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THESIS

**SOCIAL NETWORK ANALYSIS: ENHANCING THREAT
ASSESSMENTS FOR TARGETED VIOLENCE**

by

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June 2020

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ENHANCING THREAT ASSESSMENTS FOR TARGETED VIOLENCE**

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ABSTRACT

This research applies social network analysis and social identity theory to threat assessment investigations of subjects who commit acts of targeted violence. It provides a framework for understanding the expanding threat of targeted violence and its impact on U.S. homeland security. Statistics on targeted violence in the United States show that incidents are increasing in both frequency and lethality. Traditional studies of targeted violence have focused heavily on the mental state of the “lone” perpetrator without fully examining the role of social influences. This research incorporates case studies intended to offer insight, increase understanding, and suggest new methods of enhancing the current field of threat assessment for targeted violence cases. The findings of this research recommend new strategies for conducting targeted violence threat assessment investigations utilizing the application of social network analysis and social identity theory. Through an examination of previous targeted violent actors, this research establishes that understanding relevant social conditions can contribute significant clues about an individual’s risk of entering a pathway to violence. These clues can be mapped and followed over a period of time to reveal a social withdrawal and loss of restraining relationships.

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LIST OF ACRONYMS AND ABBREVIATIONS

ATF	Alcohol, Tobacco, Firearms and Explosives
CASOS	Computational Analysis of Social and Organizational Systems
CIA	Central Intelligence Agency
CORE	Common Operational Research Environment
FBI	Federal Bureau of Investigation
FTAC	Fixated Threat Assessment Center
HIPPA	Health Insurance Portability and Accountability Act
KKK	Ku Klux Klan
NHS	National Health Service
NICS	National Instant Criminal Background Check System
ORA	Organizational Risk Analyzer
ROI	relationships of interest
SIT	social identity theory
SNA	social network analysis

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EXECUTIVE SUMMARY

The ability to predict when an individual is going to commit an act of violence before the act is carried out is possibly the most difficult and challenging mission in law enforcement. For an investigator, it is the equivalent of playing a psychological chess game, in which the players can only see a fraction of their opponents' pieces, who look for obscure clues in answers from subjects who are often intentionally deceptive. Further adding to the difficulty is the fact that no existing profile or model is available for subjects who eventually commit acts of targeted violence, so investigators are left to search for signs that an individual of interest has the potential to evolve into violent behavior. Making matters worse, most potential offenders of targeted violence evolve; in other words, they can initially be judged, correctly, not to be a threat, but within a short period of time, they can change, plan, and execute an attack.

Statistics on targeted violence in the United States show that incidents are increasing in both frequency and lethality. Targeted violence is described as an “incident of violence where an attacker selects a particular target prior to an attack.”¹ The highest profile attacks within the United States since September 11, 2001, have been targeted violence attacks committed by one or two offenders. These lone offender attacks have given rise to the classification as lone wolf or self-radicalized offenders. An analysis of lone wolf attackers by decade shows that more attacks have occurred in the past eight years than in the 50 years between 1950 and 2000. Additionally, the lone wolf attacks from 1950 to 2009 resulted in 27 fewer fatalities than in the past eight years combined.²

This research has compiled profiles on two known perpetrators of targeted violence to determine whether the use of social network analysis (SNA) can provide data, or substantial evidence, that will correctly lead an investigator to explore a suspect as a

¹ Lina Alathari, *Protecting America's Schools: A U.S. Secret Service Analysis of Targeted School Violence* (Washington, DC: U.S. Secret Service National Threat Assessment Center, 2019), 1, https://www.secretservice.gov/data/protection/ntac/Protecting_Americas_Schools.pdf.

² Katie Worth, “Lone Wolf Attacks Are Becoming More Common—And More Deadly,” *Frontline*, July 14, 2016, <https://www.pbs.org/wgbh/frontline/article/lone-wolf-attacks-are-becoming-more-common-and-more-deadly/>.

possible threat. Research for this thesis has utilized both information taken from the secondary research of case studies of previous actors of targeted violence, and from the profiles assembled after extensive research on these actors, to determine whether SNA can be used to enhance the success rate of threat assessment investigations. The subjects used in the case studies were determined by the amount of relevant open-source information available. First, the subjects were analyzed under a current threat assessment. Next, the subjects were classified under a dimensional system, and vulnerabilities that could help investigators were discussed. The research of these two methods attempts to provide a possible new way to compare categories of lone actors across different crimes. Finally, the test cases were reviewed to determine if a social network component could assist an investigator in determining the meaning behind potentially significant behaviors through an analysis of a suspect's social ties.

The importance of using social network analytics in this method is the attempt to collect and analyze social influences on the actions of targeted violence actors, which are currently underrepresented in threat assessment models. When examined through the lens of SIT, it is understood that social ties can inspire individuals to perform tremendous acts of violence, as with terrorist organizations, but can also impose constraints on individuals' behavior.³ The more important social ties individuals possess, the more their behavior will be constrained or modified to the groups that have captured their loyalty. The fewer in-groups individuals align themselves with, the fewer constraints inhibit or modify their behavior and choices. SNA is a way to reflect these ties, to understand better whether people's ties are influencing a pathway to violence. To be successful, threat assessment investigations seek to understand as much as possible about the subjects. In effect, SNA creates the roadmap of the subjects' influential relationships, and social identity theory (SIT) provides the key to unlock the meaning.

The two case studies conducted during this research found striking similarities between the backgrounds of Timothy McVeigh and Anders Breivik. During their

³ Henri Tajfel, *Social Identity and Intergroup Relations* (Cambridge: Cambridge University Press, 2010), 100–127.

childhood development, both individuals lived in homes with troubled marriages, which eventually led to one parent leaving the family. McVeigh's mother left home when he was 10 years old and Breivik's parents separated before he was two years old.⁴ Breivik had minimal contact with his father and would last see him at the age of 15.⁵ Neither subject did well in school, nor did they have any real success in any aspect of their lives during this period. Neither subject had any significant criminal activity prior to the planning and implementing of their attacks. Both subjects did have some success after leaving school. McVeigh was a decorated soldier in the U.S. Army, who was promoted to the position of Sergeant, and Breivik operated a business that sold fake diplomas, which was financially successful for a period before eventually going bankrupt.⁶

Both subjects suffered failures with the most significant groups in their lives, McVeigh when he failed Army Special Forces Selection School and Breivik when he failed to obtain a position with the Progressive Party.⁷ After these failures, while both saw a significant decrease in their social networks, they were not isolated and still maintained a social network. However, both of their network ties from that point were heavily weighted towards those who shared the same extremist views, and neither was a member of a group that would have constrained their violent behavior. Both subjects were motivated by long-standing grievances against the government that evolved over an extended period of time. Many of the contacts that both had after leaving the groups that were important to their identities would have pushed them on a continued path of violence rather than constraining violent ideas.

Both subjects gravitated to others who shared similar extremist views, but eventually determined that they were the one who needed to lead the way with actions

⁴ Asne Seierstad, *One of Us: The Story of Anders Breivik and the Massacre in Norway* (New York: Farrar, Straus and Giroux, 2013), 1–12; Lou Michel and Dan Herbeck, *American Terrorist*, 1st ed. (New York: HarperCollins Publishers Inc., 2001), 7–36.

⁵ Seierstad, 202.

⁶ Michel and Herbeck, *American Terrorist*, 49–81; Seierstad, 107–120.

⁷ Michel and Herbeck, 81–95.

because the others were incapable.⁸ They were similar in their grandiose ideas of self-importance, which did not coincide with the lens of failure through which the rest of society viewed them.⁹ Both spent considerable time planning and coordinating their attacks, and both used extensive operational security methods to conceal acquiring the explosives needed for the attacks. Both subjects used similar bombing attacks, although Breivik was clearly influenced by McVeigh's attack, and expanded his own attack in a much more personal way than McVeigh. In this regard, he was likely attempting to eclipse McVeigh for the shocking nature of the attack, and thereby bring more attention to himself.¹⁰

In a comparison of mental health issues, the subjects have some notable differences, but their similarities are likely more significant. McVeigh had some suicidal thoughts prior to his attack, but was not diagnosed with a mental health issue.¹¹ Breivik, on the other hand, did not have suicidal thoughts, and was evaluated twice following his attack. In the first evaluation, they found that he suffered from paranoid schizophrenia, which made him criminally innocent, but in the second opinion, which the court sided with, Breivik was found to have pathological self-aggrandizement, and was found criminally responsible.¹² Whatever their medical diagnoses, both men had the capacity to plan, organize, and carry out an attack, and neither was hindered in that regard by any mental incapacity. If anything, possible feelings of paranoia may have caused them to add layers of operational security into their plans, and thereby make them harder to detect.

