys. However, staff members expressed concerns about implementing ALICE principles among elementary-aged children.

### **Summary**

This literary review illustrated the significant increase in active assailant incidents and the rising death toll, necessitating effective mitigation techniques to protect civilians. In addition to an alarming rise in the resolution time, these factors also necessitated a change in the mindset

and efficacy of people. They might have to take matters into their own hands until law enforcement arrives. Individuals who believed in their abilities could perform better under stressful conditions, such as during a Violent Critical Incident (VCI). This sense of perseverance and human potential allowed the average person to be capable of extraordinary and often heroic actions to save themselves or others from harm. A practical active assailant training course, such as ALICE, provided participants with the knowledge to survive VCIs while empowering them to make their own decisions instead of looking to an authority figure for guidance. There must be empirical research into efficacy to ensure the safety of society and the merits of such training of active assailant courses like ALICE on participants.

Many people believed one could not teach courage; however, the findings throughout this literature review have demonstrated that one could teach self-efficacy. A comprehensive examination of the literature cited numerous studies where participants showed measurable increases in their self-efficacy due to attending training. The studies also verified that individuals who had no training or participated in a course that did not contain hands-on scenarios had a notable decrease in their perceived ability to respond to an active assailant. One must remember that the study participants come from all walks of life. Their ranks included business professionals, doctors, nurses, firefighters, teachers, students, and administrators. Although these individuals' understanding of VCIs was minimal before attending training, the researchers found a significant correlation between the completion of active assailant training and the peace of mind that they could survive.

## **CHAPTER THREE: METHODS**

### **Overview**

This study aimed to determine the efficacy of ALICE principles in preparing civilians to survive active assailant incidents. Past research focused on participants' perceptions of effectiveness upon completing the ALICE training. However, there was still a need to investigate the performance of individuals who successfully utilized ALICE techniques and attributed their survival to the training. With the continued increase in VCIs throughout the United States, empirical research on mitigation strategies might shed light on the viability or impracticality of various options (FBI, 2021).

Chapter Three of this dissertation defined the research design, research questions, setting, participants, procedures, researcher's role, data collection and analysis, trustworthiness, and ethical considerations used in this study. The chapter provided insight into the themes identified by the researcher associated with the participants' interviews. This research provided insight into the survivors' abilities to survive a VCI and sought to identify any correlation between ALICE principles. Although there were numerous accolades from private individuals and organizations about the impact of ALICE principles, this study aimed to go directly to the source and empirically measured the confidence and performance of ALICE-trained survivors of VCIs.

### **Design**

This study aimed to measure the influence of ALICE principles perceived by survivors while examining the techniques' effectiveness during a VCI. Due to the visceral and sensitive nature of the topic, a quantitative approach would be unsuccessful in capturing firsthand accounts of survivors' emotions, thoughts, and actions. While pre and post-surveys were effective in measuring the self-efficacy of attendees after completing similar courses, the

quantitative instrument would only partially capture each respondent's personal experiences in saving their lives. Qualitative methods were the most effective way of gaining insight into human beliefs, experiences, and behaviors. Qualitative research, including phenomenology, sought to understand the meanings people assign to experiences. This methodology sought to understand better the lived experiences associated with a specific phenomenon, the reasons for individuals' actions, and the thoughts that governed their responses. Creswell and Poth (2016) emphasized that qualitative methods were utilized by researchers "to empower individuals to share their stories, hear their voices, and minimize the power relationships that often exist between a researcher and the participants in a study" (p. 45). This study employed a transcendental phenomenological design that sought to measure the impact of ALICE principles on the perceived abilities and reactions of survivors of active shooter/assailant incidents.

Developed in the mid-1900s by Professor Edmund Husserl, transcendental phenomenology was the scholar's attempt at creating a qualitative methodology that was as objective and recognized as its quantitative counterparts (Martirano, 2016). Whereas quantitative methods concentrated on analyses, transcendental phenomenology focused on individuals' detailed descriptions of events. Van Kaam (1966), as cited in Moustakas (1994), stressed that experimental designs might "distort rather than disclose a given behavior through an imposition of restricted theoretical constructs on the full meaning and richness of human behavior" (p. 12). In comparison, transcendental phenomenology focused on the "understanding of meaningful, concrete relations implicit in the original description of experience in the context of a particular situation" (Moustakas, 1994, p. 14). To be effective, one must achieve what Husserl called a "state of epoche" in which preconceptions were transcended, thus reaching the elemental essence of the concept (Martirano, 2016, p. 59).

Neubauer et al. (2019) noted that the challenge associated with this design was to participate in the study of individuals' lived experiences with a specific phenomenon that emphasized the fundamental worldwide essence of the phenomenon. "It erases the Cartesian dualism between objectivity and subjectivity by allowing researchers to develop an objective "essence" through aggregating subjective experiences of a number of individuals" (Moerer-Urdahl & Creswell, 2004, p. 32). They specifically designed the study to elicit visceral accounts of actual events; as a result, this methodology was much more appropriate for this study than quantitative methods. It permitted the researcher to experience firsthand the emotions, feelings, and thoughts associated with the participants' journey.

According to Martirano (2016), experts in deciphering data from this methodology included Creswell (2006), Moustakas (1994), and Polkinghorne (1989). Moustakas' (1994) process sought to set aside preconceived suppositions by the researcher so that they might view the phenomenon in a new light, unfettered by previous experiences, beliefs, or prejudices. One separated the data through bracketing, a process by which the researcher focuses on the circumstances that cause the "textural qualities, the feelings, sense experiences, and thoughts, the structures that underlie textures and are intimately bound within them" (Moustakas, 1994, p. 78). Bracketing allowed one to set aside extraneous information so that the process could focus solely on the phenomena in question.

### **Research Questions**

What influence did the ALICE principles have on survivors' perceptions of their ability to protect themselves and others from harm during an actual VCI? The subsequent research question supported the primary question. It incorporated the query by further expanding on the

topic of interest: a) How effective were ALICE-trained survivors in successfully utilizing the principles to protect themselves and others during an actual Violent Critical Incident?

### **Setting**

The setting for this study varied based on the participants' lived experiences in training and the locations where their VCIs occurred. Attendees of the ALICE courses came from many professions, including businesses, manufacturing, houses of worship, schools, and law enforcement organizations. The study aimed to elicit responses from ALICE-trained survivors that utilized the principles during a VCI. Thus, the setting was relative to locations where the participants effectively endured. Statistical data illustrated that common locations for active assailant incidents included schools, areas of commerce, open spaces, military bases, and houses of worship (United States Secret Service, 2020).

### **Participants**

The study used criterion sampling to identify and select individuals to participate. The researcher built the criterion sampling on the principle that viable participants were selected based on pre-established criteria vital to the study's focus. The study's uniqueness, "The Perceived Influence of the ALICE Principles on Survivors During a Violent Critical Incident," dictated that participants must meet two essential criteria to be considered candidates. To qualify for this study, potential participants must have completed ALICE Active Shooter Response training, including either the end-user or instructor course. Secondly, candidates must also have 'survived' an active shooter/assailant incident while utilizing aspects of the ALICE principles. The researcher used a Candidate Screening Questionnaire (CSQ) (Appendix C) to determine the eligibility of potential candidates. The researcher did not use any participants in this study who attended classes he had taught.

The six participants were randomly assigned pseudonyms reflective of their identified gender to ensure confidentiality. Additionally, to further protect the identity of participants, general descriptors (school, house of worship, open area) were utilized in place of specific VCI locations. The study results were generalized only to ALICE-trained survivors of VCIs. The scholar interviewed respondents using phenomenological methods; therefore, there was no control group to compare empirical data. This study did not concentrate on the course facilitators' abilities or instruction methods. Instead, the study focused on the message and options expressed to the students and their ability to convey a positive mindset that individuals can survive active assailants' events and prevail. Furthermore, the demographic makeup of the participants involved in the study varied based on the number of respondents.

### **Procedures**

The study utilized several procedural steps to protect VCI survivors' identities and avoid retraumatizing them while obtaining the necessary data. The first step was the completion of Liberty University's Institutional Review Board (IRB) application and submission of ancillary documents, including the Recruitment Email (Appendix B), CSQ (Appendix C), Consent Form (Appendix D), and Interview Questions (Appendix E). Obtaining permission from the IRB to progress with the study was essential. Upon approval from the IRB (Appendix A), the Recruitment Email (Appendix B), containing access to the CSQ QR code and hyperlink (Appendix C), was sent to potential candidates through various forms of social media and email. Suitable candidates were identified through the CSQ to ensure that potential participants met the required criteria.

Prospective candidates received the CSQ (Appendix C) through a link created within the online platform Qualtrics to assist the researcher in vetting subjects by ruling out those potential

candidates who were missing one or both criteria. The document attempted to reassure potential candidates that the researcher does not wish to revictimize survivors, only to understand better the influence of ALICE principles. To rule out any bias on the researcher's part, the CSQ inquired whether this author personally taught the ALICE course that respondents attended. The questionnaire also asked if the candidates would be willing to speak with the researcher. If selected to participate, the researcher asked that participants consent to an audio-only recorded 30-40-minute interview. Respondents would receive a \$50.00 Amazon gift card in appreciation and to further incentivize their participation. If respondents chose to defer compensation, a memorial fund for victims of active assailant incidents of their choice would receive a monetary donation.

After identifying suitable participants, the scholar emailed the Consent Form (Appendix D) to the address provided on the CSQ. Besides giving an overview of this voluntary research process, including compensation, the Consent Form also notified potential participants of the benefits of the research along with any associated risks, including injury or illness. In addition, the form provided contact information for this researcher and the IRB in case any further questions arose. Participants were notified to contact the researcher if a research question or topic caused discomfort or anxiety. This researcher understood that living through an active shooter/assailant incident was highly traumatic. The study did not seek to revictimize survivors, only better to understand the influence of ALICE principles on subjects. If an issue arose, the scholar would terminate the participant's attendance in the study immediately.

The researcher scheduled those candidates who formally consented to participate in the study for a 30–40-minute interview. To ensure consistency throughout the process, the researcher utilized standardized open-ended interview questions (Appendix E). The questions were

designed to elicit vivid accounts of participants' lived experiences. Data collection occurred through audio recordings of the participants' recollections. The information was then analyzed using the seven-step process for phenomenological studies created by Moustakas (1994).

