TIMELINES AND INDICATORS IN LONE WOLF TERRORISM ATTACK 

MOBILIZATION 

by 

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A thesis submitted to the Graduate Faculty of the 

University of Colorado Colorado Springs 

in partial fulfillment of the 

requirements for the degrees of 

Master of Public Administration and Master of Criminal Justice 

School of Public Affairs 

2018
This thesis for the Master of Public Administration and Master of Criminal Justice
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Date 5/1/2018
Timelines and Indicators in Lone Wolf Terrorism Attack Mobilization

Thesis directed by Assistant Professor Edin Mujkic.

ABSTRACT

Lacking the resources, reach and influence of organized extremist groups, lone wolf terrorist attacks should be less impactful than the spectacular attacks of larger and more organized groups. How can lone actors compare to a vast, globally resourced, network of large terrorist organizations such as ISIS or Al-Qaeda? This study sought to study the methodology of lone wolf terrorism by analyzing select cases for commonalities in attack mobilization durations and indicators. This was done by developing common terminology, outlining a method for comparing the cases, discussing the cases selected, and then comparing them in a case study text analysis. This study found that there were commonalities in both mobilization durations and indicators displayed.

Mobilization durations general fell into three categories, immediate, short and long-term durations. Mobilization indicators displayed saw commonalities in attack means acquisition that was outside the norm, making statements justifying violence, supporting extremist ideologies, and training to higher proficiency in weapons. There were also commonalities in indicators not displayed such as limited to no displays of operational security, counter-surveillance, communications encryption, seeking access through employment, and the conduct of rehearsals.
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CHAPTER I

INTRODUCTION

1.1 Introduction

Lacking the resources, reach and influence of organized extremist groups, lone wolf terrorist attacks should be less impactful than the spectacular attacks of those larger and more organized groups. How can an unemployed convenience store clerk from Kansas or a quiet couple in San Bernardino compare to the vast, globally resourced, network of large terrorist organizations such as ISIS or Al-Qaeda? Following the 2011 attack in Norway where Anders Breivik killed 77, President Obama gave the following statement on the threat of lone wolf attacks:

“The risk that we’re especially concerned over right now is the lone wolf terrorist, somebody with a single weapon being able to carry out wide-scale massacres of the sort that we saw in Norway recently. You know, when you’ve got one person who is deranged or driven by a hateful ideology, they can do a lot of damage, and it’s a lot harder to trace those lone wolf operators (CNN, 2011).”

Though smaller in scale than attacks perpetrated by large terrorist organizations, lone wolf terrorists have demonstrated that they can conduct devastating attacks on a community and achieve political means that even larger organizations cannot.
A major factor that contributes to the success these devastating attacks by lone wolves is that they can often avoid detection until the moment of the attack, allowing them to prepare in seclusion and unleash a surprise attack on their terms where they hold many advantages. Much research and writing on the threat of lone wolf terrorism echoes the words of President Obama above, that lone wolf terrorists are difficult to “trace” and therefore are incredibly hard to intercept before the execution of their attack. These assertions have led to research attempts at creating a profile of the lone wolf terrorist in an effort to find commonalities in character and means. These insights seek to establish a criminological or psychological profile to aid the intervention efforts of security forces by creating possible behavioral or methodological indicators of attack.

It was in this space that this study sought to contribute to the general knowledge of lone wolf terrorism research by identifying and contrasting the commonalities of time and mobilization indicators in lone wolf terrorism attacks. Mobilization is the time in a terrorist attack planning cycle where the perpetrator is actively planning and preparing for an attack and is discussed in detailed in Chapter 2. If a major factor in lone wolf attackers avoiding detection is the small gap of time between planning and execution, then how long was that time? Was that time consistent among lone wolf attacks or does it vary? If it varied, what were the factors that caused that timeline to expand or contract? This study explored those questions through an examination of case studies of lone wolf terrorism attacks. This exploration was an effort to gather insights on timelines of lone wolf attacks and finding common factors that accelerated or frustrated those
timelines. Furthermore, this study attempted to align commonly accepted mobilization indicators with those timelines in order to determine if those indicators influenced, or were influenced by, mobilization timelines.

The goal of this study is achieved by first introducing the purpose and scope of the study as well as the methodology and limitations inherent in that method. Next, Chapter 2 establishes a common terminology used in this study and provides a brief overview of terrorism study by highlighting relevant research. Chapter 3 summarizes how the data was collected in the study, provide a list of cases chosen, and then discuss criteria for case selection and exclusion. The cases were analyzed in Chapter 4 with a summary of the case followed by identification of the mobilization duration and indicators displayed. Chapter 5 displays the results of a case study text analysis and highlights commonalities observed as well as noting what indicators were absent in the cases. Finally, this study concludes by discussing policy implications of the findings and proposes future research that can expand upon the findings.

1.2 The Case Study

Terrorism is a small subset of violent crime and lone wolf terrorism is an even smaller subset of that, meaning that there was a smaller pool of data to draw from than was found in other research of violent crime (Riedel & Welsh, 2016). Further complicating this limited dataset was that perpetrators of lone wolf terrorism are often killed during their attack, meaning that insights into their
ideology, rationale, planning and mobilization processes must be gleaned from whatever materials they leave behind (Pape, 2003). The result of this paring down of the data was a small number of cases available that were:

1) Qualified as lone wolf terrorism attacks;
2) Where the attacker left behind enough material to provide insight into their mobilization methods; or,
3) Where the attacker was captured alive and were able to be questioned on their methods.

For this type of data, qualitative research through a case study text analysis method was ideal because case studies can provide insights into general behavior from specific instances by identifying patterns present in a number of cases (Lunenburg & Irby, 2008). By an examination of select cases, this study sought to determine if there were commonalities in lone wolf terrorism mobilization durations as well as indicators of mobilization. The data collection and case selection criteria for this study are covered in detail in Chapter 3, but in general, cases were selected as those typifying high profile lone wolf attacks. However, due to a limited number of qualifying cases in the dataset (discussed in detail in Chapter 3), many of the cases were selected on a convenience basis. Convenience cases are selected purely based on availability due to a limited dataset and Lunenburg and Irby (2008) write that they are the weakest form of cases because they are not purposeful or strategic in nature. However, this weakness was mitigated because the cases chosen were also highly typical cases that could imply commonalities in lone wolf terrorism.
This study summarized the selected cases in a narrative summary and then analyzed the cases through the lens of determining mobilization duration factors and mobilization indicators. These findings were then compared and contrasted in a text analysis that provided the foundation of the discussion in Chapter 5, focusing on the shared themes and highlighting anomalies.

1.3 Purpose of the Study

The purpose of this study was to conduct a text analysis of select typical lone wolf terrorism cases in the United States since 9/11 with a focus on mobilization durations and mobilization indicators. This analysis contributes to further research in this area as well as lone wolf terrorist attack intervention policy. It contributes to further research in that it provides insights into the specifics of attack mobilization durations by emphasizing commonalities and highlighting abnormalities. This research, coupled with psychological study of lone wolf attackers, could contribute to a greater understanding of attacker profiles.

In addition, this study sought to be of practical use in policy and attack intervention efforts by associating mobilization indicators with the mobilization durations in an effort to find commonalities of how mobilization durations and mobilization indicators influence one another.
1.4 Scope of the study

The scope of this study was to conduct a text analysis of case studies by looking for specifics in behaviors exhibited as they related to mobilization timelines and indicators. While discussed as incidental to the cases selected, psychological, sociological, mental illness and substance abuse were not criteria considered as they were outside the scope of this study.

1.5 Description of the chapters

The following section, Chapter 2, provides a background of terrorism in general and lone wolf terrorism in specific. It provides a brief history and continuity to answer the question “how did we get here?” A key section of Chapter 2 lays the foundation of terminology and definitions used in this study, which is important because of the differing opinions on terminology in the terrorism research community. Chapter 3 presents the research methods used in this study, how data was collected, the selection criteria for cases, the cases selected, and a sample of cases excluded and why. Chapter 4 is an analysis of the selected cases that is conducted by providing a narrative summary of the case followed by an analysis of the mobilization timeline and what mobilization indicators were displayed. Chapter 5 compares the cases in a cross-case analysis to find commonalities, highlight abnormalities, and propose theories the data may suggest. Finally, Chapter 6 concludes the study by evaluating if the
research goals were met, discussing policy implications, and then suggests how future research can expand upon the work done in this study.
CHAPTER II

LITERATURE

2.1 Background

The study of terrorism has a long history of being inconsistent, lacking theoretical framework, and no common approaches. Crenshaw (2011) believes that this was due to it not being solely in the arena of scholars, and even further, it was fragmented among many disciplines within the academic community. These challenges have been worsened by extended periods in modern history where the study of terrorism has been neglected due to it fading from the public conscious when prominent attacks were absent (Crenshaw, 2011; Riedel & Welsh, 2016). However, this neglect was made apparent after the 9/11 attacks that terrorism had changed, and that scholars and practitioners would have to quickly catch up. Crenshaw (2011) stated that prior to 9/11, international relations and foreign policy scholars, security forces, and law enforcement believed that terrorism was the purview of nation states and international security forces and this belief contributed to the neglect of study.

Crenshaw (2011) made the case that 9/11 was the paradigm shift from “Old Terrorism”, starting approximately in the 1960s with airplane highjacking as the primary high-profile attack, to “New Terrorism” that was exemplified by the 9/11 attacks and the dramatic rise of suicide terrorism attacks around the world. Old Terrorism was limited in scope, addressed specific grievances, and had a path to resolution or demands that could be met. A common example of this was
focused violence to take hostages to force action such as a policy change or the release of a prisoner. With New Terrorism, the goals were as unlimited as their scope. The violence was no longer focused, meaning that any number of people were targeted with whatever means are available. Their targets often did not have any connection to their grievance and were targeted for their deaths to simply add emphasis to their message (Crenshaw, 2011; Jarmon, 2014).

It was during this time that lone wolf terrorism also saw a shift in approaches and capability. A report by Georgetown University’s National Security Critical Issue Task Force (2015) analyzed lone wolf terrorism trends after 9/11 and compared them with trends as far back as 1940. They highlighted four prominent trends in attacks since 9/11 where domestic lone wolf terrorists:

1) “Increasingly target law enforcement (LE) and military personnel;
2) Overwhelmingly use firearms to conduct attacks, compared to LWTs [Lone Wolf Terrorists] in other western countries who rely on highjacking or bombs;
3) Increasingly become radicalized via the Internet, extremist media, and the civilian workplace; and,
4) Proclaim an individual ideology instead of claiming affinity to specific, organized extremist groups (National Security Critical Issue Task Force, 2015).”

These lone wolf terrorism trends in the United States, combined with a shift in global terrorism trends (Krob, 2018), painted a picture of global terrorism trends that have changed to “New Terrorism.” This shift occurred alongside an
exponential growth of internet availability that allowed these ideologies to be spread to individuals and small groups in the privacy of their home, allowing them to self-radicalize. This was seen in many ideologies from global movements, regional concerns, and splinter factions of larger movements (Leistedt, 2016). Federal Bureau of Investigation (FBI) Supervising Special Agent Ryan English stated that “becoming a terrorist used to be difficult.” One had to be radicalized in person by secretive groups that they may not have incidental contact with and then they had to gain their trust, learn the ideology, and find experts to train them on tactics and weapons use. Now, radicalization can be done over the internet in relative secrecy and anonymity (English & Garard, 2018).