Specialized units need to be created within law enforcement to better understand threat assessment investigations, and gain experience conducting them. Threat assessment investigations are more closely tied to intelligence gathering investigations than to normal investigations, with an end result of formal criminal charges. In addition to utilizing normal investigative techniques, a threat assessment investigator needs to understand both mental

⁸ Michel and Herbeck, 117–205.

⁹ Seierstad, *One of Us*.

¹⁰ Seierstad.

¹¹ Michel and Herbeck, *American Terrorist*, 95–117.

¹² Ingrid Melle, "The Breivik Case and What Psychiatrists Can Learn from It," *World Psychiatry* 12, no. 1 (February 2013): 17–18.

health issues and grievances in people who may be attempting to hide their true intentions. Threat assessment investigations involve gaining as much possible information about a person to determine if this person will at some point, maybe years down the line, commit an act of violence. In addition to the threat assessment model provided by the assassination case study, additions should include the added help of mental health providers working in conjunction with investigators, as well as computerized mapping of the subject's social networks.

The United Kingdom model for combining mental health professionals and law enforcement shows great promise in attempting to understand fully all aspects of a subject under assessment. This model should be studied for use in this country. Threat assessment groups should include representatives from all relevant law enforcement agencies sharing information. The more information gathered results in a clearer picture, which will result in a better understanding and analysis. These threat assessment groups should investigate all types of targeted violence including lone wolves and school shooters. For school threat assessment subjects, officials in the educational system should be included and consulted by the assessment groups. Computer case models, which alert the investigator if the subject under threat assessment does something that requires immediate attention, such as the purchase of a gun or explosives, should also be utilized. This SNA would have the benefit of providing an investigator with the best contacts to interview to gain insight into the subject's mental state and possible motivations and grievances. Understanding the people closest to the subject is also important because one of the statistics found across various studies shows that a high percentage of targeted violence offenders communicate their intentions to commit violence to people close to them. An SNA can also provide investigators with a picture to identify changes over time, which is important since many targeted violence actors take years from the time they develop the grievance until they move to an actual pathway of violence.

SNA has the potential for great success within the field of threat assessment. As the case studies in this research show, the SNA model provides an investigator with a simple visual map of the important people and groups within a subject's network. These important ties are vital to understanding those who influence and constrain the subject's actions. At

the core of any inquiry, the more information that investigators have, the more accurate they will be with the direction of the investigation itself. This mapping converts raw information into a digestible and more easily understandable format. This tool cannot only show the size of the subjects' network, it can be used as snapshots of time to show if subjects are withdrawing from their networks. SNA should be used in conjunction with SIT to understand how the network data collected by SNA will act as pathway or constraint on the subject of the analysis.

As a tool, SNA would also make the transfer of cases potentially easier. As mentioned, many subjects have taken years to move from their original grievances to their pathway to violence, during which time it is possible that the original investigator would no longer be assigned to the case. A social network map from the original investigation would be extremely helpful in identifying the current influential people in the subject's life, and determining if the network is becoming more conducive to radicalization.

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I. INTRODUCTION

A. PROBLEM STATEMENT

The ability to predict when an individual is going to commit an act of violence before the act is carried out is possibly the most difficult and challenging mission in law enforcement. For an investigator, it is the equivalent of playing a psychological chess game, in which the players can only see a fraction of their opponent's pieces, and then looks for obscure clues in answers from subjects who are often intentionally deceptive. Further adding to the difficulty is the fact that no existing profile or model for subjects who eventually commit acts of targeted violence exists, so investigators are left to search for signs that an individual of interest has the potential to evolve into violent behavior. Making matters worse, most potential offenders of targeted violence evolve; in other words, they can initially be judged, correctly, not to be a threat, but within a short period of time, they can change, plan, and execute an attack. For example, if Timothy McVeigh had been interviewed before August 1992, he might have expressed some anti-government sentiments but likely would not have been deemed a threat. After Ruby Ridge in August 1992, his anti-government sentiments would have been stronger, but he likely still would not have shown enough perceptible indications to classify him as an imminent threat. In February 1993, McVeigh drove from Florida to Texas, and attempted to pass through a checkpoint entrance to the Branch Davidian compound; at this point, he had begun to act on his grievances, which potentially could have led a threat investigator to refer the case for continued monitoring.¹ Finally, following the passing of the assault weapons ban in September 1994, McVeigh fully entered the planning phase of his eventual attack by purchasing a storage unit in Arizona, and obtaining explosives through purchase and theft.² It is only during this period of September 1994 when he began obtaining explosives, until April 19, 1995, when he detonated a truck bomb in front of the federal building in

¹ Lou Michel and Dan Herbeck, *American Terrorist*, 1st ed. (New York: HarperCollins Publishers Inc., 2001), 117–125.

² Michel and Herbeck, 159–205.

Oklahoma City, killing 168 people, that if investigated successfully, he would have been deemed a threat and action could have been enacted.

Some individuals who commit acts of targeted violence never come to the attention of law enforcement prior to their violent acts, and others who do come into contact with law enforcement, are judged not to be a danger. The resulting damage from failing to identify these individuals before they commit acts of violence has been devastating. On October 1, 2017, Stephen Paddock opened fire from a hotel room on a crowd attending an outdoor concert in Las Vegas Nevada.³ In 10 minutes, 58 lives were lost and 851 people were injured before the gunman took his own life.⁴ This event was the deadliest mass shooting in U.S. history, and eclipsed the previous mark of 49, set less than a year before at the Pulse nightclub in Orlando, Florida. Before he opened fire in Las Vegas, Paddock was completely unknown to law enforcement as a potential threat.⁵ Less than five months after Paddock's attack, a former student walked into a Marjory Stoneman Douglas High School in Parkland Florida, and in six minutes, 34 students, and teachers were shot, and 17 lost their lives.⁶ Conversely, to the Paddock situation, the shooter at Marjory Stoneman Douglas High School, Nikolas Cruz had multiple encounters with the police, and had been reported as a threat to commit a school shooting.⁷ For law enforcement, the challenge ahead is to find a way to identify the next Paddock before he attacks, and to find better methods in dealing with the next Cruz.

Statistics on targeted violence in the United States show that incidents are increasing in both frequency and lethality. Targeted violence is described as an “incident

³ Trever Alsup, *Las Vegas Metropolitan Police Department Preliminary Investigative Report 1 October/Mass Casualty Shooting* (Las Vegas: Las Vegas Metropolitan Police Department, 2018), 3, https://www.lvmpd.com/en-us/Documents/1_October_FIT_Report_01-18-2018_Footnoted.pdf.

⁴ Alsup, 3.

⁵ Alsup, 3.

⁶ Marjory Stoneman Douglas High School Public Safety Commission, *Initial Report Submitted to the Governor, Speaker of the House of Representatives and Senate President* (Tallahassee, FL: Florida Department of Law Enforcement, 2019), 7, <http://www.fdle.state.fl.us/MSDHS/CommissionReport.pdf>.

⁷ Marjory Stoneman Douglas High School Public Safety Commission, 231–262.

of violence where an attacker selects a particular target prior to an attack.”⁸ The largest number of profile attacks within the United States since September 11, 2001, have been targeted violence attacks committed by one or two offenders. These lone offender attacks have given rise to the classification as lone wolf or self-radicalized offenders. An analysis of lone wolf attackers by decade shows that more attacks have occurred in the past eight years than in the 50 years between 1950 and 2000. Additionally, the lone wolf attacks from 1950 to 2009 resulted in 27 fewer fatalities than in the past eight years combined.⁹ Prior to the terrorist attacks of September 11, 2001, no U.S. military member was targeted in the United States; however, since that date, 47 military members have been killed or wounded.¹⁰ Additionally, from 1950 to September 11, 2001, 12 law enforcement officers have been wounded or killed. Moreover, 24 law enforcement officers have been wounded or killed by lone wolves in the 16 years since that time.¹¹

In 2010, then Central Intelligence Agency (CIA) Director Panetta described lone wolf attacks as the “main threat to this country.”¹² A Federal Bureau of Investigation (FBI) report has described lone wolves as the most significant domestic terrorism threat facing the United States.¹³ This threat may be manifesting into public perception as a lack of governmental control due to the past targets of targeted violence actors that include churches, schools, outdoor concerts, nightclubs, and office buildings. These locations are often places Americans frequent on a daily basis, which makes the threat of becoming a victim much more personal.

⁸ Lina Alathari, *Protecting America’s Schools: A U.S. Secret Service Analysis of Targeted School Violence* (Washington, DC: U.S. Secret Service National Threat Assessment Center, 2019), 1, https://www.secretservice.gov/data/protection/ntac/Protecting_Americas_Schools.pdf.

⁹ Katie Worth, “Lone Wolf Attacks Are Becoming More Common—And More Deadly,” *Frontline*, July 14, 2016, <https://www.pbs.org/wgbh/frontline/article/lone-wolf-attacks-are-becoming-more-common-and-more-deadly/>.

