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THESIS

**A FRAMEWORK FOR VIOLENCE: CLARIFYING THE
ROLE OF MOTIVATION IN LONE-ACTOR
TERRORISM**

by

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MOTIVATION IN LONE-ACTOR TERRORISM**

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ABSTRACT

A major goal of the homeland security enterprise is to prevent terrorism in the United States. Federal, state, and local agencies have responded to this challenge with a number of initiatives that have prevented another large-scale network attack since 9/11. Yet terrorism perpetrated by a lone individual, not in direct communication with a larger terrorist network, continues to occur on a regular basis in the United States. Rather than considering lone-actor terrorism a subset of networked terrorism, this thesis considers lone-actor terrorism as a subset of other grievance-fueled violence such as mass murders and workplace violence. Comparing the motivations of the perpetrators using a case study method, this thesis considers the complexities of addressing the key trait of motivation that separates lone-actor terrorism from other forms of lone violence. As a result of this analysis, five key observations—leading to five policy implications—are postulated to provide clarity to the issue of lone-actor terrorism in pursuance of improving prevention methods.

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EXECUTIVE SUMMARY

Preventing domestic terrorism continues to be a major goal for homeland security practitioners. Yet many of our traditional counterterrorism techniques have proven inadequate to prevent one particular manifestation of terrorism: the lone actor. No network exists to infiltrate the lone-actor threat—there are no communications to intercept, no information to task informants, no weapons to trace, and no potential target to protect. Addressing the concern of lone-actor terrorism, as called for by lawmakers and the American public, requires more deeply understanding the complexity of this particular manifestation of violence.

Even with an increased emphasis on understanding lone terrorism, confusion still exists about the nature of such attacks in the United States. Many analysts and policymakers view lone-actor terrorism through the lens of networked terrorism. The lone actors who have committed some of the most successful and spectacular recent terrorist attacks in the United States, however, appear to have more similarities with mass murderers than terrorists who are steeped with radical ideology and ready to act for a group cause. This has prompted some researchers to postulate two types of lone-actor terrorists exist: “real” lone-actor terrorists and mass murderers.¹

The separation between a mass murderer and a lone-actor terrorist lies largely in the attacker’s motivation. Mass murderers are driven by a personal grievance or revenge while a lone terrorist adheres to a radical ideology to justify violent action. Further examination, however, reveals the distinction is not so binary. Many recent lone terrorists in the United States may use ideology to justify attacks rather than attacks to promote ideology, and some solo mass murderers have claimed collective grievances as part of their motivation for violence. The subjective distinctions between the two categories continue to blur and shift as we, as a nation, attempt to address the issues associated with lone-actor terrorism. Understanding the impact of motivation in a lone attack is a worthwhile pursuit to better optimize prevention and detection methods.

¹ Randy Borum, Robert Fein, and Bryan Vossekuil, “A Dimensional Approach to Analyzing Lone Offender Terrorism,” *Aggression and Violent Behavior* 17, no. 5 (2012): 392.

This thesis was undertaken with the seemingly simple goal of providing clarity to the issue of lone-actor terrorism by considering the role of motivation. Using illustrative case studies, the thesis examined two lone-actor events that represent the extremes on the spectrum of motivation. In the first case, Abdulhakim Mujahid Muhammad, responsible for a shooting spree that left one person dead in Arkansas, is considered a largely ideologically motivated terrorist. The second case considered Jared Lee Loughner, who was responsible for shooting Representative Gabrielle Giffords in Arizona, as an example of a predominantly personally motivated attack. The two cases were compared along a crime prevention framework that considered how motivation impacts an act of premeditated violence. Comparisons to existing studies also helped further explore the relationship between lone-actor violence and other forms of grievance-fueled violence such as mass murder.

A qualitative analysis demonstrated the difficulty of determining motivation. The mix of personal and ideological grievances can be found in almost all cases of lone-actor terrorism, which makes determining motivation extremely subjective. Understanding the motivation of an attacker, however, is important. The two cases illustrate individuals driven by mostly personal grievances tend to experience a different process of violent radicalization, and conduct some aspects of the attack differently than those motivated by ideological grievances. As this thesis considered how we can prevent lone-actor terrorism, understanding these nuances became critical.

Ultimately, the confluence of personal and ideological grievances will continue to challenge policymakers' and counterterrorism experts' efforts to prevent lone-actor terrorism. Mental health issues, for example, are much more prevalent in lone-actor terrorists than networked terrorists; rates are similar to those of mass murderers. The role of mental illness in lone violence, however, is not fully understood. More research is needed to better determine this relationship and how mental health treatment might reduce lone-actor terrorism.

Likewise, policymakers should consider current efforts to prevent other forms of grievance-fueled violence such as workplace and campus attacks. In these venues, threat assessment and management teams are leveraged to produce subject-based strategies to

reduce violence from high-risk individuals. Such strategies consider threat assessment and threat management as part of the same prevention process. Counterterrorism practitioners have, on a reoccurring basis, detected individuals who later commit violent crimes. This implies more robust threat management is needed in our efforts to prevent lone-actor terrorism.

We do a disservice to counterterrorism and law enforcement practitioners by confusing mass murder and lone-actor terrorism. More importantly, we give terrorist groups more credit and more power when we mislabel a mass murder event. Minimizing the effects of terrorism might include more restrictive, and uniformly applied, standards for what constitutes terrorism. Care must be taken to ensure objectivity when categorizing all acts of violence. Perhaps an even more difficult strategy is to consider fear reduction as a goal; this strategy reduces terrorist groups' power over others. Efforts to put the terrorist attacks in perspective—to show the American people how rare terrorism in the United States really is—may reduce fear and lead to increased resiliency among the population.

Ultimately, the distinctions between lone-actor terrorism and other forms of grievance-fueled violence will continue to blur. The nature of the threat is changing and will continue to adapt to our law enforcement efforts and take advantage of novel ways to influence and communicate. Only by understanding the distinctions, and commonalities, between the various subsets of grievance-fueled violence can we hope to develop effective preventative measures to reduce lone-actor terrorism.

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I. INTRODUCTION

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.... 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.

—Barack Obama¹

Arguably, the primary mission of the homeland security enterprise is to safeguard the United States from terrorism. Counterterrorism practitioners should be commended for preventing another large scale terrorist attack in the decades following 9/11. Since then, however, numerous smaller-scale attacks, perpetrated by one or two individuals operating without the direction or guidance of a larger terrorist network, have tragically injured and killed men, women, and children in the United States. After many of these attacks occur, we tend to think, as former-President Obama stated in this chapter's opening quotation, that the perpetrator "is deranged or driven by a hateful ideology." Professor John Horgan, a leading researcher in lone-actor violence, and his colleagues from Georgia State University point out such master-narratives overlook the complicated mix of psychological, personal, and collective grievances that distinguish the lone-actor terrorist from other perpetrators of violence.² Distinct lines separating lone-actor terrorists from mass murderers, school shooters, assassins, or workplace shooters are often absent. Oversimplifying the issue into seemingly discrete categories hampers effective examination and policy recommendations. This thesis aims to provide an alternative way to examine the complicated issue of lone-actor terrorism by considering the phenomena within the broader context of lone-actor grievance-fueled violence.

¹ Barack Obama, interview by Wolf Blitzer, *Situation Room*, CNN, August 16, 2011, <http://security.blogs.cnn.com/2011/08/16/obama-biggest-terror-fear-is-the-lone-wolf/>.

² Horgan et al. explain these "mono-causal master narrative explanations" are largely due to our comfort to search for simple answers after a horrific event. John G. Horgan et al., "Across the Universe? A Comparative Analysis of Violent Behavior and Radicalization across Three Offender Types with Implications for Criminal Justice Training and Education," U.S. Department of Justice, June 2016, <https://www.ncjrs.gov/pdffiles1/nij/grants/249937.pdf>.

Fatalities from terrorist attacks in Western countries accounted for a small 2.6 percent of total terrorism deaths between 2000 and 2014.³ The attacks that did occur in Western countries, however, were some of the most spectacular and deadly attacks worldwide, to include 9/11, the Madrid train bombings, the Norwegian massacre, and the London bombings.⁴ Although counterterrorism experts have successfully prevented another 9/11-scale attack on U.S. soil, the American public continues to view smaller-scale, less impactful lone-actor terrorism as a success of terrorist groups. The scale and size of the successful spectacular attacks against the West have left hyper-sensitive citizens expecting governments to provide protection against all forms of terrorism, regardless of how infrequent or impactful they may be.⁵

Key differences exist between lone-actor terrorism and networked terrorism that make it especially difficult to prevent solo attacks. Since 9/11, the vast majority of successful terrorist events carried out in the United States have been lone attacks. Between 2006 and 2014, the United States had the most lone-actor terrorist attacks of any Western country, with forty-two attacks and fifty-two deaths.⁶ By decade, the number of lone-actor attacks and fatalities appear to be increasing; the 2010s already surpass every other decade, during thirty-five lone-terrorist attacks have killed 115 people.⁷ This number includes the most lethal terrorist attack in the United States since 9/11, the June 2016 Orlando, Florida attack that left forty-nine people dead.⁸

³ Of the total number of terrorism deaths in Western countries from 2000 to 2014, 82 percent came from the 9/11 attacks. Institute for Economics and Peace (IEP), *Global Terrorism Index 2015: Measuring and Understanding the Impact of Terrorism* (IEP Report 36) (New York: IEP, 2015), <http://economicsandpeace.org/wp-content/uploads/2015/11/Global-Terrorism-Index-2015.pdf>.

⁴ Ibid.

⁵ Brian Michael Jenkins, *Would-Be Warriors: Incidents of Jihadist Terrorist Radicalization in the United States since September 11, 2001* (Santa Monica, CA: RAND, 2010), 8–9.

⁶ IEP, *Global Terrorism Index 2015*, 54.

⁷ Katie Worth, “Lone Wolf Attacks Are Becoming More Common—And More Deadly,” *Frontline*, July 14, 2016, <http://www.pbs.org/wgbh/frontline/article/lone-wolf-attacks-are-becoming-more-common-and-more-deadly/>.

⁸ William Wan and Anne Hull, “Orlando Gunman Had Been Seen on Gay Dating Apps, at Pulse Nightclub before Shooting,” *Washington Post*, June 14, 2016, https://www.washingtonpost.com/national/former-classmates-recall-orlando-shooters-bizarre-reaction-on-911/2016/06/13/f08b2950-3187-11e6-95c0-2a6873031302_story.html.

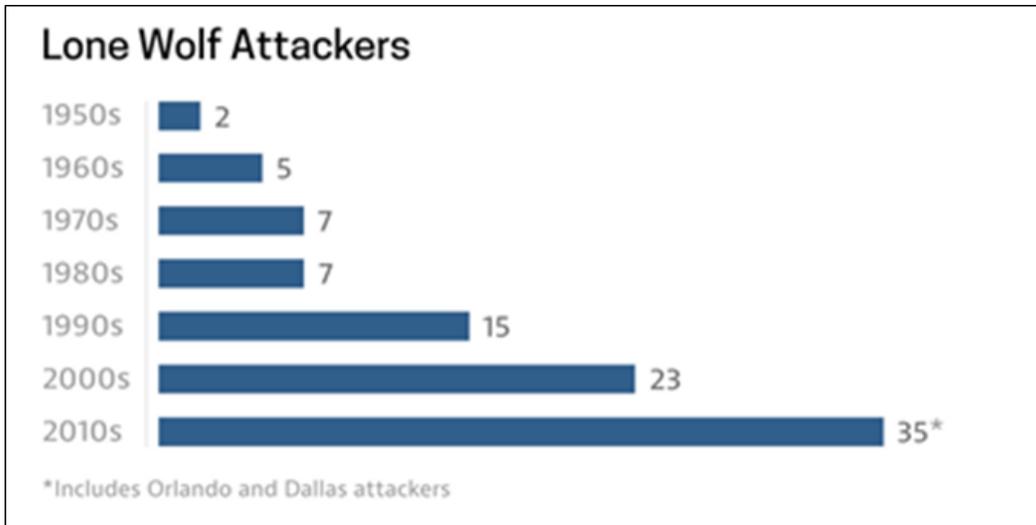
How concerned should we really be about lone-actor terrorism? The chance of being the victim of a terrorist attack in the United States is negligible, yet few issues seem to capture the attention of the American public more than terrorism. According to a survey released by the Pew Research Center in August 2016, a majority of Americans are more concerned about what politicians would do to keep the United States safe from terrorism than any other national issue.⁹ National media coverage and the horrific and unpredictable nature of these events continue to drive public demand for action against these low-likelihood violent acts. Yet the limited amount of empirical data on domestic terrorism spread over a long period of time make understanding this evolving phenomenon a challenge to policymakers and counterterrorism practitioners alike.

A. SCOPING LONE-ACTOR TERRORISM: A GROWING THREAT

Central to the issue of lone-actor terrorism is the significance of the problem. In testimony to Congress in 2010, Leon Panetta, serving as the director for the Central Intelligence Agency, stated, “It’s the lone-wolf strategy that I think we have to pay attention to as the main threat to this country.”¹⁰ Compared to networked terrorism, Panetta correctly assessed the increasing concern. As Figure 1 illustrates, the number of lone-actor terrorist is trending higher over each successive decade. Many researchers agree that, while lone-actor terrorism is not new, it is becoming more common. Debate remains, however, on what should be considered lone-actor terrorism and how significant the trend really is.

⁹ Baxter Oliphant, “In Debates, Voters Want to Hear More about Terrorism and the Economy,” Pew Research Center, August 15, 2016, <http://www.pewresearch.org/fact-tank/2016/08/15/in-debates-voters-want-to-hear-most-about-terrorism-and-the-economy/>.

¹⁰ “CIA Chief: Al Qaeda Poised to Attack U.S.,” CBS News, February 2, 2010, <http://www.cbsnews.com/news/cia-chief-al-qaeda-poised-to-attack-us/>.



Only successful terrorist attacks were included in the dataset.

Figure 1. Lone Terrorism by Decade¹¹

One challenge of scoping lone-actor terrorism is selecting an unbiased dataset. Datasets that include prosecuted cases, for example, may be heavily influenced by the increased use of confidential informants to ensure the legal requirements for terrorism charges are met. Upwards of fifty percent of terrorism prosecutions since 2009 involve informants.¹² While the exact use of confidential informants varies from passive collection to active participation, the numbers in Figure 1 do not include fifteen “sting” operations, which are generally considered unreliable for data collection. Regardless of the expanding role of confidential informants, there has been a notable increase in the use of terrorism charges as a prosecutorial tool since 2010. For example, the “material support to terrorism” charge increased from 11.6 percent of terrorism and national security cases in 2007 to 69.4 percent in 2010, and was recorded in 87.5 percent of the cases in 2011.¹³

¹¹ Source: Worth, “Lone Wolf Attacks.”

¹² Beau Barnes, “Confronting the One-Man Wolf Pack: Adapting Law Enforcement and Prosecution Responses to the Threat of Lone Wolf Terrorism,” *Boston University School of Law Review* 92, no. 5 (2012): 1637.

¹³ *Ibid.*, 1645.

While some ambiguity exists concerning the number of lone-actor terrorism cases in the United States, another common claim is the increasing number of fatalities caused by lone terrorists, as illustrated in Figure 2. Lone terrorism appears to have become increasingly deadly starting in 2010. Recent attacks—such as the 2015 San Bernardino shooting, in which fourteen people were killed, and the Orlando nightclub shooting, in which forty-nine individuals were killed, making it the deadliest terrorist attack since 9/11—provide antidotal evidence supporting the claim that lethality of attacks may be on the rise.¹⁴ One explanation for this increase may be that lack of active communication and training minimized the damage of lone terrorism in past years, but the spread of online training and the mimicry of deadly attacks have overcome some of the limitations of operating alone.¹⁵ Without a widely accepted definition of lone-actor terrorism, however, even quantifiable data (such as provided in Figure 2) may be unreliable.¹⁶

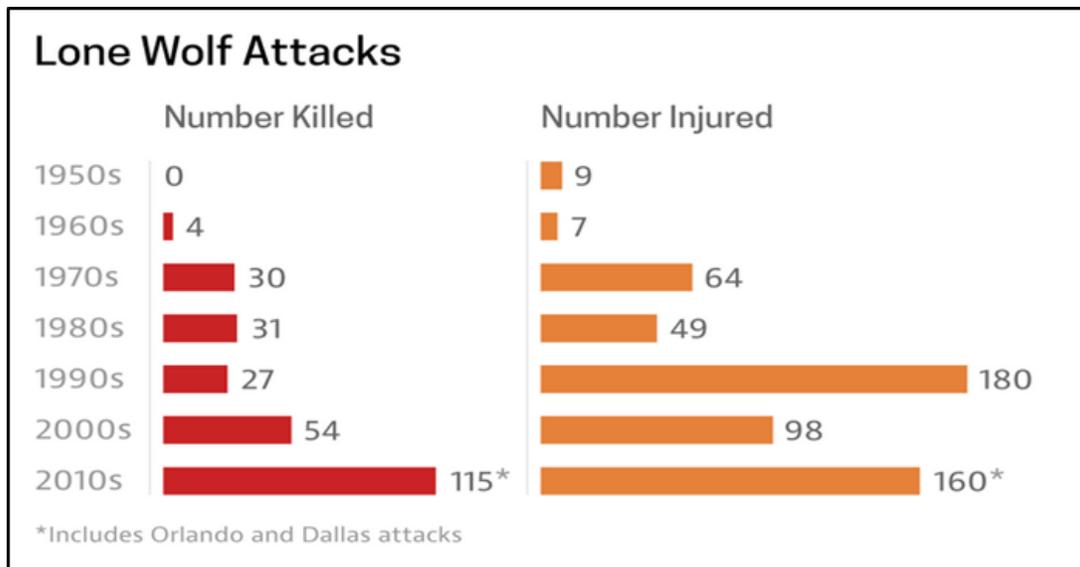


Figure 2. Lone Terrorism Fatalities by Decade¹⁷

¹⁴ Wan and Hull, “Orlando Gunman.”