### **The Researcher's Role**

This study was conducted without the assistance of Navigate360, the parent company of ALICE training solutions. The researcher conducted all aspects of the study. For full disclosure, besides this author's primary career as a law enforcement officer for the past 28+ years in central Florida and an instructor/facilitator for the past 22 years, he was also a part-time ALICE national trainer for Navigate360. Since this instructor's teaching style or message might have influenced students' perceptions of the course, the scholar excluded them, avoiding confirmation bias and ensuring the study's integrity. The researcher's only link with the ALICE-trained survivors was through phenomenological interviews of those participants who voluntarily chose to consent. The researcher used outside sources, including personal knowledge, acquaintances, word of mouth, online news outlets, and social media platforms, to identify and make initial contact with potential candidates.

### **Data Collection**

The researcher collected data for this study through phenomenological interviews of ALICE-trained VCI survivors. The scholar interviewed the six candidates who met all criteria established in the CSQ and consented to participate in the research. Each interview was audio recorded and designed to last 30-40 minutes. The researcher recognized that living through an active shooter/assailant incident was highly traumatic. The additional time was necessary to allow the researcher to establish rapport with participants at the beginning of the interviews while allowing ample time for survivors to tell their stories. To elicit the most vivid account of

the participants' lived experiences, the interview questions (Appendix E) consisted of standardized open-ended questions. This format allowed survivors to fully describe their thoughts, emotions, and actions about the research topics.

### **Interviews**

The researcher recognized that survivors might be highly apprehensive about speaking about their personal experiences while being recorded on camera. Having worked in law enforcement for over 28+ years and experienced firsthand the horrors associated with the untimely loss of life, this researcher was mindful of these events' highly traumatic and emotionally charged nature. The researcher empathized with those who endured while paying respect to those who died needlessly. The study did not seek to revictimize survivors, only better to understand the influence of ALICE principles on subjects. As such, this study only used audio recordings of participants to collect data. This format was less likely to elicit anxiety among participants while allowing the researcher to gain significant insight into the participants' world.

See Appendix E for the interview questions used by the scholar in this study. The researcher explicitly created each open-ended interview question to help answer the initial and follow-up research questions. Questions one through three aimed to determine whether participants had completed training other than ALICE and to assess their mindset after completing the ALICE course. The scholar designed questions four through six to elicit participants' thoughts regarding the likelihood of involvement in a VCI and their thoughts, emotions, and actions during the event. The following questions, seven through twenty, focused on the perceived effectiveness of ALICE principles in action. Questions twenty-one and Twenty-three allowed the interviewee to narrow their thoughts to a specific lesson learned that they

would want to be conveyed to others while also allowing them to add any further comments regarding relevant information that the researcher omitted.

### **Data Analysis**

The methodology used to analyze the data was adapted from van Kaam's (1959, 1966) initial descriptions for use with phenomenological data, as interpreted and modified by Moustakas (1994). "The fact that this approach relies on individual experiences means that the stories to be told will be told from the participants' voices and not those of the researcher or from individuals reporting studies in the literature" (Moerer-Urdahl & Creswell, 2004, p. 32). Using a transcendental phenomenological method in this study allowed the researcher to explore and visualize the participants' shared experiences. To better understand Moustakas' methods, the study included operational definitions that further provided insight into the process. The definitions were listed in the order that Moustakas' seven steps were completed.

**Horizontalization:** identifying and listing expressions that applied to the event (Moustakas, 1994).

**Bracketing (Reduction):** eliminating presumptions to arrive at enduring components of an experience (Moustakas, 1994).

**Clustering:** collecting and labeling similar experiences from multiple participants into core themes (Moustakas, 1994).

**Thematizing:** the culmination of core themes synthesized through the process (Moustakas, 1994).

**Textural Descriptions (what):** the feelings, examples, ideas, thoughts, and circumstances that comprise an individual's account of an experience (Moustakas, 1994).

**Structural Descriptions (how):** the “conscious acts of thinking and judging, imagining, and recollecting, in order to arrive at core structural meanings” (Moustakas, 1994, p. 78)

**Composite Descriptions:** synthesis of structural and textural descriptions developed from participants’ recollections of an event (Moustakas, 1994).

Moustakas’ data analysis consisted of a seven-step process that stripped away presumptions to arrive at an experience’s true meaning and essence. Moustakas’ method included:

- *Listing and preliminary grouping (step 1)* incorporated horizontalization, the identification and initial classifying of every expression applied to the event (Moustakas, 1994).
- *Reduction (bracketing) and elimination (step 2)* incorporated the removal of nonessential presumptions and sought to sort out the relevant expressions to identify the invariant constituents (Moustakas, 1994).
- *Clustering and thematizing the invariant constituents (step 3)* incorporated the collection and labeling of similar experiences from multiple participants into core themes (Moustakas, 1994).
- *Final identification of the invariant constituents and themes by application (step 4)* incorporated the researcher’s validation of the fundamental components and themes associated with an experience. This step identified viable constituents and themes while excluding irrelevant topics (Moustakas, 1994).
- *Construct for each co-researcher an individual textural description (step 5)* involved the researcher’s formation of a textural picture, the ‘*what*’ of the experience, through the

culmination of the validated invariant constituents and themes. The step included quotes from respondents relevant to their experiences (Moustakas, 1994).

- *Construct for each co-researcher an individual structural description (step 6)* involved the researcher's formation of a structural picture, the 'how' of the experience, through the culmination of the validated invariant constituents and themes (Moustakas, 1994).
- *Constructing each research participant a textural-structural description (step 7)* involved combining the 'what' and 'how' descriptions through clustering, resulting in the purest form of an experience (Moustakas, 1994). Martirano (2016) emphasized that this step "reveal[ed] the ultimate essence of the experience or phenomenon, imparting insight without partiality" (p. 63).

### **Trustworthiness**

Creswell and Poth (2016) described the validation of qualitative research as "an attempt to assess the "accuracy" of the findings, as best described by the researcher, the participants, and the readers" (p. 258). Lincoln and Guba (1985), as cited in Amankwaa (2016), suggested that a study's trustworthiness bolsters the value of qualitative research. The authors established four criteria to assist researchers in achieving this objective in qualitative research methods. This study's trustworthiness was validated utilizing the four techniques mentioned above: *credibility*, *dependability*, *confirmability*, and *transferability* (Lincoln & Guba, 1985).

### **Credibility**

*Credibility* is the certainty in the 'truth' of the result (Amankwaa, 2016). Lincoln and Guba (1985) stressed that member checking was "the most crucial technique for establishing credibility" (p. 314). This researcher utilized member checking to establish the *credibility* of the study. This process allowed interviewees to review the data collected from their audio recordings

and to provide feedback. The audio recordings of the interviews were transcribed into text for further analysis. Once examined and themes extrapolated from the data, the researcher released copies of the information to study participants. This action allowed the researcher to solicit participant feedback to validate the account of their experiences and identified themes. Stahl and King (2020) noted that an added benefit of member checking beyond assisting in validating *credibility* was that it also helped improve participants' trust in the researcher.

### **Dependability and Confirmability**

*Dependability* is the process by which the findings were determined to be reliable while also being able to be duplicated (Amankwaa, 2016). The methodology chosen for this study was relatively straightforward. Future researchers could poll ALICE-trained survivors of active shooter incidents with little effort to elicit responses. The unknown variable of prospective studies would be the willingness of survivors to participate.

*Confirmability* is the degree to which the respondent mold study results instead of the researcher's personal biases or interests (Amankwaa, 2016). One way to establish confirmability in this study was to utilize an audit trail, which consisted of a detailed account of all steps taken during the research from its start to the findings (Amankwaa, 2016). This process attempted to ensure minimal involvement by the researcher so as not to contaminate the results.

### **Transferability**

Although qualitative research, by its very nature, does not strive for the ability to be duplicated, *transferability* seeks to sustain relationships and descriptions from one perspective that may be relevant to another context (Amankwaa, 2016). One way to ensure *transferability* was for the researcher to provide thick descriptions of contextual information and identified themes. This method allows the reader to transfer data from one setting to another through shared

characteristics (Creswell & Poth, 2016). For this process to be successful, the descriptions must contain enough details to allow for their application in different situations (Stahl & King, 2020). This researcher used direct quotes from the interviewees to support this process, further bolstering the identified themes and enriching textural descriptions of the participants' lived experiences. This utilization provided the most visceral survivor's firsthand account of lived experiences but also allowed the researcher to gain a more significant understanding of what participants encountered during their ordeals.

### **Ethical Considerations**

This study was grounded in ethical principles. At its first conception, the researcher recognized that survivors might be too traumatized to recall their thoughts, feelings, and actions associated with living through an active shooter incident. While all participants had been ALICE-trained, no number of simulations would ever match the sounds, smells, sights, and sheer emotions present during their events. This researcher empathized with those who endured while paying respect to those who died needlessly. The study did not seek to revictimize survivors, only better to understand the influence of ALICE principles on subjects.

The study sought to build participants' confidence in the research and establish rapport. Given the psychological effects of reliving a VCI, precautions were taken to protect survivors' privacy and the study's validity. The researcher kept digital data on a password-protected and secured external drive, ensuring that no unauthorized access could occur through overt or surreptitious means. Prospective candidates completed an initial Candidate Screening Questionnaire (Appendix C) through Qualtrics. The Qualtrics website was secured using a unique username and password only known by the researcher.

The scholar scheduled interviews utilizing the online video platform Microsoft Teams; however, the researcher used only audio recordings of survivors' accounts. During the recordings, this scholar remained inside his residence to ensure unauthorized sources could not overhear the survivors' accounts. The six participants who met pre-established criteria completed a Consent Form (Appendix D) before data collection. Participants' responses were kept confidential through the use of randomly assigned pseudonyms. Additionally, Liberty University's Institutional Review Board (IRB) reviewed the researcher's proposed methodology before its implementation and collection of data from participants.

### **Summary**

The researcher of this study sought to empirically measure the influence of ALICE principles as perceived by survivors while also examining the techniques' effectiveness during a VCI. The relevant population for the present study consisted of participants who met two specific criteria. To qualify, potential participants must have completed ALICE Active Shooter Response training, including the end-user or instructor course. Secondly, candidates must also have 'survived' an active shooter/assailant incident while utilizing aspects of the ALICE principles.

Empirical data existed regarding positive outcomes that resulted from attendance at various active shooter courses. However, this research sought only to determine the influence that ALICE principles had in instilling a perception of self-efficacy and the ability to take action to protect oneself among survivors during an actual VCI. The study aimed to capture the raw emotions and personal struggles associated with the events by providing survivors' lived experiences. Data from the interviews further assisted this researcher in examining ALICE principles' impact on survivors' mindsets for persevering and their performance. The insight of

these certified ALICE instructors should help empirically bolster the recent accolades of the program's effectiveness while providing further credibility to the training's merits.