¹⁰ Mark Hamm and Ramon Spaaij, *Lone Wolf Terrorism in America: Using Knowledge of Radicalization Pathways to Forge Prevention Strategies, 1940–2013* (Ann Arbor, MI: Interuniversity Consortium for Political and Social Research, 2017), 5, <https://doi.org/10.3886/ICPSR36107.v1>.

¹¹ Hamm and Spaaij, 5.

¹² Randy Borum, Robert Fein, and Bryan Vossekuil, “A Dimensional Approach to Analyzing Lone Offender Terrorism,” *Aggression and Violent Behavior* 17, no. 5 (September 2012): 389–96.

¹³ Bruce Hoffman, *Inside Terrorism* (New York: Columbia University Press, 2006), 40.

Based on statistics, the number of successful lone wolf attacks is increasing in the United States, which can potentially erode public confidence in law enforcement's ability to protect and prevent further incidents, especially when they occur at schools.¹⁴ The shooter at Marjory Stoneman Douglas High School exhibited every sign that he was a threat and in need of both evaluation and threat management. The local Sheriff's Department contacted him at his home 20 times, and he came to the attention of school administrators and mental health workers, state social workers, and the FBI.¹⁵ An investigator from the Florida Department of Children and Families wrote about the suspect's plans to buy a gun, was concerned about his clinical depression, and expressions of hate including the use of Nazi symbols, and still rated his level of risk as low.¹⁶ The FBI was contacted by a concerned neighbor who felt as though the suspect was about to "shoot up a school" one month before the attack, and yet the case was not referred for investigation by the call center.¹⁷ Following the attack, the FBI Deputy Director stated that the "Number 1 risk for our organization is losing the faith of the American people."¹⁸ This case highlights the devastating consequences that any missteps can have, and also shows the tremendous effort required to sort through large volumes of information. The FBI stated that it received more than 765,000 phone tips last year, and another 750,000 internet threat tips, with nine out of 10 of the tips proving to be unsubstantiated.¹⁹ Following the shooting

¹⁴ Worth, "Lone Wolf Attacks Are Becoming More Common—And More Deadly."

¹⁵ Brett Murphy, "Numerous Missed Opportunities before Florida Shooter Killed 17 at Broward High School," Naples Daily News, February 18, 2018, <https://www.news-press.com/story/news/crime/2018/02/18/numerous-missed-opportunities-before-florida-shooter-killed-17-broward-high-school/349332002/>.

¹⁶ Murphy.

¹⁷ Murphy.

¹⁸ Chris Strohm, "FBI Vows to Regain Trust after Missing Warning on Florida Shooter," Bloomberg, February 22, 2018, <https://www.bloomberg.com/news/articles/2018-02-22/fbi-vows-to-regain-trust-after-missed-warning-on-florida-shooter>.

¹⁹ Strohm.

in Parkland, reports of homeschooling rates dramatically increased as parents became increasingly fearful of sending their children to schools.²⁰

The Orlando shooting involved a radicalized individual who in 2016 went into a nightclub and killed 49 people, which at the time was the worst mass shooting in U.S. history.²¹ In this case, the St. Lucie County Sheriff's Office had referred the attacker to the FBI after co-workers warned that he claimed connections to Al Qaeda and Hezbollah and wished to die a martyr.²² The FBI began a 10-month investigation during which it interviewed the suspect three times and added the suspect to the Terrorism Watch list.²³ Eventually, they determined that he was not a threat and closed the investigation; two years later, he pledged his allegiance to ISIS and carried out his attack.²⁴ Conversely, the Las Vegas shooter was an individual who had no contact with law enforcement or mental health services and posed very little chance of discovery prior to his attack. These two cases show the complexity and diversity of the individuals who commit these types of attacks and highlight the need to develop solutions not currently being utilized.

The upward trend regarding the statistics of lone-offender incidents of targeted violence show no sign of declining. In many of these instances, the current law enforcement methods have not been successful in preventing their occurrences. The majority of the recent high-profile targeted violence instanced in the United States has involved subjects who did not commit a criminal act before the attack or committed a minor violation that resulted in little to no jail time. Additionally, the majority of these individuals did not suffer from mental illness and would not have been eligible as a referral to a psychological

²⁰ Valerie Richardson, "Homeschooling Surges as Parents Seek Escape from Shootings, Violence," *The Washington Times*, May 30, 2018, <https://www.washingtontimes.com/news/2018/may/30/homeschooling-surges-parents-seek-escape-shootings/>.

²¹ Del Quentin Wilber, "The FBI Investigated the Orlando Mass Shooter for 10 Months—and Found Nothing, Here's Why," *Los Angeles Times*, July 14, 2016, <http://www.latimes.com/nation/la-na-fbi-investigation-mateen-20160712-snap-story.html#>.

²² Wilber.

²³ Elyssa Cherney, "Senator: FBI Investigations into Pulse Gunman Need Review," *Orlando Sentinel*, July 27, 2016, <https://www.orlandosentinel.com/news/pulse-orlando-nightclub-shooting/investigation/os-inspector-general-pulse-mateen-20160727-story.html>.

²⁴ Wilber, "The FBI Investigated the Orlando Mass Shooter for 10 Months."

evaluation. Most importantly, an arrest also does not address the issue of an individual evolving into a targeted violence threat, but merely addresses the issue of that small transgression that leads to the arrest in the first place. Further complicating the issue for law enforcement following a major targeted violence event is public pressure to simplify the act as the workings of a mentally unstable or radicalized mind, when in fact, the true motivation is a complex mixture of drives derived from personal, political, and social experiences that combine to manifest a deeply held grievance.²⁵

Early identification strategies to increase the likelihood of preventing targeted violence are needed to combat the rising threat. New methods, such as the United Kingdom Fixated Threat and Channel programs, should be analyzed for possible modeling in the United States, and computer programs that assist investigators, such as social network analysis (SNA), are needed to detect information previously unrecorded and analyze the information with tools not previously employed. Computer monitoring of those judged a possible threat that alerts investigators when a gun or explosives are purchased should also be researched and tested. Further research should be conducted on the current threat assessment models, which may be focusing too heavily on mental health data and not enough on social influences, such as the lack of group membership, which may act as a restraint against committing violence.

Anders Breivik, a lone offender of a targeted violence attack that killed 62 people in Norway in 2011, may have best summed up the depth of the current threat when he stated:

One of the great strengths of our enemies, the Western European cultural Marxist/multiculturalist regimes is their vast resources and their advanced investigation/forensic capabilities. There are thousands of video cameras all over European major cities and you will always risk leaving behind DNA, finger prints, witnesses or other evidence that will eventually lead to your arrest. They can also back trace your internet traffic in most cases and use infiltrators or informers. They are overwhelmingly superior in almost every

²⁵ Paul Gill et al., "Shooting Alone: The Pre-Attack Experiences and Behaviors of U.S. Solo Mass Murderers," *Journal of Forensic Sciences* 62, no. 3 (May 2017): 710–14.

aspect. But every 7 headed monster has an Achilles heel. This Achilles heel is their vulnerability against single/duo martyr cells.²⁶

B. RESEARCH QUESTION

1. How can investigators better understand, explain, and possibly anticipate actions related to targeted violence actors?
2. Is SNA an effective tool to understand the behaviors of targeted violence actors better?

C. LITERATURE REVIEW

The purpose of this literature review is to analyze threat assessment research, and the use of new methods that can assist investigators based on researched models of targeted violence actors. The material is derived from government reports, academia, and professional journals.

1. Threat Assessment Analysis

The current models used in threat assessment began in the 1990s with the work of Fein and Vossekuil in *Preventing Assassination: Secret Service Exceptional Case Study Project*. This case study examined 83 persons who had attempted or succeeded in assassinating public officials in the United States between 1949 and 1997.²⁷ The researchers sought insight into how the subjects developed the idea for the attack, the factors that motivated the attack, the advancement from idea to action, target selection, planning strategies, and role of mental illness. The key findings of the study were that attackers do not fit any single demographic or psychological profile.²⁸ Additionally, mental illness does not usually play a critical role, and persons who actually pose threats rarely

²⁶ Andrew Berwick, 2083—*A European Declaration of Independence* (London: n.p., 2011), https://fas.org/programs/tap/_docs/2083_-_A_European_Declaration_of_Independence.pdf.

²⁷ Robert Fein and Bryan Vossekuil, *Preventing Assassination: Secret Service Exceptional Case Study Project* (Washington, DC: National Institute of Justice, 1997), 8, unpublished.

²⁸ Fein and Vossekuil, 43.

make explicit threats to law enforcement or their intended targets.²⁹ These findings led the authors to conclude, “that targeted violence is the result of an understandable process of thinking and behavior.”³⁰ In other words, rational actors, who were not impulsive, and formulated the idea to act after a significant amount of time and planning, committed the majority of attacks.³¹ For some of the case study subjects, the planning phase of the attack monopolized their thoughts and provided “a sense of purpose” that dulled their emotional pain.³² This work is the foundation upon which all other work in the field of threat assessment has been built.