¹⁵ Raffaello Pantucci, Clare Ellis, and Lorien Chaplais, *Lone-Actor Terrorism Literature Review* (London: RUSI, 2016), 12, https://rusi.org/sites/default/files/201512_clat_literature_review_0.pdf/.

¹⁶ The 2015 San Bernardino shooting and 2013 Boston bombing, for example, had two perpetrators at each event. To some researchers, this does not meet the definition of lone-actor terrorism.

¹⁷ Source: Worth, “Lone Wolf Attacks.”

Even if we agree that lone-terrorist attacks are increasing and becoming more deadly, the numbers are still relatively very small; in this light, lone-actor terrorism, while tragic, is “ultimately insignificant” and far from an existential threat to the United States.¹⁸ When considering right-wing, left-wing, and religious terrorism combined, there have been fewer than three deadly attacks per year since 2010.¹⁹ Between September 11, 2001, and January 1, 2017, fewer than 160 people have died as a result of lone-actor terrorism in the United States. Most researchers agree that, thankfully, lone-actor terrorism is not as lethal as attacks perpetrated by terrorist groups.²⁰ Regardless of the overall impact of lone-actor terrorism to our national security, however, the American public will likely continue to view domestic terrorism as a threat that must be addressed.²¹

B. THE CHALLENGE OF LONE-ACTOR TERRORISM

Detecting and preventing terrorism has not always been the explicit goal of law enforcement agencies. Prior to 9/11, much of our law enforcement efforts focused on responding to terrorism events. With the horrific attacks on 9/11, our efforts shifted away from response; preventing terrorism is now the number-one priority of the FBI and the Department of Justice.²² Initial prevention efforts met with some success, but counterterrorism experts suggest lone terrorism is a tactical adaptation of terrorist groups and, as such, is very difficult to stop.²³ Prevention and detection methods likely yield diminishing returns as the terrorists adapt and change to successful law enforcement techniques.

¹⁸ Barnes, “One-Man Wolf Pack,” 1655.

¹⁹ Peter Bergen et al., “Terrorism in America after 9/11,” New America Foundation, accessed February 9, 2016, <http://www.newamerica.org/in-depth/terrorism-in-america/>.

²⁰ Barnes, “One-Man Wolf Pack,” 1655.

²¹ *Ibid.*, 1658.

²² *Ibid.*, 1632.

²³ *Ibid.*, 1649.

Detection of a lone-actor terrorist is extremely difficult because, as most researchers agree, “it is impossible to profile a lone-actor terrorist.”²⁴ One commonality does exist between lone terrorists: The attackers display higher rates of mental illness than group-actor terrorists and the general population.²⁵ A study by Gruenewald, Chermak, and Freilich found that 40 percent of lone terrorists experienced mental illness, compared to 7.6 percent among group-based actors.²⁶ This is consistent with the findings of Horgan et al.’s study of 71 lone-actor terrorists, in which he found 39 percent had a previous history of mental illness.²⁷ The number of lone-actor terrorists suffering from untreated mental illness may be even higher. By comparison, approximately 50 percent of non-ideological active shooters suffered from mental health issues.²⁸ In this regard, lone-actor terrorism is more similar to other forms of grievance-fueled violence, such as mass murders, than to networked terrorism.²⁹

Perhaps even more challenging than detecting lone actors is preventing lone-actor terrorism. As Barnes notes, successful prevention of domestic terrorism usually involves confidential informants, surveillance of suspected terrorists, monitoring of communications, and increased physical security for vulnerable locations. The solitary nature of the lone attacker, however, leaves little opportunity for counterterrorism experts to disrupt a lone terrorist attack before it happens. Barnes concludes that traditional “law enforcement tools simply [are] not effective against lone wolf terrorists.”³⁰

²⁴ Pantucci, Ellis, and Chaplais, *Lone-Actor Terrorism Literature Review*, 5.

²⁵ Mental illness includes psychological disturbances such as depression, post-traumatic stress disorder, bi-polar disorder, and inability to establish social relationships. Lydia Alfaro-Gonzalez et al., *Report: Lone Wolf Terrorism*, Georgetown University, June 27, 2015, 27, <http://georgetownsecuritystudiesreview.org/wp-content/uploads/2015/08/NCITF-Final-Paper.pdf>.

²⁶ Jeff Greunewald, Steven Chermak and Joshua D. Freilich, “Distinguishing ‘Loner’ Attacks from Other Domestic Extremist Violence: A Comparison of Far-Right Homicide Incident and Offender Characteristics,” *Criminology and Public Policy* 12, no. 1, (2013): 78.

²⁷ Horgan et al., “Across the Universe,” 23.

²⁸ Joel Capellan, “Lone Wolf Terrorist or Deranged Shooter? A Study of Ideological Active Shooter Events in the United States, 1970–2014,” *Studies in Conflict and Terrorism* 38 (2015): 402, doi: 10.1080/1057610x.

²⁹ Worth, “Lone Wolf Attacks.”

³⁰ Barnes, “One-Man Wolf Pack,” 1650.

Barnes further points out that, even if a potential terrorist is detected, it is difficult for current counterterrorism efforts to prevent and disrupt lone-actor terrorism.³¹ According to Barnes, efforts to deter lone terrorism through detection, threats of arrest, incapacitation, or incarceration likely do little to stop a determined lone terrorist. The culmination of such attacks, often resulting in the killing of the perpetrator, negates threats of prosecution in deterring lone terrorism. Even if detected, Barnes concludes, “the absence of pre-attack illegal conduct renders most discoveries insufficient to effectively incapacitate a would-be lone wolf.”³²

From a policymaker perspective, the response to lone-actor terrorism is complex. No two cases of terrorism in the United States are alike; the response to lone terrorism must, therefore, also be complex. Denying the means to carry out domestic terrorism is challenging. First Amendment issues aside, restricting access to specialized knowledge such as weapons training, bomb-making skills, and operational techniques is difficult given the dispersed nature of the internet. Likewise, denying access to weapons or explosive precursors would also run into constitutional and practical issues.

Much of the recent counterterrorism efforts focus on community outreach as a means to identify individuals who may be radicalized and prevent future radicalization. These efforts, however, depend on public trust, which is often undermined by the use of confidential informants and sting operations. Given the isolated and complex motivations of lone-actor terrorists, it is difficult to assess how effective counter-radicalization efforts would be.³³ As journalist Katie Worth wrote, “Lone wolf attackers are rarely motivated by politics alone—personal grievances are usually central to their drive.”³⁴ A better understanding of the complexities motivating the individuals who commit these attacks may yield new approaches for preventing and disrupting lone terrorism.

³¹ Ibid., 1651.

³² Ibid., 1655.

³³ Ibid., 1653.

³⁴ Worth, “Lone Wolf Attacks.”

C. THESIS GOAL: CLARIFYING THE ROLE OF MOTIVATION IN LONE-ACTOR TERRORISM

Researchers increasingly focus on similarities between lone-actor terrorism and other forms of grievance-fueled violence. McCauley, Moskalenko, and Van Son, for example, found similarities between assassins, school attackers, and lone-actor terrorists. All three types of assailants plan violence, act alone, and have a perceived grievance motivating their action. The researchers concluded that lone terrorists, assassins, and school attackers may all be subsets of a larger category of lone-actor, grievance-fueled violence.³⁵

Capellan, in his comparison of non-ideological and ideological active shooters, also discovered similarities. He concluded the underlying social and psychological factors that drive a person to violence are similar, but the manifestation of the violence differs greatly.³⁶ Capellan suggests “ideological and non-ideological active shooters will have significant differences across all three stages of the active shooter event: preparation, execution, and conclusion.”³⁷ Capellan found ideologically motivated lone-actors are significantly more likely to have thoroughly planned the attack, to include research and training, making the attacks more lethal. Additionally, lone-actor terrorists are “significantly more likely [to] discuss their plans with others.”³⁸ Capellan’s study found both ideological and non-ideological lone actors target locations they can easily enter and that most of the attacks end within one hour. Lone-actor terrorists, however, are more likely to target locations with which they have no professional or personal contact. Also, a lone-actor terrorist attack is more likely to end with the terrorist being killed by police or potential victims.³⁹

³⁵ Clark McCauley, Sophia Moskalenko, and Benjamin Van Son, “Characteristics of Lone-Wolf Violent Offenders: A Comparison of Assassins and School Attackers,” *Perspectives on Terrorism* 7, no. 1 (2013): 6.

³⁶ Capellan, “Terrorist or Deranged Shooter,” 398.

³⁷ *Ibid.*, 399.

³⁸ *Ibid.*, 402.

³⁹ *Ibid.*, 405.

Current efforts to analyze lone terrorism are hampered by limited empirical data. Recent research by John Horgan et al. attempted to rectify that limitation by comparing terrorists and criminals whose violence is similar, yet with different apparent motivations. In particular, researchers postulate comparing lone terrorists and solo mass murder offenders may have significant implications for investigative practices; such efforts may lead to a better understanding of the role motivation plays in lone-actor terrorism.⁴⁰ Yet little research exists to further divide ideological lone actors. The ideological impact on the planning, execution, and conclusion of violence perpetrated by lone actors may have further implications for detection, prevention, and mitigation of terrorist attacks within the United States. Ultimately, further clarity on the similarities and differences between perpetrators of lone-actor violence will be beneficial to attempts to counter domestic terrorism.

The primary question this research seeks to address is: How can we prevent lone-actor terrorism? To answer this question, the research examines in depth the key characteristic that separates lone-actor terrorism from other forms of grievance-fueled violence: motivation. The thesis research utilizes a qualitative analysis of two recent successful lone-terrorism attacks that illustrate the two extremes of lone-actor terrorist motivation—individuals who are largely ideologically driven and those who are largely personally motivated. The cases illustrate the complexity of lone-actor terrorism but also provide opportunities for comparisons to other forms of grievance-fueled violence. The results of the case study research are compared to current grievance-fueled violence research to ascertain possible efficiencies to counterterrorism efforts.

⁴⁰ Horgan et al., “Across the Universe,” 10.

D. THESIS OUTLINE AND UPCOMING CHAPTERS

Chapter II contains a review of pertinent literature and sets the foundation for future chapters. The literature review focuses on our current understanding of lone terrorism and lone-actor grievance-fueled violence. The chapter includes definitions of the problem set and current challenges to understanding lone-actor terrorism. Chapter III discusses the research design and methodology used in the case study approach. Chapter IV discusses the observations and possible policy implications of the findings, as well as areas for future research.

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II. LITERATURE REVIEW

What is lone-actor terrorism? This question has no simple answer, but is central to any meaningful discussion of this phenomenon. This literature review surveys a brief history of lone-actor terrorism in the United States to contextually examine why it is difficult to define lone-actor terrorism, and to highlight some of the challenges of lone-actor terrorism research. The chapter then exams a topology by the National Security Critical Issues Task Force (NSCITF) that helps explain why violent individuals choose to operate alone. Equipped with such a framework, the thesis considers some possible explanations, and limitations, for how lone-actors radicalize. The final section reviews some promising research comparing lone-actor terrorism to other forms of lone-actor grievance-fueled violence.

A. HISTORY OF LONE-ACTOR TERRORISM IN THE UNITED STATES

Lone-actor terrorism is not a new phenomenon. Its existence can be traced back to nineteenth-century anarchism, which encouraged individuals to act alone or in small groups without direction from a hierarchical organization.⁴¹ Spaaij, a sociologist and researcher on the topic, points out the historical significance of lone-actor terrorism—under the principle of leaderless resistance—to the white supremacists and antigovernment extremists in the second half of the twentieth century. Leaderless resistance advocated “an individual, or very small, highly cohesive group, engage in acts of anti-state violence independent of any movement, leader, or network of support.”⁴² White supremacist Louis Beam popularized modern leaderless resistance as an adaptation to the successful destruction of hierarchical U.S. militias by law enforcement agencies.⁴³ More recently, Barnes, in a legal note written for the *Boston Law Review*, described

⁴¹ Ramón Spaaij, “The Enigma of Lone Wolf Terrorism: An Assessment,” *Studies in Conflict & Terrorism* 33, no. 9 (August 2010): 859, doi: 10.1080/1057610X.2010.501426.

⁴² Jeffrey Kaplan, “Leaderless Resistance,” *Terrorism and Political Violence* 9, no. 3 (September 1997): 80, doi:10.1080/09546559708427417.

⁴³ Spaaij, “Enigma of Lone Wolf Terrorism,” 859.

jihadist-inspired lone-actor terrorism as a similar tactical evolution.⁴⁴ Like Beam and other white supremacists, radical organizations belonging to the global jihadist movement encourage “smaller-scale, less technically complex tactics ... [which are] more difficult for law enforcement and intelligence operatives in the United States to identify in advance.”⁴⁵

Viewing lone-actor terrorism as a tactical adaptation indicates the success of U.S. law enforcement agencies’ counterterrorism efforts.⁴⁶ Some manifestations of lone-actor terrorism, however, occur without the existence of any organized terrorism network. Often, lone-actor terrorists have a unique blend of religious, political, and personal grievances not representative of a larger terrorism network. Theodore Kaczynski (also known as “the Unabomber”) is an example of a lone-actor terrorist who combined personal vendettas with political grievances.⁴⁷ Many recent examples of this type of lone-actor terrorist exist: Jared Loughner (used as a case study in this thesis) killed six people in January 2011 in a bizarre political statement, and Joseph Stack flew a plane into an IRS office in Austin, Texas in 2010.⁴⁸

A study by Hamm and Spaaij of pre-9/11 and post-9/11 radicalization found lone-actor terrorists are becoming increasingly independent of terrorist networks.⁴⁹ The researchers found only 42 percent of post-9/11 lone-actor terrorists hold beliefs in accordance with clearly defined organizational entities, as opposed to 63 percent prior to 9/11. Hamm and Spaaij assert the increasing ideological autonomy of lone-actor terrorists is due to technology. The internet has supplanted the need for clearly defined

⁴⁴ Barnes, “One-Man Wolf Pack,” 1655.

⁴⁵ Brian Fishman and Andrew Lebovich, “Countering Domestic Radicalization: Lessons for Intelligence Collection and Community Outreach,” *New America Foundation* 22 (2011), as quoted in Barnes, “One-Man Wolf Pack,” 1649.

⁴⁶ Barnes, “One-Man Wolf Pack,” 1615.

⁴⁷ Spaaij, “Enigma of Lone Wolf Terrorism,” 861.

⁴⁸ Garance Franke-Ruta, “Remember When Andrew Joseph Stack Flew a Plane into a Texas IRS Building?” *Atlantic*, May 15, 2013, <http://www.theatlantic.com/politics/archive/2013/05/remember-when-andrew-joseph-stack-flew-a-plane-into-a-texas-irs-building/275887/>.