In addition to radicalizing online, many modern terrorists then learned tactics and then practiced those tactics to a high degree of proficiency, possibly even before attack mobilization (Gruenwald et al., 2013). This held true to lone wolf attackers, even to those outside of far-right extremist ideology and those surrounded by “gun culture.” For example, U.S. Army Major Nidal Hassan, who shot and killed 13 Soldiers at Fort Hood in 2009, admitted to spending hours at a nearby shooting range training to consistently hit targets in the chest in head up to 100 yards away, firearms training far more involved than any he received as a psychiatrist in the military (Kenber, 2013).

Becker’s 2014 study of 84 lone wolf terrorist attacks between 1940 and 2012 reinforced the findings of the National Security Critical Issue Task Force in that firearms were the favored means of attack by lone wolf terrorist attacks (Becker, 2014). He found that the majority of lone wolf attacks were conducted
with firearms at 56% and bombs (typically improvised and homemade) at 36%.
To that point, Spaaij argued that firearms were the majority due to lone wolves
lacking the resources and expertise of extremist organizations. Furthermore,
firearms in the United States are legal, relatively easy to obtain, and require less
expertise to use than explosives or other means (Spaaij, 2011). In addition to
firearms being used in the majority of attacks, Becker also saw an increase in
explosives as a means with 22 of the 30 attacks studied after 9/11 involving
explosives. He hypothesized that this was due to an increased access to
knowledge and materials in bomb manufacture found online. These bomb
attacks were typically not effective as the bombs were usually discovered and
defused prior to detonation, or the attackers were apprehended before they could
emplace them (Becker, 2014).

These trends in targets, means and ideology reflect the current state of
lone wolf terrorism in the United States and were found to be present in most of
the cases in this study, with some indications as to where the trends were
heading.

2.2 Definitions

As noted at the beginning of this chapter, the study of terrorism, and
especially lone wolf terrorism, is very fragmented and findings are often
contested due to a lack of shared terminology and methods (Spaaij & Hamm,
2015). Because of this, it was very important to establish the terminology, and
which interpretations of that terminology, that was used throughout this study.
2.2.1 Terrorism

To qualify as terrorism, a crime must meet the following criteria as established by the FBI:

1) “Involve acts dangerous to human life that violate federal or state law;

2) Appear intended
   a. to intimidate or coerce a civilian population;
   b. to influence the policy of a government by intimidation or coercion; or
   c. to affect the conduct of a government by mass destruction, assassination, or kidnapping; and

3) Occur primarily within the territorial jurisdiction of the U.S. (Graham, 2015).”

Krob stated these criteria in simple terms: the offense must be a federal violation, be carried out by acts of force or violence, and be motivated by political or social goals (Krob, 2018).

This strict definition has led to confusion in cases where the public may see a clear cut case of terrorism, but the FBI did not label it as so and seeks to prosecute under a different charge, as happened after the attacks in San Bernardino in 2015 (Graham, 2015) and the shooting in Fort Hood in 2009 (Criss, 2017). Many terrorism cases were prosecuted as hate crimes and there are many reasons for this. First, hate crimes are easier to prove as terrorism charges
rely heavily on proving motive and other psychological factors. The sentences can be similar, but hate crimes often carry a harsher sentence. Also, it may have been easier to pursue the death penalty as was the case with Nidal Hasan, the Fort Hood shooter. Finally, hate crime charges are not separate charges, but an “enhancement” to existing charges such as multiple counts of premeditated murder, that can rapidly accumulate into harsh sentences (Myre, 2017).

Another reason prosecutors were hesitant to charge perpetrators with terrorism was that it could set a precedent where radical thought is prosecuted. Myre quotes Shamsi: "There's a real danger of the government criminalizing ideology, theology and beliefs rather than focusing on specific criminal acts (Myre, 2017)." In regards to this, McCauley and Moskalenko (2014) stated that radical opinion is common, but radical action is not. Through a series of phone interviews in the United Kingdom, they asked UK Muslims their opinion on a scale of questions with criticisms of the government at one end and support of terrorist attacks at the other end. From their results, they developed a pyramid of radical opinion with the largest group, the pyramid’s base, being neutral in radical opinion and attitudes toward terrorist attacks. Going up the pyramid in smaller groups were those who sympathized with terrorists, those who justified their actions, and finally at the top of the pyramid, were those who felt a personal moral obligation to conduct attacks (McCauley & Moskalenko, 2014).

Literature on the subject reached somewhat of a consensus in that the difference between terrorists and other mass attackers was the ideological motivation of terrorists (Capellan, 2015). However, as stated above and at the
start of this chapter, there was a divide between scholars and practitioners as law enforcement and the courts were hesitant to prosecute on ideological grounds and instead prosecuted the majority of terrorism attacks as other mass attacks and hate crimes. With that said, the FBI’s definition of terrorism still holds, even though they rarely use it to prosecute, and that was the definition of terrorism used in this study.

2.2.2 Lone Wolves

As fragmented as the study of terrorism was, the discussion surrounding the terminology of lone wolf terrorism was even more divisive. Spaaij (2015) is a prolific scholar of lone wolf terrorism and he bemoaned the research community’s inability to settle upon common terminology with the following criticism of current definitions:

“Let us rehearse a sample of buzzwords that characterize academic discourse on lone wolf terrorism: loner, lone actor, solo actor, solo terrorist, solitary, free-lancer, self-starter, lone offender, lone avenger, leaderless, self-directed, self-motivated, lone wolf pack, one-man wolf pack, self-activating, idiosyncratic. (Spaaij & Hamm, 2015)”

For another perspective on labeling, Greunwald et al. (2013), in their study of far-right lone wolf homicides in the U.S., divided lone wolf attackers into three definitions:

1) Loners, who operate alone and had no ties to extremist organizations;
2) Lone Wolves, who were similar to Loners in that they operated alone, but Lone Wolves were members (or claim membership) of extremist organizations, whether formal or informal; and,

3) Wolf Packs, small groups of Lone Wolves who shared group membership and only differ from Lone Wolves in that there were more than one.

Spaiij (2015) preferred the term “lone offender” as it removed the glamour or romance of the term lone wolf terrorist. Furthermore, he argued that lone wolves should not be used if there was more than one attacker. Gill et al. (2013) insisted that pairs of individual lone actors, who they labeled as isolated dyads, were important to include in the study of lone wolf terrorism because “the formation of a dyad, in some cases, may be a function of the type of terrorist attack planned (Gill et al., 2013).” This statement that the formation of the dyad closely relating to the function of the attack has borne true in the cases in this study. For this reason, the definition of a lone wolf terrorist used in this study was a solo actor, or duo, that carried out a terrorist attack under no external directive, even though they may have received external inspiration for the attack.

### 2.2.3 Radicalization and Unfreezing

If lone wolf terrorists were defined by their internal initiative rather than external directives, how did they become radicalized? As with all forms of mass communication, the dissemination of radical ideology has evolved over the past
30 years along with technology. An example of this evolution of radical ideology dissemination was Louis Beam, a former Texas Klansman popularized through his calls of leaderless resistance among whites to work toward overthrowing the federal government. He first spread his message through printed newsletters and pamphlets such as *The Seditionist*, and then rapidly expanded his reach with the development of the first white supremacist website. His plan of leaderless resistance was targeted to resonate with individuals and small groups where he envisioned phantom cells of white freedom fighters, underground and decentralized pockets of resistance, that would take action against the government without national leadership (Sharpe, 2000).

Another piece of ideological media held in high esteem by far-right extremists is the *Turner Diaries*, a work of fiction authored by William Pierce in 1978. This novel chronicled a coup d’État of the federal government by a group of white supremacists that was put in motion through the fictional Cohen Act, which outlawed the private ownership of firearms. Though it did not originate with the *Turner Diaries*, the outlawing of firearms ownership is a common fear of the far-right and this fear is played upon in many radical writings. The book is considered a call to arms by many far-right extremists and many carry a copy on their person. One act of the book consists of the bombing of a federal building and Timothy McVeigh, convicted bomber of the Murrah federal building in Oklahoma City, allegedly carried a copy of the book on him (Sharpe, 2000).

With the abundance of readily available radical material available, an individual with radical leanings needed only to perform a cursory search and they
would be inundated with rhetoric that fit their grievances. If radical opinions were present in large portions of the population, there was a multitude of material that an individual can use to self-radicalize, and there was easy access to means (firearms, homemade explosives) in the U.S., then why was there not more radical action?

McCauley and Moskalenko (2014) suggested that while many individuals met all of the criteria for radical action, they never suffered a shaping emotional event, or “unfreezing”, which galvanized their resolve and put them on a path of “nothing to lose.” They cited the example of Clayton Waagner who suffered a strong emotional break during the stillbirth of his grandchild where he claimed the voice of God asked him “how can you grieve so hard over this one when millions are killed each year and you do nothing? (Waagner, 2003)” Waagner planned to kill abortion doctors and claimed to have several in his rifle sights, “easy targets” as he said, but he could not bring himself to pull the trigger and instead resorted to tactics of fear (Waagner, 2003). He then sent over 550 packets of fake Anthrax to abortion clinics around the U.S. in the fall of 2001 hoping to disrupt their operations enough to cause women scheduled to undergo a procedure to reconsider their decision (McCauley & Moskalenko, 2014). The case of Waagner demonstrated how one can be carried “over the edge” from radical thought to action.
2.2.4 Mobilization

Mobilization is what separated the “talker” from the “walker” in the words of the Canadian Security Intelligence Service who also offered a more detailed definition of: “the process by which a radicalized individual moves from an extremist intent to preparatory steps to engage in terrorist activity such as an attack, travel for extremist purposes or facilitating the terrorist activity of someone else (Canadian Security Intelligence Service, 2018).” It was the period of time between the “unfreezing” moment and the conduct of the attack. It was in this period that this study existed as it sought to find commonalities in the duration of mobilization periods and what mobilization indicators were demonstrated.

The following list of mobilization indicators was constructed from various sources by combining similar indicators into more broad definitions and removing indicators that did not apply to lone wolf terrorists, such as financing or seeking to join with foreign terrorist organizations. A message that was reinforced in all sources of the following indicators was that these indicators were not immediate indicators of attack mobilization and must be investigated for corroborating evidence before any interdiction action was taken (Canadian Security Intelligence Service, 2018; Joint Counterterrorism Assessment Team, 2017; National Counterterrorism Center, 2017; Wiser, 2018).

The indicators of lone wolf terrorism mobilization considered in this study were:
1) Isolating oneself – includes breaking contact with family and friends willingly or being ostracized, marginalized, or ejected from family or community.

2) Statements to justify violence – including seeking justification or permission from religious leaders, family, friends, and online contacts.

3) Eschewing the larger religious community to follow one or two violent extremist voices.

4) Consuming or sharing violent extremist videos and/or propaganda.

5) Frequently using internet cafes or public internet hotspots instead of their personal computer and internet connection.

6) Communicating with or “linking” with violent extremists online.

7) Increased use of encrypted communications – more specifically, using multiple applications that have the sole purpose of encryption.

8) Using security or counter-surveillance techniques and tradecraft – examples are changing wireless phone “SIM” cards, using multiple phone numbers and disposable “burner” phones.

9) Seeking occupations with access – airports, critical infrastructure, transportation, law enforcement, military, or the intelligence community.

10) Financial preparations – maxing out credit cards, seeking multiple lines of credit or selling personal belongings to finance equipment.

11) Unexplained or unusual equipment, weapons, or explosives precursor acquisition – including stockpiling weapons and ammunition, use of hidden storage caches, or the acquisition of laboratory equipment and chemicals.
12) Final preparations and getting affairs in order – including writing a last will, giving away possessions, or distributing a manifesto or martyrdom video/statement.