Vossekuil and Fein further developed the field of threat assessment with an article that expanded on their previous findings, and in 2000, they published a guide that provides information on how to conduct threat assessment investigations: *Protective Intelligence and Threat Assessment Investigations*.³³ This guide for law enforcement officials’ details methods of conducting threat investigations and also includes guidance on how to develop a threat management program.

In 2002, Vossekuil and Fein worked with Reddy, Borum, and Modzeleski for a case study on targeted violence in schools.³⁴ Following the attack at Columbine High School, this study used data from the 1997 case study to understand better why school shootings happen and what can be done to prevent them. The study identified 37 incidents, working backward from 2000 to the first targeted school incident in 1974.³⁵ The results of this study corroborated those of the previous one, including the finding that no useful profile of

²⁹ Fein and Vossekuil, 68, 72.

³⁰ Fein and Vossekuil, 80.

³¹ Fein and Vossekuil, 33.

³² Fein and Vossekuil, 57.

³³ Robert Fein and Bryan Vossekuil, *Protective Intelligence and Threat Assessment Investigations: A Guide for State and Local Law Enforcement Officials* (Washington, DC: U.S. Department of Justice, Office of Justice Programs, 2000), 1–59.

³⁴ Bryan Vossekuil et al., *The Final Report and Findings of the Safe School Initiative: Implications for the Prevention of School Attacks in the United States* (Washington, DC: U.S. Secret Service and Department of Education, 2002), 1–51, <http://hdl.handle.net/2027/mdp.39015055588142>.

³⁵ Vossekuil et al., 3.

students who commit acts of targeted violence at schools exists.³⁶ It was determined in both studies that only one-third of those who had committed acts of targeted violence received any kind of mental health evaluation, and less than one-fifth were diagnosed with a mental illness prior to the incident.³⁷ The studies also found that acts of targeted school violence are rarely sudden or impulsive; attacking students often conveyed their intentions to others, but rarely to intended targets. Most students who committed acts of targeted violence struggled with personal loss or failures, and many contemplated suicide, felt bullied or persecuted, and engaged in activities that inspired concern in others or indicated a need for help.³⁸

In response to the campus shooting at Virginia Tech on April 17, 2007, which claimed the lives of 32 students, Drysdale, Modzeleski, and Simmons produced a report on college campus-targeted violence on behalf of the United States Secret Service, Department of Education, and the FBI.³⁹ This report highlighted that a college environment is very different from that of elementary and high schools, as students are not in constant contact with teachers and administrators at college, campuses take up a much larger physical space, and students live on campus as opposed to just attending school there.⁴⁰ These facts make identifying pre-attack behaviors much more challenging. The study looked at the number of targeted violence events at universities from 1900 through 2010 by decade and found 162 incidents from 1990 to 2010 compared to 110 incidents from 1900 to 1990.⁴¹ In 53 percent of the cases, actors exhibited signs of pre-attack behaviors, which included stalking, verbal, or written threats, and physically abusive

³⁶ Vossekuil et al., 11.

³⁷ Vossekuil et al., 21.

³⁸ Vossekuil et al., 21.

³⁹ Diana Drysdale and William Modzeleski, *Campus Attacks: Targeted Violence Affecting Institutions of Higher Education* (Washington, DC: U.S. Secret Service, Department of Education, and Federal Bureau of Investigation, 2010), 1–33.

⁴⁰ Drysdale and Modzeleski, 4.

⁴¹ Drysdale and Modzeleski, 11.

acts.⁴² This work, while explaining the unique problem facing universities in addressing targeted violence, did not expand the ideas of threat assessment.

Additional works in the field of threat assessment have been consistent in explaining the deep complexity in understanding and dealing with those who may pose a threat. These works have also been consistent in highlighting that additional work is needed to help combat lone wolf shooters and targeted violence in schools. Numerous works have described how methods like physical barriers in schools have been ineffective because they do not address the goal-related behaviors and the willingness of the actor to circumvent established security practices.⁴³

In 2014, Gill, Horgan, and Deckert conducted a study of 119 incidents committed by lone-actor terrorists during the period between 1978 and 2015, which occurred in North America and Europe. The subjects studied included those who died during the commission of their attacks, or subsequently convicted for the crime. For the parameters of the study, terrorism was defined as the use or threat of violence designed to “influence the government or to intimidate the public or a section of the public, and/or the use or threat is made for the purpose of advancing a political, religious, or ideological cause.”⁴⁴ The study found that outside of the sample being overwhelmingly male, no uniform variables reflecting a majority of the group were identified. The study concluded that in 63.9% of the cases, people close to the subject were aware of the intent to engage in violence due to statements made by the offender.⁴⁵ It was also found that lone-actor terrorist acts were rarely impulsive and committed a detectable activity, which suggests that subjects are best identified through their actions. These findings are all consistent with the findings of the exceptional case study of assassins. This study also gave insight to the popular perception

⁴² Drysdale and Modzeleski, 21.

⁴³ Brandon A. Hollister and Mario J. Scalora, “Broadening Campus Threat Assessment beyond Mass Shootings,” *Aggression and Violent Behavior* 25, part A (November–December 2015): 43–53, <https://doi.org/10.1016/j.avb.2015.07.005>.

⁴⁴ 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, <https://doi.org/10.1111/1556-4029.12312>.

⁴⁵ Gill, Horgan, and Deckert, 429.

that lone actors remain isolated while their grievances manifest into violent planning and action. The study found that 62% of those studied maintained contacts with either radical extremist or other individuals involved in terrorist activities.⁴⁶

In 2017, Gill, Silver, Horgan, and Corner conducted a case study of 115 mass murders in the United States between 1990 and 2014, and concluded that mass murder, defined in this study as having four or more victims, was a relatively rare event.⁴⁷ The study reported that murders involving more than one person accounted for less than 4% of the total victims over the 24-year study.⁴⁸ Furthermore, the results of the study found “that mass murderer attacks are usually the culmination of a complex mix of personal, political and social drivers that crystalize at the same time to drive the individual down the path of violent action.”⁴⁹ It also found that the likelihood of an attack occurring following the intensification of a grievance was often a mixture of target availability and vulnerability combined with the subjects’ psychological and technical capability.⁵⁰ Findings of the study important to threat assessment investigations include that the mass murders are very similar to lone-actor terrorists, have no discernable profile, leak information about their intentions, are rarely sudden or impulsive, and are not categorically socially isolated.

In 2018, Bakker, Gill, and Bouhana expanded on their previous study published four years before and examined 55 cases of lone-actor extremists in Europe and North America between 1978 and 2015. They examined lone-actor attack planning and preparation methods to gain insight into pre-attack behavior.⁵¹ The study found that detecting and pre-emptively stopping lone actors is more difficult than stopping whole groups due to the lack of ties to co-conspirators, but also found that on many occasions,

⁴⁶ Gill, Horgan, and Deckert, 430.

⁴⁷ Gill et al., “Shooting Alone,” 710.

⁴⁸ Gill et al., 710.

⁴⁹ Gill et al., 713.

⁵⁰ Gill et al., 713.

⁵¹ Edwin Bakker, Paul Gill, and Noémie Bouhana, “Lone Actor Terrorist Attack Planning and Preparation: A Data-Driven Analysis,” *Journal of Forensic Science* 63, no. 4 (July 2018): 1191–1200, <https://doi.org/10.1111/1556-4029.13676>.

the lone actor is not as socially isolated as has been previously believed, with 53% of those studied having ties to extremist groups or movements.⁵² Social ties were found to play a significant role in the development of an individual's motivation and during the planning phase of these crimes.⁵³

Other findings of the study highlighted the fact that the majority of lone actors are unconcerned with operation security, convey their intentions to others, and sustain social ties which are important in the evolution and planning phase of their intended violent attack.⁵⁴ Their analysis found that the planning and preparation of these types of attacks occurred months, and sometimes years, before any violent action took place, and that the current lone-actor "type" was based on exceptions, not statistical observation.⁵⁵ The study also notes that those lone actors who consider operational security, and do not have ties, (or if they do, do not share information with those ties), are in the minority of total overall lone actors, and are the hardest to detect and possibly the most lethal. Two examples of lone actors who engaged in these types of operational security were Theodore Kaczynski, and Anders Breivik of Norway.⁵⁶ Other findings of the study include that lone actor terrorism is not a mental health issue in the majority of the studied cases, and that past violent behavior is the best future predictor of future violence. In the course of planning and preparing for these attacks it was discovered that 49% of those studied had contact with authorities, and 27% were suspected of terrorism-related activities.⁵⁷

2. Social Network Analysis

SNA has been defined as a collection of tools developed to provide the researcher with the ability to understand better patterns of interdependent relationships in hard-to-

⁵² Bakker, Gill, and Bouhana, 1197.