⁴⁹ Mark Hamm and Ramon Spaaij, “Lone Wolf Terrorism in America: Using Knowledge of Radicalization pathways to Forge Prevention Strategies,” U.S. Department of Justice, February 2015, 11, <https://www.ncjrs.gov/pdffiles1/nij/grants/248691.pdf>.

organizational alignment. With the help of the internet, an individual can find any ideological cause, or create his or her own.⁵⁰ Virtual networks of social media platforms connect people who are “worried about everything from drone strikes to a one-world government and the pending imposition of martial law in the United States and tell them that they do not worry in isolation.”⁵¹

B. NO STANDARD DEFINITION OF LONE-ACTOR TERRORISM

Lone-actor terrorism may not be new, but little agreement exists on what, exactly, lone-actor terrorism is. Spaaij and Hamm noted that a lack of consensus about lone-actor terminology adds to the difficulty of meaningful research on this topic.⁵² Other researchers, such as Pantucci et al., believe the lack of definitional consensus makes it increasingly difficult to identify key characteristics for further research.⁵³ Various academic discourse has used a wide array of terms to describe a lone-actor terrorist, including “loner, lone actor, solo actor, solo terrorist, solitary, freelancer, self-starter, lone offender, lone avenger, leaderless, self-directed, self-motivated, lone wolf pack, one-man wolf pack, self-activating, idiosyncratic.”⁵⁴ This thesis utilizes Hamm and Spaaij’s widely accepted definition of lone-actor terrorism as “political violence perpetrated by individuals who act alone; who do not belong to an organized terrorist group or network; who act without the direct influence of a leader or hierarchy; and whose tactics and methods are conceived and directed by the individuals without any direct outside command or direction.”⁵⁵

The lack of definitional consensus exists largely because researchers disagree on the elements that define a lone-actor terrorist. Some argue that two individuals can be seen as a collective lone actor if they do not identify with a larger terrorist network, as

⁵⁰ Hamm and Spaaij, “Lone Wolf Terrorism in America,” 11.

⁵¹ Ibid.

⁵² Ramón Spaaij and Mark S. Hamm, “Key Issues and Research Agendas in Lone Wolf Terrorism,” *Studies in Conflict & Terrorism* 38, no. 3 (March 2015): 168, doi: 10.1080/1057610X.2014.986979.

⁵³ Pantucci, Ellis, and Chaplais, *Lone-Actor Terrorism Literature Review*, 4.

⁵⁴ Spaaij and Hamm, “Key Issues and Research Agendas,” 169.

⁵⁵ Hamm and Spaaij refer to lone-actor terrorism as lone wolf terrorism; the terms are often used interchangeably. Hamm and Spaaij, “Lone Wolf Terrorism in America,” 3.

one individual likely recruited the other to assist with the planned attack.⁵⁶ The sociodemographic factors and behaviors driving the lone terrorists are insignificant between one or two individuals operating independent of a group. By expanding the definition of lone terrorism to include two attackers, acts perpetrated by the Tsarnaev brothers—responsible for the 2013 Boston Marathon bombings—and the husband and wife 2015 San Bernardino shooters, for example, would be included within the research.

An additional challenge illustrated by Hamm and Spaaij’s definition arises when considering “tactics and methods are conceived and directed by the individuals without any direct outside command or direction.”⁵⁷ With the online publication and dissemination of terrorist propaganda such as Al Qaida’s *Inspire* magazine and, more recently, the Islamic State’s *Dabiq*, it becomes challenging to determine the extent to which a lone-actor terrorist conceives of his own tactics and methods. Likewise, narrow definitions may also exclude copycat lone terrorists who determined tactics and methods based on media reports of previous attacks.

A standard definition is certainly critical for research and policy. The conceptual issues introduced by the multitude of definitions prevent methodical analysis and solutions. Researchers, thankfully, do agree on a few consistent elements of lone-actor terrorists. “Most definitions refer to a lack of direction from a wider terrorist group; an absence of clear command and control separates lone wolves from networked terrorist plots.”⁵⁸

C. THE PROBLEM OF MINIMAL DATASETS

The confusing analytical findings resulting from different definitions of lone-actor terrorism are magnified due to the small dataset of these rare events. The infrequent nature of lone-actor terrorism makes it difficult to study in rigorous detail. Becker, for example, considered eighty-four lone-actor terrorist attacks between 1940 and 2012 for

⁵⁶ Paul Gill, John Horgan, and Paige Deckert, “Bombing Alone: Tracing the Motivations and Antecedent Behaviors of Lone-Actor Terrorists,” *Journal of Forensic Sciences* 59, no. 2 (March 2014): 426, doi: 10.1111/1556-4029.12312.

⁵⁷ Hamm and Spaaij, “Lone Wolf Terrorism in America,” 3.

⁵⁸ Pantucci, Ellis, and Chaplais, *Lone-Actor Terrorism Literature Review*, 4.

his study on target selection.⁵⁹ Becker's dataset included attempted and perpetrated lone-actor terrorist attacks. Within the timeframe included in this study, there was, on average, just over one case of lone-actor terrorism per year.⁶⁰ Spaaij expanded his dataset for the period between 1968 and 2007 to include seventy-four cases of lone-actor terrorism in fifteen countries, with thirty occurring in the United States.⁶¹ However, neither study considered the temporal nature of lone-actor terrorism throughout the decades. Limiting research to shorter timeframes would lead to even less empirical data from which to draw conclusions, but keeping the timeframe broad may obfuscate emerging trends. To address this, Hamm and Spaaij published an additional study in 2015 that included eighty-three cases of lone-actor terrorism in the United States, broken down from 1940 to 2000 (thirty-eight attacks) and 2001 through 2013 (forty-five attacks).⁶²

Expanding the dataset, as both the Becker and Spaaij studies do, to include individuals accused and charged with terrorism has additional methodological problems. After the shift to preventative counterterrorism, the Department of Justice focused on discovering, arresting, and prosecuting prospective terrorists, which has led to an increase of successful terrorism prosecutions. Some studies suggest that at least 62 percent of all successful terrorism prosecutions relied on confidential informants and sting operations.⁶³ Within the Becker study, twelve out of eighty-four attacks, relied on confidential informants.⁶⁴ In certain cases, the informants exert influence on the attack to include preparation, method, target, and possibly even the motivation of the attacker. As such, consideration must be given, as Spaaij and Hamm do, to separate controlled operational cases from lone terrorism not influenced by law enforcement. Because of the success of controlled operations, the use of confidential informants will likely remain a

⁵⁹ Michael Becker, "Explaining Lone Wolf Target Selection in the United States," *Studies in Conflict and Terrorism* 37, no. 11 (August 2014): 960, doi: 10.1080/0157610x.2014.952261.

⁶⁰ While this is true on average, some periods, such as the 1970s, saw a higher density of terrorism, to include lone-actor terrorism.

⁶¹ Spaaij, "Enigma of Lone Wolf Terrorism," 858.

⁶² Hamm and Spaaij, "Lone Wolf Terrorism in America," 4.

⁶³ Barnes, "One-Man Wolf Pack," 1636.

⁶⁴ Spaaij and Hamm, "Key Issues and Research Agendas," 171.

staple of domestic counterterrorism efforts; ensuring an untampered dataset will continue to be a challenge.⁶⁵

D. WHY INDIVIDUALS OPERATE ALONE

Researchers with the National Security Critical Studies Task Force (NSCITF) developed a typology in an effort to understand why terrorists operate alone (see Figure 3).⁶⁶ The topology is based on two key characteristics separating lone-actor terrorists from group-oriented terrorists: ideological autonomy and social competence. Ideological autonomy, representing the x axis of the topology, is the degree to which the lone-actor “assumes the ideology of an existing organization.”⁶⁷ The researchers define social competence as “all the factors within an individual that influence relationship quality and are necessary for recruiting and maintaining supportive close personal relationships.”⁶⁸ This characteristic is largely based on lone-actor terrorists’ higher rate of mental illness and social alienation compared to the general population and group-actor terrorists.⁶⁹

⁶⁵ Barnes, “One-Man Wolf Pack,” 1637.

⁶⁶ Alfaro-Gonzalez et al., *Report: Lone Wolf Terrorism*, 29.

⁶⁷ *Ibid.*, 28.

⁶⁸ *Ibid.*

⁶⁹ Ramón Spaaij, *Understanding Lone Wolf Terrorism: Global Patterns, Motivations and Prevention* (New York: Springer, 2012).

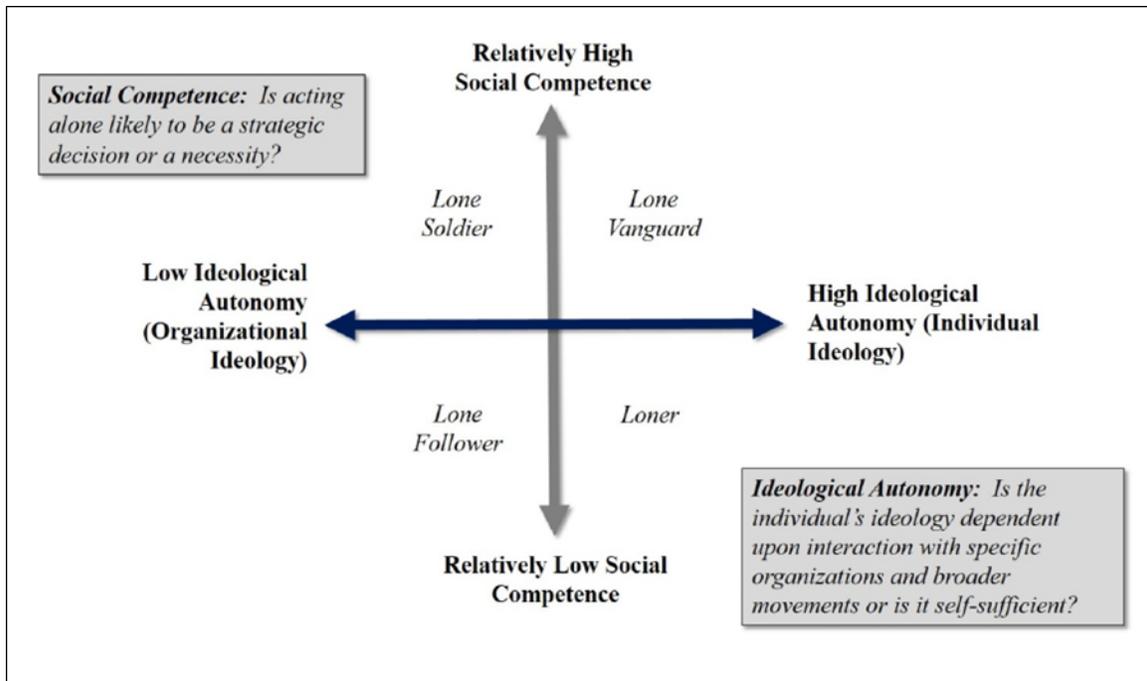


Figure 3. A Topology of Lone Terrorists⁷⁰

The exact role of social competence and social isolation within an individual's pathway to violence is difficult to determine. The NSCITF report agrees that lone actors "may choose to operate alone to improve their operational security and avoid detection," but individuals may also have no choice but to operate alone because they lack social skills.⁷¹ This social inadequacy may indicate the maladjustment or mental illnesses that occur in high rates among lone-actor terrorists.⁷² According to the NSCITF report, mental illness may work in two ways: when individuals suffer from mental illness it increases "the likelihood of extremist ideologies resonating" and, simultaneously, "lead[s] to either failed and rejected attempts to join a group, or a tendency to avoid social interaction all together."⁷³ Generally, the psychopathologies suffered by lone-actor terrorists do not significantly reduce the perpetrator's ability to carry out an attack.⁷⁴ The

⁷⁰ Source: Alfaro-Gonzalez et al., *Report: Lone Wolf Terrorism*, 29.

⁷¹ *Ibid.*, 28.

⁷² Horgan et al., "Across the Universe," 23.

⁷³ Alfaro-Gonzalez et al., *Report: Lone Wolf Terrorism*, 20.

⁷⁴ *Ibid.*, 23.

Task Force report did conclude that social inadequacy is necessary to explain lone-actor terrorists.⁷⁵

In many cases of lone-actor violence, it is difficult to judge the degree of ideological autonomy. Most lone-actor terrorists tend to mix ideology with personal grievances.⁷⁶ Hamm and Spaaij found 80 percent of lone terrorists held both personal and political grievances. The two researchers believe this is a signature difference compared to group terrorists, who share a collective grievance.⁷⁷ Ideological autonomy usually correlates to a lone-actor's grievances and the degree of ideological autonomy may impact the execution of a violent act. Individuals with greater independence from established terrorist groups are generally more likely to "rely on firearms, target multiple victims and engage in suicide missions."⁷⁸

Further explaining the Task Force topology for lone-actor behavior, individuals with high social competence and low ideological autonomy (*lone soldiers*) may choose to operate alone for strategic purposes such as operational security.⁷⁹ Lone soldiers are examples of tactical adaptations of existing terrorist networks mentioned earlier in this chapter. Individuals with high social competence and high ideological autonomy (*lone vanguards*) chose to act alone to advance an individual ideology not represented by an organized terrorist network.⁸⁰ Individuals with low social competence and high ideological autonomy (*loners*) believe in a unique individual ideology but also may lack the social skills necessary to attract others to their cause.⁸¹ Likewise, individuals with low social competence and low ideological autonomy (*lone followers*) lack the social skills to gain acceptance into a group.⁸² Low social competence, especially in the loner and lone follower categories, highlights the role of mental health in lone-actor terrorism.

⁷⁵ Ibid.

⁷⁶ Ibid.

⁷⁷ Hamm and Spaaij, "Lone Wolf Terrorism in America," 8.

⁷⁸ Capellan, "Terrorist or Deranged Shooter," 398.

⁷⁹ Alfaro-Gonzalez et al., *Report: Lone Wolf Terrorism*, 29.

⁸⁰ Ibid., 30.

⁸¹ Ibid., 31.

⁸² Ibid.

E. LONE-ACTOR RADICALIZATION

Terrorism is commonly seen as a collective activity. Many researchers focus on collective identity and group dynamics to explain pathways to terrorism.⁸³ Absent the collective or group influence, how can we explain radicalization of lone-actor terrorists? Hamm and Spaaij point out that virtually all lone actors demonstrate a sympathy or affinity with “some person, community, or group, be it online or in the real world.”⁸⁴ Most lone terrorists do not self-radicalize without some sort of group dynamic, indicating the process may be very similar to that of group-based terrorists. While this may be true for individuals who share an organizational ideology, it may not hold true for individuals with unique, and highly personal, ideologies.

Horgan, in his analysis of radicalization and violence, explains there is no single pathway to violence. The motivators to embrace an ideology may be completely different from those that drive an individual to violence.⁸⁵ In the case of lone-actor terrorism, however, the proclivity for violence may already be part of the individual’s psyche and a triggering event may serve as the impetus for violent action.⁸⁶ The radical ideology simply disinhibits an individual to commit violent acts and may provide a justification for the violence. An individual prone to violence may not be any more or less attracted to a radical ideology than a non-violent person. When a violent person is also a believer, however, it does indicate possible future violence in the name of the radical views.

Ultimately, it is difficult to study lone-actor radicalization because it is impossible to build a single profile of a lone-actor terrorist. That being said, certain demographic factors do appear more prevalent than others. Researchers Gill, Horgan, and Deckert studied the motivations of 119 individuals who perpetrated, or considered perpetrating, lone-actor terrorism. They found that the majority were male (96.6 percent), over the age of 30 (70 percent), unemployed (40.2 percent), had criminal convictions (41.2 percent),

⁸³ Spaaij, “Enigma of Lone Wolf Terrorism,” 855.

⁸⁴ Hamm and Spaaij, “Lone Wolf Terrorism in America,” 11.

⁸⁵ John Horgan, “From Profiles to Pathways and Roots to Routes: Perspectives from Psychology on Radicalization into Terrorism,” *The ANNALS of the American Academy of Political and Social Science* 618, no. 1 (July 1, 2008): 85, doi: 10.1177/0002716208317539.

⁸⁶ Alfaro-Gonzalez et al., *Report: Lone Wolf Terrorism*, 21.

and had a history of mental illness (31.9 percent), and that others were aware of the perpetrators' commitment to violent acts (63.9 percent). Ultimately, the researchers concluded there are no single set of behaviors that are necessary for lone-actor terrorism and the events emerge from a gradual series of behaviors.⁸⁷ Hamm and Spaaij, in their 2015 study, provided some recently emerging general trends in lone-actor terrorism. Post-9/11 lone terrorists expanded weapon selection to include “not only firearms and bombs but also airplanes, biological weapons, knives and construction equipment.”⁸⁸ Most post-9/11 lone terrorists have only committed one attack as opposed to the multiple attacks from one perpetrator witnessed before 9/11.⁸⁹ The most significant change in post-9/11 lone-actor terrorism may be “the targeting of uniformed police and military officers”; the number of law enforcement personnel killed in the first thirteen years following 9/11 was twice that of the sixty preceding years.⁹⁰ The trends are helpful in understanding lone-actor terrorism but the numbers do little to further our understanding of its underpinnings.