## **CHAPTER FOUR: FINDINGS**

### **Overview**

This qualitative transcendental phenomenological study intended to quantify the influence of ALICE training principles as understood by survivors while examining the techniques' effectiveness during a VCI. The study sought to measure the usefulness of ALICE training principles in changing attendees' mindsets and how this change affects survival outcomes. A single sub-question further strengthened the primary research question for this study: (a): How effective were ALICE-trained survivors in successfully utilizing the principles to protect themselves and others during an actual Violent Critical Incident?

Chapter Four outlined the study's findings while describing data analysis and the themes identified from participant interviews. This chapter contained empirical results that answer the study's previously stated research questions. The study's data were gathered through transcendental phenomenological interviews with ALICE-trained VCI survivors. The data incorporated structural and textural descriptions synthesized from participants' interviews using Moustakas' seven-step process. The process identified four core themes supported across all six interviews: preservation of life, preparedness, resilience, and gratitude. A more detailed explanation of each theme and empirical data that answer the research questions follows.

### **Participants' Interviews**

Due to the inherent traumatic nature of VCIs, active measures were taken to not only protect the identities of participants but also to gain their trust. A list of pseudonyms was generated randomly before conducting any interviews. Four male and two female participants consented to participate in the study. Upon verifying the participants' suitability for the study, the six individuals were randomly assigned one of the pseudonyms based on gender. To further

secure participant identities, the study limited biographical information about them. Participants' references to the specific location of their VCIs were sanitized to prevent further discovery of their identities.

Whenever possible, the researcher cited direct quotes from participants' interviews. The detailed textural descriptions of each interview were highly visceral and emotional for participants. Participants' intense accounts detailed the significant tragedies they experienced while addressing inquiries about how the ALICE principles contributed to their survival. To further protect participants, the interviews intentionally focused on using ALICE principles and survivability, not casualties.

### **Ross**

Ross was the youngest adult participant. At the time of his VCI, he was a student at the school. Ross's instructors were from the school's staff, not a national ALICE trainer. Ross admitted that he was sometimes not as attentive as he should have been during the class. In his school's courses, the administration chose not to conduct the active assailant scenarios with students, only administrative staff and teachers. The ALICE instructors then taught the students a more refined version of the principles without a simulated intruder. However, Ross complimented the school on running monthly drills incorporating ALICE principles after the initial training. Navigate360 distinguishes drills from scenarios in that drills do not contain sensory information where a simulated active assailant role player moves throughout a location with props. Drills allow students to put into practice the abilities and knowledge needed to apply the ALICE concepts. Ross stated that had he not drilled, "I don't know where I would be now. I lost friends. I would never wish this upon anyone. What I am sure of is that ALICE saved my life and the lives of others around me that day" (Ross Interview, February 9, 2023).

Ross stated that ALICE training was mandatory at the site. He stressed that he never thought he would have to use the principles. The primary strategies discussed by Ross during his interview were Alert and Lockdown + Barricade. “*Alert* is overcoming denial, recognizing the signs of danger, and receiving notifications about the danger from others” (ALICE, 2022b, para. 1). To fortify the area, ALICE’s enhanced Lockdown includes proactive blocking of entry points with readily available furniture such as desks, cabinets, and chairs. In doing so, the time it takes for an active assailant to gain entry increases, while the ability for the assailant to harm the occupant(s) decreases.

During his VCI, Ross could not Evacuate based on the proximity of the assailant to his location. Ross recalled hearing the sound of the gunfire and immediately barricading the nearby door with his classmates. Ross stated that he recognized the shots and began grabbing desks and chairs with his classmates after his teacher locked the door. He further described quickly placing these items in front of the door to secure the classroom better. Once students barricaded the door, the teacher instructed all students to move away from the entrance and spread out. During the interview, Ross stressed, “boy was I wrong; although I am proud of my actions afterward, I didn’t realize the importance of this type of training until then” (Ross Interview, February 9, 2023). When asked about a lesson that others could benefit from, Ross stressed that people must “attend a course, pay better attention, and have a plan” (Ross Interview, February 9, 2023).

### **Amy**

The first phone conversation showed that Amy was initially very apprehensive about speaking about her VCI. Amy had difficulty talking about the memories of her VCI. Amy received repeated assurances that she could end the interview if it became too stressful. Amy initially spoke about becoming ALICE-trained in high school approximately nine years earlier.

The primary strategies discussed by Amy during her interview were Alert, Counter, and Evacuation. Amy described her ALICE training as incorporating both classroom and scenarios.

While attending an event, Amy heard what she recognized as shots and immediately began to Evacuate the open-air location. “Evacuating to a safe area takes people out of harm's way and hopefully prevents civilians from having to come into any contact with the shooter” (ALICE, 2022b, para. 5). In an evacuation, it was assumed that people were in a position to move from one location to another to flee danger safely and that this was the best course of action given the circumstances at the time. Amy described the scene as 'chaotic' as many people failed to acknowledge the situation and take action to protect themselves. She stated that people just fell to the ground. In fleeing the location, Amy described how she utilized aspects of the Counter and Evacuation strategies by continually moving and increasing the distance between her and the shooter, thus decreasing the assailant's ability to shoot accurately.

During the interview, Amy stated, “I remembered my instructor continually harping on us that it was better to do something than nothing and that, if the opportunity presented itself, we needed to get out of harm's way” (Amy Interview, February 15, 2023). Amy credited her instructor and ALICE principles with saving her life. She emphasized that “this little voice in my head kept repeating run, run as fast as you can” (Amy Interview, February 10, 2023). It was not until the end of the discussion that Amy divulged that she had witnessed someone get shot. Amy wept as she described the look on the subject's face in great detail as she ran past.

While Amy survived the incident, others did not. Amy spoke very candidly about regret and loss. Amy was conflicted, stating that sometimes she felt guilty about surviving yet very appreciative of being alive. Amy said that she “felt like a weight [had] been lifted off of [her] shoulders” and that “the world needs to understand the lasting effects these senseless killings

have on the people involved” (Amy Interview, February 10, 2023). Amy praised the techniques taught in ALICE for saving her life.

### **Theo**

The primary techniques discussed by Theo during his interview were Lockdown + Barricade and Counter. Navigate360 emphasizes that *Counter* focuses on “actions that create noise, movement, distance, and distraction with the intent of reducing the shooter's ability to shoot accurately” (ALICE, 2022b, para. 4). Distractions are one element of the Counter strategy. This action involved using environmental items such as books, water bottles, and staplers at the VCI location, which are thrown at the intruder's face to interrupt their thought process. By taking the assailant's focus from their mission and redirecting it to other stimuli, citizens may be able to Evacuate, Lockdown + Barricade, or, as a last resort, take actions to subdue the offender. Theo trained on the Counter strategy using tennis balls to interrupt the intruder's thought process. If it was the only course of action left, Theo was instructed to use anything at his disposal to throw at the shooter.

Unlike Ross and Amy, Theo admitted that he did not initially recognize what happened during his incident. Although he had been ALICE-trained by Staff at his school approximately 2-3 years before the incident, Theo stated he “second-guessed [himself] when [he] heard the loud bangs” (Theo Interview, February 15, 2023). Theo noted that he finally started acting when he heard others yelling about a ‘gun.’ During the interview, Theo stated, “Everything slowed down like I was watching the Matrix” as Theo began to look around the room for environmental items specific to each location, such as books, backpacks, and computer monitors, to use against the intruder in case he gained access to the classroom (Theo Interview, February 15, 2023). Theo stated he reverted to his ALICE training, grabbing a nearby textbook and ceramic mug used as a

penholder to defend himself from the attacker. Theo expressed surprise at how quickly he responded once he recognized a threat. Theo further described how other students frantically “piled desks and chairs” against the door, as taught in the ALICE training, to barricade the classroom (Theo Interview, February 15, 2023).

Theo explained that even though the intruder never entered the room, he was ready to use aspects of the Counter strategy if necessary. During his VCI, Theo remembered his ALICE instructor talking about what he referred to as the “ODA loop” and the importance of “interfering with the shooter’s mission to kill” (Theo Interview, February 15, 2023). The acronym Theo spoke about was the “OODA loop,” which refers to Observe, Orient, Decide, and Act. This decision-making model was used to describe the thought process of the intruder and how to interrupt this process. When asked about the overall impact of ALICE principles, Theo stated, “Had it not been for the [ALICE] training, I would have probably froze and done nothing” (Theo Interview, February 15, 2023).

### **Marco**

The primary techniques discussed by Marco during his interview were Alert, Lockdown + Barricade, and Evacuation. Marco was present at the same incident as Theo but was much closer to the assailant. Theo contacted Marco after his interview and informed him of the study. Marco consented to joining the research and discussing his own experience. Marco stated that the nearby noises were instantly recognizable as shots and “*shook*” his classmates (Marco Interview, February 17, 2023). He described the initial frantic response by his classmates as they prepared to protect themselves. Marco credited his teacher for keeping everyone calm while they started to barricade the door. He spoke about how everyone joined in and began placing desks, chairs, and tables against the classroom door to secure the room further. Upon finishing the

barricade, Marco described how he and the other students spread out throughout the classroom while trying to avoid being visible through the classroom door window.

Marco successfully broke a classroom window and fled to safety along with other classmates. Marco expressed surprise at how quickly the group built a "*fortress*" [emphasis added] around the door (Marco Interview, February 17, 2023). He recalled looking at the classroom's external windows as an alternate escape route to Evacuate from the room. Marco stressed that he would not have considered breaking windows before attending the ALICE training. Marco remembered his ALICE instructor, a local law enforcement officer, emphasizing that windows may be the only exit available during VCIs. He emphatically stressed, "Listen, I never [expletive] thought that I would use it. I remember her (the instructor) speaking about it, but never would I [expletive] believe that I am going to smash a window to leave school" (Marco Interview, February 17, 2023). When asked about a lesson learned, Marco stated that people need to "take this...seriously" and recognize that "the time to prepare is now" (Marco Interview, February 17, 2023).