⁵³ Bakker, Gill, and Bouhana, 1195.

⁵⁴ Bakker, Gill, and Bouhana, 1198.

⁵⁵ Bakker, Gill, and Bouhana, 1198.

⁵⁶ Bakker, Gill, and Bouhana, 1198.

⁵⁷ Bakker, Gill, and Bouhana, 1197.

detect networks.⁵⁸ SNA uses these tools to expand on the ability of the human memory to process and identify network patterns. SNA focuses largely on social connectivity indicators, such as social gatherings and centers of worship, as well as the relationships developed between individuals. The number of ties one person has to another person is meaningful in the study of SNA, as is the determination of how interaction patterns affect both individual and collective group behavior.⁵⁹

The development of SNA has grown from the fields of psychology, sociology, and anthropology. The primary roots of classic SNA are grounded in the Gestalt psychology methods, which were attributed to the work of Wolfgang Kohler in the 1920s.⁶⁰ Kohler's research focused on the structure of organized patterns of thoughts and perceptions; these methods suggested that organized patterns of thought determined individual thoughts, which led to the idea of social determination.⁶¹ Modern SNA is rooted in the work of Milgram and Mitchell in the late 1960s. Milgram conducted a test using random people to record connectivity to a target person, which led to the conception of the phrase "six degrees of separation."⁶² Mitchell codified SNA as a pattern of links individuals have with others, and the links others have within a specified group. His position was that networks are created from a transfer of information, goods, and services.⁶³

In 1973, Granovetter researched the strength of interpersonal ties and their resulting social implications. Ties were described as strong, weak, or non-existent, and defined as a "combination of the amount of time, the emotional intensity, the intimacy, and the

⁵⁸ Daniel Cunningham, Sean Everton, and Phillip Murphy, *Understanding Dark Networks: A Strategic Framework for the Use of Social Network Analysis* (Lanham, MD: Rowman & Littlefield, 2016).

⁵⁹ Cunningham, Everton, and Murphy.

⁶⁰ Stanley Wasserman and Katherine Faust, *Social Network Analysis: Methods and Applications* (Cambridge: Cambridge University Press, 1994), 10–15.

⁶¹ Wasserman and Faust, 10–15.

⁶² Steve Ressler, "Social Network Analysis as an Approach to Combat Terrorism: Past, Present, and Future Research," *Homeland Security Affairs; Monterey* 2, no. 2 (July 2006), Proquest, <https://search.proquest.com/docview/1265818456/abstract/136282147FA74441PQ/1>.

⁶³ Wasserman and Faust, *Social Network Analysis*, 10–15.

reciprocal services which characterize the tie.”⁶⁴ He found that because weak ties linked members of different small groups, these ties were more important for integration into communities, as they exposed the people to networks outside of their own. Strong ties were found to be associated with cohesion in one group, which limited opportunities for integration. In 2006, Patacchini and Zenou took these principles and applied them to criminal activities.⁶⁵ This research similarly found that weak ties caused an increase in criminal activities and caused increased transitions into crime for persons who previously had not been involved in criminal activity.⁶⁶

This research has not discovered a source that has used SNA to address crimes of targeted violence specifically; it has been extensively used in the closely related fields of terrorism and criminal activity. Following the attack of 9/11, SNA was heavily researched for use against terrorist organizations; Krebs provided a network map of the 9/11 hijacking groups using SNA. Using ties, such as attendance at the same college, using the same address to purchase flight tickets, and attending the same flight school, Krebs was able to connect all 19 hijackers in one map.⁶⁷ This connectivity is significant when considering that this group was covert, or part of the dark network, with numerous members on the same flight being unknown to each other until the last minute.⁶⁸ His research determined that three main difficulties arose in dealing with dark networks that must be addressed, or at least considered when analyzing such social ties. The first difficulty is the evolving nature of dark networks, which leads to constant change. The second difficulty is the incompleteness of data, as dark networks are designed to be secretive. The final challenge lies in determining the boundaries of the network.⁶⁹

⁶⁴ Mark S. Granovetter, “The Strength of Weak Ties,” *The American Journal of Sociology* 78, no. 6 (May 1973): 1360–80.

⁶⁵ Eleonora Patacchini and Yves Zenou, “The Strength of Weak Ties in Crime,” *European Economic Review* 52, no. 2 (February 2008): 209–236.

⁶⁶ Patacchini and Zenou, 234.

⁶⁷ Valdis E. Krebs, “Mapping Networks of Terrorist Cells,” *Connections* 24, no. 3 (2002): 43–52.

⁶⁸ Krebs, 46.

⁶⁹ Krebs, 51.

In the field of criminal investigations and predictive behavior, Fox conducted a study of criminal gangs in Arizona utilizing five years of police field interview reports to create a social network map of the organization.⁷⁰ His research looked at the gang members in terms of the four levels of centrality, which include degree, closeness, betweenness, and eigenvector.

Degree centrality is the measure of the number of ties held by an individual node. “Degree centrality suggests that those who have the most ties are the most central to the network, but they are not necessarily the most strategic actors.”⁷¹ Fox explained closeness centrality as taking into account the distance between the nodes in the network. Nodes are the representation of people or in an SNA usually designated by a circle, and ties are the link between two nodes generally designated with a line.⁷² “Closeness centrality is calculated as the number of other nodes in the network divided by the sum of the geodesic distances between that node and all other nodes in the network.”⁷³ Betweenness centrality is “the proportion of shortest distance communication chains included in a given node.”⁷⁴ This measure relates to the amount of information that the person would control, which in turn, would raise its importance within the network. Eigenvector centrality indicates “that individuals are important to a network” because they themselves are centrally located and are tied to others who are centrally influential.⁷⁵ “Thus, the centrality of one’s friends is taken into account by including not just who you know, but also [the persons] your friends know.”⁷⁶ A person who has ties to multiple individuals of influence will presumably have greater network influence.⁷⁷

⁷⁰ Andrew Fox, “Examining Gang Social Network Structure and Criminal Behavior” (PhD diss., Arizona State University, 2013), 3, <https://cvpcs.asu.edu/sites/default/files/content/products/AFoxDissertation.pdf>.

⁷¹ Fox, 86.

⁷² Fox, 85.

⁷³ Fox, 86.

⁷⁴ Fox, 86.

⁷⁵ Fox, 86.

⁷⁶ Fox, 86.

⁷⁷ Fox, 87.

As a result of this research, Fox concluded that betweenness centrality was important for understanding criminal networks, as it most allows for a social position that provides connections to different groups, information, and opportunities.⁷⁸ He also discovered “that network centrality can enhance the likelihood of arrests” for the subjects who belonged to gangs.⁷⁹

In 1986, Krohn used SNA to examine how social networks can act as a restraint on delinquent behavior in juveniles.⁸⁰ From his research, he developed the hypothesis, “the higher the density of the network structure of the community, the lower the rate of delinquent behavior.”⁸¹ Network density describes the ratio of all connected ties in a network; the measurement is derived by comparing the observed ties in network to the maximum possible ties.⁸² It is with mentioning that this maximum density in a network is achieved only if everyone in the network knows each other.⁸³

In 2008, Johnson et al. conducted a test in cooperation with the Richmond Virginia Police Department to incorporate SNA into the current crime analysis methodologies of the agency.⁸⁴ This research incorporated examining offender ties in terms of positive or negative ties. Positive ties are characterized as being cooperative in nature, such as those between family or friends, or criminal partners.⁸⁵ Negative ties are described as those with hostile intentions towards each other, an example being the perpetrators of a crime, and their victims.⁸⁶ The SNA program’s use in the Richmond Police Department led to arrests

⁷⁸ Fox, 87.

⁷⁹ Fox, 91.

⁸⁰ Marvin D. Krohn, “The Web of Conformity: A Network Approach to the Explanation of Delinquent Behavior,” *Social Problems* 33 (1986): 81–93.

⁸¹ Krohn, 85.

⁸² Krohn, 81–93.

⁸³ Krohn, 81–93.

⁸⁴ Jennifer A. Johnson et al., “Social Network Analysis a Systematic Approach for Investigating,” *FBI Law Enforcement Bulletin*, March 5, 2013, <https://leb.fbi.gov/articles/featured-articles/social-network-analysis-a-systematic-approach-for-investigating>.

⁸⁵ Johnson et al.

⁸⁶ Johnson et al.

in a shooting and a string of robberies, from which the analysts using SNA uncovered case-critical information, which was previously unknown to the detective working the case.⁸⁷ The police found SNA mapping information was easily accessed by analysts and could be effectively shared with investigators.⁸⁸

In 2016, Green et al. used SNA to analyze more than 130,000 people in Chicago over an eight-year period in an effort to determine if gun violence spreads through social networks.⁸⁹ The research focused on gun-based violence spreading through a flu-like epidemic of social interactions described as social contagion, which was defined as “the spread of beliefs, attitudes, and behaviors through social interactions.”⁹⁰ The research found that social contagion accounted for 63.1% of the more than 10,000 shooting instances that occurred during the research period.⁹¹ These findings accounted for better predictive models of those who will be involved in gun violence, compared to the demographic models previously in use, which allowed for potentially preventative strategies to be implemented in the researched region.