F. TERRORISM AS A SUBSET OF GRIEVANCE-FUELED VIOLENCE

Recent research compares lone-actor terrorism to other categories of lone-actor grievance-fueled violence such as school shootings, mass murders, workplace violence, and lone assassin attacks. The comparisons show promise; the many similarities among all forms of lone-actor violence increases the dataset of otherwise thankfully rare events.

McCauley, Moskalenko, and Van Son were some of the first modern researchers to compare two seemingly disparate forms of lone-actor violence assailants: school attackers and assassins.⁹¹ The researchers compared existing data of forty-one school attackers from 1972–2000 to eighty-three assassins from 1949–1999. Both school attackers (78 percent) and assassins (44 percent) had a high rate of psychopathology, to include depression, despair, or suicidal ideations. School attackers and assassins also

⁸⁷ Gill, Horgan, and Deckert, “Bombing Alone,” 434.

⁸⁸ Hamm and Spaaij, “Lone Wolf Terrorism in America,” 4.

⁸⁹ *Ibid.*, 5.

⁹⁰ *Ibid.*

⁹¹ McCauley, Moskalenko, and Van Son, “Characteristics of Lone-Wolf Violent Offenders.”

shared high levels of grievances (81 percent and 67 percent), personal crises that might make a person receptive to violent thought or action (98 percent for school attackers and around 50 percent for assassins), history of weapon use outside the military (71 percent and 63 percent), as well as a history of interest in violence (59 percent and 44 percent).⁹² Current lone-actor terrorist research indicates similar levels of mental health issues, grievances, and personal crises, supporting the hypothesis that lone-actor terrorism, in many ways, is similar to other types of grievance-fueled violence.⁹³

In 2013, Lankford compared suicide terrorists to other types of rampage, school, and workplace shooters. He found very little difference in the underlying social and psychological processes, but the attackers did use different execution methods, indicating ideological influence on how the violence is carried out.⁹⁴ Capellan furthered lone-actor violence research by studying 40 ideological and 242 non-ideological active shooter cases between 1970 and June 2014. Of the total, more than half of the cases (160) took place in the last ten years. Both types of shooters “tend to be white males in their '30s, with rather dysfunctional adult lives. They tend to be single/divorced, unemployed, have low levels of education, and suffer from mental illness.”⁹⁵ As Capellan states, the similarities indicate lone-actor terrorists and deranged shooters “are but part of a larger phenomenon of lone-actor grievance-fueled violence.”⁹⁶

Horgan et al. compared 71 lone-actor terrorists and 115 solo mass murderers from 1990–2013. The researchers noted both offender types are very similar in terms of demographics and behavior but do differ in certain elements.⁹⁷ The researchers postulated identifying differing characteristics that might be useful for developing offender-specific intervention policies, targeted treatment policies, and risk assessments, and might “help with our understanding of who takes part in particular violent

⁹² Ibid., 14.

⁹³ Horgan et al., “Across the Universe,” 5–6.

⁹⁴ Adam Lankford, “A Comparative Analysis of Suicide Terrorists and Rampage, Workplace, and School Shooter in the United States from 1990 to 2010,” *Homicide Studies* 17, no. 1(2013): 265.

⁹⁵ Capellan, “Terrorist or Deranged Shooter,” 407.

⁹⁶ Ibid.

⁹⁷ Horgan et al., “Across the Universe,” 11.

offenses.”⁹⁸ Key differences included lone terrorists are more likely to attempt to recruit others, more likely to interact virtually with members of a larger network, and more likely to produce public statements and letters prior to the attack. The researchers also found “lone-actor terrorists were significantly more likely to have university experience, military experience, combat experience, criminal convictions, experience a tipping point in their pathway to violent extremism, change address prior to their attack, live alone, be socially isolated, engage in dry runs, demonstrate that their anger is escalating and possess a stockpile of weapons.”⁹⁹ Also noteworthy, lone terrorists were “significantly more likely to verbalize intent to commit violence to friends/family/wider audience, have others aware of their grievance, express a desire to hurt others, have others involved in procuring weaponry and have others aware of their attack planning.”¹⁰⁰

Horgan et al. also attempted to identify emerging trends by dividing and analyzing their data within two time periods, 1990–2005 and 2006–2013. The two groups were split based on the dramatic increase in attacks per year starting in 2006; 1990–2005 averaged 5 per year and 2006–2013 averaged 12.75 per year.¹⁰¹ The researchers identified very few behaviors that might be responsible for the uptick of solo violence in the later period. They did note that more recent offenders are less likely to have military experience, more likely to have been imprisoned, less likely to verbalize intent, more likely to target indiscriminately, and more likely to use the internet in their attack planning.¹⁰²

⁹⁸ Ibid., 11.

⁹⁹ Ibid., 18.

¹⁰⁰ Ibid.

¹⁰¹ Ibid., 48.

¹⁰² Ibid., 49.

G. CONCLUSION

Lone-actor terrorism is a complex issue that does not lend itself to easy solutions. Added to the fact that no standard profile exists for a lone-actor terrorist, the complex physiological dynamics make understanding lone-actor terrorism especially difficult.¹⁰³ Research is hindered by definitional issues and small datasets that have contributed to methodological differences, which make comparisons of existing research problematic. However, useful topologies do exist to explain the various types of lone-actor terrorists.

Much of the existing research surrounding lone-actor terrorist behavior draws upon organizational-based terrorism research. Recent efforts have taken a different approach and begun to examine the commonalities between lone-actor terrorism and other types of lone-actor grievance-fueled violence. Along this line of research, this thesis will seek to isolate the defining characteristic that separates lone-actor terrorism from other forms of lone-actor violence to consider how such a distinction can further guide our understanding of lone terrorism and the impact on possible prevention methods.

¹⁰³ Hamm and Spaaij, "Lone Wolf Terrorism in America," 6.

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III. ANALYTICAL DIMENSION OF LONE-ACTOR VIOLENCE

Many people view lone-actor terrorism as simply an adaptation of networked terrorism. Some terrorist organizations, most notably white supremacist and jihadist groups, encourage leaderless resistance through propaganda efforts when effective law enforcement prevents homegrown terrorism. This tactical adaptation is designed to exploit perceived vulnerabilities in our counterterrorism efforts.¹⁰⁴ The adaptation has been effective; from 2006 to 2014, the United States had the highest number of lone-actor attacks (forty-two), followed by the United Kingdom (twenty).¹⁰⁵

To understand lone-actor terrorism as a tactical evolution, we need look no further than the counterterrorism tools in use to disrupt terrorist plots after 9/11. Immediately following the 9/11 attacks, the attitude toward domestic terrorism changed from response to prevention at any cost. As a result, government officials demanded disruption of terrorist plots as early as possible.¹⁰⁶ The new emphasis on prevention led to new tools and powers for federal and state law enforcement in the war on terrorism. These new powers included the use of confidential informants to gather information and prevent terrorist plots, the use of community engagement to preempt radicalization, denial of means to specialized knowledge or potential weapons, physical security to deter would-be attackers, and a variety of new prosecutorial authorities to ensure a strong message was sent to individuals contemplating violence.¹⁰⁷

Many of these tools are not effective against lone-actor terrorism. Lone-actors are much more difficult to detect, often avoiding unnecessary contact or discussion to further operational security. Many lone terrorists use whatever weapon is available and attack soft targets. Likewise, prosecutorial tools mean little to a lone-actor terrorist, especially

¹⁰⁴ Barnes, "One-Man Wolf Pack," 1649.

¹⁰⁵ IEP, *Global Terrorism Index 2015*, 54.

¹⁰⁶ Barnes, "One-Man Wolf Pack," 1632.

¹⁰⁷ *Ibid.*, 1634–40.

one who is willing to die for a cause. This leaves our law enforcement at a distinct disadvantage.¹⁰⁸

Equally concerning, Hamm and Spaaij propose that lone-actor terrorists are becoming increasingly independent from holding beliefs in accordance with a clearly defined terrorist network.¹⁰⁹ Terrorist networks will continue to have less central control and lone terrorists could attack in creative ways not explicitly sanctioned by any organization. This high ideological autonomy provides further justification for researching lone-actor terrorism independent of organizational terrorism.

Lone-actor terrorism as a tactical adaptation of terrorist networks cannot explain all manifestations of this violence. A second category of lone-actor terrorists may be considered individuals that are unable to operate with a group. The loner and lone follower, using the topology developed by NSCITF, have no choice but to operate alone and would do so even in a more permissible environment.¹¹⁰ The final category of lone-actor terrorists, lone vanguards, may have ideological beliefs that do not readily align with any existing extremist organization. Their decision to operate alone (or in small groups if they have the social competence to convince others to join their cause) is again due to a lack of alternatives. How we understand these different types of lone-actor terrorists has implications for policy and prevention.

A. DIMENSIONS OF LONE-ACTOR TERRORISM

This thesis asked the question: How can we prevent lone-actor terrorism? Understanding how motivation drives a lone-actor's violence is one way to determine effective prevention policies. This thesis builds off the 2012 work of Borum, Fein, and Vossekuil, in which the researchers proposed a dimensional approach to studying lone-actor terrorism (shown in Figure 4). By examining the features of terrorism cases, instead of the categories, they proposed a continuum to help researchers and policymakers understand lone-actor terrorism. Within this continuum, the researchers identified three

¹⁰⁸ Ibid., 1615.

¹⁰⁹ Hamm and Spaaij, "Lone Wolf Terrorism in America," 11.

¹¹⁰ Alfaro-Gonzalez et al., *Report: Lone Wolf Terrorism*, 23.

distinct characteristics of importance: loneness, direction, and motivation. Loneness is “the extent to which the offender/attacker initiated, planned, prepared for and executed the attack without assistance from any other person.”¹¹¹ The researchers argue that the degree of loneness can affect an offender’s pre-attack activities and planning efforts. Direction is “the nature and extent of the attacker’s independence and autonomy in all decisions across the spectrum of attack.”¹¹² The researchers believe the level of autonomy directly influences where and how the attack will occur. The third dimension, motivation, is what drives a person to attack.

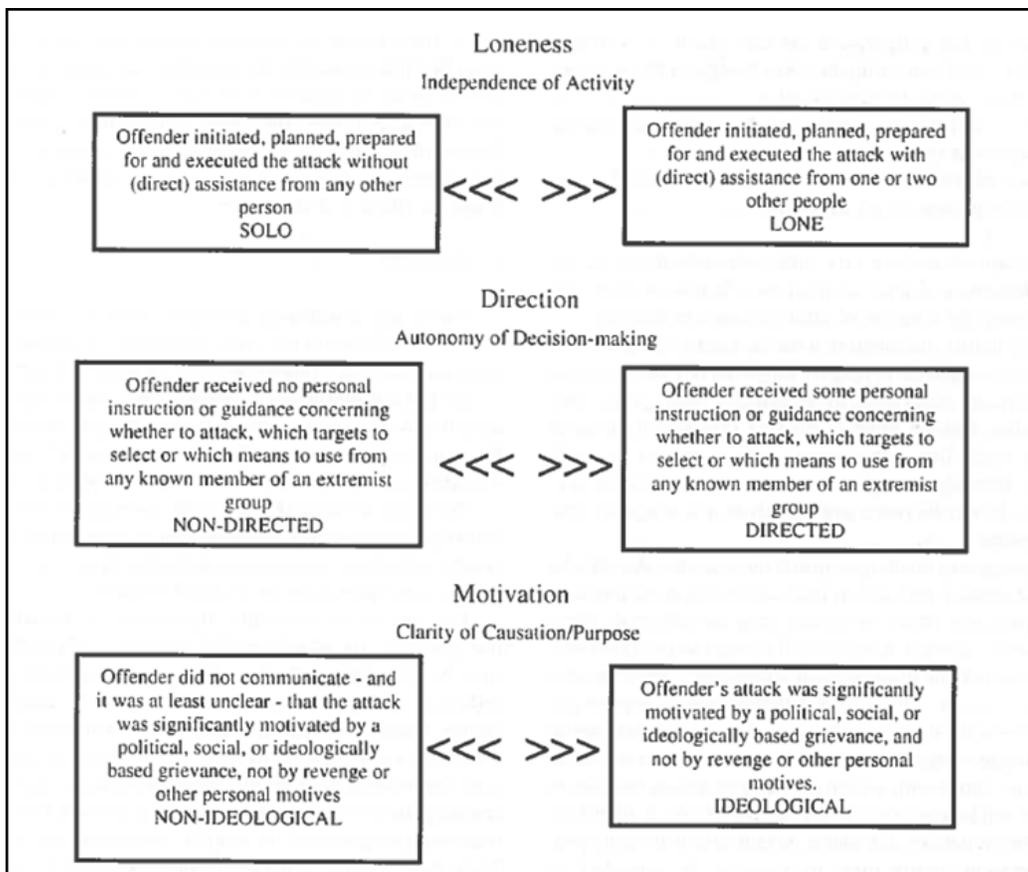


Figure 4. Dimensions of Lone Offender Terrorism¹¹³

¹¹¹ Borum, Fein, and Vossekuil, “Dimensional Approach,” 393.

¹¹² Ibid., 394.

¹¹³ Source: Borum, Fein, and Vossekuil, “Dimensional Approach,” 393.

The framework developed in this thesis isolates and focuses on only one of the three dimensions: motivation. Borum, Fein, and Vossekuil point out motivation is, arguably, what separates “lone offender terrorism from the much wider span of mass murders, spree killings, and assassinations.”¹¹⁴ By isolating motivation, one can consider lone-actor terrorism in relation to other forms of grievance-fueled violence.

The intent of this thesis is not to dismiss the importance of liveness and direction. These two elements are essential to understanding lone-actor terrorism in relation to networked terrorism. However, the focus of this thesis is to understand the separation of lone-actor terrorism from other forms of violence. Horgan et al., in their study of 115 mass murderers and 71 lone-actor terrorists from 1990 to 2013, also recognized motivation as the “fundamental distinction between the two groups.”¹¹⁵ In many cases, much of the violence of lone terrorists and mass murderers appears indistinguishable. Recognizing and focusing on the dimension of motivation provides conceptual clarity and an alternative framework for policymakers to consider the challenge of preventing lone-actor terrorism.

This thesis uses a case study methodology to inductively build on the framework of motivation. On one end of the spectrum is the case of Abdulhakim Mujahid Muhammad, an offender for whom “the attack is motivated solely by a political, social, or ideologically based grievance, with neither revenge nor any other personal motive being a significant factor.”¹¹⁶ The other end of the motivation spectrum is represented by the case of Jared Lee Loughner, an individual who may be motivated, solely or in large part, by “revenge or some other personal motive.”¹¹⁷ Such a study represents the divergent motivation of lone-actor terrorism, as shown in Figure 5. The cases are necessarily imperfect and merely meant to serve as a framework to consider the motivational distinctions of lone-actor terrorists and help homeland security professionals understand the public and mental health implications of the lone actor. Additionally, it is

¹¹⁴ Ibid., 395.

¹¹⁵ Horgan et al., “Across the Universe,” 4.

¹¹⁶ Borum, Fein, and Vossekuil, “Dimensional Approach,” 395.

¹¹⁷ Ibid.

a method researchers and policymakers can use to better understand the relationship between lone-actor terrorism and other forms of grievance-fueled violence such as mass murder.

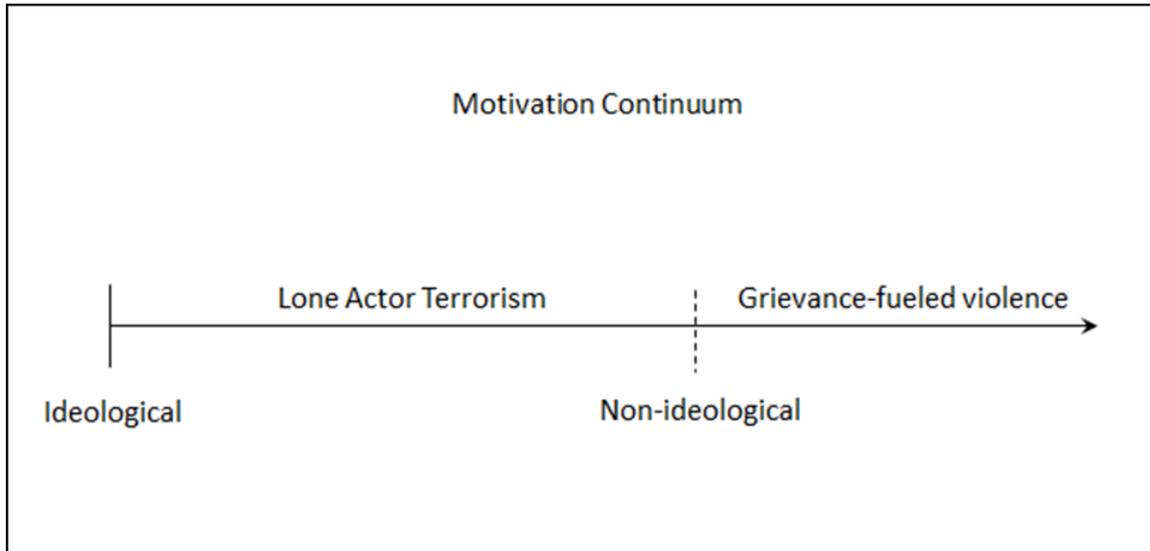


Figure 5. Motivation Dimension of Lone-Actor Terrorism

As illustrated in Figure 5, motivation is the defining characteristic that separates lone-actor terrorism from other forms of grievance-fueled violence. The separation between lone-actor terrorism and grievance-fueled violence, represented by the dashed line, is highly subjective. A case that is closer to the other end of the spectrum (ideologically motivated), however, does not necessarily imply proximity to networked or homegrown terrorism. Terrorist groups continue to influence individuals to commit violence along any point of the spectrum. The true motivations of the perpetrator are irrelevant to many groups that espouse violent rhetoric or take credit for lone-actor attacks. Many lone offenders who “engage in terrorism or mass murder are not driven primarily by deep ideological beliefs.”¹¹⁸ Likewise, individuals can have deep ideologically beliefs and yet not have the social competence or share a collective ideology that would bring them any closer to terrorism networks.