### **William**

William was a middle-aged gentleman who described himself as "a God-fearing man" (William Interview, February 21, 2023). While the media had interviewed others regarding his incident, William noted this was the first time he felt comfortable discussing the shooting. A mutual acquaintance had contacted William to see if he would be willing to participate in this study. After much deliberation, William consented and agreed to an interview as long as anonymity was guaranteed. He emphasized, "It's about time that I deal with this. It's been eating at me for some time" (William Interview, February 21, 2023).

William received ALICE training through his employer approximately seven years before the incident; however, the VCI occurred at a house of worship. At the time, William was skeptical about the ALICE instructor's claims of 'empowering' individuals to help themselves. He believed staying put was the best course of action and that any other response could result in a greater chance of injury. While completing the course, William admitted that he "*erroneously assumed*" he would never have to use the newly acquired skills (William Interview, February 21, 2023). William recalled that his opinion drastically changed as his class went through the ALICE active shooter scenarios at the end of the first day. William went into great detail as he recounted the "*decrease in body count*" in scenarios using the ALICE strategies. William noted that the ALICE principles, including "barricading, movement, and distractions," resulted in far fewer casualties than the traditional Lockdown scenario (William Interview, February 21, 2023). He emphasized, "It was at that time I became a convert; I had an epiphany regarding the importance of being prepared to take action to protect myself" (William, February 21, 2023).

The primary techniques discussed by William during his interview were Alert and Evacuation. William vividly described the shooter entering the auditorium and the initial shots. He described the initial panic that ensued as people started to react. He observed congregant members attempting to flee from the location while others froze and did nothing. William described the latter people as "deers caught in the headlights, unable to process or react" (William Interview, February 21, 2023). He credited ALICE with providing him the mindset to respond when others failed. William recounted remaining calm and being able to Evacuate from the location successfully. William broke down crying as he emphasized, "In what I believed to be the last seconds of my life, I was able to find solace in the fact that I had been taught to take

matters into my own hands. I wish others had been so fortunate” (William Interview, February 21, 2023).

### **Faith**

Faith was the last participant to consent to the study. She was very soft-spoken and docile. Although Faith trained in ALICE in high school approximately five years prior, she was able to utilize the principles later in life. Faith described how students simulated a Lockdown in a scenario and remained still, resulting in many ‘deaths.’ Faith then spoke about another ALICE scenario in which the students were surprised by a ‘shooter’ while changing classes. She vividly recalled the decreased simulated casualties during the scenario due to the students' movements. She remembered not being struck by projectiles even though she ran past the ‘shooter.’ Faith proclaimed,

Before then, I never thought I had it in me to survive. Having experienced the earlier scenario, I was NOT (strong verbal emphasis) going to be a statistic. The movement scenario left a lasting impression on me to this day and is the reason why I am still here to tell my story (Faith Interview, February 21, 2023)

The primary technique discussed by Faith during her interview was Alert and Evacuation. Faith described the initial Alert during her VCI as reacting to others fleeing the open-air event. She stated that she did not remember hearing any gunshots. She admitted that, while unsure of what was happening, she quickly realized that she had to act. Faith described how she became aware of her surroundings and looked for a location to provide her protection. Like Amy's earlier recollection about getting out of harm's way, Faith was conscious that she had to continue moving or risk becoming a target. Faith took comfort in the fact that while she fled, she consciously tried to help other attendees who appeared “disoriented” [emphasis added] (Faith

Interview, February 21, 2023). However, Faith seemed humble and highly emotional when recounting those injured and dying.

## **Results**

This study's results agreed with expectations derived from the literary review. The survivors' accounts further strengthened the understanding of the examined phenomenon. Data extrapolated from survivor interviews were analyzed using a seven-step process created by Moustakas (1994) for use in transcendental phenomenological research. Moustakas' procedure allowed for the examination and synthesis of evidence that supported the primary research question and sub-question A.

### **Analysis of Data and Synthesis of Themes**

The first step in data analysis was to convert participants' audio-only Microsoft Teams interviews into text. The researcher utilized the online subscription-based program, Go Transcribe, to translate the conversations into a usable format. The process of *horizontalization* allowed the researcher to thoroughly review participants' detailed descriptions of their thoughts, decisions, and actions during a VCI. Only statements crucial to understanding the participants' lived experiences were kept, while extraneous data were excluded. The next step in the process was *bracketing* and *elimination*. This step incorporated a detailed examination of the transcripts and began the bracketing process to identify commonalities among each interviewee while also considering biases. In respondent transcriptions, common comments were highlighted, and handwritten notes of the perceived similar experiences were taken (*thematizing*).

The next step in the process was the creation of a Clustered Response Chart (CRC) (Appendix F) consisting of three headings: Interview Question/Participant, Response Summary, and Clustered Responses. The chart allowed the researcher to summarize interviewees' responses

to each question while accounting for commonalities among all participant responses. The researcher generated a separate CRC for the twenty-three interview questions (Appendix E). Although this researcher created individual interview questions to account for each ALICE-based option, interviewees often answered several queries simultaneously as they recalled the rich details of their initial ALICE training and response to a VCI. Once the momentum of participants vividly recalling details began, to avoid distractions, the interviewees were not interrupted. Participants' in-depth recollections compelled the researcher to extrapolate answers to some questions from the totality of their descriptions instead of interrupting them during their interview.

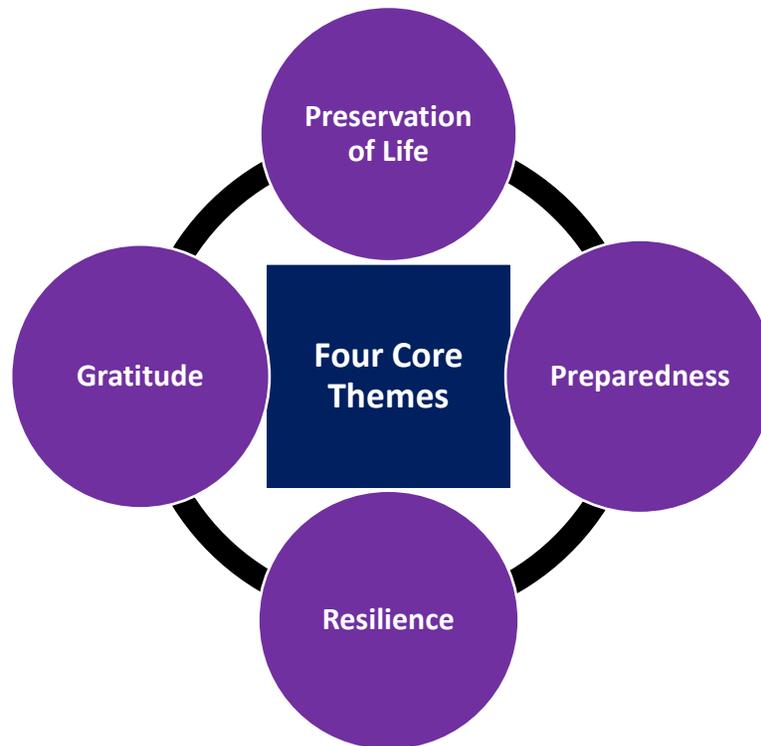
Upon identifying clustered responses from each question, the answers were paired with clustered reactions from the other interview questions. This collaboration identified four core themes: preservation of life, preparedness, resilience, and gratitude. This study only utilized themes established and addressed in all six participants' interviews. The study did not include possible themes that were inconsistently present across all participants' interviews.

After identifying the core themes, the researcher created vivid *textural descriptions* of participants' lived experiences while discarding irrelevant information. The researcher documented direct quotes from participants that embodied the raw emotions, thoughts, and actions associated with their survival. These rich pictures allowed the researcher to understand participants' perceptions better while gaining insight into their lived experiences. In doing so, the researcher validated that each participant had experienced the phenomenon. The researcher then constructed *structural descriptions*. "The essence of the experience is derived" through structural descriptions, "presenting a picture of the conditions that precipitate an experience and connect with it" (Moustakas, 1994, p. 35).

Although participant responses to the CSQ indicated that they had ‘survived’ a VCI, the sheer magnitude of this phenomenon’s impact on participants became apparent to this researcher while synthesizing the *textural* and *structural descriptions*. These descriptions provided the “what” and “how” of the experience (Moustakas, 1994). The creation of the *textural-structural descriptions* of each interview exposed the “ultimate essence” of the phenomenon while “imparting insight without partiality (p.63). The raw emotions of fear, sorrow, anger, uncertainty, guilt, and perseverance contributed to the essence of the participant’s lived experiences. The following paragraphs describe the core themes and their relationship to the phenomenon.

### Phenomenological Core Themes

**Figure 4.**



*Note.* Core themes derived from participants’ interviews using Moustakas’s (1994) seven-step process.

Preservation of life was the first theme identified in all six interviews. The innate response to shield oneself from credible threats was grounded in the self-efficacy theory. Increased self-efficacy in one's abilities led to greater resilience to survive. It drove individuals to take matters into their own hands to ensure their safety. In the brief moments following their initial responses, interviewees discussed the thoughts going through their minds, including plans for the future, missed opportunities requiring rectification, missing loved ones, and verbally expressing a profound desire not to become a victim. All survivors mutually communicated appreciation for being able to speak about their survival. Participants candidly spoke about their overwhelming desire to live and addressed their desire to help others during their ordeals. Survivors of these VCIs wanted society to learn from the tragedies they experienced so that others may live.

Preparedness was the second identified theme observed throughout participant interviews. Pitts (2018) describes preparedness as “The ability to prevent, identify, and respond effectively to active shooter situations...by confidently implementing the knowledge and skills that were acquired” (p. 7). While participants had no way of knowing the outcome of their VCIs, they were ready to take action to defend themselves. Reminiscing about their survival, all participants conveyed an overwhelming sense of self-confidence in their abilities. Several admitted initial apprehension or delay; however, all stressed that they recognized the importance of acting. They had been trained on the consequences of inaction during VCIs and realized they could not sit idly by. Participants credited the ALICE training with empowering them with the skills to save their lives. All parties agreed that they would have acted differently, or not at all, had they not received the ALICE training.

Resilience was the third theme identified among participants' responses. Windle (2011) defines resilience as "the process of effectively negotiating, adapting to, or managing significant sources of stress or trauma. Assets and resources within the individual, their life and environment facilitate this capacity for adaptation and 'bouncing back' in the face of adversity" (p. 163).

While all participants initially described experiencing panic, they further discussed how quickly their focus changed from fear to survival. Several people spoke at great lengths about reacting without ever thinking. They recalled utilizing the ALICE principles without being cognizant of their actions. By their accounts, participants remained vigilant, monitoring the stimuli and information around them and using it to decide on a course of action. The primary ALICE techniques utilized by participants were the recognition of an Alert as an actual incident, Lockdown with barricading, and Evacuation of the location. One participant spoke about grabbing items in the room to Counter if the barricade failed and the assailant gained entry.