Kathleen Carley, the head of the Computational Analysis of Social and Organizational Systems (CASOS) at Carnegie Mellon University, has been involved in numerous research projects involving the use of SNA to examine covert terrorist organizations, including predictive modeling techniques.⁹² Focusing on relationships of interest (ROI), Carley’s team built a predictive model to identify the members of a covert network using “triad closure.”⁹³ Triad closure is described as “person *i* has a dyad with

⁸⁷ Johnson et al.

⁸⁸ Johnson et al.

⁸⁹ Ben Green, Thibaut Horel, and Andrew V. Papachristos, “Modeling Contagion through Social Networks to Explain and Predict Gunshot Violence in Chicago, 2006 to 2014,” *JAMA Internal Medicine* 177, no. 3 (March 1, 2017): 326–33, <https://doi.org/10.1001/jamainternmed.2016.8245>.

⁹⁰ Green, Horel, and Papachristos, 326.

⁹¹ Green, Horel, and Papachristos, 326–333.

⁹² Ressler, “Social Network Analysis as an Approach to Combat Terrorism.”

⁹³ Matthew Dombroski, Paul Fischbeck, and Kathleen M. Carley, “Estimating the Shape of Covert Networks,” in *Proceedings of the 8th International Command and Control Research and Technology Symposium* (Washington, DC: Carnegie Mellon University, 2003), 2, http://www.casos.cs.cmu.edu/publications/papers/dombroski_2003_estimatingshape.pdf.

person j and person j has a dyad with person k , then there is a higher than chance likelihood that person i and person k have a dyad.”⁹⁴ Her team’s research also found that a “group’s behavior, values, and/or performance can be articulated by understanding the relationships that exist within the group.”⁹⁵ This finding supports the use of social identity theory (SIT) to interpret the findings of an SNA project. SIT, which was conceived by Turner and Tajfel as a means to explain how groups influence individual’s actions, is important in this research for understanding the data produced through an SNA examination.⁹⁶ SIT is further defined and examined later in this paper.

Cunningham et al. have also done important work in using SNA to understand and disrupt dark or covert networks. One of the principles of the research, and the strength of SNA, is the understanding that “people are substantially influenced by the behavior and choices of other actors around them-both directly and indirectly.”⁹⁷ Their research has found that a key to understanding a network’s capacity and resiliency lies with an understanding of the network’s topography.⁹⁸ Topographical features of a dark network are measured by determining the density and centralization of the network. Centrality differs from centralization in that it attempts to identify central actors, whereas centralization is “about the distribution of a centrality score throughout an entire network.”⁹⁹ The measures of network topography are described as very dense on one side, and very sparse on the other. An additional measure found important in understanding the structure of dark networks is the subgroups classification. Subgroups, listed in the Appendix, are important because of the intimate interaction implied, which in turn, “amplifies the peer effect that governs people’s actions and constraints.”¹⁰⁰ The research

⁹⁴ Dombroski, Fischbeck, and Carley, 2.

⁹⁵ Dombroski, Fischbeck, and Carley, 3.

⁹⁶ Henri Tajfel, *Social Identity and Intergroup Relations* (Cambridge: Cambridge University Press, 2010).

⁹⁷ Cunningham, Everton, and Murphy, *Understanding Dark Networks*, 14.

⁹⁸ Cunningham, Everton, and Murphy, 85–107.

⁹⁹ Cunningham, Everton, and Murphy, 87.

¹⁰⁰ Cunningham, Everton, and Murphy, 109.

concluded by describing the challenges faced in attempting to analyze dark networks, starting with the fact that they are all unique and can evolve very rapidly.¹⁰¹ Social ties are continually added and severed, and the nature of ties are frequently unclear, but as the science continues to evolve, much more is being understood, and further research has the potential for important discoveries in the field.

D. RESEARCH DESIGN

This research has compiled profiles on two known perpetrators of targeted violence to determine whether the use of SNA can provide data, or substantial evidence, that will correctly lead an investigator to explore a suspect as a possible threat. Research for this thesis has utilized both information taken from the secondary research of case studies of previous actors of targeted violence, and from the profiles assembled after extensive research on these actors, to determine whether SNA can be used to enhance the success rate of threat assessment investigations. The subjects of the case studies are determined by the amount of relevant open-source information available. First, the subjects are analyzed under a current threat assessment. Next, the subjects are classified under a dimensional system, and vulnerabilities that may help investigators are discussed. The research of these two methods attempts to provide a possible new way to compare categories of lone actors across different crimes. Finally, the test cases are reviewed to determine if a social network component can assist an investigator in determining the meaning behind potentially significant behaviors through an analysis of a suspect's social ties.

The primary objective of this research is to create a model that expands on the current field of threat assessment by adding importing informational elements, which are currently underdeveloped. This model may also allow for the person conducting the investigation to observe changes over time that may show that the subject under investigation is moving toward a path of violence. A successful test may result in the SNA model revealing information significant enough to lead an investigator to decide that further investigation of a subject is warranted. However, since the only true test of this

¹⁰¹ Cunningham, Everton, and Murphy, 293–300.

model is only on a person who has not yet committed an act of targeted violence, the results are only provided to prove that the concept has validity. The traditional model of threat assessment has been developed from existing open-source literature on the subject and examines the case study subjects' mental health history (including evidence of desperation, despair, or suicidal thoughts), criminal history, interest in prior attacks or previous assailants, approaching or visiting potential target(s), attack planning, obtaining or practicing with weapons, and communication of threats.

The threat assessment model using the SNA enhancement examines the profiles of targeted violence actors with the same indicators used in the traditional model, as well as an examination of memberships in social organizations, political organizations, groups followed on the internet, family relationships, social network of friends, and religious affiliations. The importance of using social network analytics in this method is the attempt to collect and analyze social influences on the actions of targeted violence actors, which are currently underrepresented in threat assessment models. When examined through the lens of SIT, it is understood that social ties can inspire individuals to perform tremendous acts of violence, as with terrorist organizations, but can also impose constraints on people's behavior.¹⁰² The more meaningful social ties people possess, the more their behavior will be constrained or modified to the groups that have captured their loyalty. The fewer in-groups people align themselves with, the fewer constraints that will inhibit or modify their behavior and choices. SNA is a way to reflect these ties to understand better whether people's ties are influencing a pathway to violence.

The number of targeted violence subjects examined through this threat assessment process was limited by the availability of reliable open-source information. This lack of availability is a potential limiting factor, as the assessment model is designed to ask specific questions during the assessment process, which in this case, cannot be asked. Threat assessments are designed for a two-stage process, the first, a determination of the likelihood that the subject is capable of an attack, and the second, a determination of whether the

¹⁰² Tajfel, *Social Identity and Intergroup Relations*, 100–127.

subject is moving toward violent actions. This examination occurs after the fact, so it is already known that the subject is capable of the attack.

The goal of this research is to create a model for use in the future development of threat assessment methodology. The research seeks to provide a better understanding of how certain social ties enable and constrain individuals within their relationships. The research may also determine whether targeted violence actors have a similar lack of social constraints enabling action on their violent thoughts. The research also suggests a strategy to utilize these methods in the form of threat assessment programs for any law enforcement agency, school, or mental health professional tasked with identifying potential threats.

E. BACKGROUND

Targeted violence refers to “situations in which an identifiable perpetrator poses a threat of violence to a particular individual or group.”¹⁰³ Incidents of targeted violence include lone wolf shooters, school attackers, and assassins of public officials. The traits commonly found in these groups include a perceived grievance, experiencing depression, and undergoing a personal crisis.¹⁰⁴ Further similarities have been exhibited in the planning and execution of attacks towards the targeted victims due to an emotional response to a perceived slight against themselves or a person or group with whom they identified. The increase of individuals acting alone in these attacks has seen a marked increase since the Oklahoma City bombing in 1995. From 1970 to 1995, individuals unaffiliated with an extremist group made up 6.5% of all attacks; however, from 1995 to 2007, that figure has risen to comprise 33% of all attacks.¹⁰⁵

Targeted violence actors are difficult to identify before they commit an attack, either due to isolation, or due to a tendency only to exchange their views with similar-minded people who are unlikely to alert authorities. These actors can be difficult to detect,

¹⁰³ Robert Fein, Bryan Vossekuil, and Gwen Holden, *Threat Assessment: An Approach to Prevent Targeted Violence* (Washington, DC: National Institute of Justice, 1995), 1.

¹⁰⁴ Fein, Vossekuil, and Holden, 80.