¹¹⁸ Randy Borum, “Informing Lone-Offender Investigations: Loner Attacks and Domestic Extremism,” *Criminology & Public Policy* 12, no. 1 (February 2013): 108, doi:10.1111/1745-9133.12016.

The two case studies were selected to serve as archetypes for the two extremes of the dimension. The cases were studied in the conceptual framework of situational crime prevention and routine activity theory to better illuminate the motivations of successful lone-actor terrorist events. In keeping with the framework outlined by Horgan et al., the case studies were broken into four stages: (a) decision and search activity, (b) preparation stage, (c) event execution stage, and (d) post-event activity.¹¹⁹ To the extent possible, the influences of motivational factors in each of the phases were emphasized. The decision and search activity phase focuses on when the individual may have moved from radical thought to a willingness to take violent action by examining the possible influences of an individual's decision to conduct an attack. The preparation stage focuses on possible motivations and how they might address the "operational, logistical, and organizational issues" of the attack.¹²⁰ The event execution stage reviews motivational factors concerning how the attack was perpetrated, such as timing, public statements, and modifications to the attack. The final stage, post-event activity, considers how the terrorist intended to end the attack.¹²¹ As Horgan et al. state, studying motivation in each of the phases may help explain the true motivations of the perpetrator and "it may be possible to formulate phase-specific intervention strategies that seek to deter and disrupt future lone-actor terrorist plots."¹²²

In addition to Horgan et al.'s framework, this thesis considers the possibility that some current lone terrorism may be better understood in the context of grievance-fueled violence. What moves an individual to become a lone terrorist may share similar underpinnings with individuals who are moved to become active shooters, mass murderers, or even perpetrators of workplace violence. By expanding and considering the available dataset to include other examples of lone-actor violence, researchers may be able to better understand some of the unique aspects of lone-actor terrorism, which may ultimately lead to improved prevention.

¹¹⁹ Horgan et al., "Across the Universe," 54.

¹²⁰ Ibid.

¹²¹ Ibid., 55.

¹²² Ibid., 53.

B. LIMITATIONS

Ascertaining motivation is “possibly the most difficult of the three dimensions to discern.”¹²³ As Spaaij notes, “Assigning purposes and motivations to individual acts of terror is inherently subjective and open to interpretation.”¹²⁴ Lone-actor terrorists usually act “from a complex mix of personal and principled ideas tangled in web of emotions and beliefs.”¹²⁵ As such, it can be difficult to assign clear-cut motives for lone-actor terrorist acts. Ultimately, however, such an effort could be worthwhile to better discern the complexities surrounding lone-actor terrorism.

Borum, Fein, and Vossekui point out two specific challenges that make motivational analysis difficult. First, the offender’s stated motivation may not correspond to his or her actual motivation.¹²⁶ Second, the higher rate of mental illness among lone offenders, as compared to networked terrorists, may also make attribution more complicated. “Mental Illness is not necessarily a ‘master motivation,’ nor does it automatically suggest a greater or lesser hazard.”¹²⁷ It does, however, make it harder to determine what role, if any, mental illness may have contributed to the violence. By focusing on Horgan’s four stages, this thesis attempts to ascertain explicit motivation but also inferred motivation, based on indicators such as target selection, event execution, and other indicators of personal or ideological grievances.

The data used for this research are publicly available and largely based on two case studies compiled by the National Threat Assessment Center (NTAC). The U.S. Secret Service established the NTAC in 1998 to conduct research and provide guidance on the threat assessment process. The advantage of using NTAC reporting is access to Secret Service data that would not otherwise be available to the general public. Additionally, a qualitative approach based on the two case studies may overcome the difficulty in ascertaining the attacker’s motivation by considering motivational indicators

¹²³ Ibid., 395.

¹²⁴ Spaaij, “Enigma of Lone Wolf Terrorism,” 857.

¹²⁵ Borum, Fein, and Vossekui, “Dimensional Approach,” 395.

¹²⁶ Ibid.

¹²⁷ Ibid.

in addition to verbalized grievances. Finally, the focus on two successful post-9/11 lone-actor attacks removes much of the bias inherent in the controversial sting operations the FBI relies on to catch potential lone-actor terrorists.

C. CASE STUDIES

1. Abdulhakim Mujahid Muhammad

On June 1, 2009, Abdulhakim Mujahid Muhammad, formerly Carlos Leon Bledsoe, shot and killed U.S. Army Private William Long and wounded U.S. Army Private Quinton Ezeagwula outside of the Army-Navy Recruiting Center in Little Rock, Arkansas.¹²⁸ The case of Abdulhakim Mujahid Muhammad provides an example of a lone-actor terrorist greatly motivated by an ideologically based grievance.

a. Decision and Search Activity

Muhammad was raised by a middle-class Baptist family in Memphis, Tennessee. Throughout his school years he had various behavioral problems and multiple contacts with law enforcement. While in high school, Muhammad was allegedly a member of a gang and had experienced a number of suspensions due to fighting.¹²⁹ In the summer of 2003, after graduation from high school, Muhammad was involved in a traffic accident in which he threatened to kill the driver of the other vehicle.¹³⁰ On February 21, 2004, during Muhammad's freshman year in college, law enforcement discovered drugs, a loaded SKS rifle, two shotguns, and a switchblade knife in the car Muhammad was riding in. Muhammad claimed ownership of the weapons and faced a lengthy prison sentence but the charges were dismissed and expunged in June 2004.¹³¹

The 2004 arrest may have spurred Muhammad to turn his life around. In December 2004 he converted to Islam and stopped drinking and smoking marijuana.

¹²⁸ National Threat Assessment Center, "Investigating Ideological Inspired Violent Extremists: Local Partners Are an Asset: A Case Study on Abdulhakim Mujahid Muhammad," U.S. Secret Service, December 2015, https://www.secretservice.gov/data/protection/ntac/Abdulhakim_Muhammad_Using_Local_Assets.pdf.

¹²⁹ Horgan et al., "Across the Universe," 68.

¹³⁰ National Threat Assessment Center, "Abdulhakim Mujahid Muhammad," 4.

¹³¹ Ibid.

Over the next year, Muhammad displayed several signs of his commitment to Islam. During a 2005 visit to his parents' home, he took down all his posters of Dr. Martin Luther King, Jr., explaining to his parents that Islam did not allow glorification of idols other than Allah. Muhammad stopped playing basketball and listening to rap music, and set his dog loose because of the Muslim belief that dogs are unclean. Muhammad also became argumentative with his brother-in-law when discussing religion and unsuccessfully attempted to convert family members to Islam.¹³²

In September 2007 Muhammad moved from Nashville, Tennessee to Aden, Yemen, ostensibly to teach English at the British Academy. Muhammad's sister was concerned that he might get involved in radical activities but Muhammad dismissed the idea, claiming he was not a violent person. Muhammad's letters to his sister became increasingly religious and he continued to attempt to convert her to Islam. It appears Muhammad's interest in violent extremism was nurtured by the contacts he made in Yemen. He continued to be angered by news reports about the treatment of Muslims by U.S. soldiers. On November 14, 2008, officials arrested Muhammad for using a fake passport while attempting to travel to Somalia. Muhammad had manuals in his possession on how to construct explosives and homemade silencers as well as videos of militants. An FBI agent travelled from the Nashville Field Office to Yemen to interview Muhammad. Approximately two weeks after his arrest in Yemen, Muhammad's parents contacted their congressional representative, which eventually led to Muhammad's return Muhammad to the United States on January 29, 2009. Muhammad eventually settled in Little Rock, Arkansas, to oversee a branch of his father's business.¹³³

b. Preparation Stage

Muhammad likely initiated his plan for a violent attack against a U.S. target shortly after his resettlement in Little Rock. Because of his limited budget and his refusal to use credit in adherence to Islam's prohibition, it took Muhammad some time to purchase guns and stockpile ammunition. In early May 2009, Muhammad purchased a

¹³² Ibid., 5.

¹³³ Ibid., 6.

.22 rifle with a laser sight from a retail store. He would later claim the purchase was a test to see if he was under surveillance.¹³⁴ A week later, he purchased a semiautomatic handgun through a personal posting in a newspaper. He also purchased a Russian-made semiautomatic rifle secondhand from another individual. Muhammad was concerned the FBI was monitoring his activity and believed buying used weapons would decrease his chance of detection.¹³⁵

Around the same time he acquired the weapons, Muhammad began to plan the details of his attack by conducting target identification research online. He settled on a plan to assassinate Jewish targets and attack military recruiting centers in the Southeast, mid-Atlantic, and Northeast areas of the United States. On May 28, 2009, Muhammad posted a video discussing his plans to attack Jewish and military targets in retaliation for Americans' actions against Muslims.¹³⁶ The night before Muhammad began attacks, which culminated in the killing of U.S. Army Private Long, he watched jihadist videos online.¹³⁷

c. Event Execution Stage

On the night of May 29, 2009, Muhammad began a three-day rampage engaging in six failed attempts to attack Jewish and military targets. Muhammad approached the home of a rabbi in Little Rock and fired ten shots from the .22 rifle before driving away. He then drove 135 miles to Memphis, Tennessee, and approached the home of a second rabbi around 3:00 a.m. Muhammad left without attacking because he was worried about being reported by the neighbors. On May 31, 2009, Muhammad drove to Nashville where he left the home of a third rabbi without incident. He then drove to a Jewish community center and left without attacking due the presence of children and the location not affording an easy getaway. Muhammad then drove 260 miles to Florence, Kentucky, to discover the military recruiting center he had targeted was closed. Muhammad then drove

¹³⁴ Horgan et al., "Across the Universe," 69.

¹³⁵ The same FBI agent who spoke with Muhammad in Yemen interviewed him again shortly after his return to the United States National Threat Assessment Center, "Abdulahkim Mujahid Muhammad," 6.

¹³⁶ *Ibid.*, 7.

¹³⁷ Horgan et al., "Across the Universe," 70.

215 miles back to Nashville to throw a Molotov cocktail at the home of his sixth target at around 2:00 a.m. The explosive bounced off the window without causing any damage.¹³⁸

After these failed attempts, Muhammad felt discouraged and decided to drive the 350 miles back to Little Rock. Approximately three miles from his apartment, Muhammad saw Private Long and Private Ezeagwula wearing U.S. Army fatigues and smoking outside the Army-Navy Career Center. At 10:19 a.m. on June 1, 2009, Muhammad drove up and fired fifteen shots at the two soldiers, killing Private Long and seriously injuring Private Ezeagwula.¹³⁹

d. Post-event Activity

Muhammad attempted to flee the scene but was pulled over approximately twelve minutes after the attack. Among weapons discovered in Muhammad's truck, arresting officers also found medicine and a plastic tub containing non-perishable food, water, and a butane lighter. On July 25, 2011, Muhammad pleaded guilty to, among other offenses, capital murder resulting in twelve life sentences without parole.¹⁴⁰ As justification for his actions, Muhammad later stated, "There's an all out war against Islam and Muslims in Afghanistan, Pakistan, Waziristan, Chechnya, Somalia, Palestine, Philippines, Yemen etc. And Muslims have to fight back."¹⁴¹

Muhammad's violence has continued in prison. On one occasion he stabbed a prison guard and, on another, stabbed a fellow inmate. He is responsible for a number of threats against his guards and has vandalized his cell on numerous occasions.¹⁴²

e. Summary

The case of Abdulhakim Mujahid Muhammad demonstrates the motivation of a violent ideology. Muhammad appears to clearly represent lone-actor terrorism as a

¹³⁸ National Threat Assessment Center, "Abdulhakim Mujahid Muhammad," 7.

¹³⁹ Ibid.

¹⁴⁰ Ibid., 8.

¹⁴¹ Horgan et al., "Across the Universe," 68.

¹⁴² Ibid., 70.

tactical adaptation of networked terrorism. Muhammad's violent radicalization likely occurred while he was travelling to Yemen, and largely drove his target selection. Like other lone-actor terrorists, Muhammad was a convert to Islam. He also displayed violent tendencies prior to the attack and was familiar with the weapon which likely guided the attack execution. Horgan et al. identify several key traits of lone-actor terrorists that Muhammad exhibited. Muhammad made a public statement prior to the attack (an action shared with 60 percent of lone terrorists), had previous criminal convictions (57.5 percent), and lived alone (44 percent).¹⁴³ Illustrating the difficulty of profiling lone-actor terrorists, however, Muhammad did not show any signs of mental illness and appeared to have a loving, supportive family and a stable job managing his father's Little Rock tour bus company branch.

2. Jared Lee Loughner

On January 8, 2011, Jared Lee Loughner shot and injured U.S. Representative Gabrielle Giffords in Tucson, Arizona. Loughner killed six people in the attack and injured twelve others.¹⁴⁴ In the years prior to the attack, Loughner exhibited symptoms of mental illness. His motivation for the attack appeared to be a combination of conspiracy concerns (driven by his illness coupled with a personal dislike for the target), concerns about his inability to find long-term employment or stay enrolled in school, and a search for meaning in his life.

Loughner's case demonstrates the critical role of subjectivity in labeling an event as terrorism or some other form of grievance-fueled violence such as mass murder. Researchers such as Hamm and Spaaij list Loughner as a lone-actor terrorist but the START Global Terrorism Database, along with most U.S. federal agencies, do not categorize Loughner's attack as terrorism.¹⁴⁵ Certainly it meets the definition for this

¹⁴³ Ibid., 17.

¹⁴⁴ National Threat Assessment Center, "Using a Systems Approach for Threat Assessment Investigations: A Case Study on Jared Lee Loughner," U.S. Secret Service, December 2015, https://www.secretservice.gov/data/protection/ntac/Jared_Loughner_Using_Systems.pdf.

¹⁴⁵ National Consortium for the Study of Terrorism and Responses to Terrorism (START), "Global Terrorism Database" [Data file], University of Maryland, accessed January 19, 2017, <https://www.start.umd.edu/gtd/search/>.

thesis of “political violence perpetrated by individuals who act alone.” The inability to adhere to a standard method of classification highlights a major discrepancy in which some individuals, especially those with mental health issues, are labeled lone-actor terrorists and others with similar complex motivations are labeled mass murderers.

a. Decision and Search Activity

Loughner had an early history of drug abuse, which may have contributed to his dropping out of high school in Tucson at the end of his junior year. In the summer of 2006.¹⁴⁶ In addition, he had a tendency to become overly augmentative with those who disagreed with him and frequently spoke about his dislike of the government and its cover-up of an unspecified conspiracy. After leaving high school, Loughner enrolled in a program through Aztec Middle College to earn his diploma and transition to Pima Community College. Around this time, Loughner allegedly began taking hallucinogenic drugs and had difficulty holding down a steady job.¹⁴⁷

In 2007 Loughner attended a political event hosted by U.S. Representative Giffords in Tucson. Loughner posed bizarre questions to Giffords and was unhappy with the resulting interaction. Loughner came to dislike her, referring to Giffords as “fake” and “unintelligent” to his friends.¹⁴⁸

In 2008 Loughner started to display indicators of mental illness.¹⁴⁹ He reportedly began to hear voices and started to drift away from his close friends from middle and high school. Throughout 2009 and 2010, Loughner displayed bizarre and concerning behavior while taking classes at Pima Community College, resulting in his suspension from the school in October 2010. Much of his behavior centered on his anger toward government and authority, believing his numerous confrontations with school administrators were part of a larger conspiracy. Loughner’s parents were concerned about

¹⁴⁶ National Threat Assessment Center, “Jared Lee Loughner,” 5.