Unexpectedly, gratitude with the final theme derived from participants' interviews. Participants appeared extremely humble, expressing significant angst for the seriously injured and killed victims, their families, and loved ones, yet were emotionally conflicted because they lived. Participants clung to the loss of friends and acquaintances during their VCIs. Several participants were still searching for ways to put the traumatic events and outcomes into perspective. They were highly emotional and extremely appreciative of being alive. Participants often referred to lessons learned during their ALICE instruction and repeatedly praised the course and the trainers for saving their lives. Participants were grateful that programs like ALICE existed and stressed that everyone should receive training. Participants refused to accept the Amazon gift cards as appreciation for their assistance with this study. They unanimously voted in favor of donations to memorial funds of active assailant victims. Upon completing the

interviews, this researcher made three 100.00 dollar donations on behalf of study participants to the Michigan State University shooting victims, including students Arielle Diamond Anderson and Brian Fraser (Brian Fraser Presidential Memorial Scholarship) and police dispatcher Aimee Barajas.

### **Research Questions Responses**

This study's design sought to answer the primary research question while supporting sub-question A. The primary research question for this study was: What influence did the ALICE principles have on survivors' perceptions of their ability to protect themselves and others from harm during an actual VCI? This question emanated from the Self-Efficacy Theory in seeking the impact the ALICE principles had on survivors' mindsets during the event. The subsequent research question was: How effective were ALICE-trained survivors in successfully utilizing the principles to protect themselves and others during an actual Violent Critical Incident? Both questions provided guidelines that allowed this researcher to remain focused on the study's purpose without losing sight of the identified problem and the lack of empirical data. The culmination of these two questions formed the foundation of the study, assisting in the creation of the CSQ and the eventual identification of eligible candidates.

The study's findings supported the primary research question: What influence did the ALICE principles have on survivors' perceptions of their ability to protect themselves and others from harm during an actual VCI? Participants expressed mixed emotions while initially attending the course; however, their perceptions changed significantly upon surviving a VCI. Several participants mistakenly thought they would never be in a situation where they would have to use the principles. While they discussed possessing far more confidence in their abilities after the training, these participants admittedly took the ALICE principles for granted. Participants

expressed that they only fully appreciated the effectiveness of ALICE and the strength of their abilities after the incidents. Faith's description best summarizes her newly found gratitude towards and overall impact of the training,

Before then, I never thought I had it in me to survive. Having experienced the earlier scenario, I was NOT (strong verbal emphasis) going to be a statistic. The movement scenario left a lasting impression on me to this day and is the reason why I am still here to tell my story. (Faith Interview, February 21, 2023)

The study's findings further provided evidence supporting sub-question A: How effective were ALICE-trained survivors in successfully utilizing the principles to protect themselves and others during an actual Violent Critical Incident? Concerning this inquiry, all participants unanimously indicated that the ALICE training principles were the reason for their survival. ALICE had prepared them to act during VCIs instead of freezing and becoming static, passive targets. It allowed them to make split-second decisions based on available stimuli and information, dramatically increasing their survivability chances. Each participant successfully selected response option(s) that permitted them to persevere. Ross's account of the incident best summarized ALICE's effectiveness in declaring, "What I am sure of is that ALICE saved my life and the lives of others around me that day" (Ross Interview, February 9, 2023)

### **Summary**

This transcendental phenomenological study assessed the ALICE training principles' viability in empowering individuals to save their lives during an actual active assailant incident. This chapter described data collection, analysis, and synthesis, answered the study's primary research question, and provided evidence supporting sub-question A. The chapter incorporated survivors' firsthand accounts of their initial ALICE training and their actions during an actual

VCI to assist in uncovering the phenomenon's essence. Data extrapolated from participants' interviews were analyzed using Moustakas' seven-step process identified in Chapter Three. Data analysis identified four core themes that permeated participants' recollections: preservation of life, preparedness, resilience, and gratitude. The synthesized themes were the foundation for further dialogue and inferences discussed in Chapter Five.

## **CHAPTER FIVE: CONCLUSION**

### **Overview**

This transcendental phenomenological study aimed to comprehend the impact of ALICE training concepts on an individual's ability to survive a crucial violent episode. The study gathered data through individual interviews of the eligible participants over one month. A total of six candidates, four males and two females, met the study requirements and agreed to participate. The interview data were analyzed using Moustakas's (1994) seven-step process. The examination resulted in the identification of four core themes consistent in all of the participants' data.

Chapter Five encompasses the conclusion of the research and encapsulates the study's findings. The chapter was broken down into several sections to better illustrate the study's results and further bolster the significance of the findings concerning ALICE's impact on the survivability of VCIs. The chapter additionally discusses the study's findings and implications related to the empirical and theoretical literature examined in Chapter Two: Literature Review. Chapter Five also explores the delimitations and limitations associated with the research and recommendations for future research.

### **Summary of Findings**

This study used transcendental phenomenological methods to gather crucial data on how the ALICE Active Shooter Response training affected VCI survivorship. Before this study, the effectiveness of ALICE training principles on survivors during an actual VCI lacked empirical evidence. While numerous accolades existed that summarized encouraging increases in participants' self-efficacy after attending ALICE courses; this study sought to go directly to the source and interview ALICE-trained survivors of VCIs. Through analysis of survivors' vivid

accounts of their lived experiences, thoughts, and actions, this researcher could better understand the emotional toll the incident took on them and the efficacy of the training. Data analysis found four core themes that permeated participants' survival memories: preservation of life, preparedness, resilience, and gratitude. These core themes formed the foundation of the phenomenological study, which assisted in discovering the essence of survivors' lived experiences while also providing insight into their self-efficacy and the efficacy of the ALICE principles. Chapter One presented the study's primary research question and associated sub-question A. As described in Chapter Four, empirical results that supported both research questions were synthesized through data collection and analysis.

The primary research question studied the influence of the ALICE principles on survivors' perception of their abilities to protect themselves during a VCI. The data relating to this question was decisive, with all participants staunchly supporting the principles' ability to prepare them to take proactive measures to protect themselves. Survivors often alluded to lessons learned during their ALICE training that assisted them. While two participants admitted that they did not fully appreciate the ALICE training during their attendance, all parties agreed that the principles undoubtedly catalyzed their survival.

Sub-question A explored the effectiveness of the ALICE principles during their implementation by survivors. This question sought to expand on participants' perceptions of their self-efficacy by studying the efficacy of the ALICE principles during a real VCI. Dissimilar to past research that only accounted for the measure of participant influence upon completion of training or drills, this study focused on the intentional use of ALICE principles while enduring a VCI. The data corresponding to sub-question A conclusively supported survivors' detailed accounts of employing the ALICE principles to stay alive. Participants praised the techniques

taught in ALICE as the sole source of their survival. Contained within the principles were essential tools that empowered survivors to make sound decisions and take decisive actions. ALICE-trained survivors presented considerable gratitude towards the ALICE training principles and trainers in inoculating them from fear and indecision while enabling them to persevere and overcome.

## **Discussion**

This section addressed the study's findings relative to the empirical and theoretical works analyzed in Chapter Two and synthesized Chapters Four and Five aspects. The study validated the theoretical and empirical literature previously discussed. Attributes of the study's findings further substantiated prior empirical research results denoted in Chapter Two.

### **Theoretical Literature**

This study utilized Bandura's Self-Efficacy Theory (SET) (1977) and Social Cognitive Theory (SCT) (1986) as its theoretical framework. SCT posited that an individual's behavior is a culmination of behavioral, personal, environmental, and cognitive factors. The SCT addresses the correlation between an individual's self-efficacy and perceived performance capabilities. Bandura's SET (1977) noted that the greater the perceived confidence a subject has in their abilities, the greater the effort they would put forth. Ackerman (2022) expanded on Bandura's four sources of self-efficacy, noting that mastery of experiences, actually living through an event, was the most potent source of self-assurance.

SET and the SCT were the cornerstones of this research, supporting three of the four core themes: preservation of life, preparedness, and resilience. According to Maddux (2012), as individuals witness themselves effectively managing and overcoming complicated circumstances, their sense of proficiency is enhanced. These factors were relevant to the current

study in that a person who did not possess self-confidence in protecting themselves might hesitate or fail to act. As a result, their performance might falter, possibly causing them to become seriously injured or killed during a VCI. In contrast, an individual properly desensitized to stress through training may be able to think more clearly and make informed decisions when seconds count.

This study showed that by using a combination of traditional classroom education, online learning, and participation in active shooter scenarios, the ALICE training concepts effectively prepared students to respond quickly under pressure. All six participants recounted their experiences of 'living through' ALICE drills or scenarios, which they credited with preparing them to save their lives. Survivors' accounts detailed the ALICE training principles' considerable influence on their ability to endure VCIs. Based on participant interviews, the increased perception of self-efficacy and preparedness transferred to the study's participants through attendance in the ALICE courses was the definitive factor in their survivability.

### **Empirical Literature**

Many of the empirical studies presented in Chapter Two's literary review lend credibility to the findings of this study. While not a complete list of all empirical studies in Chapter Two, it was a synopsis of the associations between the literature presented in the chapter and the study's findings. The empirical studies consisted of several sections, including the impact of self-efficacy on human performance, the evolution of violent critical incidents, the impact of active shooter/assailant training, self-efficacy and active shooter incidents/training, the influence of active shooter/assailant simulations and drills, contradictory finding regarding alleged trauma from drills, ALICE principles in action, and detractors and scholarly defense of ALICE principles.

While discussing the importance of active assailant training, Kula (2019) emphasized that teaching civilians how to respond to VCIs must empower them to realize they can make a difference in a crisis. The author further stressed that the “ability to overcome crisis is birthed from having been there before...in reality-based training” (p. 8). Dorn (2018) emphasized that if students could not effectively use the options taught during an exercise, their self-doubt would increase when it mattered most. The author pointed out that, through the use of scenario-type training, inconsistencies between listed procedures and potential human performance during a VCI were discovered.

In studying the impact of active assailant training on K-12 teachers, Embry-Martin (2017) found that “Training increases self-efficacy, and self-efficacy increases effort and perseverance” (p. 143). The author noted that even with increased stress associated with this type of training, teachers stated that it assisted them in feeling more prepared to react to a real VCI. Whitney (2017) echoed similar thoughts regarding the importance of training in emphasizing, “By recognizing options-based approaches as an acceptable strategy, school systems have the potential to increase the likelihood of survival dramatically. Lockdown should be an option, not THE solution” (p. 100).