¹⁰⁵ Borum, Fein, and Vossekuil, “A Dimensional Approach to Analyzing Lone Offender Terrorism,” 104.

even when coming into contact with law enforcement, because of hard-to-detect, or deliberately disguised signals. These actors do not fit into a universally applicable profile for all situations, but targeted violent acts have been shown to be the result of detectable behavior.¹⁰⁶ However, the detection of these frequently insignificant behaviors and the resulting protective intelligence program may be more labor intensive and time consuming than many law enforcement agencies have the resources to expend.

An important component in the attempt to discover targeted violence actors prior to their committing a violent act is a protective intelligence program. This program consists of three major functions: identification, assessment, and case management.¹⁰⁷ After identifying a person who may pose a threat, a threat assessment investigation should be conducted to evaluate mental or social pressures that may lead to violence. If detectable behaviors or mental conditions are deemed to be potentially dangerous, further investigation, leading to a threat management program, is the best course of action.¹⁰⁸ Behaviors uncovered in a threat assessment model that may lead to additional investigation include a subject's interest in violence, planning behaviors, and communications of intentions.¹⁰⁹ Threat assessment is limited to the ability of the investigator to uncover information that the subject often is attempting to hide, and to interpret information of varying importance from differing types of potentially threatening actors. The prediction of violent behavior is conditional, as it is based on a changing set of mental and environmental variables, but the best chance for a correct indication is if all the relevant information can be obtained and analyzed, and the subject can be monitored for planning or attack related behaviors.¹¹⁰

Motivation, which is a key component to understanding why subjects commit acts of targeted violence, is described as a “goal-directed attention toward planning, preparing,

¹⁰⁶ Fein and Vossekuil, *Protective Intelligence and Threat Assessment Investigations*, 16.

¹⁰⁷ Fein and Vossekuil, 24.

¹⁰⁸ Fein and Vossekuil, 53–59.

¹⁰⁹ Fein and Vossekuil, 43.

¹¹⁰ Fein and Vossekuil, 3–20.

and ultimately committing an act of terrorist violence.”¹¹¹ The intention to kill others is described as a complex process involving multiple factors, notably the “interaction between the person and the frictions present in his or her environment.”¹¹² Frictions, or those external factors that influence a person’s decision to pursue a pathway to violence, often change over time; in other words, the factors that initiate the interest may be different from the final factors that influence the decision actually to commit the violent act.¹¹³ Change in these frictions can cause significant changes to the perceived outcome, which can result in changing the targets or abandoning the plan all together. Motivations for assassination were found to include “wishes for notoriety, revenge, idiosyncratic thinking about the target, hopes to be killed, interest in bringing about political change, and desires for money.”¹¹⁴ Motivations for school shooters included revenge, trying to solve a problem, suicide or desperation, and recognition.¹¹⁵

One of the key motivating factors revolves around grievances that have relevance in a high number of targeted violence cases and found in 67% of all subjects at the time of the incidents in the *Preventing Assassination Case Study*.¹¹⁶ The percentage of school shooters who had a grievance was 81% of those studied for *The Final Report and Findings of the Safe School Initiative*.¹¹⁷ Grievances are frequently acted against those who the subject feels are responsible for the situation, as in the case of Sirhan who assassinated Senator Robert Kennedy in 1968. Sirhan, a Palestinian-American held two grievances. He was unhappy with his income and living condition, and he also felt the Palestinian people were being unfairly treated by Israel and Americans who supported them. Sirhan had no personal grievance against Kennedy but held him responsible for the plight of the Palestinian people due to his support of the planned sale of U.S. F-15 fighter jets to Israel.

¹¹¹ Bakker, Gill, and Bouhana, “Lone Actor Terrorist Attack Planning and Preparation,” 1192.

¹¹² Bakker, Gill, and Bouhana, 1192.

¹¹³ Bakker, Gill, and Bouhana, 1192.

¹¹⁴ Fein and Vossekuil, *Preventing Assassination*, 18.

¹¹⁵ Vossekuil et al., *The Final Report and Findings of the Safe School Initiative*, 21–23.

¹¹⁶ Fein and Vossekuil, *Preventing Assassination*, 21.

¹¹⁷ Vossekuil et al., *The Final Report and Findings of the Safe School Initiative*, 24.

Another motivating factor is the adaptation of a violent or extreme ideology typically referred to as becoming “radicalized.” The motives of many who commit violent actions after becoming radicalized or self-radicalized are often time more complex than just acting in the interests of the ideology. Many who commit violent acts have little knowledge about the doctrine that their acts are reflecting, and few experiences with what would be considered a traditional radicalization process.¹¹⁸ Borum writes that in seeking answers to why people engage in terrorism, many look to “overly simplistic explanations,” and are predisposed to use the political connection as the master explanation when the truth is usually far more complex.¹¹⁹ He goes on to explain this complexity of understanding these relationships by stating:

The relationship between ideas or ideologies and behavior moves in both directions. Some people attach to a grievance because they adhere to a particular ideology, but others gravitate toward an ideology because they hold a particular grievance. conviction and commitment to a cause may precede his or her willingness to participate in violence but participating in violence may also strengthen a person’s conviction and commitment to a cause.¹²⁰

While some lone offenders are ultimately converted by a particular ideology, and eventually commit violence, this situation is not typical.¹²¹

SIT was conceived in the late 20th century by social psychologists John Turner and Henri Tajfel as a means to explain how people’s sense of self is often heavily based on their memberships in, or association with, various in-groups and social units.¹²² Humans are inherently social beings, and SIT maintains that their placement within various groups (such as family, social organizations, socioeconomic class, political party/affiliation, etc.) provides a sense of belonging, self-esteem, and responsibility. Victims of cults, members of terrorist organizations, and other damaging social organizations often cite feelings of

¹¹⁸ Randy Borum, “Informing Lone-Offender Investigations,” *Criminology and Public Policy* 12, no. 1 (February 2013): 103–12.

¹¹⁹ Borum, 103–112.

¹²⁰ Borum, 103.

¹²¹ Borum, 103–112.

¹²² Tajfel, *Social Identity and Intergroup Relations*, 15–36.

belonging and “being a part of something,” as major characteristics that attracted them to the organization in the first place. SIT holds that to improve self-images, people often seek to increase or improve the status of those groups people consider themselves to be a part of, or their “in-group.”¹²³ In-groups often inspire some form of prejudice against those who are not in the group, which are considered “out-groups.” Out-groups and in-groups almost always lead to an “us” versus “them” mentality among those in social situations, as viewing themselves or their organization/group/affiliation/etc., as superior to other’s helps contribute to people’s self-esteem.¹²⁴ This mentality can take many forms, some as benign as a friendly rivalry between fans of two teams in any given sport. However, on a larger and more serious scale, strong senses of in- and out-groups can inspire genuine concepts of out-groups as enemies. This factor contributes to the conception of many terrorist organizations. Group membership with these organizations gives individuals a sense of belonging, or an in-group fighting against their cause, which is usually the destruction of an out-group. One of the main ideas of SIT is that an in-group’s evaluation of the out-group will likely be negative in relation to its positive evaluation.¹²⁵ People’s social identity can be more influential in decision making than their personal identity, with their self-image closely tied to group membership.¹²⁶ “Critical to this process is that once individuals define themselves as members of a group, there is pressure for them to assume the characterization of the group as positive.”¹²⁷

These social ties within terrorist organizations can inspire individuals to perform tremendous acts of violence; however, these ties can also be utilized by the same organization to impose constraints on their behavior. When part of an in-group that is very important to their self-image, people are going to consciously make decisions and act in ways that will benefit their in-group. As Brannan states, “Because our group memberships

¹²³ Tajfel, 299–334.

¹²⁴ Tajfel, 299–334.

¹²⁵ Tajfel, 299–334.

¹²⁶ Richard Fleece, “Suicide Terrorism in America?: The Complex Social Conditions of This Phenomenon and the Implications for Homeland Security” (master’s thesis, Naval Postgraduate School, 2012), 30, <http://hdl.handle.net/10945/27830>.

¹²⁷ Fleece, 30.

become parts of our identity, and value associated with those groups will have implications for our feelings of self-worth.”¹²⁸ Individuals who possess a strong patron/client relationship to an in-group are likely to have their behavior constrained or modified by the groups that have captured their loyalty. Conversely, individuals who do not have in-groups to align themselves with will not be constrained. This lack of constraint in the cases of many lone wolf shooters, especially students who commit school shootings, can be disastrous. Some of the attackers in school shootings did not have an in-group with which to align themselves, and if their peers and teachers bully or ignore them, these shooters may consider the entire school to be an “out-group” or enemy that needs to be attacked.¹²⁹

The methodology of using SNA to help inform threat assessment investigations is complimented through the understanding of SIT. To be successful, threat assessment investigations seek to understand as much about the subject as possible. One method of obtaining needed information is through interviews of the subjects, such as “employers, coworkers, neighbors, relatives, associates, and, caregivers.”¹³⁰ These groups are all inclusive of an SNA of the subject. The additional methodology of SIT allows for the inclusion of group membership and the examination of the subjects through the full lens of ties created by their network. In effect, SNA creates the roadmap of the subjects’ influential relationships, and SIT provides the key to unlock the meaning.