¹⁴⁷ *Ibid.*

¹⁴⁸ *Ibid.*

¹⁴⁹ *Ibid.*, 6.

the effects of illicit drugs on their son’s behavior and asked him to undergo a drug test; the results came back negative.¹⁵⁰

Approximately thirty days after his suspension in November 2010, Loughner bought a handgun from a retail store.¹⁵¹ He continued to exhibit concerning behavior and made those around him feel uncomfortable. During this same time he also appeared desperate to be around people. Loughner called his few remaining friends frequently, showed up at their homes uninvited, and often offered to pick up the tab when Loughner and his friends went out as a way to spend more time with them.¹⁵²

Loughner’s online behavior was equally concerning. His online postings escalated as he vented about his inability to obtain and maintain employment. On January 13, 2010, in an apparent cry for help, Loughner posted that he was contemplating suicide “again.”¹⁵³ A plea for companionship also appeared on December 13, 2010, when Loughner posted a question as to why no one was talking to him.¹⁵⁴

b. Preparation Stage

Loughner appears to have made the decision to assassinate U.S. Representative Giffords sometime in December 2010. During this time, his social media site had concerning posts and videos including references to violence against Giffords and threats toward law enforcement.¹⁵⁵ In late December 2010, Loughner was reportedly practicing with his handgun. In early January 2011, Loughner conducted online research about political assassins and punishments for assassinating a public figure. On January 7, 2011, one day before the attack, Loughner likely conducted surveillance of the target site by visiting a retail store next to the location where a political event featuring Giffords was slated to occur the following morning.¹⁵⁶

¹⁵⁰ Ibid.

¹⁵¹ Ibid., 10.

¹⁵² Ibid., 6.

¹⁵³ Ibid., 11.

¹⁵⁴ Ibid., 12.

¹⁵⁵ Ibid.

¹⁵⁶ Ibid.

c. Event Execution Stage

On the morning of January 8, 2011, Loughner wrote a final message on his social media site in which he stated, “Goodbye.”¹⁵⁷ He then took a taxi to the location of Giffords’s public event. Loughner approached a member of Giffords staff and confirmed the identity of the congresswoman. At 10:12 a.m. Loughner walked to the front of the line where Giffords was meeting constituents and shot her. He then began firing at the crowd, killing six people and injuring twelve others. Bystanders subdued Loughner when his weapon malfunctioned.¹⁵⁸

d. Post-event Activity

After the arrest, investigators executed a search warrant of Loughner’s home. In Loughner’s bedroom they found a small safe containing an envelope on which was written words or phrases such as, “I planned ahead,” “My assassination,” and “Giffords.” Additional content within the safe implied that, in addition to Loughner’s dislike for Representative Giffords, he may have been motivated by a desire to achieve fame as an assassin.¹⁵⁹ Based on his behavior, it is likely that Loughner did not plan on surviving the attack.

Initially, Loughner was deemed incompetent to stand trial due to mental health issues. Loughner was forcibly medicated and restored to competency, at which time he pleaded guilty to all charges and was sentenced to seven life sentences plus 140 years in prison.¹⁶⁰

e. Summary

Loughner’s case highlights several of the challenges in researching lone-actor terrorism on this end of the motivation continuum. Incidents of terrorism with a complex mix of personal and ideologically grievances, especially coupled with mental health

¹⁵⁷ Ibid., 13.

¹⁵⁸ Ibid., 14.

¹⁵⁹ Ibid.

¹⁶⁰ Ibid.

issues, are much more difficult to categorize than cases such as Muhammad's. Loughner's diminished social competency likely contributed to his acting alone. Hamm and Spaaij refer to this as "relative deprivation." Loughner's social exclusion may have led to feelings of being deprived from employment, education, or even a meaningful social identity. Loughner's quest for notoriety as an assassin may have been "a deviant adaptation to this gap between means and goals."¹⁶¹ Taking this one step further, Loughner's inability to build social bonds may have been a major motivation for conducting the attack as a way to gain notoriety.

Lone offenders, compared to networked terrorists, "appear ... more commonly to have psychological problems."¹⁶² Borum points out, in research of 119 lone-actor terrorists, nearly one-third had a history of mental health problems.¹⁶³ According to Horgan et al., signs of mental illness were observed in 39 percent of lone-actor terrorists and 48 percent of mass murderers.¹⁶⁴ Contrary to popular belief, and illustrated in this case, some people who suffer from mental health issues can plan and execute behavior just as well as those without mental health issues.¹⁶⁵ Mental health issues illustrate the complexities of motivational analysis and threat assessments when considering that "mental illness, by itself, does not necessarily change the level of threat."¹⁶⁶

Unlike in the Muhammad case study, the role of other communities, either virtual or physical, is unclear in Loughner's radicalization. Hamm and Spaaij proposed that lone-actor radicalization begins with "personal and political grievances which form a basis for an affinity with online sympathizers."¹⁶⁷ The researchers note that the affinity with an extremist group is becoming less important, with only four in ten post-9/11 lone-actor terrorists showing an affinity with extremist groups, as opposed to six in ten of the pre-

¹⁶¹ Hamm and Spaaij, "Lone Wolf Terrorism in America," 7.

¹⁶² Borum, Fein, and Vossekuil, "Dimensional Approach," 395.

¹⁶³ Borum, "Informing Lone-Offender Investigations," 106.

¹⁶⁴ Horgan et al., "Across the Universe," 23.

¹⁶⁵ *Ibid.*, 107.

¹⁶⁶ Borum, Fein, and Vossekuil, "Dimensional Approach," 395.

¹⁶⁷ Hamm and Spaaij, "Lone Wolf Terrorism in America," 11.

9/11 lone terrorists. Hamm and Spaaij theorize virtual communities may have replaced some of the extremist groups but they contend that “virtually all lone wolves demonstrate affinity with some person, community, or group, be it online or in the real world.”¹⁶⁸ Loughner’s bizarre belief in a government conspiracy did not lend itself to an affinity with any radical groups; although he did seem to share his beliefs more freely to his online community than to others, the role the community played in Loughner’s radicalization to violence remains unknown.

A comparison of the two case studies (shown in Table 1) illustrates Loughner’s attack has much more in common with mass murder attacks than Muhammad’s. Loughner felt personally offended by Representative Giffords, as is the case with most mass murderers. According to Horgan et al., “Most mass murderers (57 percent) are concerned with personal feelings of having been wronged by a specific person and ultimately murder (or attempt to murder) the person whom they hold responsible for that wrong.”¹⁶⁹ Also, like Loughner, most mass murderers do not “concern themselves with post-event activity.”¹⁷⁰ Forty-three percent of mass murder events end when the offender commits suicide and 10 percent of mass murderers are killed by the police at the scene, with only 17 percent planning an escape.¹⁷¹ It is also worth noting that, possibly like Loughner, most mass murderers do not need virtual or physical sympathizers to radicalize to violence. Instead, mass murderers experience an “ideation” stage, in which “the individual realizes and accepts that violence is the appropriate and necessary means to address the grievance.”¹⁷²

¹⁶⁸ Hamm and Spaaij, “Lone Wolf Terrorism in America,” 6.

¹⁶⁹ Horgan et al., “Across the Universe,” 107.

¹⁷⁰ Ibid.

¹⁷¹ Ibid.

¹⁷² Ibid., 108.

Table 1. Case Study Comparison of Motivation in Lone-Actor Terrorism

Comparative Stages	Muhammad	Loughner	Similarity and Difference
Decision and Search	Prone to violence/drug abuse	Social alienation, perceived slight by future target	Role of sympathizers for Loughner
Preparation	Stockpile weapons, target research	Violent postings, weapon practice	Both had “leakage” prior to attack
Event—Execution	Fits ideology, multiple attacks	After shooting, target continued killing	Goal of violence
Post-event	Claimed war on Islam, prepared for more attacks	Suicide by cop, fame as assassin	Continuation of terror versus suicide by cop

IV. FINDINGS, IMPLICATIONS, AND CONCLUSION

Get on the damn elevator! Fly on the damn plane! Calculate the odds of being harmed by a terrorist! It's still about as likely as being swept out to sea by a tidal wave.... Suck it up, for crying out loud. You're almost certainly going to be okay. And in the unlikely event you're not, do you really want to spend your last days cowering behind plastic sheets and duct tape? That's not a life worth living, is it?

—John McCain¹⁷³

A. CONCEPTUALIZING LONE-ACTOR TERRORISM

As noted in Chapter II, this thesis adhered to Hamm and Spaaij's definition of lone-actor terrorism as “political violence perpetrated by individuals who act alone; who do not belong to an organized terrorist group or network; who act without the direct influence of a leader or hierarchy; and whose tactics and methods are conceived and directed by the individuals without any direct outside command or direction.”¹⁷⁴ A standard definition is certainly critical for research and policy. The conceptual issues introduced by the multitude of definitions prevent methodical analysis and solutions. The confusing analytical findings resulting from different definitions of lone-actor terrorism are magnified due to the small dataset of these thankfully rare events.

No standard definition, however, of lone-actor terrorism will likely provide an objective distinction to separate some lone-actor terrorists from other perpetrators of grievance-fueled violence. This is evident in the case of Jared Loughner. Regardless of what definition is used, the subjectivity of terms such as “political violence” leaves room for interpretation. Definitions that allow for objective distinction of motivation would have little value. The costs of putting qualifiers within the definition such as “no indicators of personal grievance” would likely render the definition overly restrictive and would still not guarantee that personal grievances played no motivating role. Ultimately,

¹⁷³ John McCain and Mark Salter, *Why Courage Matters: The Way to a Braver Life* (New York: Random House, 2004), 35–36.

¹⁷⁴ Hamm and Spaaij, “Lone Wolf Terrorism in America,” 3.

the thin line between personal and ideological violence makes such distinctions largely irrelevant. Any definition of lone-actor terrorism will require subjectivity in the individual's motives. The lack of an objective distinction between lone-actor terrorism and other forms of grievance-fueled violence likely has broader implications for researchers looking to further understand current and future manifestations of lone terrorism than it does for counterterrorism and law enforcement officials focusing on preventing violence.

Clearly, in some cases, only a subjective distinction exists between mass murderers and lone-actor terrorists. Motivation is arguably the key difference between the two. The motivation can have a critical role in the way the violence manifests itself, including in areas such as preparation, target selection, and post-attack behavior. Yet mass murder attacks and lone-actor terrorism are usually motivated by a complex mix of political, personal, emotional, and social factors that carry a person down a path that ends in violence.¹⁷⁵ The complicated interactions of these drivers limit the practicality of motivational distinctions and we may continue to see more overlap between the two types of violence. Distinguishing between ideologically motivated lone-actor violence and personal grievance-motivated violence is in large part futile; the two are increasingly intertwined.

Analysis of the two case studies identified five observations that can contribute to the overall clarity of lone-actor terrorism:

- | | |
|----------------|---|
| Observation #1 | Distinction between lone-actor terrorists and mass murderers is, in some cases, arbitrary. |
| Observation #2 | Existing counterterrorism prevention tools are not optimized for lone-actor terrorism. |
| Observation #3 | Mental illness plays a complex role in all forms of grievance-fueled violence. |
| Observation #4 | Unlike other forms of grievance-fueled violence, networks can reinforce lone-actor terrorism. |

¹⁷⁵ Horgan et al., "Across the Universe," 111.

Observation #5 Would-be offenders often come into contact with community systems, but threat management is inadequate without follow-up attack deterrence activities.

1. Observation #1: Motivational Complexity of Lone-Actor Terrorists

The case studies illustrate the difficulty in making clear and meaningful distinctions between motivational factors of lone-actor terrorism and other forms of grievance-fueled violence.¹⁷⁶ This was reflected in the difficulty of finding representative cases that illustrate purely ideologically or purely personal motivations. The studied cases have elements of personal and ideological grievances interwoven with emotion and behavioral traits that led to the justification for violence. Hamm and Spaaij's study of ninety-eight lone-actor terrorists between 1940 and 2013 validated the commonality of personal and ideological grievances. They discovered evidence of both themes in 80 percent of all lone-actor terrorists and consider the commonality a signature of lone-actor terrorism.¹⁷⁷ The lack of meaningful distinctions for the vast majority of lone-actor terrorists does have some important implications.

Borum, Fein, and Vossekuil's dimensional study of lone-actor terrorism considered the characteristics of liveness, direction, and motivation.¹⁷⁸ The two dimensions of liveness and direction may not have a significant influence on motivation. Generally, we would assume lone-actor terrorists that have direct assistance from one or two co-conspirators, or some sort of group guidance, would also have deeper ideological motivations for terrorism. Many lone-actor terrorists, however, do not hold deep ideological beliefs.¹⁷⁹ Given the interwoven grievances of lone-actor attackers, strong ideological adherence may not be as prevalent as one would assume. Conversely, individuals with no co-conspirators or group guidance may be highly ideologically motivated based on an internalized interpretation of a group ideology. The lack of

¹⁷⁶ Spaaij, "Enigma of Lone Wolf Terrorism," 857.

¹⁷⁷ Hamm Spaaij, "Lone Wolf Terrorism in America," 7.

¹⁷⁸ Borum, Fein, and Vossekuil, "Dimensional Approach," 392–395.

¹⁷⁹ Borum, "Informing Lone-Offender Investigations," 108.

meaningful motivational distinctions may exist independent of the loneness and direction dimensions.

2. Observation # 2: Limitations to Existing Counterterrorism Tools

While a case study method is anecdotal in nature, it may be illustrative to mention a few observations about lone-actor terrorism supported by other research initiatives. To help illustrate the findings from the case studies, this section revisits lone-actor terrorism as an adaptation to the counterterrorism tools currently used to prevent terrorism mentioned in the literature review and in research design. As Barnes outlined in his 2013 paper concerning law enforcement and prosecutorial responses to lone-actor terrorism, the federal and state tools include community engagement to preempt radicalization, the use of confidential informants to gather information and prevent terrorist plots, denial of means to specialized knowledge or potential weapons, physical security to deter would-be attackers, and a variety of new prosecutorial authorities to ensure a strong message is sent to individuals contemplating violence.¹⁸⁰ Let us consider each one in regards to lone-actor terrorism.

a. Community Engagement

Community engagement as a means to preempt terrorism appears to be effective. For example, Mueller found in his study of 120 arrests of Muslim-Americans for terrorism related offenses, 48 of the arrests (in which the initial source of information was disclosed) were initiated from the Muslim-American community.¹⁸¹ This approach seems to be supported by the high amount of leakage of intent found in Horgan et al.'s study (80 percent for lone terrorists and 46 percent for mass murderers) as well as Hamm and Spaaij's study (84 percent of pre-9/11 and 76 percent of post-9/11 lone-actor terrorists).¹⁸²

¹⁸⁰ Barnes, "One-Man Wolf Pack," 1634–40.

¹⁸¹ John Mueller, *Terrorism since 9/11: The American Cases* (Washington, DC: Cato Institute, 2016), <http://politicalscience.osu.edu/faculty/jmueller/since.html>.

¹⁸² Horgan et al., "Across the Universe," 9.

Another potential observation for grievance-fueled violence is the presence of stressors in the attackers' lives. Horgan et al. found that 62 percent of lone terrorists and 43 percent of mass murderers experienced a "tipping point" or stressful event prior to the attack.¹⁸³ According to the findings, 27 percent of lone actors and 63 percent of mass murderers experienced long-term stress.¹⁸⁴ A Secret Service study examining attacks on federal government targets found that over 90 percent of offenders experienced a stressful event prior to carrying out their attack. Furthermore, 75 percent had experienced at least one stressor in the year prior to the attack.¹⁸⁵ The stressors ranged from minor losses to major negative changes such as conflicts in relationships, financial hardships, work or school-related problems, or legal issues.

The significant occurrence of both leakage and stressors demonstrates the importance of continued, and possibly improving, community engagement. As illustrated by the number of successful lone-actor attacks, however, the results of such engagement may be limited. The reduction of leakage, or broadcasting, intent from pre-9/11 to post-9/11 lone-actor terrorists may show an adaptation away from observable pre-event behavior within the community. For example, "jihadist groups have warned aspiring terrorists to avoid discussing their plans with others."¹⁸⁶ Hamm and Spaaij identified that post-9/11 lone-actor terrorists are becoming increasingly independent from physical communities and migrating toward virtual ones.¹⁸⁷ This trend may reduce the effectiveness of community outreach as lone actors rely on a scattered network far removed from their physical location.

The findings also have an impact on counter-radicalization strategies. While moderate messaging efforts are worthwhile as a means to counter group narratives, many lone offenders who engage in terrorism "are not driven primarily by deep ideological

¹⁸³ Ibid., 17.

¹⁸⁴ Ibid., 23.