Based on survivors' rich accounts of their thoughts, decisions, and actions while living through a VCI, the ALICE principles were the definitive reason for participants' options-based responses and overall survival. Participants credited the Alert, Lockdown + Barricade, Counter, and Evacuation strategies and the drills and scenarios taught by ALICE in empowering them to save their lives. These findings were further corroborated by prior research results highlighting that a person's belief in their abilities correlated to whether they think deliberately and confidently and that the stronger the self-confidence, the more significant the increase in the

individual's resolve and effort (Bandura, 1977; Maddux, 2012; Schwarzer, 2014; Embry-Martin, 2017; Ackerman, 2022). This study demonstrated that the ALICE training for these participants instilled a 'life lesson' that they recalled and implemented, in many cases years later and without recent practice, to save their lives. ALICE successfully infused in participants the ability to remain calm and make informed decisions under severe circumstances.

### **Implications**

The intended purpose of this section was to discuss the research's theoretical, empirical, and practical implications. In addition, this segment further addressed suggestions for those stakeholders impacted by the study, including civilians, trainers, and administrators. Relevant literature supported the evolution of this study throughout the process. The literary review in Chapter Two and the data collection and analysis described in Chapter Four echoed the theoretical and empirical support associated with the phenomenon. While the study's findings might appear secondary to the sheer impact of violent critical incidents, the theoretical, empirical, and practical implications could further advance this body of literature

#### **Theoretical Implications**

Understanding the effect of Bandura's Self-Efficacy Theory (SET) (1977) and Social Cognitive Theory (SCT) (1986) on ALICE-trained survivors was essential to comprehend the phenomenon better. These two concepts, first described in Chapter One and further expanded on in Chapter Two, provided the context to measure the effectiveness of the ALICE training principles. *Self-efficacy* refers to how confident individuals respond effectively to danger (Schwarzer & Warner, 2013; Bandura & Adams, 1977). This study defined *self-efficacy* as the participant's perceived ability to appropriately respond to active assailant incidents using

ALICE's options-based principles. It was this self-perception that directly dictated the type of response from individuals.

In this study, ALICE-trained survivors were asked to reflect on their survived incidents and provide detailed accounts of their experiences. Interviewees spoke candidly about the lessons from the initial training and detailed their proactive responses to active shooter incidents corresponding to the ALICE principles. Several survivors described their reactions to the initial recognition of gunfire as responding instinctively and instituting ALICE principles before realizing what they had done. Data collected during this study demonstrated enhanced confidence among participants in utilizing the ALICE principles and an innate ability to act to protect themselves quickly.

### **Empirical Implications**

The results of this study and the literature review in Chapter Two implied several empirical inferences. The first implication was a strong correlation between the completion of ALICE training and participants' perceived confidence in their abilities to survive a VCI. Williams (1992) emphasized that self-efficacy was the dominant predictor of behavioral change. Cherry (2020) expanded on earlier findings, pointing out that a higher degree of self-efficacy—obtained by successfully completing a task—can assist individuals in navigating through life's many challenges, reducing stress and increasing performance. Akhtar (2008) accentuated this motif, stating, “To have a resilient sense of self-efficacy requires experience in overcoming obstacles through effort and perseverance” (para. 5).

The survivors spoke candidly about participating in ALICE scenarios and drills during their initial training and continued practice. These scenarios and drills appeared to form the foundation upon which the survivors based their future decisions. Five of the six participants

attributed their survival to prior involvement in ALICE's scenarios. The remaining survivor, Ross, did not benefit from participating in the scenarios because the staff at his location excluded them from the course; however, he spoke highly of his experiences with the ALICE drills. Ross stated that had he not drilled, "I don't know where I would be now. What I am sure of is that ALICE saved my life and the lives of others around me that day" (Ross Interview, February 9, 2023). Completing the simulations and exercises increased participants' confidence, allowing them to succeed.

The second implication was the strong influence of participants' increased self-efficacy and their performance utilizing the ALICE strategies under pressure. Prior research suggested that teaching participants to survive and help others stay alive were the significant benefits of active assailant training (Kapucu & Khosa, 2013; Morris, 2014; Pitts, 2018). Snyder (2014) and Craig (2022) found a strong correlation between attendance in active assailant-type courses and a positive change in attendees' mindsets. The authors noted a sense of empowerment regarding survival among participants. Findings from Zaki et al. (2019) suggested that self-efficacy is enhanced through training programs and positively correlated to increased employee performance. Eastern Michigan University (EMU) (2016) stressed, "A trained individual will more likely not descend into denial, while the untrained will more likely not respond appropriately, descend into denial and helplessness, and may become part of the problem" (p. 4).

Survivors detailed the actions they took to protect themselves during a VCI. They attributed their ability to think clearly and perform under pressure to the sense of empowerment obtained through the ALICE training. Amy stated, "I remembered my instructor continually harping on us that it was better to do something than nothing and that, if the opportunity presented itself, we needed to get out of harm's way" (Amy Interview, February 15, 2023). Faith

emphasized, “The movement scenario left a lasting impression on me to this day and is the reason why I am still here to tell my story (Faith Interview, February 21, 2023). William expounded on this impact, declaring, “In what I believed to be the last seconds of my life, I was able to find solace in the fact that I had been taught to take matters into my own hands” (William Interview, February 21, 2023). William graphically described the nonreactive nature of individuals he assumed had not received active assailant training as “deers caught in the headlights, unable to process or react” (William Interview, February 21, 2023). Based on the lived experiences described by study participants, ALICE training significantly improved participants' survivability by enabling them to make split-second decisions based on available information and stimuli. Each participant recalled instances in which they successfully selected and utilized response strategies that aided them in enduring.

### **Practical Implications**

Several practical inferences were gleaned from this research. Any instruction/training was likely more effective than no training at all. Studies in Chapter Two demonstrated that individuals who attended various instructional forums and received positive feedback, whether from an instructor or through personal achievements, were left with notable increases in self-confidence and, in many cases, gains in their performance. McKenna et al. (2017) emphasized that “humans develop various levels of competence and employ them according to how they fit with their efficacy beliefs in response to different situations and in anticipation of future outcomes” (p. 57). Peifer et al. (2020) found empirical evidence that positive guidance enhances an individual's self-efficacy, which improves a subject's perception of competency in completing a prescribed task. These findings and this research's results suggested that self-

efficacy was enhanced through training programs and positively correlated to increased student performance.

The second practical inference from this research was that the benefits of attendance in active assailant training mirrored the previous findings regarding other forms of instruction. To increase overall preparedness, civilians—who were, in most cases, the actual first responders to an incident—should receive some form of training on active assailants. Chapter Two further provided insight into the significance of individuals participating in training. Rider's (2015) survey found a significant correlation between the number of active assailant drills in which teachers participated and their overall perception of preparedness. Wands (2016) stressed that one must overcome complacency with confidence through practical active shooter training and drills. Ellies (2015) emphasized that exercises must be conducted that provide participants with the knowledge to “intervene in active shooter incidents to save lives and bring a resolution to a crisis event” (p.12). Whitney (2017) emphasized, “By recognizing options-based approaches as an acceptable strategy, school systems have the potential to increase the likelihood of survival dramatically” (p. 100). In the case of this study, the findings empirically supported the position that ALICE strategies increased participants’ perceptions of confidence and empowered them with the tools to save lives. The ALICE strategies positively impacted attendees' mindsets, which in turn, affected their survivability.

### **Stakeholders**

Studies demonstrated the alarming trend regarding the yearly increase in active assailant incidents. In addition, research revealed that these VCI were often over before law enforcement arrived, leaving civilians frequently to fend for themselves. It was no longer a question of whether one would occur but when and where it would happen next. What was certain was that a

lack of civilian training on this topic resulted in significant casualties. This research would benefit several groups, including survivors, untrained civilians, and politicians. These stakeholders could influence how the general public perceives active assailant training and whether it was implemented throughout all occupations in this country.

Survivors who successfully utilized strategies must be willing to speak about their ordeals during future research, providing feedback on what worked and what did not. While this topic might have been considered taboo and traumatic by many, it was the only way to determine if specific methods were effective in real-world situations. Anecdotal accounts about training courses that lacked scientific scrutiny, while beneficial at face value, require further empirical studies to evaluate their efficacy. Only those programs proven to work should be taught to civilians.

People must also educate themselves and become more hypervigilant of their surroundings. Untrained civilians must take a vested interest in their survival. They must recognize the impact of this epidemic and be willing to take action, if not for themselves, then for their loved ones. They must call upon community leaders, school administration, and organizational governance to defend our society from individuals seeking mass murder. They must provide these individuals with compelling evidence that active assailant training increases survivability, thus decreasing casualties.

This study and previous findings supported the overwhelming need for a national response. Politicians must heed a declaration from the populace, supported by empirical evidence, demanding actions to protect their constituents from VCIs while deterring future offenders. Politicians must actively support federal, state, and local legislation that further hardens defenses while preparing people to react. Based on survivors' visceral accounts and the

growing number of VCIs reported each year, a substantial need existed for further deliberations among politicians and the public regarding the nationwide implementation of evidence-based active assailant programs proven effective in increasing survivability.

### **Delimitations and Limitations**

Describing delimitations and limitations was essential to ensure the study remained focused on the phenomenon and was not distracted by outliers, which may have obscured the study's intended purpose. Delimitation was an intentional act by the researcher to narrow the scope and describe the study's boundaries to target a specific sample. "Researchers identify and articulate delimitations to explain what their studies will and won't cover while also defining the methodologies and approaches they'll use to carry out their studies" (Naar, 2021, para. 2). In contrast, limitations referred to aspects of the research that were potential weaknesses or barriers that were uncontrollable or impossible to avoid. While revealing the study's restrictions, these deficiencies also served as a basis for future research.

#### **Delimitation**

The main limitation of this study was the researcher's decision to collect data through transcendental phenomenological interviews rather than other quantitative or qualitative techniques. The process of seeking potential candidates from ALICE-trained survivors lent itself to in-depth interviews. Different research methods, such as Likert-style surveys or case studies, would not have provided the rich context and details necessary to capture the significance of this phenomenon. The study required a critical examination of participants' thoughts, decisions, and actions trying to stay alive while, tragically, others perished. The research sought to understand better the impact of ALICE training principles on participants' survival.