13) Changes in training and physical fitness routines – including attempts to gain expertise or capability in military/security weapons and tactics.

14) Conducting reconnaissance of potential targets – including photography, filming, eliciting security information, gaining unauthorized facility access, and the testing of security measures and response.

15) Creating simulations for rehearsing an attack – can be physical or virtual representations of real-world locations.

In most cases, the mobilization period ends when the attack begins. An attack in this study was defined as perpetrators who took action toward carrying out their planned attack (LaFree et al., 2012). However, in a few cases, there could be multiple mobilization periods in which an attacker was not captured or killed and was free to select future targets and stay mobilized.

2.3 Previous research

When examining criminological theories, there are several that can be applied in the study of lone wolf terrorism. Examples are Merton’s Anomie and General Strain Theory where offenders express anger and frustration at not meeting the society’s goals and metrics of success. Cornish and Clarke’s Rational Choice Theory, and the classical and economic theories of crime it builds upon, also applied to this study in that in most cases examined, the
offender consciously made rational choices in preparation toward their attack. It is important to note that in Rational Choice Theory, the decision does not have to be rational to society, only rational in the mind of the offender (Cullen et al., 2014).

Outside of those examples, environmental theories of crime informed much of this study, particularly Cohen and Felson’s Routine Activity Theory, Clarke’s Situational Crime Prevention, and Newman’s Defensible Space theories. In their Routine Activity Theory, Cohen and Felson propose that crime exists where motivated offenders find a suitable target that is absent capable guardians (Cullen et al., 2014). Lone wolf attackers meet the criteria of motivated offenders in that they are driven by ideological grievances and will aggressively seek a target that reflects that grievance. Furthermore, seeking targets that display a lack of capable guardians is routinely a factor in lone wolf terrorism attacks, and many attackers will change targets based on observed security (National Security Critical Issue Task Force, 2015).

Moving from theoretical foundations, there were a multitude of individual characteristics observed that could influence lone wolf attacks, such as substance abuse and mental illness that, when combined with other characteristics could influence mobilization factors. In an effort to find common characteristics in lone wolf attackers, Gruenwald et al. analyzed the Extremist Crime Database (Freilich et al., 2011) in an attempt to create a profile of right-wing lone wolf attackers in the United States. They found commonalities in attacker age, background, and means of attack. What made their research
unique was that they found a high occurrence of substance abuse in select attacks that, when taken together with age and means of attack, painted a picture of the circumstances leading to an attack. According to their research, this high occurrence of substance abuse that proceeded an attack was almost exclusively found in right-wing attackers and closely mirrors many pre-attack circumstances in hate crimes (Gruenwald et al., 2013). In this study, substance abuse was only a factor in Case 7 and may have accounted for the rapid behavior change and accelerated mobilization timeline for that individual.

In regard to the mental state of lone wolf attackers, McCauley and Moskalenko found that while lone wolf attackers demonstrated higher rates of mental illness than individuals in other acts of terrorism (6 of 27 individuals demonstrated mental illness in the cases studied), it was only a factor in a portion of the attacks. They labeled this group as disconnected-disordered due to the combination of a grievance, means, disconnection, and a mental disorder. The second group, they named caring-consistency, were very empathic and acutely felt the suffering of others. This caused them to strongly identify with those they saw as victims which then created in them a sense of personal responsibility to reduce the offenses (real or perceived) or enact revenge on the perpetrators (McCauley & Moskalenko, 2014).

Meloy and Yakely, two psychiatrists experienced in criminal investigation and forensics, approached the profiling of lone wolf attackers from a psychoanalytic perspective. They analyzed various attackers and remarked on how the psychoanalytic process rarely resulted in a consensus among their
peers. For example, an analysis of Norway attacker Anders Breivik caused a rift between psychiatrists with some finding that he had a psychotic illness while others found his severe personality disorder was more prominent. Their major findings were that the practice of psychoanalysis of lone wolf attackers was still in its infancy, and the pool of attackers analyzed was so small, that any psychiatrist who claimed to have a psychoanalytic profile should be taken with skepticism (Meloy & Yakeley, 2014).

While this study focused on the behaviors observed by lone wolf attackers, the effects of mental illness on the mobilization process can be significant. However, as psychological factors were outside of the scope of this study, attempts were made to control for this influence by excluding cases where mental illness appeared to be a factor. The following chapter goes in-depth into these inclusion and exclusion criteria for case selection and the overall method used for research in this study.
CHAPTER III

METHODS

3.1 Data Collection

Data collected was a combination of journal articles, conference proceedings, research reports, lectures from subject matter experts, case studies, news articles, and online databases. Research was conducted using internet search engines such as Google, Google Scholar, LexisNexis, University of Colorado Colorado Springs’ Kraemer Family consolidated search, EBSCO Host, the National Criminal Justice Reference Service, and the Naval Postgraduate School’s Homeland Security Digital Library. Whenever possible, all data was collected from a diverse set of sources with an emphasis toward selecting sources that appeared objective and unbiased with priority given to sources from peer-reviewed journals. Key words used during research included: “terrorism”, “lone wolf terrorism”, “lone wolf terrorism attacks”, “radicalization”, “terrorism mobilization”, and “terrorism indicators”.

Two datasets were used in this study to select the cases studied, the Global Terrorism Database (GTD) and the New America Terror Plots Database (NATPD). Maintained by the University of Maryland’s National Consortium for the Study of Terrorism and Responses to Terrorism (START) research center, the GTD is an open-source database with over 170,000 cases of terrorist attacks and plots from 1970 through 2016 (University of Maryland START, 2018). New America, a policy think tank, maintains the New America Terror Plots database.
that focuses on terrorism cases in the United States from 2001 to 2016 (Bergen et al., 2018). Both databases were chosen for case selection research as they both provided their complete dataset to researchers upon request and, together, they provided an exhaustive collection of terrorism cases in the United States.

3.2 Selection Criteria

The confluence of terrorism, mass shootings, hate crimes and the propensity to prosecute terrorism as a hate crime led to a blending of these crimes to a point where the difference between them was often unclear and varied from case to case. This challenge of definitions was explored more in depth in Chapter 2, but this created a limitation in how cases were selected for this study. Cases selected for this study were chosen because they met the criteria of terrorism by the definitions established in Chapter 2 and the narrow selection criteria established in Chapter 3.

The unit of analysis for the study was one case study. If there were multiple attacks from one attacker, only the first attack was selected, unless that attacker began an entirely new mobilization cycle. Unless otherwise noted, it was assumed that they carried over their mobilization from one attack to the next. The desired sample for this study was all attacks in the database that met the criteria of:

1) The attack must have occurred in the United States after September 11th, 2001;
2) Being unaffiliated and/or not receiving directives or resources from an external terrorist group;

3) Aligning with this study’s definition of a lone wolf attacker being solo or a duo; and,

4) The attackers had to have been captured and/or had some sort of documentation providing insight into their mobilization.

Criteria that excluded cases were:

1) Attacks that occurred before September 11th, 2001;

2) Attacks that occurred outside of the United States;

3) Attackers that had ties to domestic or foreign terrorist organizations. This exclusion does did include those who claimed allegiance or inspiration from terrorist organizations or radical ideologies;

4) Where three or more attackers were involved in an attack;

5) Cases where it was debatable if the attack was terrorism (see section 3.4);

6) Cases where the attackers were juveniles;

7) Recent cases where the attackers were still undergoing the trial or appeals process.

After cases were excluded following these criteria, over hundred cases remained that were potential cases for this study. These cases were then examined on an individual basis for the inclusion criteria of having enough publicly available information of their mobilization. Most of the cases where the perpetrators died during the attack were excluded due to them leaving behind very little information on their mobilization. In addition, more cases where the
attacker lived were then excluded due to them also not enough available information on their mobilization. This process was discussed in greater detail in the following section. The cases with the most information available were the most high-profile cases, and while this may have skewed the sample toward high profile cases, they were selected for this study based on the necessity of having enough cases for analysis. This limitation is discussed in detail in Chapter 5. The result of the inclusion and exclusion criteria applied to both datasets were eight cases for analysis in this study.

3.3 Cases Selected

The initial dataset for this study consisted of 170,350 terrorism cases recorded from 1970 to 2016. By selecting only attacks that occurred in the United States, the number of cases was reduced to 2758. This number was further reduced to 281 by selecting only cases occurring after September 11th, 2001. In keeping with the established definition of lone wolf terrorists for this study, only cases with one or two perpetrators were selected, which resulted in 204 cases remaining. Additionally, all cases where the perpetrators had ties to larger extremist organizations were dropped, leaving 122 cases. Of the cases that remained, only two were dropped due to the perpetrators being juveniles and that left 120 cases.

In instances where there were multiple attacks over a time period from one offender, The Global Terrorism Database created a new record for each
attack and linked them together. This resulted in 27 duplicate records of cases that were consolidated to one case, which left 93 cases remaining when removed. There were 40 cases undergoing investigation or trial, resulting in little publicly available information available and 53 cases remaining. Of the cases that were left, 41 were determined to not be terrorism by using the additional criteria established in section 3.4. Most of the cases removed in this step were commonly believed to be hate crimes or revenge killings. Of the 12 cases that remained, only eight cases had enough publicly available information to inform a text analysis of the case.

The eight cases selected for analysis in this study were:

1) Mohammed Reza Taheri-azar (2006)
2) Naveed Afzal Haq (2006)
3) Scott Roeder (2009)
4) Nidal Mailk Hasan (2009)
6) Tamerlan and Dzhokhar Tsarnev (2013)
7) Mohammad Youssuf Abdulazeez (2015)
8) Syed Rizwan Farook and Tashfeen Malik (2015)

3.4 Cases Excluded

As discussed in Chapter 2, the definition of terrorism was be a gray area and that lack of a common definition, or not adhering to a definition, was a source
of consternation during case selection. After applying the case selection criteria, there were still many cases that could be defined as terrorism, a hate crime, or a mass shooting. In these cases, a subjective decision was made whether to exclude them. To better reach this decision, the following questions were asked in reference to the case:

1) Was there a greater public perception that this was terrorism?
2) Were ideological reasons the primary motivation for the attack?
3) What was the grievance of the attacker and did the grievance manifest itself in target selection and conduct of the attack?

An example where these questions were applied to cases was in a large number of vandalism, drive-by shooting, and arson attacks against buildings representing an ideology that the attacker had a grievance against, such as churches, mosques, and community centers. Hate crimes did fit into the definition of terrorism as they violated a law and were intended to intimidate or coerce a civilian population. In his study of comparing ideological and non-ideological active shooters, Capellan found that ideological active shooters (terrorists in this study) were more methodical in their planning and calculating in execution in comparison to non-ideological active shooting attacks that were emotionally-charged or heavily influenced by mental illness (Capellan, 2015).

Using these findings, it was important to acknowledge that what were seen traditionally as hate crimes are terrorism. However, as this study sought to understand the mobilization factors of attacks, cases that were driven by passion...
or mental illness were often excluded as they either did not have a mobilization phase or the perpetrator was not a rational actor.

Based on this additional criteria, examples of cases excluded were hate crimes of small scope defined by an assault on individuals or the vandalism/arson of one building, police assassinations, and cases where mental illness had a pronounced influence. Assassinations have long been a staple of historical terrorism and featured prominently in early usage and definitions of terrorism (Crenshaw, 2011). However, recent trends of police assassinations were excluded as they more closely aligned with opportunistic revenge killings driven by passion. Again, these assassinations fall into the definition of terrorism, but they met the exclusion criteria of not having a mobilization period, or not having enough available information on mobilization. Finally, many mass shooting attacks were excluded as they did not seem to have a strong ideological motive or mental illness played a significant role in the attack.