¹⁸⁵ National Threat Assessment Center, "Exploring the Effects of Stressors in Threat Assessments Investigations: A Case Study of Bart Allen Ross," U.S. Secret Service, December 2015, https://www.secretservice.gov/data/protection/ntac/Bart_Ross_Investigating_Stressors.pdf.

¹⁸⁶ Barnes, "One-Man Wolf Pack," 1651.

¹⁸⁷ Hamm and Spaaij, "Lone Wolf Terrorism in America," 11.

beliefs.”¹⁸⁸ Counter-radicalization efforts will probably do little to curb many of the lone-actor terrorist attacks. An individual who has radicalized on his or her own, especially when considering individuals such as the Unabomber (Theodore Kaczynski) or Jared Loughner, is likely not receptive to moderate narratives that do not address the unique combination of personal and ideological grievances.¹⁸⁹ The inability to make clear motivational distinctions of lone-actor terrorism implies that counter-radicalization efforts will have a limited impact on individuals who are personally driven as well as more ideologically motivated.

b. Confidential Informants

The use of confidential informants is extremely controversial. The United States is one of the few Western countries that allows the use of confidential informants in terrorism prevention activities. One study of terrorism-related prosecutions since 2009 found that 50 percent of the studied cases involved informants.¹⁹⁰ The use of confidential informants seems to be well suited for lone-actor terrorism; Horgan et al. found that 24 percent of lone terrorists tried to recruit others, as compared to only 2.5 percent of mass murderers.¹⁹¹ Interestingly, and controversially, confidential informants may be able to influence lone actors who are otherwise unable to form social connections, and who may not have been receptive to other intervention efforts.¹⁹²

As with all prevention measures, it is impossible to know how many cases involving intervening informants would have resulted in violence. However, in many cases, the confidential informants “seem to have acted as [a] ‘psychological accelerant’ for would-be terrorists.”¹⁹³ It remains to be seen, however, if the confidential informants, playing the role of like-minded acquaintances or mentors, could also be used to counter the radicalization of the individual instead of accelerating the process. Furthermore, when

¹⁸⁸ Borum, “Informing Lone-Offender Investigations,” 108.

¹⁸⁹ Barnes, “One-Man Wolf Pack,” 1653.

¹⁹⁰ As quoted in Barnes, “One-Man Wolf Pack,” 1636.

¹⁹¹ Horgan et al., “Across the Universe,” 17.

¹⁹² John Mueller provides several examples of this in his research. See Mueller, *Terrorism since 9/11*.

¹⁹³ Mueller, *Terrorism since 9/11*, 25.

used exclusively against one minority group, such as Muslim-Americans, it is likely the use of confidential informants comes at a cost of undercutting the effectiveness of community involvement. Ultimately, due to the notoriety of using confidential informants, future plotters, as demonstrated by Abdulhakim Mujahid Muhammad, are likely to increase operational security.¹⁹⁴ For example, a confidential informant was introduced, and rejected, in the case of the Orlando shooter in 2013; this method was, at best, ineffective in preventing the Pulse Nightclub shooting and, at worst, might have contributed in some way to the shooter's radicalization.¹⁹⁵ Finally, individuals with low social competence may not be as detectable to confidential informants due to their internal social constraints. These factors will likely impose an upward limit on the effectiveness of confidential informants.

c. Denial of Means

Denying the means to conduct violent attacks usually entails denying access to specialized information, such as vulnerabilities of targets or how to manufacture weapons, and denying access to weapons.¹⁹⁶ However, lone-actor terrorists appear to select weapons not based on symbolic value or lethality but on ease of acquisition and use. Both Abdulhakim Mujahid Muhammad and Jared Loughner chose weapons they were familiar with for their attacks: guns. While a gun or bomb may seem like a first choice in the United States, other lone-actor terrorists choose knives, use a vehicle to run people over, make a pressure cooker bomb, or use whatever object can be turned into a weapon. The weapon availability and selection have a direct impact on the manifestation of the violence: weapon first, then the target.¹⁹⁷ This effectively negates the denial of weapons enacted by the federal government in response to past terrorist incidents.¹⁹⁸ Gun control may reduce the lethality of the attack but will not stop a determined attacker.

¹⁹⁴ Barnes, "One-Man Wolf Pack," 1651.

¹⁹⁵ "FBI Tried to Lure Orlando Shooter into Terror Plot in 2013," Mintpress News, June 20, 2016, <http://www.mintpressnews.com/fbi-tried-lure-orlando-shooter-terror-plot-2013/217343/>.

¹⁹⁶ Barnes, "One-Man Wolf Pack," 1638–1639.

¹⁹⁷ Horgan et al., "Across the Universe," 54.

¹⁹⁸ A good example of this is the stringent controls on bomb-making materials as a result of the 1995 bombing of the Murrah Federal Building in Oklahoma City.

Hamm and Spaaij, in their study of pre-9/11 and post-9/11 lone-actor terrorists, found that the contemporary group has indeed expanded their arsenal of weapons.¹⁹⁹ The expansion could be viewed as a tactical adaptation based on the denial of means against bomb-making materials, guns, and specialized weapon knowledge.

d. Physical Security

Generally, researchers believe terrorists holding narrowly defined ideologies will select targets that they are less familiar with and that represent the enemy. More broadly defined ideologies, however, such as radical jihad, will allow for the targeting of sites the terrorist is familiar with and likely have a higher operational success.²⁰⁰ The decentralized nature of lone-actor terrorism, coupled with the intermingling of personal grievances, can often lead to a target that has personal significance to the attacker. While this appears to be very true for jihadist lone attacks—such as the Orlando nightclub, the San Bernardino attack at the Inland Region Center, or even the Ft. Hood attack—it can also be true for right-wing terrorists—such as David Adkisson, who targeted a church his ex-wife previously attended. Hamm and Spaaij found that attacks have, indeed, become more personal.²⁰¹

As an example of the blurred lines between ideological and personal grievance-fueled violence, terrorists who are more ideologically motivated still target familiar people or places based on personal grievance factors; in the San Bernardino attack, the perpetrators killed coworkers who had thrown them a baby shower earlier in the year.²⁰² The latitude for attackers to choose their own targets may be an evolution of terrorist groups encouraging lone-actor behavior. Regardless, it still indicates the role of personal grievances throughout the spectrum and the ability of lone-actor terrorists to overcome

¹⁹⁹ Hamm and Spaaij, “Lone Wolf Terrorism in America,” 4.

²⁰⁰ Becker, “Lone Wolf Target Selection,” 962.

²⁰¹ Hamm and Spaaij, “Lone Wolf Terrorism in America,” 6.

²⁰² Jamie Schram, Larry Celona, and Joe Tacopino, “Muslim Newlyweds Slaughter Co-workers Who Threw Them a Baby Shower,” *New York Post*, December 3, 2015, <http://nypost.com/2015/12/03/muslim-newlyweds-slaughter-coworkers-who-threw-them-a-baby-shower/>.

denial of means and physical security measures by selecting targets about which they have ample prior knowledge.

e. Prosecutorial Authorities

With the focus on prevention in U.S. counterterrorism efforts, “prosecutors have developed a variety of tools to secure convictions for pre-attack conduct of suspected terrorists.”²⁰³ Barnes provides examples such as criminal liability, conspiratorial liability, material support, and pretextual prosecutions.²⁰⁴ Unfortunately, the tactical adaptation of lone-actor terrorism illustrates the difficulty of using prosecutorial authorities as preventative measures. First and foremost, “the material and preparation required to execute the typical lone wolf attack are, absent governmental omniscience of an individual’s intent, wholly legal.”²⁰⁵ Second, lone-actors (by definition) have no co-conspirators and are absent direct links to a foreign terrorist organization necessary for prosecution of “material support to terrorism.”²⁰⁶ Finally, criminal punishment for the terrorist attacks as a deterrent may have prevented some lone-actor terrorism, yet attacks happen frequently enough to continue to be a major concern to the public and policymakers. Criminal punishment is likely even less of a deterrent for individuals motivated by personal grievances, as illustrated by the high number of mass murderers who have no intention of surviving the attack.

3. Observation #3: Role of Mental Health in Grievance-Fueled Violence

Another shared commonality with grievance-fueled violence is the prevalence of mental health issues in both mass murderers and lone-actor terrorists.²⁰⁷ Horgan et al.’s study of 71 lone-actor terrorists and 115 solo mass murderers from 1990 to 2013 showed a history of mental illness among 39 percent of lone terrorists and 48 percent of mass

²⁰³ Barnes, “One-Man Wolf Pack,” 1641.

²⁰⁴ *Ibid.*, 1641–46.

²⁰⁵ *Ibid.*, 1654.

²⁰⁶ *Ibid.*

²⁰⁷ Mental illness includes psychological disturbances such as depression, post-traumatic stress disorder, bipolar disorder, and inability to establish social relationships.

murderers.²⁰⁸ This is remarkably higher than in the general population, in which only about six percent is believed to suffer from severe mental illness.²⁰⁹ Corner and Gill concluded that lone actors with a history of mental illness are more likely to display certain behaviors that may be detectable by law enforcement and intelligence agencies.²¹⁰ Intuitively, one would assume that mental health issues would be more prominent closer to the personal grievance–fueled end of the motivation continuum. However, given the complexity of attackers’ motivations, it is possible that mental health issues occur throughout the degree of offender type. While the exact distribution of mental health issues in relation to motivation is outside the scope of this thesis, it is likely that understanding and addressing mental health issues would be valuable within the full spectrum of lone-actor terrorism as well as other forms of grievance-fueled violence.

The role of mental illness in radicalization to violence remains unclear. Some mental illness may increase an individual’s affinity toward an extremist group. Likewise, mental illness may affect an individual’s ability to cope with perceived slights and lead to ideation that violence is the only alternative. Regardless of psychopathology’s role, the high rate of mental illness among perpetrators of lone-actor violence demonstrates, at the very least, a correlation. Further research into the relationship between lone-actor violence and mental health may be beneficial to preventing lone-actor terrorism as well as other types of violence. It could also change the dialogue from a counterterrorism focus to one of mental health assistance. Providing options such as mental healthcare services or specialized acute care responder teams would likely garner more community support than the current use of pre-event prosecution to prevent terrorism.

4. Observation #4: Role of Networks to Reinforce Violence

One aspect that is unique to lone-actor terrorism in relation to other forms of grievance-fueled violence is the ability of networks to reinforce motivations to attack.

²⁰⁸ Ibid.

²⁰⁹ John D. Milby, “Preempting Mass Murder: Improving Law Enforcement Risk Assessments of Persons With Mental Illness,” (master’s thesis, Naval Postgraduate School, 2015), 7.

²¹⁰ Emily Corner and Paul Gill, “A False Dichotomy? Mental Illness and Lone-Actor Terrorism,” *Law and Human Behavior* 39, no 1 (2015): 23–34.

This is especially true for the jihadist ideology, which praises previous attacks. While our law enforcement may be able to curtail the praise and hateful rhetoric of domestic terrorist groups, we have not been as effective against international groups such as Al Qaida and the Islamic State. As an example, prior to the call for attacks in the West by the Islamic State on September 22, 2014, there had been no attacks in the West motivated by the group's violent rhetoric. In the year following the call to jihad in the West, twenty-one plots killed fifteen people.²¹¹ Our inability to shut down the radical propaganda coming from these groups appears to have a detrimental effect on our efforts to mitigate lone-actor terrorism. Hamm and Spaaij found evidence of potential copycat attacks in one-third of lone-actor terrorism cases.²¹² Most experts agree a key motivation in mass shootings, to include ideologically inspired mass shootings, is the fame and power the individual believes he or she will achieve for the crime.²¹³ Researchers from Western New Mexico University found that the “prevalence of these crimes has risen in relation to the mass media coverage of them and the proliferation of social media sites that tend to glorify the shooters and downplay the victims.”²¹⁴

5. Observation #5: Insufficient Community-Level Attack Deterrence

The National Threat Assessment Center prepared the case studies of Abdulhakim Mujahid Muhammad and Jared Lee Loughner to illustrate the importance of threat assessments and collaboration in detecting potential perpetrators of violence. Much of the literature surrounding grievance-fueled violence deals with ways to improve detection. This leads to an understated theme in lone-actor terrorism research: detection is not necessarily the biggest challenge. A Secret Service study that examined attacks on federal government targets found that all of the perpetrators had contact with one or more

²¹¹ IEP, *Global Terrorism Index 2015*, 52.

²¹² Hamm and Spaaij, “Lone Wolf Terrorism in America,” 6.

²¹³ Jennifer Johnston and Andrew Joy, “‘Medial Contagion’ Is Factor in Mass Shootings, Study Says,” American Psychological Association, August 4, 2016, <https://www.apa.org/news/press/releases/2016/08/media-contagion.aspx>.

²¹⁴ Ibid.

community systems in the year prior to the attack.²¹⁵ In addition, consider the number of lone-actor terrorists who had contact with law enforcement and yet still managed to conduct an attack. The list includes both case studies used in this thesis, the Boston Marathon bombers, the Orlando nightclub shooter, and the Fort Hood shooter, to name a few.²¹⁶ While an argument could certainly be made for improved information sharing and better threat assessments, the fact is we have very few law enforcement or community tools at our disposal to legally deter lone-actor terrorists, even after detection of a likely candidate to commit violence is identified.

B. POSSIBLE POLICY IMPLICATIONS FOR PREVENTION OF LONE-ACTOR TERRORISM

The observations identified from the qualitative case studies led to five possible policy considerations. None of the policy implications are mutually exclusive and each can be viewed as possible research extension for further consideration.

1. Threat Management

Our current lone-actor threat assessment might be improved by considering the confluence of personal and individualistic grievances coupled with ideological motivations. Threat assessments focusing on grievance-fueled violence, such as the Workplace Assessment of Violence Risk (WAVR-21), could certainly be useful for detection of would-be terrorists as well as other mass murderers. Likewise, conceptualizing a lone-actor terrorist's radicalization to violence through the pathway to violence model typically reserved for mass murderers may yield valuable clues to future manifestations of lone-actor terrorism.²¹⁷

²¹⁵ Community systems were defined as the judicial system, educational institutions, employers, law enforcement, mental health professionals, social services, and spiritual centers. National Threat Assessment Center, "Attacks on Federal Targets: 2001–2013," U.S. Secret Service, December 2015, https://www.secretservice.gov/data/protection/ntac/Attacks_on_Federal_Government_2001-2013.pdf.

²¹⁶ Lee points out the FBI failed in its terrorism assessment on one of the Boston bombers and the same failures are evident in the Fort Hood shooting. Walter A. Lee, "Finding the Wolves in Sheep's Clothing: Ways to Distinguish and Deter Lone-Wolf Terrorist," (master's thesis, Naval Postgraduate School, 2015).

²¹⁷ Horgan et al., "Across the Universe," 108.

Equally—if not more—important is considering effective threat management as part of the prevention strategy. Threat management addresses prevention once an individual is detected as a likely candidate for committing violence. One recommendation that has gained some traction at university campuses is the development of an integrated threat assessment and management team (TAM), which would “develop, implement, monitor, and (on an on-going basis) review a case management plan to intervene and mitigate the threat posed, to the extent reasonably possible.”²¹⁸ Proponents of the TAM propose several subject-based strategies for preventing violence. Short-term intervention strategies include continuously engaging with the subject, mentoring, assisting the individual with problem-solving and coping skills, evaluating the subject’s mental health, and establishing behavior expectations directly with the subject.²¹⁹ Short-term intervention strategies are coupled with ongoing efforts to move the subject away from violent thoughts, provide the subject with support resources, and communicate with other agencies to continue subject monitoring beyond the TAM community purview.²²⁰ Such threat management techniques may prove valuable for individuals who show a high probability to commit violence, to include potential lone-actor terrorists.

2. Conceptual Approach to Prevention

Besides directly confronting the complicated motivations of lone terrorism in the United States, there are other ways to minimize terrorism. Terrorism in the United States accounted for less than 160 deaths between post-9/11 and the end of 2016.²²¹ Some researchers suggest that the chance of being the victim of terrorism in the United States is one in 3.5 million.²²² At most, all mass killings, to include high-profile lone-terrorism events, account for only 1 percent of all murders in the United States annually.²²³ Lone-

²¹⁸ J. Reid Meloy and Jens Hoffman, *International Handbook of Threat Assessment*, 1st ed. (Oxford University Press, 2013), 111.

²¹⁹ *Ibid.*

²²⁰ *Ibid.*, 112.

²²¹ Bergen et al., “Terrorism in American after 9/11.”

²²² Mueller, *Terrorism since 9/11*, 30.