The study's results supported the presumption that ALICE training principles increase participants' self-efficacy and effectively empower civilians to survive a VCI. The phenomenological interviews were critical to understanding the events better, and the detailed textural and structural descriptions could not have been captured using other research methods. Participants' firsthand accounts of the ALICE strategies used during their ordeals provided rich context to the phenomenon's essence while offering insight into the efficacy of the ALICE training principles.

### **Limitations**

The size of the sample population was the primary limitation of this study. This study was not intended to revictimize survivors, only to gain insight into the phenomenon. Early on, the researcher recognized that the study's population might be much smaller because of the traumatic nature of VCIs and the targeted phenomenon. It was difficult to locate ALICE-trained survivor candidates and even more challenging to get them to agree to speak about their ordeals. Due to the study's limitations and chosen research methodology, participants were limited to a minimum of five and a maximum of fifteen. Although the smaller size may have constrained the generalizability of the study to other populations, the rich accounts gleaned from study participants were a suitable starting point for the research. The smaller sample size allowed the researcher to understand the phenomenon better and was conducive to the chosen research method.

The phenomenon itself served as another relevant limitation. The information gathered from interviews concerned a traumatic incident in which participants were unsure whether or not they would survive. Anyone who had not experienced a similar situation could not fully comprehend the magnitude of what occurred. While survivors provided detailed accounts, one

could not truly comprehend the gravity of the circumstances, decisions, and actions required to endure. While this study added to the body of knowledge regarding the effects of ALICE training principles on survivors, the descriptions of the phenomenon might be constrained by several factors, including participants' aptitude, inability to describe their observations fully, and the lack of recall regarding particular event details.

Another limitation was the lack of data from survivors regarding the effectiveness of ALICE's Inform strategy due to the rapidly evolving nature of the events surrounding the studied VCIs. Navigate360 stressed that "ongoing, real-time information is key to making effective survival decisions" (ALICE, 2022b, para. 3). Inform utilized real-time information to keep citizens advised of the assailant's location so they can make educated survival decisions. Navigate360 recommended that this strategy only be used when it was safe to do so (ALICE, 2022b). Survivors in the six cases discussed stated they did not have time to Inform others due to their perceived proximity to the shooter. Due to the lack of survivors who were in a position to Inform others of the attacker's actions or locations safely, the results regarding the Inform strategy remained inconclusive. The study's findings neither supported nor contradicted the efficacy of this ALICE strategy.

### **Recommendations for Future Research**

This research aimed to understand the impact ALICE training principles had on the survivability of study participants during real-life VCIs. The study gathered data through transcendental phenomenological interviews of ALICE-trained survivors. The sample size was small for several reasons, including the specific criteria required for eligible participants and the traumatic nature of the phenomenon. The study's findings might encourage potential research participants who may have been initially reluctant to share their survival stories to contribute

more willingly. Future research, incorporating firsthand accounts by survivors, should continue expanding on ALICE principles, especially the influence of the Inform strategy. Qualitative researchers should consider alternative research methods while conducting similar studies on other active assailant training programs. The viability of alternative training methods should endure the same empirical scrutiny as the ALICE principles. Furthermore, the time allotted for interviews within this study restricted the depth of the research. Using case studies might assist future researchers in gaining better insight that was not possible within the parameters of this study.

### **Summary**

This transcendental phenomenological study aimed to determine ALICE-trained survivors' perceptions of the impact of ALICE principles while also investigating the effectiveness of strategies used during an actual VCI. The problem in this study was addressed by analyzing survivors' rich descriptions of living through a VCI. The purpose of the study was to provide empirical data on how effective the ALICE principles were in changing the mindset of attendees. Four core themes emerged based on the analysis of participant interviews: preservation of life, preparedness, resilience, and gratitude. Each theme substantially impacted how survivors viewed their performance potential and utilized the ALICE strategies in a real-world VCI.

Survivors reacted to various Alerts during their VCI and made individual decisions to implement ALICE strategies, including Lockdown + Barricade, Counter, or Evacuation based on exceptional circumstances. ALICE training improved survivors' efficacy and enabled them to endure. In summary, survivors' lived experiences credited the ALICE training principles with empowering them to save their lives. This study demonstrated that better-educated individuals

with the knowledge of protecting themselves, in turn, gained self-confidence that aided in their survivability. The study empirically demonstrated that ALICE training principles intrinsically empowered civilians to take active measures to save lives. While successful training might only protect one life, this outcome would be immeasurable compared to the alternative. Along with future research that expands on this body of work, this study could pave the way for more expansive knowledge about violent critical incidents and better training that further reduces mortality rates.

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## APPENDICES

### APPENDIX A

# LIBERTY UNIVERSITY

## INSTITUTIONAL REVIEW BOARD

February 8, 2023

Shawn Collins  
Angela Swan

Re: **IRB Exemption - IRB-FY22-23-818 THE PERCEIVED INFLUENCE OF THE ALICE TRAINING PRINCIPLES ON SURVIVORS DURING A VIOLENT CRITICAL INCIDENT**

Dear Shawn Collins, Angela Swan,

The Liberty University Institutional Review Board (IRB) has reviewed your application in accordance with the Office for Human Research Protections (OHRP) and Food and Drug Administration (FDA) regulations and finds your study to be exempt from further IRB review. This means you may begin your research with the data safeguarding methods mentioned in your approved application, and no further IRB oversight is required.

Your study falls under the following exemption category, which identifies specific situations in which human participants research is exempt from the policy set forth in 45 CFR 46:104(d):

Category 2.(iii). Research that only includes interactions involving educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior (including visual or auditory recording) if at least one of the following criteria is met:

The information obtained is recorded by the investigator in such a manner that the identity of the human subjects can readily be ascertained, directly or through identifiers linked to the subjects, and an IRB conducts a limited IRB review to make the determination required by §46.111(a)(7).

**Your stamped consent form(s) and final versions of your study documents can be found under the Attachments tab within the Submission Details section of your study on Cayuse IRB.** Your stamped consent form(s) should be copied and used to gain the consent of your research participants. If you plan to provide your consent information electronically, the contents of the attached consent document(s) should be made available without alteration.

Please note that this exemption only applies to your current research application, and any modifications to your protocol must be reported to the Liberty University IRB for verification of continued exemption status. You may report these changes by completing a modification submission through your Cayuse IRB account.

If you have any questions about this exemption or need assistance in determining whether possible modifications to your protocol would change your exemption status, please email us at [irb@liberty.edu](mailto:irb@liberty.edu).

Sincerely,

**G. Michele Baker, MA, CIP**  
*Administrative Chair of Institutional Research*  
**Research Ethics Office**

## APPENDIX B

### Recruitment Email

Dear [Recipient]:

As a graduate student in the Helms School of Government at Liberty University, I am conducting research as part of the requirements for a Ph.D. in Criminal Justice. The purpose of my research is to understand the relationship between ALICE training and survivors of active shooter/assailant incidents, and I am writing to invite eligible participants to join my study.

Participants must have completed ALICE Active Shooter Response training, including the end-user or instructor course. Secondly, candidates must also have ‘survived’ an active shooter/assailant incident while utilizing aspects of the ALICE principles. Participants, if willing, will be asked to consent to an audio-recorded interview. It should take approximately 30-40 minutes to complete the interview. Names and other identifying information will be requested as part of this study, but the information will remain confidential.

To participate, please click the hyperlink or scan the QR code below to complete the Candidate Screening Questionnaire.

[https://qfreeaccountssjc1.az1.qualtrics.com/jfe/form/SV\\_ezACuAmGCWESzQ2](https://qfreeaccountssjc1.az1.qualtrics.com/jfe/form/SV_ezACuAmGCWESzQ2)



Those individuals meeting the established study criteria will be emailed a consent document. The consent document contains additional information about my research. If you choose to participate, you must sign and return the consent document to me before making any interview arrangements. Upon review and completion of the consent form, you will be contacted by phone to set a date and time for an interview.

Respondents will receive a \$50.00 Amazon gift card in appreciation for their participation. If respondents choose to defer compensation, a memorial fund for victims of active assailant incidents of their choice will receive a monetary donation. This researcher wishes to thank you for your consideration in assisting with this endeavor.

Sincerely,



Shawn W. Collins

Ph.D. Candidate, Liberty University



## APPENDIX C

### Candidate Screening Questionnaire (CSQ)

The qualitative study you are asked to participate in seeks to understand the relationship between ALICE training and survivors of active shooter/assailant incidents. The study's uniqueness, "The Perceived Influence of the ALICE Training Principles on Survivors During a Violent Critical Incident," dictates that participants must meet two essential criteria to be considered candidates. To qualify for this study, potential participants must have completed ALICE Active Shooter Response training, including either the end-user or instructor course. Secondly, candidates must also have 'survived' an active shooter/assailant incident while utilizing aspects of the ALICE principles.

For this study, Clumpner defines an active shooter/assailant incident as an event in which "armed person(s) uses any weapon to inflict severe harm or deadly physical force on others in public and continues to do so while having access to additional victims" (Clumpner, 2017, p. 7). Navigate 360 uses *Violent Critical Incidents* (VCI) to describe these incidents. VCIs are "man-made forms of violent disaster, including active shooter, violent intruder, mass shooting, terrorism, workplace violence, and other unexpected tragedies" (ALICE, 2022a, para. 1). Navigate 360 utilizes this term synonymously with the more commonly used terms of an active shooter, active killer, and active assailant.

Having worked in law enforcement for over 28 years and experienced first-hand the horrors associated with the untimely loss of life, this researcher is mindful of these events' highly traumatic and emotionally charged nature. This researcher empathizes with those who endured while paying respect to those who died needlessly. The study does not seek to revictimize survivors, only better to understand the influence of ALICE principles on subjects.

1. Name: \_\_\_\_\_
2. Phone Number: \_\_\_\_\_
3. Email Address: \_\_\_\_\_
4. Have you previously received training from Navigate360, formerly the ALICE Training Institute (ATI), or an ALICE-certified instructor in the principles of Alert, Lockdown, Inform, Counter, and Evacuate (ALICE) Active Shooter Response Options?  
\_\_\_\_\_
5. Were you a student in one of the ALICE classes taught by part-time national trainer Shawn Collins? \_\_\_\_\_
6. Have you experienced an incident, as defined by Clumpner et al. (2017) and ALICE (2022a), involving an active shooter/assailant which occurred after completion of the ALICE training? \_\_\_\_\_
7. Did you use skills acquired from the ALICE training to assist you during the incident?  
\_\_\_\_\_
8. Are you comfortable sharing any lived experiences regarding these topics with this researcher in an audio-recorded interview? \_\_\_\_\_

Respondents will receive a \$50.00 Amazon gift card in appreciation for their participation. If respondents choose to defer compensation, a memorial fund for victims of active assailant incidents of their choice will receive a monetary donation. This researcher wishes to thank you for your consideration in assisting this endeavor.