Another possible exclusion was the practice entrapment by security forces that could have encouraged and resourced a perpetrator, resulting in an attack mobilization that would not have otherwise occurred. Norris and Grol-Prokopczyk (2016) found that among 580 post-9/11 terrorism prosecutions, 55% involved an informant or undercover agent before the crime was committed. Their study then analyzed these cases for 20 potential indicators of entrapment and their findings led them to conclude that entrapment may have been more widespread than thought in terrorism cases (Norris & Grol-Prokopczyk, 2016).
If entrapment was as prevalent as they claim, it could have had an impact on influencing attack mobilization methods and could have potentially invalidated cases used in this study. In effort to mitigate this problem, this study modified the case selection process in two ways. First, cases where the attackers successfully carried out an attack were given priority, because if an attack was allowed to be carried out, it stands to reason that if informers were present, law enforcement would have taken measures to intervene. Second, if cases were selected where the attack was successfully intervened, Norris and Grol-Prokopczyk’s 20 indicators of entrapment would be applied and an assessment of whether or not entrapment occurred would be present in the narrative for that case. Neither of these steps were necessary in this study as in all eight cases selected there were no informants or undercover agents and the attackers were able to successfully carry out their attack.
4.1 Introduction

Below are the case analyses for this study in chronological order with the name of the attacker(s) heading each section. The cases were discussed with a short summary that contained the relevant case details such as timing, grievance, target selection, means acquisition, criminal charges and sentence (if applicable). The second part of each case was an analysis that highlighted the duration of the mobilization period, the means used in the attack, indicators displayed, and commentary on the confidence of the data. At the bottom of each case analysis section, there is a table displaying the definitions of the indicators displayed for reference and to summarize the analysis.

4.2 Case 1: Mohammed Reza Taheri-azar (2006)

4.2.1 Case Summary

On March 3rd, 2006, 22 year old Mohammed Reza Taheri-azar drove a rented Jeep Grand Cherokee through an area crowded with pedestrians at the University of North Carolina, Chapel Hill. Taheri-azar circumvented anti-vehicle barricades and drove through a crowded plaza at estimated speeds of 40-45 miles per hour with the intent to kill pedestrians. Shortly after the attack, Taheri-azar drove a short distance where he pulled over, called the police, calmly
confessed to the attack, and then gave his position where he was arrested without further incident. Nine individuals were struck by the vehicle with six transported to the hospital, and later released after treatment, and three who declined treatment (Franks & Wallace, 2006).

Taheri-azar, an Iranian-born graduate of the university, told police that he was angry at the United States “killing his people across the sea” and that the attacks were “an eye for an eye (Goodman, 2006).” He told investigators that he had been thinking about taking “retaliatory” action for over two years, but had only spent two months planning and preparing for the attack (mobilization). He rented the larger vehicle with the intent of causing as much damage as possible and reflected disappointment that the plaza was not more crowded. Taheri-azar was charged with nine counts of attempted first-degree murder and nine counts of assault with a deadly weapon (Goodman, 2006). He pled guilty to nine counts of attempted murder and was sentenced for 26 to 33 years in prison (Carlson et al., 2008).

4.2.2 Analysis

While the attacker stated he had “thought of” committing the attack for two years, his stated mobilization duration was two months from when he admitting to preparing to the day of the attack. Taheri-azar prominently displayed two mobilization indicators and one to a lesser degree. Indicator 11, was displayed when he attempted to buy a pistol and acquire a gun permit. In his martyrdom statement, he mentioned that he tried to acquire the pistol, but the laws were too
strict causing him to move toward a vehicle as a weapon. He suggested that he was unable to get a gun due to his ethnicity, compounding on his existing grievance. Police also discovered a knife and pepper spray in his apartment, which he later stated he planned to carry with him during the attack to discourage anyone from stopping him (Goodman, 2006).

Indicator 12 was prominent in that he left a martyrdom letter for police to find in his apartment (Franks & Wallace, 2006). After the attack when he pulled to the side of the road and called police to turn himself in, he informed the dispatcher that there was a letter in his apartment that explained his actions. This study does not have access to the original contents of the letter as it was a handwritten letter that was transcribed and first appeared in *The Herald Sun*, a local North Carolina newspaper. The paper has since shut down and an original archive of the article was not found online. There are several blogs that claimed to have a transcribed copy of the letter, but the wording varied by site and the sites themselves displayed strong anti-Muslim or nationalistic bias.

Indicator 13 was not displayed as strongly as the previous two, but was present in Taheri-azar purchasing two Navy Seals training videos in an effort to learn military weapons tactics (Goodman, 2006). These indicators, when taken with the short mobilization period, suggested that Taheri-azar was preparing a more complex attack involving a handgun, but was hampered by gun purchasing laws. Conducting a vehicle ramming attack was a secondary option and it could be inferred that since vehicle ramming does not require any special training, that
his mobilization period was shortened as he could conduct the attack immediately.

Table 1. Case 1: Mobilization Indicators Observed

<table>
<thead>
<tr>
<th>No.</th>
<th>Mobilization Indicators Observed</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>Unexplained or unusual equipment, weapons, or explosives precursor acquisition – including stockpiling weapons and ammunition, use of hidden storage caches, or the acquisition of laboratory equipment and chemicals.</td>
</tr>
<tr>
<td>12</td>
<td>Final preparations and getting affairs in order – including writing a last will, giving away possessions, or distributing a manifesto or martyrdom video/statement.</td>
</tr>
<tr>
<td>13</td>
<td>Changes in training and physical fitness routines – including attempts to gain expertise or capability in military/security weapons and tactics.</td>
</tr>
</tbody>
</table>

4.3 Case 2: Naveed Afzal Haq (2006)

4.3.1 Case Summary

On July 28th, 2006, 30 year old Naveed Afzal Haq forced his way into the Jewish Federation of Greater Seattle building by taking a 13 year old girl hostage with a pistol. Once inside, he opened fire with two semi-automatic pistols, killing one woman and wounding five others (Associated Press, 2006). The shooting rapidly became a hostage situation where, when Haq calmed down, he called 911 and spoke to a dispatcher. He told the dispatcher that “These are Jews and I’m tired getting pushed around and our people getting pushed around by the situation in the Middle East (Yardley, 2006).” He later told investigators that he was angry at the war in Iraq and the military cooperation between the United
36

States and Israel (Associated Press, 2006). Haq surrendered to police 12 minutes after the shooting began. He was later convicted of aggravated murder, which carried an automatic life sentence without parole. In addition, he was sentenced to 87 ½ years for attempted murder, eight years for malicious harassment and unlawful imprisonment, and 33 years for the use of a firearm (Sullivan, 2010).

4.3.2 Analysis

While there was evidence that Haq was self-radicalized, he displayed a prominent anti-Israel and anti-United States intervention grievance, there was little discussion within sources on a radicalization or mobilization timeline. Displaying Indicator 11, Haq acquired two handguns legally, one .40-caliber and one .45-caliber from two separate gun stores. He honored the mandatory waiting period and picked up his guns and extra ammunition “just days earlier (Associated Press, 2006; CNN, 2006).” He displayed Indicator 1 by being a loner with few friends. Co-workers describe him as quiet and polite (Associated Press, 2006; Green, 2006). He displayed Indicator 2 to his mother by repeatedly venting his frustrations to her. There was no evidence that she knew what he planned, but she was suspicious and urged him not to travel to Seattle (Green, 2006). Indicator 3 was not as pronounced as while he adamantly defined himself as a Muslim-American, Haq had not been to a Mosque in over ten years and preferred to worship alone (Green, 2006). There was no evidence in sources that he
radicalized online by preferring radical teachings of Islam, but he most certainly 
eschewed the larger religious community.

Finally, with Indicator 14, Haq did conduct a reconnaissance, but it was 
hasty and lacked a focus. Seattle Police Chief Gil Kerlikowske stated that 
analysis of Haq’s computers revealed that he typed “something Jewish” in a 
search engine and the search results returned the Jewish Federation of Greater 
Seattle building that became the target (CNN, 2006). With the available 
information and indicators found in the sources, it was inferred that Haq’s 
mobilization period was very short, possibly even less than one week. While 
there was passion involved, Haq demonstrated an enduring ideological 
motivation as he waited two days to obtain his handgun purchases and drove 
over 200 miles from his home in Pasco, Washington to Seattle (CNN, 2006). 
Furthermore, he was ticketed by police for a minor traffic violation just prior to the 
attack and did nothing to rouse the officer’s suspicion (CNN, 2006). While a short 
mobilization period may have indicated a crime of passion and emotion, the 
additional factors in this case indicated that Haq was a rational actor and 
followed a mobilization period, just on an accelerated timeline.
Table 2. Case 2: Mobilization Indicators Observed

<table>
<thead>
<tr>
<th>No.</th>
<th>Mobilization Indicators Observed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Isolating oneself – includes breaking contact with family and friends willingly or being ostracized, marginalized, or ejected from family or community.</td>
</tr>
<tr>
<td>2</td>
<td>Statements to justify violence – including seeking justification or permission from religious leaders, family, friends and online contacts.</td>
</tr>
<tr>
<td>3</td>
<td>Eschewing the larger religious community to follow one or two violent extremist voices.</td>
</tr>
<tr>
<td>11</td>
<td>Unexplained or unusual equipment, weapons, or explosives precursor acquisition – including stockpiling weapons and ammunition, use of hidden storage caches, or the acquisition of laboratory equipment and chemicals.</td>
</tr>
<tr>
<td>14</td>
<td>Conducting reconnaissance of potential targets – including photography, filming, eliciting security information, gaining unauthorized facility access, and the testing of security measures and response.</td>
</tr>
</tbody>
</table>

4.4 Case 3: Scott Roeder (2009)

4.4.1 Case Summary

On May 31st, 2009, 51 year old Scott Roeder walked into the Wichita, Kansas Reformation Lutheran Church and shot the usher, Dr. George Tiller once in the head, which killed him (Pilkington, 2010). Witnesses then saw Roeder leave the scene in his distinct powder blue car with anti-abortion stickers on the windows (Fitzpatrick, 2009). The assassination victim, Dr. George Tiller, was
well-known in the region for performing abortions and had been targeted by others in the past by having a clinic bombed and being shot in both arms. He was repeatedly targeted by anti-abortion activists and militants to such a degree that he had hardened his clinic with bulletproof glass, hired armed guards, and installed state of the art security systems. He also drove an armored vehicle and wore body armor everywhere he went (Barstow, 2009). Later in his trial, Roeder elaborated on his grievance by stating that he killed Tiller to protect children (Pilkington, 2010). Roeder was convicted of premeditated first-degree murder and sentenced to life in prison with no chance of parole for 50 years. Roeder’s life sentence was vacated in 2016 after “the U.S. Supreme Court ruled in 2013 that juries, not judges must decide whether to increase punishment (Associated Press, 2016).” His revised sentence was 25 years in prison and then he is eligible for parole.

4.4.2 Analysis

Roeder’s case tested the definition of being a lone wolf due to his affiliations with militant and/or radical ideological groups. He was affiliated with the anti-government Freemen group, who had a three-month standoff with the FBI in Montana in 1996 (Fitzpatrick, 2009). He was also affiliated with the Sovereign Citizen movement and a local Kansas variant known as the Patriot Movement, who advocated many minor infractions such as not displaying license plates on their vehicles (Saulney & Davey, 2009). This practice caused him to be pulled over by police in 1996 near Topeka Kansas for not having a proper license
plate. The officers found ammunition, blasting caps, fuse cord, 1lb. of gun powder and 9-volt batteries in his car, all bomb making supplies (Fitzpatrick, 2009). He was later released with minor charges. Despite these affiliations, Roeder was considered a lone wolf terrorist in this study due to the definition of being an individual who operated on internal imperatives, not external directives, even if they drew external inspiration. Roeder did not show any indications of working with, or being resourced by, any other parties.