²²³ “Behind the Bloodshed,” *USA Today*, accessed January 3, 2017, <http://www.gannett-cdn.com/GDCContent/mass-killings/index.html#frequency>.

actor terrorism, when viewed as an adaptation to the success of our counterterrorism efforts, is certainly far less threatening than the large-scale, networked attacks the public was warned about immediately following 9/11. As Barnes points out, “Lone wolf terrorists—poorly trained individuals operating alone with minimal equipment against relatively unimportant targets—do not pose an ‘existential threat,’ or even a significant threat, to the United States.”²²⁴

However, Americans do worry about terrorism. A December 2015 Gallup poll found that 47 percent of Americans were “‘very’ or ‘somewhat’ worried that they or a family member will become a victim” of a terrorist attack. This is in contrast to 38% that worried “about becoming a victim of mass shooting.”²²⁵ The number of mass murders, which include lone-actor terrorist attacks with four or more victims, is on the rise. In addition, the numbers of casualties from these events has been rising steadily over the past decade.²²⁶

3. Fear Reduction Policies

Policymakers have the difficult task of balancing the actual threat with the perceived threat. One possibility is to place more emphasis on policies designed to reduce the fear and anxiety associated with terrorism.²²⁷ Fear and anxiety are central to terrorists’ goal; taking this power away from the terrorists should be a main goal of our policies. Fear reduction policies might include informing the public about how rare terrorism in the United States really is. This would require cooperation between politicians, media, and public/private agencies. Such policies would likely have the added benefit of making the American public more resilient. Such an effort would be an uphill

²²⁴ Barnes, “One-Man Wolf Pack,” 1618.

²²⁵ The survey was specific to Islamic State-inspired terrorism but illustrates the terrorism concern of Americans. Art Swift, “Americans More Worried about Terrorism Than Mass Shootings,” Gallup, December 16, 2015, <http://www.gallup.com/poll/187688/americans-worried-terrorism-mass-shootings.aspx>.

²²⁶ Milby, “Preempting Mass Murder,” 4.

²²⁷ John Mueller, “Six Rather Unusual Propositions about Terrorism,” *Terrorism and Political Violence*, no. 17 (2005): 497, doi: 10.1080/095465591009359.

battle given the funding, political support, and emotional connotations associated with the issue of terrorism.

4. Perception Management

Severing the ideological connection between terrorism and the violent event is a second way to reduce the impact of terrorism. This could be done by focusing on the personal grievances that motivated the individual. The public needs to understand that the violence was not driven simply by a hateful ideology but was the act of an individual with emotional and possibly mental health issues that, ultimately, was unable to function in our society. Taking credit away from the extremist organization not only prevents the terrorist group from benefiting for the event, but also sends a signal to other would-be lone-actors that violence do not add purpose or significance to a person and that violence should not be emulated.

5. Public Health Model

One way of achieving both the goal of limiting fear and minimizing the connection between violence and terrorism may lie in a public health model. As Horgan et al. demonstrate in their comparison of lone-actor terrorists and mass murderers, motivation is the only fundamental difference between the two groups.²²⁸ While both categories may evoke irrational fear, improving public health to address the underpinnings of mass murder could ultimately help not only lone-actor terrorism, but also other forms of grievance-fueled violence such as school shootings, assassinations, and workplace violence. More research into public health solutions to grievance-fueled violence may be time well spent in the quest for reliable prevention. Ultimately, this approach may be the best way to reduce lone-actor terrorism.

²²⁸ Horgan et al., “Across the Universe,” 4.

C. CONCLUSION

It is beneficial for homeland security professionals to consider lone-actor terrorism from a different perspective. Motivation is the key characteristic that separates a mass murderer from a lone-actor terrorist.²²⁹ As Spaaij points out, however, “The boundaries of lone wolf terrorism are inevitably fuzzy and arbitrary.”²³⁰ Motivation is becoming less distinguishable and may indicate that lone-actor terrorist attacks are becoming more similar to mass murders in the decision and search activity stage (personal grievances drive target selection) and post-event stage (less concern for escape, more deadly). Likewise, some lone-actor terrorists may experience a radicalization process more in line with mass murderers (ideation) and less dependent on virtual or physical networks. Ultimately, the evolution of terrorism to a solo activity renders many of our post-9/11 prevention tools obsolete or inadequate. By shifting our focus toward the commonalities with other forms of grievance-fueled violence, research efforts could be focused on threat assessment management or mental health models that may effectively prevent lone-actor terrorism.

Such is the nature of terrorism that we cannot abandon our current counterterrorism policies without an increased risk of network or homegrown terrorism. As a tactical adaptation, lone-actor terrorism cannot be deterred with the very law enforcement tools that forced the change. Formulating specific policies to address lone-actor terrorism, however, is complicated given the lack of identifiable profiles within offender types or within motivational extremes. It may be possible to develop pre-event indicators by considering the distribution of proximal and distal factors in relation to motivation. It is possible that cases that fall on the two extremes of the motivation continuum have unique commonalities. This, in turn, may provide insight into the relationship between motivation and pre-event indicators. As an example, individuals who are more ideologically motivated may also be more prone to leakage or more likely to conduct pre-attack reconnaissance. Unfortunately, due to the isolation of lone terrorists, no conceivable policies are likely to prevent all lone-actor terrorism.

²²⁹ Ibid., 107.

²³⁰ Spaaij, “Enigma of Lone Wolf Terrorism,” 857.

One thing is clear in our goal to prevent lone-actor terrorism: our security agencies must have greater collaboration with public health services and understand what might contribute to violence risk. In some cases, it might be possible to treat a potential lone-actor terrorist as a mental health issue as opposed to a criminal or security threat. While it will not prevent all occurrences of lone-actor terrorism, a mental health approach may encourage people to report on relatives they fear may be radicalizing. Also, this could be an alternative to heavy-handed policies that may, ultimately, be counterproductive. Such a policy could not only reduce lone-actor terrorism but might have a significant impact on other forms of grievance-fueled violence while avoiding the pitfalls of the massive resource allocation and civil liberty violations any impactful counterterrorism approach would require.

Ultimately, perhaps the best way to prevent lone-actor terrorism is to convince Americans to stop worrying about terrorism.²³¹ As politician and mental health advocate Patrick J. Kennedy stated, “Terrorism is a psychological warfare. Terrorists try to manipulate us and change our behavior by creating fear, uncertainty, and division in society.”²³² Policies treating, perhaps even redefining, certain cases of lone-actor terrorism as a public health issue could help reduce the fear associated with the threat of lone-actor violence. As the public and policymakers continue to demand effective policies to prevent lone-actor terrorism, we, as a nation, will need to address the difficult public health problem of grievance-fueled violence. Perhaps our war on terror could give us the impetus to apply much-needed resources to the task.

²³¹ Mueller, “Unusual Propositions about Terrorism,” 497.

²³² Congressman Kennedy used these words to introduce the National Resilience Development bill of 2003 (H.R.3774, 108th Cong.) aimed at enhancing Americans psychological resilience to terrorist threats and attacks. The bill was referred to the Subcommittee on Crime, Terrorism, and Homeland Security in 2004 with no further action.

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LIST OF REFERENCES

- Alfaro-Gonzalez, Lydia, RJ Barthelmes, Christina Bartol, Michael Boyden, Thomas Calderwood, Daniel Doyle, Jacob Green, Erin Herro, Taylor Johnson, Katelyn Lawrenz, Katharine McMaster, Margaret Nencheck, Neil Noronha, Lee Smith, Kathleen Walsh, Letitia Wu, and Kaila Yee. *Report: Lone Wolf Terrorism*. Georgetown University, June 27, 2015. <http://georgetownsecuritystudiesreview.org/wp-content/uploads/2015/08/NCITF-Final-Paper.pdf>.
- Barnes, Beau. "Confronting the One-Man Wolf Pack: Adapting Law Enforcement and Prosecution Responses to the Threat of Lone Wolf Terrorism." *Boston University School of Law Review* 92, no. 5 (2012): 1613–62.
- Becker, Michael. "Explaining Lone Wolf Target Selection in the United States." *Studies in Conflict and Terrorism* 37, no. 11 (August 2014): 959–78. doi: 10.1080/0157610x.2014.952261.
- "Behind the Bloodshed." *USA Today*, accessed January 3, 2017. <http://www.gannett-cdn.com/GDCContent/mass-killings/index.html#frequency>.
- Bergen, Peter, Albert Ford, Alyssa Sims, and David Sterman. "Terrorism in America after 9/11." New America Foundation, accessed February 9, 2016. <http://www.newamerica.org/in-depth/terrorism-in-america/>.
- Borum, Randy. "Informing Lone-Offender Investigations: Loner Attacks and Domestic Extremism." *Criminology & Public Policy* 12, no. 1 (February 2013): 103–12. doi:10.1111/1745-9133.12016.
- Borum, Randy, Robert Fein, and Bryan Vossekuil. "A Dimensional Approach to Analyzing Lone Offender Terrorism." *Aggression and Violent Behavior* 17, no. 5 (2012): 389–96.
- Capellan, Joel. "Lone Wolf Terrorist or Deranged Shooter? A Study of Ideological Active Shooter Events in the United States, 1970–2014." *Studies in Conflict and Terrorism* 38 (2015): 395–413. doi:10.1080/1057610x.
- "CIA Chief: Al Qaeda Poised to Attack U.S." CBS News, February 2, 2010. <http://www.cbsnews.com/news/cia-chief-al-qaeda-poised-to-attack-us/>.
- Corner, Emily, and Paul Gill. "A False Dichotomy? Mental Illness and Lone-Actor Terrorism." *Law and Human Behavior* 39, no 1 (2015): 23–34.
- "FBI Tried to Lure Orlando Shooter into Terror Plot in 2013." Mintpress News, June 20, 2016. <http://www.mintpressnews.com/fbi-tried-lure-orlando-shooter-terror-plot-2013/217343/>.

- Franke-Ruta, Garance. "Remember When Andrew Joseph Stack Flew a Plane into a Texas IRS Building?" *Atlantic*, May 15, 2013. <http://www.theatlantic.com/politics/archive/2013/05/remember-when-andrew-joseph-stack-flew-a-plane-into-a-texas-irs-building/275887/>.
- Gill, Paul, John Horgan, and Paige Deckert. "Bombing Alone: Tracing the Motivations and Antecedent Behaviors of Lone-Actor Terrorists." *Journal of Forensic Sciences* 59, no. 2 (March 2014): 425–35. doi: 10.1111/1556-4029.12312.
- Greunewald, Jeff, Steven Chermak and Joshua D. Freilich. "Distinguishing 'Loner' Attacks from Other Domestic Extremist Violence: A Comparison of Far-Right Homicide Incident and Offender Characteristics." *Criminology and Public Policy* 12, no. 1, (2013): 65–91.
- Hamm, Mark, and Ramón Spaaij. "Lone Wolf Terrorism in America: Using Knowledge of Radicalization pathways to Forge Prevention Strategies." U.S. Department of Justice, February 2015. <https://www.ncjrs.gov/pdffiles1/nij/grants/248691.pdf>.
- Horgan, John. "From Profiles to Pathways and Roots to Routes: Perspectives from Psychology on Radicalization into Terrorism." *The ANNALS of the American Academy of Political and Social Science* 618, no. 1 (July 1, 2008): 80–94. doi: 10.1177/0002716208317539.
- Horgan, John G., Paul Gill, Noemie Bouhana, James Silver, and Emily Corner. "Across the Universe? A Comparative Analysis of Violent Behavior and Radicalization across Three Offender Types with Implications for Criminal Justice Training and Education." U.S. Department of Justice, June 2016. <https://www.ncjrs.gov/pdffiles1/nij/grants/249937.pdf>.
- Institute for Economics and Peace (IEP). *Global Terrorism Index 2015: Measuring and Understanding the Impact of Terrorism* (IEP Report 36). New York: IEP, 2015. <http://economicsandpeace.org/wp-content/uploads/2015/11/Global-Terrorism-Index-2015.pdf>.
- Jenkins, Brian Michael. *Would-Be Warriors: Incidents of Jihadist Terrorist Radicalization in the United States since September 11, 2001*. Santa Monica, CA: RAND, 2010.
- Johnston, Jennifer, and Andrew Joy. "'Medial Contagion' Is Factor in Mass Shootings, Study Says." American Psychological Association, August 4, 2016. <https://www.apa.org/news/press/releases/2016/08/media-contagion.aspx>.
- Kaplan, Jeffrey. "Leaderless Resistance." *Terrorism and Political Violence* 9, no. 3 (September 1997): 80–95. doi:10.1080/09546559708427417.

- Lankford, Adam. "A Comparative Analysis of Suicide Terrorists and Rampage, Workplace, and School Shooter in the United States from 1990 to 2010." *Homicide Studies* 17, no. 1(2013): 255–74.
- Lee, Walter A. "Finding the Wolves in Sheep's Clothing: Ways to Distinguish and Deter Lone-Wolf Terrorist," Master's thesis, Naval Postgraduate School, 2015.
- McCain, John, and Mark Salter. *Why Courage Matters: The Way to a Braver Life*. New York: Random House, 2004.
- McCauley, Clark, Sophia Moskalenko, and Benjamin Van Son. "Characteristics of Lone-Wolf Violent Offenders: A Comparison of Assassins and School Attackers." *Perspectives on Terrorism* 7, no. 1 (2013): 4–24.
- Meloy, J. Reid, and Jens Hoffman. *International Handbook of Threat Assessment*, 1st ed. Oxford University Press, 2013.
- Milby, John D. "Preempting Mass Murder: Improving Law Enforcement Risk Assessments of Persons With Mental Illness." Master's thesis, Naval Postgraduate School, 2015.
- Mueller, John. "Six Rather Unusual Propositions about Terrorism." *Terrorism and Political Violence*, no. 17 (2005): 487–505. doi: 10.1080/095465591009359.
- . *Terrorism Since 9/11: The American Cases*. Washington, DC: Cato Institute, 2016. <http://politicalscience.osu.edu/faculty/jmueller/since.html>.
- National Consortium for the Study of Terrorism and Responses to Terrorism (START). "Global Terrorism Database" [Data file]. University of Maryland, accessed January 19, 2017. <https://www.start.umd.edu/gtd/search/>.
- National Threat Assessment Center. "Attacks on Federal Targets: 2001–2013." U.S. Secret Service, December 2015. https://www.secretservice.gov/data/protection/ntac/Attacks_on_Federal_Government_2001-2013.pdf.
- . "Exploring the Effects of Stressors in Threat Assessments Investigations: A Case Study of Bart Allen Ross." U.S. Secret Service, December 2015. https://www.secretservice.gov/data/protection/ntac/Bart_Ross_Investigating_Stressors.pdf.
- . "Investigating Ideological Inspired Violent Extremists: Local Partners Are an Asset: A Case Study on Abdulhakim Mujahid Muhammad." U.S. Secret Service, December 2015. https://www.secretservice.gov/data/protection/ntac/Abdulhakim_Muhammad_Using_Local_Assets.pdf.

- . “Using a Systems Approach for Threat Assessment Investigations: A Case Study on Jared Lee Loughner.” U.S. Secret Service, December 2015. https://www.secretservice.gov/data/protection/ntac/Jared_Loughner_Using_Systems.pdf.
- Oliphant, Baxter. “In Debates, Voters Want to Hear More about Terrorism and the Economy.” Pew Research Center, August 15, 2016. <http://www.pewresearch.org/fact-tank/2016/08/15/in-debates-voters-want-to-hear-most-about-terrorism-and-the-economy/>.
- Pantucci, Raffaello, Clare Ellis, and Lorien Chaplais. *Lone-Actor Terrorism Literature Review*. London: RUSI, 2016. https://rusi.org/sites/default/files/201512_clat_literature_review_0.pdf/.
- Spaaij, Ramón, “The Enigma of Lone Wolf Terrorism: An Assessment.” *Studies in Conflict & Terrorism* 33, no. 9 (August 2010): 854–70. doi: 10.1080/1057610X.2010.501426.
- . *Understanding Lone Wolf Terrorism: Global Patterns, Motivations and Prevention*. New York: Springer, 2012.
- Spaaij, Ramón, and Mark S. Hamm. “Key Issues and Research Agendas in Lone Wolf Terrorism.” *Studies in Conflict & Terrorism* 38, no. 3 (March 2015): 167–78. doi: 10.1080/1057610X.2014.986979.
- Swift, Art. “Americans More Worried about Terrorism Than Mass Shootings.” Gallup, December 16, 2015. <http://www.gallup.com/poll/187688/americans-worried-terrorism-mass-shootings.aspx>.
- Worth, Katie. “Lone Wolf Attacks Are Becoming More Common—And More Deadly.” *Frontline*, July 14, 2016. <http://www.pbs.org/wgbh/frontline/article/lone-wolf-attacks-are-becoming-more-common-and-more-deadly/>.

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