## APPENDIX D

### Consent Form

**Title of the Project:** The Perceived Influence of the ALICE Training Principles on Survivors During a Violent Critical Incident.

**Principal Investigator:** Shawn W. Collins, Helms School of Government, Criminal Justice Department, Liberty University

#### Invitation to be Part of a Research Study

You are invited to participate in a research study. To participate, you must meet two criteria. You must have completed ALICE Active Shooter Response training, including either the end-user or instructor course. Secondly, you must also have 'survived' an active shooter/assailant incident while using aspects of the ALICE principles. Taking part in this research project is voluntary.

Please take time to read this entire form and ask questions before deciding whether to take part in this research.

#### What is the study about, and why is it being done?

The purpose of the study is to measure the influence of ALICE principles as understood by survivors while also examining the techniques' effectiveness during a VCI. The study seeks to measure the usefulness of ALICE principles in changing attendees' mindsets and how this change affects survival outcomes. While subjective praise surrounding the use of ALICE exists, this researcher is seeking to interview ALICE-trained active assailant survivors to obtain first-hand accounts.

#### What will happen if you take part in this study?

If you agree to be in this study, I will ask you to do the following:

1. Participate in a 30-40-minute interview either over the phone or through an internet meeting platform such as Zoom or Microsoft Teams (audio-recorded only).

#### How could you or others benefit from this study?

Participants should not expect to receive a direct benefit from participating in this study.

Benefits to society include insight into the ALICE principles' intrinsic value in empowering civilians to take active measures to save lives. This research may be the stepping stone to sharing more inclusive knowledge about mass shootings and improving training that reduces mortality rates. While successful training may only protect one life, this outcome is immeasurable compared to the alternative because even minor improvements are steps in the right direction.

#### What risks might you experience from being in this study?

The risks involved in this study are minimal, which means they are equal to the risks you would encounter in everyday life.

Recalling the events of your survival may elicit anxiety. This researcher understands that living through an active shooter/assailant incident is extremely traumatic. The study does not seek to revictimize survivors, only better to understand the influence of ALICE principles on subjects. If a specific research question or topic begins to cause you any form of discomfort or anxiety, please notify the researcher. Further participation in the study will be terminated immediately.

#### **How will personal information be protected?**

The records of this study will be kept private. Published reports will not include any information that will make it possible to identify a subject. Research records will be stored securely, and only the researcher will have access to the records.

- Participant responses will be kept confidential by replacing names with pseudonyms. Furthermore, specific locations where the active shooter/assailant incidents occurred will be sanitized to protect participants' anonymity further.
- Interviews will be conducted in a location where others will not easily overhear the conversation.
- Data collected from you may be used in future research studies. If data collected from you is reused or shared, any information that could identify you, if applicable, will be removed beforehand.
- Data will be stored on a password-locked computer. After three years, all electronic records will be deleted.
- Interviews will be recorded and transcribed. Recordings will be stored on a password-locked computer for three years and then erased. Only the researcher will have access to these recordings.

#### **How will you be compensated for being part of the study?**

Participants will be compensated for participating in this study. Respondents will receive a \$50.00 Amazon gift card upon completion of the interview in appreciation for their participation. The scholar will email the gift card to the address provided in the Candidate Survey Questionnaire (CSQ).

If the participant requests removal from the study prior to the interview, they will not be compensated. If respondents choose to defer compensation, a memorial fund for victims of active assailant incidents of their choice will receive a monetary donation.

#### **Is the researcher in a position of authority over participants, or does the researcher have a financial conflict of interest?**

The researcher serves as a part-time national trainer at Navigate360. No candidates who attended ALICE courses taught by this researcher will be selected to limit potential or perceived conflicts in the study. The Candidate Screen Questionnaire (CSQ) that all potential candidates completed assisted this researcher in eliminating these subjects. This disclosure is made so you can decide if this relationship will affect your willingness to participate in this study. No action will be taken against an individual based on his or her decision to participate or not participate in this study.

**Is study participation voluntary?**

Participation in this study is voluntary. Your decision on whether or not to participate will not affect your current or future relations with Liberty University. If you decide to participate, you are free not to answer any question or withdraw at any time without affecting those relationships.

**What should you do if you decide to withdraw from the study?**

If you choose to withdraw from the study, please contact the researcher at the email address or phone number included in the next paragraph. Should you choose to withdraw, data collected from you will be destroyed immediately and will not be included in this study.

**Whom do you contact if you have questions or concerns about the study?**

The researcher conducting this study is Shawn W. Collins. You may ask any questions you have now. If you have questions later, **you are encouraged** to contact him at [REDACTED] or [REDACTED]. You may also contact the researcher's faculty sponsor, Dr. Angela Swan, at [REDACTED].

**Whom do you contact if you have questions about your rights as a research participant?**

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, **you are encouraged** to contact the IRB. Our physical address is Institutional Review Board, 1971 University Blvd., Green Hall Ste. 2845, Lynchburg, VA 24515; our phone number is 434-592-5530, and our email is [irb@liberty.edu](mailto:irb@liberty.edu).

*Disclaimer: The Institutional Review Board (IRB) is tasked with ensuring that human subjects research will be conducted in an ethical manner as defined and required by federal regulations. The topics covered and viewpoints expressed or alluded to by student and faculty researchers are those of the researchers and do not necessarily reflect the official policies or positions of Liberty University.*

**Your Consent**

By signing this document, you agree to be in this study. Make sure you understand what the study is about before signing. You will be given a copy of this document for your records. The researcher will keep a copy with the study records. If you have any questions about the study after you sign this document, you can contact the study team using the information provided above.

*I have read and understood the above information. I have asked questions and have received answers. I consent to participate in the study*

The researcher has my permission to audio-record me as part of my participation in this study.

\_\_\_\_\_  
Printed Subject Name

\_\_\_\_\_  
Signature & Date

Liberty University  
IRB-FY22-23-818  
Approved on 2-8-2023

## APPENDIX E

### Interview Questions

#### *Standardized Open-Ended Interview Questions*

#### ***ALICE Active Shooter Response Training***

1. Please describe your personal experience with active shooter/assailant training, if any, before attending the ALICE Active Shooter Response course.
2. Please describe your thoughts, emotions, and actions regarding the ALICE active shooter training.
3. Upon completing the course, what influence did the ALICE principles have on your confidence in your ability to survive an active shooter/assailant incident?

#### ***Thoughts Concerning the Likelihood of Experiencing an Active Shooter Incident***

4. After you received ALICE active shooter training, what, if any, steps did you take on your own to prepare yourself for the possibility of experiencing an active shooter incident?
5. At the time, had you ever believed you would be involved in a similar incident?
6. Please describe your thoughts, emotions, and actions during your incident.

#### ***Perceived Effectiveness of ALICE Principles in Action***

7. Do you believe the ALICE training enabled you to respond appropriately during the active shooter/assailant event? Why or why not?
10. Do you believe your outcome may have been different had you not been ALICE trained? Why or why not?
11. If utilized, please explain your actions or behaviors corresponding to ALICE's Alert protocol during the incident.
12. How effective was the ALERT protocol, if at all, in assisting with your survival?

13. If utilized, please explain your actions or behaviors corresponding to ALICE's Lockdown protocol during the incident.
14. How effective was the Lockdown protocol, if at all, in assisting with your survival?
15. If utilized, please explain your actions or behaviors corresponding to ALICE's Inform protocol during the incident.
16. How effective was the Inform protocol, if at all, in assisting with your survival?
17. If utilized, please explain your actions or behaviors that correspond to ALICE's Counter protocol during the incident
18. How effective was the Counter protocol, if at all, in assisting with your survival?
19. If utilized, please explain your actions or behaviors corresponding to ALICE's Evacuate protocol during the incident.
20. How effective was the Evacuate protocol, if at all, in assisting with your survival?
21. If you had to attribute your survival to one ALICE-based critical decision, action, or principle, what would that be?
22. If there is a lesson to be learned regarding these incidents that you could convey to the world, what would it be?
23. Is there anything else you would like to mention about the ALICE principles, survival during an active shooter incident, or any other relevant topic this researcher may have overlooked?

## APPENDIX F

## Clustering Response Chart (CRC)

Question #7: Do you believe the ALICE training enabled you to respond appropriately during the active shooter/assailant event? Why or why not?

Interview Question / Participant	Response Summary	Clustered Response
Question #7 / Ross	<i>"I don't know where I would be now. I lost friends. I would never wish this upon anyone. What I am sure of is that ALICE saved my life and the lives of others around me that day."</i>	Gratitude Preservation of Life
Question #7 / Amy	<i>"I remembered my instructor continually harping on us that it was better to do something than nothing and that, if the opportunity presented itself, we needed to get out of harm's way."  "This little voice in my head kept repeating run, run as fast as you can."</i>	
Question #7 / Theo	<i>"Had it not been for the [ALICE ] training, I would have probably froze and done nothing."</i>	
Question #7 / Marco	<i>"Listen, I never [expletive] thought that I would use it. I remember her [the ALICE instructor] speaking about it, but never would I [expletive] believe that I am going to smash a window to leave school."</i>	
Question #7 / William	<i>"In what I believed to be the last seconds of my life, I was able to find solace in the fact that I had been taught to take matters into my own hands."</i>	
Question #7 / Faith	<i>"Before then, I never thought I had it in me to survive. Having experienced the earlier scenario, I was NOT (strong verbal emphasis) going to be a statistic. The movement scenario left a lasting impression on me to this day and is the reason why I am still here to tell my story."</i>	

## VITA

Shawn William Collins is a doctoral candidate with the Helms School of Government, pursuing a Ph.D. in Criminal Justice - Homeland Security. He received his Bachelor's Degree in Mass Media/Communications from the University of Akron. Throughout his academic journey, he also received two Master's Degrees, one in Criminal Justice from Troy University and the second in Organizational Leadership from The University of South Dakota. Shawn has worked in law enforcement in central Florida for the past twenty-eight years and as an instructor/teacher for various colleges and universities for twenty-two years.