Roeder’s mobilization timeline seemed to start and stop at various times. He noted that he had a long-standing belief that Tiller had to die and that the planning “took many years” while he decided upon the method (Pilkington, 2010). Roeder displayed Indicator 2 in his repeated statements, before and after the attack, justifying violence against abortion practitioners and specifically Dr. Tiller, which he called “justifiable homicide (Fitzpatrick, 2009).” While Roeder certainly displayed Indicator 11 in his 1996 traffic stop while possessing bomb making materials, there was little evidence to suggest he went out of his way to acquire any weapons that were outside the norm of rural Kansas. The murder weapon, a .22-caliber pistol, was purchased with ammunition the day before the attack. After the purchase, Roeder spent the day practicing with his brother by shooting targets (Pilkington, 2010). These behaviors suggested a combination of Indicators 13, 14 and 15. First, Roeder conducted reconnaissance on Dr. Tiller by following his routine and noting that he drove an armored vehicle and his clinic was hardened and secure. Roeder debated on means from using a rifle to snipe
Tiller at his clinic from a nearby church to using a sword and chopping off his hands (Pilkington, 2010).

In the end, Roeder’s mobilization appeared to be expedited as he purchased the murder weapon only a day before the attack. The weapon choice itself suggests the findings from his reconnaissance. A .22-caliber pistol is a low-powered caliber suited to hunting small game such as squirrels and would have been ineffective against Tiller’s body armor (Pilkington, 2010). Therefore, Roeder seemed to have planned shooting Tiller in the head to achieve his aim, which indicates a culmination of mobilization steps informed by close observation of his target.

Table 3. Case 3: Mobilization Indicators Observed

<table>
<thead>
<tr>
<th>No.</th>
<th>Mobilization Indicators Observed</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td><strong>Statements to justify violence</strong> – including seeking justification or permission from religious leaders, family, friends and online contacts.</td>
</tr>
<tr>
<td>11</td>
<td><strong>Unexplained or unusual equipment, weapons, or explosives precursor acquisition</strong> – including stockpiling weapons and ammunition, use of hidden storage caches, or the acquisition of laboratory equipment and chemicals.</td>
</tr>
<tr>
<td>13</td>
<td><strong>Changes in training and physical fitness routines</strong> – including attempts to gain expertise or capability in military/security weapons and tactics.</td>
</tr>
<tr>
<td>14</td>
<td><strong>Conducting reconnaissance of potential targets</strong> – including photography, filming, eliciting security information, gaining unauthorized facility access, and the testing of security measures and response.</td>
</tr>
<tr>
<td>15</td>
<td><strong>Creating simulations for rehearsing an attack</strong> – can be physical or virtual representations of real-world locations.</td>
</tr>
</tbody>
</table>
4.5 Case 4: Nidal Malik Hasan (2009)

4.5.1 Case Summary

On November 5th, 2009, 39 year old U.S. Army Major and Psychiatrist Nidal Hassan opened fire with a pistol in a Fort Hood deployment center where he killed twelve U.S. Soldiers, one Department of Defense civilian employee, and injured forty-two others. Before his attack he climbed onto a desk and then yelled “Allahu Akbar!”, Arabic for “God is great!” Responding Department of Army Civilian Police fired upon Hasan, striking him several times and causing him to lose consciousness from his wounds as they took him into custody (Kenber, 2013; Webster, et al., 2012). Hasan was found guilty of 45 counts of murder and attempted murder, was sentenced to death by lethal injection in 2013, and is currently undergoing the appeals process (Fernandez, 2013).

4.5.2 Analysis

Hasan became known to intelligence agencies through incidental collection of them monitoring the communications of violent extremist Anwar Nasser al-Aulaqi (also spelled “Awlaki”) (Webster, et al., 2012). On December 17th, 2008, Hasan went to the site www.anwar-alawlaki.com and clicked on the “Contact the Sheikh” link where he then composed a message to Awlaki using his private email address of NidalHasan@aol.com (Webster, et al., 2012). This was the first of several occurrences of Indicator 6 where Hasan sought to engage
Awlaki in dialogue. The content of the message was whether Muslim U.S. Soldiers that killed their fellow Soldiers were helping Islam and fighting the Jihad. Further, if they died, would he consider them “shaheeds” (martyrs), displaying Indicator 2 in attempting to justify violence (Webster, et al., 2012).

FBI Joint Terrorism Task Force San Diego flagged Hasan’s communication as a “Product of Interest” and forwarded it on for more analysis. Unfortunately, due to disconnect between the FBI and Department of Defense, Hasan was originally not found in a database as a military member and that led to much confusion and investigative dead ends. After Hasan’s second communication to Awlaki, he was discovered to be a Soldier stationed at Walter Reed Hospital, but his contact with Awlaki was explained by the Army as him conducting research on radicalization (Webster, et al., 2012). Hasan wrote six messages to Awlaki, with some being very lengthy and detailed with questions on the justification of violence against fellow Soldiers. In one of the final messages, Hasan announced to Awlaki that he was creating a $5,000 scholarship fund to students who could write an essay on the subject of: “Why is Anwar Al Awlaki a great activist and leader (Webster, et al., 2012).” Awlaki only responded to Hasan twice and in a very cautious and brief manner.

After this series of exchanges over a period of several months, the FBI assigned Hasan’s case as an open investigation in February of 2009 and tasked an agent to investigate. Upon review of Hasan’s military record, all evaluations seemed favorable, that agent decided that Hasan’s communication was part of his research on Islam. Hasan sent his final email to Awlaki on June 16th, 2009.
containing wording that Hasan had found a justification for violence where it was in the defense of others. In July of 2009, the Army transferred Hasan to Fort Hood, Texas, further increasing miscommunication by investigators as he was now under the jurisdiction of a new field office (Webster, et al., 2012).

On July 31st, 2009, Hasan legally purchased a Herstal FN-57 from the Guns Galore in Killeen, Texas. Additionally, he also purchased a large amount of ammunition and when asked by employees what he intended to do with it, he evaded the questions, displaying Indicator 11. During this time, Hasan also displayed Indicator 13 as he purchased a membership at a nearby shooting range where he trained himself to consistently shoot targets in the head and chest up to 100 yards away. On the days leading up to the attack, and the morning of the attack, Hasan gave away some of his belongings, displaying Indicator 12 (Kenber, 2013).

For indicators 14 and 15, it was unclear from the sources whether Hasan visited the attack location for reconnaissance or whether he conducted rehearsals using the building layout, on top of his weapons training. Furthermore, Hasan displayed none of the indicators associated with securing his communications or online activity. All messages were sent unencrypted and in plain language using his real name. Up to this point, it was inferred that Hasan was seeing justification for violence at least 11 months before the attack, but it was not clear when he decided to attack, it may not even have been known to Hasan. July 31st was when he purchased the handgun used in attack, which put his mobilization duration of just over three months. Finally, in October 2009,
Hassan was notified that he would be deploying to Afghanistan in November 2009 (Webster, et al., 2012). This was significant as it could have indicated an “unfreezing” event where one of his worst fears was coming true, that he would be sent to kill Muslims, reinforcing his grievance and possibly spurring him to action. In this case, this study considered his handgun acquisition and training as a “soft” mobilization period with his deployment notice being his unfreezing moment and final commitment to the attack.

Table 4. Case 4: Mobilization Indicators Observed

<table>
<thead>
<tr>
<th>No.</th>
<th>Mobilization Indicators Observed</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td><strong>Statements to justify violence</strong> – including seeking justification or permission from religious leaders, family, friends and online contacts.</td>
</tr>
<tr>
<td>3</td>
<td>Eschewing the larger religious community to follow one or two violent extremist voices.</td>
</tr>
<tr>
<td>6</td>
<td>Communicating with or “linking” with violent extremists online.</td>
</tr>
<tr>
<td>11</td>
<td><strong>Unexplained or unusual equipment, weapons, or explosives precursor acquisition</strong> – including stockpiling weapons and ammunition, use of hidden storage caches, or the acquisition of laboratory equipment and chemicals.</td>
</tr>
<tr>
<td>12</td>
<td><strong>Final preparations and getting affairs in order</strong> – including writing a last will, giving away possessions, or distributing a manifesto or martyrdom video/statement.</td>
</tr>
<tr>
<td>13</td>
<td><strong>Changes in training and physical fitness routines</strong> – including attempts to gain expertise or capability in military/security weapons and tactics.</td>
</tr>
</tbody>
</table>
4.6 Case 5: Wade Michael Page (2012)

4.6.1 Case Summary

On August 5th, 2012, 40 year old Wade Michael Page entered a Sikh temple in Oak Creek, Wisconsin where he used a handgun to shoot and kill six people and wounded four others both inside and outside the temple (CNN Wire Staff, 2012). Page was shot by responding police and then killed himself with a shot to the head (BBC, 2012). Page, a white supremacist extremist with a hatred toward non-whites, was driven by seeking revenge on the 9/11 attacks and believed he was killing Muslims at the temple (Elias, 2012).

4.6.2 Analysis

Page, a frequent figure in white supremacist and neo-Nazi circles, was guided in his beliefs during his time in the U.S. Army at Fort Bragg, where a small cell held gatherings and parties to share extremist views and propaganda, displaying Indicator 4. Page’s association with this group began to impact his work as he reported to work drunk and eventually went absent without leave (AWOL), both contributing to his dismissal from the Army, an event he blamed on non-whites (Elias, 2012). Unlike a common assumption of lone wolf terrorists, Page was not socially isolated and he was quite involved in his local Wisconsin extremist group community, to the extent that he played in a neo-Nazi band that justified and advocated for violence against non-whites, displaying Indicators 2 and 6 (Leitsinger, 2012).
On July 28th, 2012, Page purchased a 9mm handgun from a shop near Milwaukee, Wisconsin. The store owner said that they were “very strict” and often refused to sell guns to people who appeared irate or under the influence. He stated that Page acted calm, did not “talk stupid or act stupid.” He paid cash for the handgun and three 19-round magazines. Page picked the gun up two days later, after the mandatory waiting period, and then spent some time in the store’s basement shooting range practicing with the firearm. He did not buy any other guns or large amounts of ammunition from the store (Hennessy-Fiske & Murphy, 2012). It was questionable if this purchase displayed Indicator 11 as there was not a large amount of ammunition purchased and Page did not arouse suspicion in the store owner. However, as this was an attack means acquisition days before the attack, this was identified as Indicator 11.

There was no indication in the sources available that Page conducted any training outside of the brief time familiarizing himself at the gun store (aside from his military training), nor were there any indications that he conducted reconnaissance of the temple before the attack. Furthermore, while Page was radicalized early in life, associated with extremist groups, and repeatedly made calls to violence, there was no indication from the sources of when Page’s attack mobilization began. For this study, the mobilization for Page began at the date of means acquisition, July 28th, when he purchased the handgun used in the attack.
Table 5. Case 5: Mobilization Indicators Observed

<table>
<thead>
<tr>
<th>No.</th>
<th>Mobilization Indicators Observed</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Statements to justify violence</td>
</tr>
<tr>
<td></td>
<td>– including seeking justification or permission from</td>
</tr>
<tr>
<td></td>
<td>religious leaders, family, friends and online contacts.</td>
</tr>
<tr>
<td>4</td>
<td>Consuming or sharing violent extremist videos and/or propaganda.</td>
</tr>
<tr>
<td>6</td>
<td>Communicating with or “linking” with violent extremists online.</td>
</tr>
<tr>
<td>11</td>
<td>Unexplained or unusual equipment, weapons, or explosives precursor acquisition</td>
</tr>
<tr>
<td></td>
<td>– including stockpiling weapons and ammunition, use of hidden storage caches, or the</td>
</tr>
<tr>
<td></td>
<td>acquisition of laboratory equipment and chemicals.</td>
</tr>
</tbody>
</table>

4.7 Case 6: Tamerlan and Dzhokhar Tsarnaev (2013)

4.7.1 Case Summary

On April 15th, 2013, two improvised explosive devices (IEDs) exploded near the finish line of the Boston Marathon. Tamerlan and Dzhokhar Tsarnaev made pressure cookers into IEDs that killed three people and injured more than two hundred. The Tsarnaev brothers were identified early on as suspects in the bombing by law enforcement and both were tracked to nearby Watertown, Massachusetts. During the arrest, Tamerlan was shot and killed by police while Dzhokhar fled and was later apprehended after an extensive manhunt (Office of the Inspector General, 2014). Dzhokhar faced multiple counts of federal charges: use of a weapon of mass destruction and malicious destruction of property resulting in death. In addition, he faced multiple counts of local charges including possession and use of a firearm, bombing a place of public use, carjacking, and
interference with local commerce. In January of 2015 he was found guilty of all 30 charges and sentenced to death (WBUR Newsroom, 2015). In July of 2015, citing unique security considerations, Dzhokhar was transferred to the federal Supermax prison in Florence, Colorado rather than the federal prison in Terre Haute, Indiana where federal inmates awaiting execution are routinely held (Valencia, 2015).

4.7.2 Analysis

The Tsarnaev brothers immigrated to the United States in 2003 from Kyrgyzstan with their parents and within a few years became lawful permanent residents. A series of intercepted communications between Tamerlan and Chechen Separatists in Russia revealed a self-radicalization toward radical Islam between 2006 and 2009, primarily conducted online (Office of the Inspector General, 2014). In 2012, Tamerlan created a YouTube account where he posted several jihad-themed videos that displayed Indicators 2, 3 and 4. A forensic analysis of his computer revealed a “substantial amount” of jihadist articles and videos including copies of *Inspire*, a magazine distributed by Al-Qaeda that serves to radicalize readers and instructs them how to commit acts of terror. One of the *Inspire* articles highlighted by investigators was entitled, “Make a Bomb in the Kitchen of your Mom,” that included instructions on how to create the bombs used in the attack, demonstrating Indicator 13 (Office of the Inspector General, 2014).
Dzhokhar remained largely silent during the investigation and trial, offering little to investigators that could give more insight into his mobilization activities. This resulted in investigators and the prosecution having to piece together many details from evidence such as his brother’s computer. Investigators believe that Tamerlan was the main planner behind the attack and over the years, he radicalized his brother Dzhokhar who then assisted him in carrying out the attacks (Cooper et al., 2013). Though there was surveillance camera footage of the brothers emplacing the bombs right before they detonated, there was no footage or released documentation that showed the brothers conducting reconnaissance or target selection in general.

There was some evidence that the brothers had been planning the attack for months when, on February 6th, 2013, they bought fireworks from a store about one hour north of Boston. In an interview, the store owner stated that “He came in and he asked the question that 90 percent of males ask when they walk into a fireworks store: ‘What’s the most powerful thing you’ve got?’” (Cooper et al., 2013) The store owner described the entire transaction as “uneventful” in not arousing his suspicion. A line could be drawn between the Inspire magazine found on the brothers’ computer to the acquisition of attack means by them purchasing the fireworks used in the pressure cooker bombs. For this study, the mobilization period in this attack begins on February 6th, when the bomb precursors were purchased, a display of Indicator 11.
Table 6. Case 6: Mobilization Indicators Observed

<table>
<thead>
<tr>
<th>No.</th>
<th>Mobilization Indicators Observed</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Statements to justify violence — including seeking justification or permission from religious leaders, family, friends and online contacts.</td>
</tr>
<tr>
<td>3</td>
<td>Eschewing the larger religious community to follow one or two violent extremist voices.</td>
</tr>
<tr>
<td>4</td>
<td>Consuming or sharing violent extremist videos and/or propaganda.</td>
</tr>
<tr>
<td>11</td>
<td>Unexplained or unusual equipment, weapons, or explosives precursor acquisition — including stockpiling weapons and ammunition, use of hidden storage caches, or the acquisition of laboratory equipment and chemicals.</td>
</tr>
</tbody>
</table>

4.8 Case 7: Mohammad Youssuf Abdulazeez (2015)

4.8.1 Case Summary

On July 16th, 2015, 24 year old Mohammad Youssuf Abdulazeez parked his Ford Mustang convertible outside of the Chattanooga, Tennessee Combined Armed Forces Recruiting Center and fired into the building while still in his vehicle. One Marine was wounded in the shooting. Abdulazeez then drove to Naval Operations Support Center where he rammed his car through the security gate, drove his car into an office building and opened fire on those within and around the building, killing four Marines and critically wounding a Sailor that later died of his wounds. As police responded, Abdulazeez opened fire wounding one officer before being shot and killed (Keneally, 2015).
4.8.2 Analysis

Friends and acquaintances of Abdulazeez do not recall seeing any signs of radicalization and were shocked when they learned about the shootings. Just days before the attack, friends describe socializing with Abdulazeez at his home where he dribbled a soccer ball and excitedly told them about his new job at a company that manufactures cable products. While he was an expert with his weapons, friends recount spending many days at the shooting range together, it did not appear that he was training for the attack and his shooting appeared to be more of a social activity and hobby (Associated Press, 2015). The three guns used in the attack, an AK-47-type assault rifle, a 12-guage shotgun, and a 9mm pistol, were owned by Abdulazeez long before the attack and he was very proficient in their use due to his time at the shooting range (Williams & McClam, 2015).

Abdulazeez’s journal does offer some insight into his state of mind and potential mobilization indicators. As early as 2013, he wrote about his suicidal thoughts and becoming a martyr after losing his job due to drug abuse. A trend of him abusing prescription and non-prescription drugs continued with opioids, sleeping pills, painkillers, alcohol and marijuana. Compounding his difficulties, he was thousands of dollars in debt and considering bankruptcy in addition to facing a criminal trial on drunk driving charges earlier in the year (Ross, Lantz, & Meek, 2015).
Sources found were unable to confirm why he choose the military targets, what grievance those targets reflected, or any sort of preparation such as reconnaissance or training that was outside of his recreational shooting. While his journal writings in to reference martyrdom and the desire to stop the deaths of children in Syria display Indicators 2 and 3, these thoughts did not appear to progress into a coherent grievance and were not observed by his family or others in the community. Since Abdulazeez already possessed the firearms in the attack, and the absence of other mobilization evidence, this study used the date of July 11th as the start of the mobilization period as it was when he purchased the large amount of ammunition used in the attack from a local Walmart (Ross et al., 2015). As a final note on this case, due to the lack of clear-cut mobilization indicators displayed, and the influence of drugs, there was doubt as to whether this case could have been considered terrorism and not a mass shooting. This case was selected due to the targets, military facilities, being highly symbolic targets displayed in recent trends that reflect an anti-military, anti-government, or anti-United States interventionist grievance (National Security Critical Issue Task Force, 2015).
### Table 7. Case 7: Mobilization Indicators Observed

<table>
<thead>
<tr>
<th>No.</th>
<th>Mobilization Indicators Observed</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Statements to justify violence – including seeking justification or permission from religious leaders, family, friends and online contacts.</td>
</tr>
<tr>
<td>3</td>
<td>Eschewing the larger religious community to follow one or two violent extremist voices.</td>
</tr>
<tr>
<td>11</td>
<td>Unexplained or unusual equipment, weapons, or explosives precursor acquisition – including stockpiling weapons and ammunition, use of hidden storage caches, or the acquisition of laboratory equipment and chemicals.</td>
</tr>
</tbody>
</table>

### 4.9 Case 8: Syed Rizwan Farook and Tashfeen Malik (2015)

#### 4.9.1 Case Summary

On December 2\(^{nd}\), 2015, Syed Rizwan Farook, 28, and Tashfeen Malik, 29, carried out a mass shooting attack and attempted bombing at the Inland Regional Center in San Bernardino, California. On the morning of December 2\(^{nd}\), 2015, the San Bernardino County Department of Public Health hosted a training seminar, and later a holiday luncheon, at the Inland Regional Center in San Bernardino. Farook, a Health Inspector for the agency, attended the start of the event. Witnesses reported that he left the event early and seemed agitated, but assumed he would return as he left his backpack behind (Los Angeles Times, 2015). Approximately 30 minutes later, Farook and his wife, Malik, returned to the building wearing tactical gear and armed with two .223-caliber semi-automatic rifles, a .22-caliber semi-automatic rifle, and two 9mm pistols between
them. The “tactical gear” they wore consisted of load bearing vests, used to store multiple magazines of ammunition in an easily accessible manner, that were not ballistic or “bullet proof” vests (Domonoske, 2015).

Farook and Malik fired 65-75 rounds into the room where Farook’s coworkers were gathered, resulting in 14 killed and 21 injured. Around the same time as the shooting began, a Facebook posting was made by Malik under a different name that pledged allegiance to Islamic State leader Abu Bakr al-Baghdadi (Whitcomb & Hosenball, 2015). After moving through the room methodically shooting anyone who moved or made a sound, Farook and Malik departed in a black SUV that Farook had rented days earlier. The police arrived after the shooters departed and, while clearing the building, they discovered three pipe bombs wired to a remote-control device. They then evacuated the victims and ordered everyone out while the bomb squad cleared the devices (Los Angeles Times, 2015).

A witness of the shooting recognized Farook as one of the shooters and informed the police, who were then able to determine that Farook rented a black SUV days earlier that was similar to the one used by the shooters to escape. As police approached Farook and Malik’s home, they saw a black SUV matching the description depart the home and they pursued. The pursuit took officers along the freeway and into a residential neighborhood where a shootout between the attackers and police began. The attackers fired 76 rifle rounds at the police who returned fire with over 380 rounds before both attackers were killed. Police found more than 1,400 .223-caliber rounds (used in the rifles) and over 200 9-mm
rounds (used in the pistols) on the bodies of the attackers and inside the vehicle (Los Angeles Times, 2015).

Police later searched the home of Farook and Malik and discovered “thousands” of rifle and handgun rounds, 12 pipe bombs, and bomb making materials (Domonoske, 2015). Days later, Enrique Marquez, was arrested for being a “Straw Purchaser” of the rifles used in the attack as well as planning terrorist attacks and charged with providing material support to terrorism. A Straw Purchaser is someone who legally purchases a firearm for someone who would not have been able to purchase it legally or seeks to conceal the purchase (Department of Justice, 2015). Furthermore, Marquez conspired with Farook and Malik to conduct terrorist attacks in a variety of scenarios. While Marquez did not plan the attack on the Inland Regional Center, many of the elements of plots he developed with the attackers were used (Department of Justice, 2015).

4.9.2 Analysis

This case was different than the other cases in this study in many areas, chiefly in its sense of scale and the comparatively long mobilization period seen before the attack. Indicator 1 was displayed in general as the couple were quiet and kept to themselves, but for some reason they came out of their “shell” to radicalize Enrique Marquez and bring him in on their plots. The definition of lone wolf terrorism for this study was one or two actors and that definition still holds as, while Marquez plotted with the couple to plan attacks in general, the couple
did not include him in the planning for the Inland Regional Center (Department of Justice, 2015). Indicators 2, 3 and 5 were all displayed as Farook and Malik consumed radical Islamic teachings online, espoused radical beliefs to each other and Marquez, and advocated for violence against many targets as they plotted attacks. An example of an attack plotted between the three was detonating a pipe bomb in the cafeteria of a local college and then shooting the students as they fled outside (Department of Justice, 2015).

There were little indications that Farook or Malik displayed Indicators 5 or 7 to safeguard their communications as online direct messages between the couple were sent unencrypted. These messages were how the couple met in 2013 as they discussed ideology and jihad online (Baker & Santora, 2015). However, Indicator 7, encrypting communications, was displayed in this case as the couple’s iPhones were locked and encrypted, prompting the FBI’s attempt to legally compel Apple to unlock the phones that evolved into a large national debate. For this case, even though they conducted most communications encrypted, Indicator 7 was displayed as the issue of encrypted communications became so large that it overshadowed the entire case and was a landmark event in a protected and encrypted communications debate. Indicator 6 was somewhat displayed as, while they were certainly radicalized online, to this day there is no evidence that they reached out to foreign terrorist organizations not received direction from them. However, the pair did reach out to each other, self-identified jihadists at that time, arranged a meeting in-person and later became engaged and married (Baker & Santora, 2015).
Farook was a health inspector with the county's Department of Public Health before the attacks, but there was no indication of Indicator 9, that he sought this position for access to conduct attacks. Indicator 11 was routinely displayed in the couple's acquisition of weapons that were illegally modified to accept rapidly-detachable magazines, per California magazine release laws (Yablon, 2015). Furthermore, they stockpiled thousands of rounds of rifle and handgun ammunition in addition to large quantities of explosive precursors and bomb making supplies. Again, copies of Al-Qaeda's magazine *Inspire* were found at the home with articles detailing how to make pipe bombs (Department of Justice, 2015). Indicator 12 was displayed as Malik made her pledge of allegiance to the Islamic State through Facebook. It was inferred that Malik knew that such an act was a strong indicator of an attack when she waited until the moment just before the shooting began to post the message.

Both Farook and Malik displayed indicator 13, but Farook had been practicing for an attack by developing weapons proficiency as early as 2011 where he and Marquez first began plotting attacks, acquiring weapons, and training (Department of Justice, 2015). Indicators 14 and 15 were displayed as the trio brainstormed potential target locations, drafted plans, and then walked through how to best execute them in virtual rehearsals. It was apparent that this happened with the prior plots, but this information came largely from Marquez, who was not brought into the planning of the Inland Regional Center and therefore could not offer planning insight to that attack (Department of Justice, 2015).
The mobilization period for this case was unique in this study as there was evidence that a general mobilization period began as far back as 2011 when Farook began acquiring weapons and training for an attack (Department of Justice, 2015). It was not clear from sources on when the attack on the Inland Regional Center was conceived, but Farook, and later Malik, maintained a constant state of mobilization. This extended mobilization repeatedly demonstrated multiple indicators of mobilization as the couple continued to stockpile weapons, ammunition, explosives, and honed their skills training until they found a suitable target.
<table>
<thead>
<tr>
<th>No.</th>
<th>Mobilization Indicators Observed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Isolating oneself – includes breaking contact with family and friends willingly or being ostracized, marginalized, or ejected from family or community.</td>
</tr>
<tr>
<td>2</td>
<td>Statements to justify violence – including seeking justification or permission from religious leaders, family, friends and online contacts.</td>
</tr>
<tr>
<td>3</td>
<td>Eschewing the larger religious community to follow one or two violent extremist voices.</td>
</tr>
<tr>
<td>4</td>
<td>Consuming or sharing violent extremist videos and/or propaganda.</td>
</tr>
<tr>
<td>6</td>
<td>Communicating with or “linking” with violent extremists online.</td>
</tr>
<tr>
<td>7</td>
<td>Increased use of encrypted communications – more specifically, using multiple applications that have the sole purpose of encryption.</td>
</tr>
<tr>
<td>11</td>
<td>Unexplained or unusual equipment, weapons, or explosives precursor acquisition – including stockpiling weapons and ammunition, use of hidden storage caches, or the acquisition of laboratory equipment and chemicals.</td>
</tr>
<tr>
<td>12</td>
<td>Final preparations and getting affairs in order – including writing a last will, giving away possessions, or distributing a manifesto or martyrdom video/statement.</td>
</tr>
<tr>
<td>13</td>
<td>Changes in training and physical fitness routines – including attempts to gain expertise or capability in military/security weapons and tactics.</td>
</tr>
<tr>
<td>14</td>
<td>Conducting reconnaissance of potential targets – including photography, filming, eliciting security information, gaining unauthorized facility access, and the testing of security measures and response.</td>
</tr>
<tr>
<td>15</td>
<td>Creating simulations for rehearsing an attack – can be physical or virtual representations of real-world locations.</td>
</tr>
</tbody>
</table>
4.10 Summary of Findings

Table 9 provides a summary of the findings from the case analyses sorted by mobilization duration, attack means, and indicators on the left with cases along the top. In addition, the total number of all indicators in each case are displayed along the bottom and the total numbers of each individual indicators displayed in all cases are displayed in the far-right column.
Table 9. Combined case timelines and indicators

<table>
<thead>
<tr>
<th>Case Criteria</th>
<th>Case 1</th>
<th>Case 2</th>
<th>Case 3</th>
<th>Case 4</th>
<th>Case 5</th>
<th>Case 6</th>
<th>Case 7</th>
<th>Case 8</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mobilization Duration (in weeks)</td>
<td>8</td>
<td>1</td>
<td>1</td>
<td>12</td>
<td>1</td>
<td>10</td>
<td>1</td>
<td>205</td>
<td></td>
</tr>
<tr>
<td>Attack Means</td>
<td>Vehicle</td>
<td>Firearm</td>
<td>Firearm</td>
<td>Firearm</td>
<td>Firearm</td>
<td>Explosive</td>
<td>Firearm</td>
<td>Firearms &amp; Explosive</td>
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</tr>
<tr>
<td>Indicator 1 – Isolating Self</td>
<td>Y</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Indicator 2 – Statements</td>
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<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td></td>
<td>7</td>
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<tr>
<td>Justifying Violence</td>
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<td></td>
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<tr>
<td>Indicator 3 – Radical Path of Religion</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td></td>
<td>5</td>
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<td>Indicator 4 – Violent</td>
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<td>Y</td>
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<td>Y</td>
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<td>Extremist Media</td>
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<tr>
<td>Indicator 5 – Concealing</td>
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<tr>
<td>Indicator 6 – Communicating</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Y</td>
<td>Y</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>with Violent Extremists</td>
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<td></td>
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<tr>
<td>Indicator 7 – Encrypted</td>
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</tr>
<tr>
<td>Communications</td>
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<tr>
<td>Indicator 8 – Counter-</td>
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<td>Surveillance Actions</td>
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<td>Indicator 9 – Seeking Access</td>
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<tr>
<td>Indicator 10 – Financial</td>
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<tr>
<td>Preparations</td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>Indicator 11 – Acquiring</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>8</td>
</tr>
<tr>
<td>Means</td>
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<tr>
<td>Indicator 12 – Final Preparations</td>
<td>Y</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td>3</td>
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<td>Indicator 13 – Training</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td></td>
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<td>Indicator 14 – Reconnaissance</td>
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<td>Indicator 15 – Rehearsing</td>
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<tr>
<td>Total Indicators Displayed</td>
<td>3</td>
<td>5</td>
<td>5</td>
<td>6</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>11</td>
<td></td>
</tr>
</tbody>
</table>
CHAPTER V

RESULTS

5.1 Introduction

This study intended to determine if there were commonalities in mobilization timelines and indicators through a text analysis of lone wolf terrorism case studies. Continuing from the individual case analyses in the previous chapter, this chapter is a combined analysis of all cases to identify commonalities. Following this combined case analysis is a discussion of possible theories that can be based in the findings of this work. Finally, this chapter concludes with a summary of the limitations found in both the cases used in this study and that data within those cases.

5.2 Combined case analysis

The analyses of these cases showed trends in mobilization duration, attack means and mobilization indicators, with seven indicators showing little to no representation. For mobilization duration, the data suggested three ranges of time for the cases studied: one week (4 cases), eight to twelve weeks (3 cases), and greater than twelve weeks (1 case). Case 8 displayed a mobilization duration of 205 weeks, almost 20 times the duration of the closest case at 12 weeks, making it an extreme outlier.
There were three attack means displayed in the cases: vehicles (1 case), firearms (6 cases), and explosives (2 cases). Firearms were the attack means of choice by a large degree and were a factor in all cases, even if they were not used in the attack. For example, the perpetrator in Case 1 attempted to purchase a handgun for the attack, but was discouraged by purchasing restrictions and instead decided to use a vehicle as a weapon. With the exception of Case 8, all firearms used in the cases were legally purchased without raising the suspicions of the salespersons at the stores, or at least raising suspicion to the degree where the sale was refused. In both cases using explosives, Cases 6 and 8, investigators found copies of Al-Qaeda’s *Inspire* magazine that contained instructions on building homemade explosives.

In regards to mobilization indicators, there were two indicators consistently displayed and seven that occurred rarely or not at all. The attackers making statements justifying violence was present in seven of the eight cases, but there was a limitation with this data as it was unknown who saw or heard these statements and if there was the possibility of intervention. For example, one attacker in Case 6 made a YouTube account where he uploaded jihadist videos calling for violence, but it was unclear if these videos were disseminated to a degree that would draw the attention of law enforcement. Another example seen in two cases was that the attackers made these statements to their family, but the family members either did not believe them or believed that they could be helped within the family and did not notify law enforcement. A final example was in Cases 3 and 5 where the attackers made statements calling for violence, but
the statements were to those of like mindedness who did not report them to law enforcement.

Another indicator displayed in all cases was the acquiring of means to complete the attack. It was logical that all cases involving an attack required the attacker to obtain the means of that attack. Furthermore, all of those attacks were successful in that their acquisition of attack means went undetected by law enforcement and the community at large. In all cases where guns were legally acquired, no suspicion was raised in salespersons that would have led to a report. This indicator may have been overrepresented in these studies, but it was kept due to the lack of information on the start of a mobilization cycle and often, only the acquisition of means as an indicator was the first indicator that presented itself in a mobilization period.

There were seven mobilization indicators that were shown only in one to two cases, or not at all. The first was that in only two cases the attacker displayed signs of social isolation. Most of the attackers were socially active in their personal lives or at work. However, there was again an exception here when defining the social environment for these attackers. Many were socially active with those of a likeminded worldview and could be considered isolated from the community at large due to their radical views. The next trend that the analysis suggested was that lone wolf terrorists did not take measures to conceal their activity. In no cases studied did attackers attempt to obscure their activity by using internet cafes or hotspots, all research, purchasing, and communications were done from their home computer and internet connection. Additionally, only
one attacker (Case 8) attempted to encrypt communications and it was possible that the encryption was done incidentally as a function of the iPhone. No cases demonstrated attackers using counter-surveillance techniques or other security tradecraft to conceal their activity.

Investigators in Case 8 never sought to prove Farook obtained a job at the Department of Health for access in order to commit attacks, which means none of the cases showed attackers seeking employment to gain access for their attacks. No attackers in the cases studied showed obvious practices of preparing financially for their attacks that included trying to obtain greater amounts of credit or selling possession to fund weapons or gear. Finally, in only two cases did attackers conduct rehearsals of attacks and in those cases (Cases 3 and 8) it was unclear as to the degree or method of rehearsal outside of studying the target and planning best approaches.

5.2.1 Proposed Theory

One interpretation of the findings from this study was that there is not a “one size fits all” rule for lone wolf terrorist mobilization durations. The data from this study suggested that there are three tiers of mobilization durations:

1) Immediate-term planning – approximately one week in duration.

2) Short-term planning – up to three months in duration.

3) Long-term planning – greater than three months in duration and potentially lasting several years.
Immediate-term planners, cases 2, 3, 5 and 7, seemed to want to act immediately on their grievance and in all cases the attacker conducted the attack within days after acquiring their attack means, handguns in all four cases. These attackers conducted only rudimentary reconnaissance, if at all, and only one conducted rehearsals, possibly reinforcing their desire for immediate action on an accelerated timeline.

Short-term planners, cases 1, 4 and 6, demonstrated a more patient and methodical approach to their attacks, with the exception being Case 1 where the extended mobilization duration may have been a factor of his inability to obtain a firearm. Cases 4 and 6 both demonstrated a more methodical mobilization period as the attackers trained and planned detailed attacks. Case 6, the Tsarnaev brothers, showed extensive planning and research efforts in creating their bombs as well as a subterfuge plan in emplacing the explosives.

Long-term planners, Case 8, showed the highest degree of planning, training, tactics, and resourcing that could equal or exceed the capabilities of large terrorist organizations. As there was only one case displaying this degree of sophistication in the study, this element of the theory could be an anomaly, but the data suggested that it marks an extreme end of the lone wolf capability spectrum, and while rare, it does exist even in such a small sample size as this study.
5.3 Limitations

While case study analysis is a great way of drawing generalizations from the specific, it was not without limitation. First, there was always the possibility that the cases selected were not representative of the whole and could therefore lead to conclusions and generalizations that were not accurate. Second, as lone wolf attacks continued to occur during this research, the number of available cases were ever expanding, and conclusions drawn from this study could be outdated as tactics, techniques and procedures (TTPs) change. An example of this was recent low-tech terrorism trends that favor vehicle ramming attacks and bladed weapons. Finally, the cases selected were constrained by many the factors detailed in Chapter 3. One of these factors was that this study relies heavily on publicly released testimony and admissions from the perpetrators. Cases without a public release of information, such as cases still in the trial or appeals process, were excluded due to either a lack of information or the information publicly available was conjecture or hearsay. This heavy reliance on publicly available information for case selection in this study could have also skewed the cases selected toward more high-profile cases as there was a great deal of public interest resulting in a great deal more publicly available information than in more obscure cases.

Since all of the attackers in the cases selected were able to mobilize and conduct their attacks without intervention, it was reasonable that the indicators they displayed were not detected. There was a possibility that not all mobilization indicators the attackers displayed were noted in this study. It could have been a
source was not selected that contained an indicator not mentioned elsewhere, the attackers conducted better operational security than was believed and they effectively concealed their preparations, or they simply did not display the indicators at all. An example was whether the Tsarnaev brothers conducted reconnaissance of the Boston Bombing location. Due to their diligence in all other aspects of planning the attack, one can assume that they conducted some sort of reconnaissance, but no sources were found that could establish that as a fact.

Some cases relied upon a limited number of sources to inform the case analysis. Even though there may have been multiple articles on the events, many of the original sources can be traced back to the same press briefing, release, or document. This was a judgement call to include cases that had limited sources, but in most of those cases, the case was dropped from the study. In relation to this limitation, during the case study analyses, news reports were the bulk of the sources. These sources were examined for journalistic rigor and compared to similar news agencies to determine if there was any bias in the reporting. Opinion pieces were discarded as sources while articles simply reporting known facts, or the facts as they were known at the time, were preferred sources.

As discussed in Chapter 2, a lack of common terminology and definitions in this field of study complicates the analysis, as a researcher must search for all permutations of terminology in researching the facts of a case, possibly missing some evidence. This was apparent when discussing group memberships and affiliation. For example, Wade Michael Page was a member of a local white supremacist group and played in a neo-Nazi band. Many news sources used far-
right extremist groups interchangeably causing reports that listed Page as a white supremacist, neo-Nazi, skinhead, white nationalist, member of the Aryan Brotherhood, a sovereign citizen, or a member of the Christian Identity Movement.

Finally, due to many details regarding mobilization durations and indicators coming out during the investigation and trial, this study was not able to use many newer cases. This resulted in a soft cutoff date of late 2015 for case selection with an allowance for newer cases if there was enough information available. The result of this cutoff was a limitation in the study where the newer trend of low-tech, spontaneous, foreign-inspired, lone wolf terrorism using vehicle ramming attacks and bladed weapons. These newer attacks cause a divergence from lone wolf trends in both their mobilization indicators, means used, and target selection that provides an opportunity for future research.
CHAPTER VI

DISCUSSION

6.1 Policy Implications

A prominent observation from the case analyses was that lone wolf terrorists do not practice effective operational security during their mobilization period. No cases showed the use of any sort of counter-surveillance or tradecraft in their activity and communications. All communications, such as research or communicating with foreign extremists, was all done from their home computer, personal internet connection and sent without encryption. In Case 4, Hasan communicated to a known international terrorist using his real name and real email address. This openness initially threw off intelligence analysts as they assumed the name Hasan was an alias as they tried to find his real name (Webster, et al., 2012).

There could have been many reasons for this practice. It may have been ignorance of the capabilities of intelligence and law enforcement agencies, a feeling that they were doing nothing wrong or that their activity was protected speech, or just a general ignorance of technology and operational security practices. Regardless of why, attackers in every case in this study conducted their preparations and operational communications in a very open manner, potentially giving law enforcement and intelligence agencies many opportunities for intervention.
If lone wolf terrorists practice such poor operational security, how effective were law enforcement and the public in detecting them? Hewitt studied 20 cases of terrorism consisting of a mixture of organized groups and lone wolf attacks. Hewitt’s research shows that the use of public tips by law enforcement was the most significant factor contributing to early apprehension in 60% of the cases studied (Hewitt, 2014). A famous example of this was when the Unabomber, Ted Kaczynski, published his manifesto in *The Washington Post* and *The New York Times*. After reading the manifesto, David Kaczynski, Ted’s Brother, came forward to law enforcement believing that his brother was the author. David turned over his letters from Ted and a handwriting analysis comparing the letters was major factor in Ted’s capture (Hewitt, 2014). Informants were found to be a major contributing factor toward early apprehension for extremist groups in Hewitt’s study but were a much lower factor for lone wolf apprehension, only 30% of cases (Hewitt, 2014). However, this was a significant percentage that merits further examination.

One could assume that since lone wolves operate alone without the need for a connection to a larger extremist group that they will keep to themselves and not discuss their plan with others. However, Capellan’s research found that 61% of lone wolf terrorists discussed their plan with someone else prior to the attack and he suggested that this “red flag” may go unnoticed as they were more likely to discuss their plans with someone holding similar ideological beliefs (Capellan, 2015). This finding of Capellan bore true in this study where those who shared their plans did so with those of like mindedness and close family members. The
findings of Hewitt and Capellan demonstrated that even though lone wolves go through attack preparation as an individual or duo, there are opportunities for their mobilization indicators to be noticed by family members, coworkers, law enforcement informants, or the public.

McCauley and Moskalenko discuss this period of potential discovery following their emotional unfreezing event and prior to their attack. They argue that this was the intersection between traditional terrorism research - motive, and traditional criminological theory - opportunity. They offer that this culmination of motive, opportunity and means will narrow the risk pool, meaning that the population of individuals exhibiting high-risk signs of radical action will narrow as the factors converge (McCauley & Moskalenko, 2014). What can be interpreted from Hewitt, Capellan, McCauley and Moskalenko’s findings, was that as a lone wolf gets closer to their attack, the probability of their detection by law enforcement increases, whether it be through an informant, an observant member of the public, them discussing their plans, or a similar mistake on their part. Therefore, to increase the probability of the early detection of attacks, we must utilize law enforcement assets, and build awareness in the public to discover these preparations before an attack can occur.

Informants can be a powerful tool for interdicting terror attacks before they begin. As demonstrated earlier, they were more effective in extremist groups, but they still had some use in the prevention of lone wolf attacks. While lone wolves worked alone without contact with extremist groups, they shared ideology and
the public or an informant may hear a lone wolf vocalize a plan or observe an indicator of mobilization.

Public awareness of the threat of lone wolf attackers and mobilization indicators can be effective. In regard to general terrorism threats, this has been done in the past with awareness campaigns such as “see something, say something” where a channel was in place where a citizen could report suspicious activity. Gruenwald et al. urges that public awareness campaigns must keep in mind how wildly different lone wolf attackers are, which can be challenging when creating a “targeted policy” or profile that is observable by the public (Gruenwald et al., 2013). One method to enhance the effectiveness of public informants was a special emphasis placed on identifying suspicious activity near key ideological targets such as Planned Parenthood buildings, government and military facilities and military recruiting stations. The intent of this emphasis would be to identify possible attackers when they are most exposed - during their surveillance of the target. This emphasis aligns with targets observed in lone wolf terrorism trends as well as the findings of this study in that lone wolf attacker practiced poor operational security and often conducted their preparations in the open.

6.2 Future Research

The research in this study can be expanded upon by future research in a number of ways. First, as noted in Chapter 5, the cases in the study only covered a period from 2006 to 2015. There is an opportunity for future research to
examine the newer trends in lone wolf terrorism attacks, such as vehicle ramming and bladed weapon attacks and compare them to the results of this study. Furthermore, it may be beneficial to go back and study attacks before 9/11 to examine trends in order to determine if there are trends that are cyclical.

Second, the mobilization indicators applied in the case analyses were created from an examination of many terrorism cases and lacked specifics unique to lone wolf terrorism. Opportunities exist for the creation of lone wolf terrorism specific indicators that could be modelled from data observed in cases such as the ones used in this study. These focused indicators could provide a greater refinement in case analysis and provide indicators more relevant to lone wolf terrorism attacks in that they would provide a method to create a theoretical framework to better understand lone wolf methods.

Finally, this study focuses on the operational methods and techniques of lone wolf terrorists from a strict standpoint of behavior observed. Future research can combine this research with psychological and sociological study in an effort toward answering the “why” of these behaviors in service of developing a more well-rounded understanding of lone wolf terrorists.

6.3 Conclusion

The purpose of this study was to contribute to the general knowledge of lone wolf terrorists by analyzing select cases for commonalities in attack mobilization durations and indicators. This goal was achieved by developing a
common terminology used in the study, outlining a method to compare the studies, discussing the cases selected, and then comparing them in a cross-case analysis. This study found that there were commonalities in both mobilization durations and indicators displayed. Mobilization durations general fell into three categories, immediate, short and long-term durations. Mobilization indicators displayed saw commonalities in means acquisition that was outside the norm, making statements justifying violence, supporting extremist ideologies, and training to higher proficiency in weapons. There were also commonalities in indicators not displayed such as limited to no displays of operational security, counter-surveillance, communications encryption, seeking access through employment, and the conduct of rehearsals.

These findings together serve to paint a picture of operational methods that can be combined with psychological and sociological research in an effort toward creating a more complete picture of the lone wolf terrorist.
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