F. RELEVANCE AND GOAL

Targeted violence incidents in the United States show every indication of becoming more common and more lethal. The continued threat from targeted violence actors has risen with few answers to combat the threat. Although numerous shooting events like Columbine High School have occurred over the past 20 years, improving measures to detect or prevent targeted violence events show little signs of being created. New methods are needed to detect information previously not recorded and analyze the information with tools not

¹²⁸ David Brannan, Anders Strindberg, and Kristin Darken, *A Practitioner’s Way Forward: Terrorism Analysis* (Salinas, CA: Agile Press, 2014), 51.

¹²⁹ Vossekuil et al., *The Final Report and Findings of the Safe School Initiative*, 8–19.

¹³⁰ Fein and Vossekuil, *Protective Intelligence and Threat Assessment Investigations*, 28.

previously employed. Current threat assessment models may be focusing too heavily on mental health data, and not enough on social influences, such as the lack of group membership that may act as a restraint against committing violence. Additionally, since these actors frequently go through cycles that lead to the violent acts, mapping models can be important to show differences in their behavior over time when law enforcement have multiple contacts with them. A 2018 study found that lone actors have considerably more social ties than previously believed, and that “86% of lone actors communicated their radical convictions to others.”¹³¹ It is extremely important to identify anyone close to the subjects who can potentially be interviewed to provide relevant information to the threat assessment.¹³² In the example of Timothy McVeigh, when attackers have a support network, understanding who is in that support network is very important. If McVeigh is considered a threat and Terry Nichols is arrested for stealing explosives, a computer-generated alert should be sent to the case agent that shows the relationship and prompts further investigation into both men.

¹³¹ Andrew Berwick, “2083 - A European Declaration of Independence,” 2011, https://fas.org/programs/tap/_docs/2083_-_A_European_Declaration_of_Independence.pdf.

¹³² Fein and Vossekuil, *Protective Intelligence and Threat Assessment Investigations*, 35–46.

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II. CURRENT THREAT ASSESSMENT MODELS

A. EXCEPTIONAL CASE STUDY THREAT ASSESSMENT MODEL

Many of the threat assessment models currently being used, including that of the United States Secret Service, are based on the report of the findings from the *Exceptional Case Study Project*. That report resulted in a guide published in January 2000 by the U.S. Department of Justice, National Institute of Justice, titled *Protective Intelligence Threat Assessment Investigations: A Guide for State and Local Law Enforcement Officials*.¹³³ This report is intended to guide law enforcement in the methods and reasoning behind threat assessment investigations. The results of the *Exceptional Case Study Project* were derived from an examination of 83 people who had attacked or attempted to attack a public figure from 1949 to 1996. Targets of these attacks included “Presidents, Members of Congress, Federal Judges, prominent national political leaders, State and city officials, business executives, and entertainment, sports, and media celebrities.”¹³⁴

The key findings of the report were that attacks are the result of “understandable and often discernible processes and thinking and behavior,” the majority of subjects saw the attack “as the means to a goal or a way to solve a problem,” and that target selection and motive are connected.¹³⁵

The guide reported that attacks are planned and not spontaneous occurrences, target selection is deliberate, and planning sometimes takes years. The attackers will often rehearse the attack, and the planning will frequently consume their lives and provide a sense of meaning that eases their emotional pain and allows them to rectify a perceived grievance.¹³⁶ The study found that eight motives were most prevalent, “to achieve notoriety or fame; to bring attention to a perceived wrong; to retaliate for a perceived injury; To end personal pain, to be removed from society, to be killed; to save the country

¹³³ Fein and Vossekuil, *Protective Intelligence and Threat Assessment Investigations*, 1–59.

¹³⁴ Fein and Vossekuil, *Preventing Assassination*, 6.

¹³⁵ Fein and Vossekuil, 60.

¹³⁶ Fein and Vossekuil, 64–67.

or the world, to fix a problem; To develop a special relationship with the target; To make money; To bring about political change.”¹³⁷

The study suggests that an investigator should obtain information on the subject based on three categories: personal identifiers, background information, and current life situation.¹³⁸ Identifiers include standard information that may help identify people associated with the subject, such as family and friend information, work history, military history, and current and former addresses. A social network map of the subject may be very helpful to an investigator during this process. It should include an ego network analysis, which includes people and organizations that have a direct tie to the subject, and a two-step expansion of the subject’s network. The two-step expansion includes the network of the people who have direct ties to the subject who can then potentially give an indication of isolation or radicalization.

Background information includes data intended to illuminate “behaviors, interests, and lifestyles of subjects that may influence their motivations, or capacity to attempt an attack.”¹³⁹ This information includes criminal history, mental health history, a history of grievances, and “interest in extremist ideas or radical groups; and travel history, especially in the previous year.”¹⁴⁰

Current life situation is information intended to determine if a person is in a life transition, crisis, or in an unstable living situation.¹⁴¹ The finding of the study that some attackers engaged in violence due to their current living environment frames the basis for obtaining this information. The guide suggests obtaining the following information from the subject of threat assessment investigation: is the person in a “stable living situation, with basic needs,” and how does the current living situation compare to past living

¹³⁷ Fein and Vossekuil, 19.

¹³⁸ Fein and Vossekuil, *Protective Intelligence and Threat Assessment Investigations*, 41–42.

¹³⁹ Fein and Vossekuil, 40.

¹⁴⁰ Fein and Vossekuil, 41.

¹⁴¹ Fein and Vossekuil, 42.

conditions project a downward course.¹⁴² Other considerations are the loss of employment or the end of a marriage, the loss of important contacts and supports, the death of someone close, and desperate or suicidal thoughts.¹⁴³

The study also found that most attacks were preceded by discernible attack related behaviors, which were often “observed by people in the subject’s life.”¹⁴⁴ These warning signs include an interest in murder or assassination, or acts “of violence directed at public officials, visiting sites connected with assassinations, and emulating assassins.”¹⁴⁵ Notes in a diary about committing an attack can include planning notes regarding the targets travel, law enforcement protective measures, or efforts to obtain a weapon.¹⁴⁶ By “communicating an inappropriate interest” in a potential target, the study found that attackers rarely “communicate a direct threat to their target or law enforcement,” but often communicated their intentions to relatives, coworkers, neighbors, or others.¹⁴⁷ Other signs include visiting a site linked to a possible target, even while this site may not have an immediately understood relevance to the target.

B. THREAT ASSESSMENT MODEL

Based on the finding of the *Preventing Assassination: Secret Service Exceptional Case Study Project*, the National Institute of Justice printed the *Protective Intelligence Threat Assessment Investigations*. This publication is described as a guide for state and local law enforcement officials who conduct threat investigations.¹⁴⁸ The following 10 questions, which are taken directly from the guide, are recommended for investigators to ask the assessment subject and collateral sources while conducting a threat assessment.¹⁴⁹

¹⁴² Fein and Vossekuil, 42.

¹⁴³ Fein and Vossekuil, 42.

¹⁴⁴ Fein and Vossekuil, 48.

¹⁴⁵ Fein and Vossekuil, 48.

¹⁴⁶ Fein and Vossekuil, 48.

¹⁴⁷ Fein and Vossekuil, 49.

¹⁴⁸ Fein and Vossekuil, 1–59.

¹⁴⁹ Fein and Vossekuil, 50–51.

1. What motivated the subject to make the statement or take the action that caused him or her to come to attention?
2. What if anything has the subject communicated to someone else (target, law enforcement, family, friends, colleagues, associates) or written in a diary or journal concerning his or her intentions?
3. Has the subject shown an interest in any of the following? Assassins or assassinations, weapons, militant or radical ideas/groups, murders, murderers, mass murderers, and workplace violence and stalking incidents.
4. Is there evidence that the subject has engaged in menacing, harassing, and/or stalking-type behaviors? These behaviors combine an inappropriate interest with any of the following: Developing an attack idea or plan, approaching, visiting, and/or following the target, approaching, visiting, and/or following the target with a weapon, attempting to circumvent security, assaulting, or attempting to assault a target.
5. Does the subject have a history of mental illness involving command hallucinations, delusional ideas, feelings of persecution etc., with indications that the subject has acted on those beliefs?
6. How organized is the subject? Does the subject have the ability to plan and execute a violent action against a target?
7. Is there evidence that the subject is experiencing desperation and/or despair? Has the subject experienced a recent personal loss and/or loss of status? Is the subject now, or has the subject ever been suicidal?
8. Is the subject's "story" consistent with his or her actions?
9. Are those who know the subject concerned that he or she might act based on inappropriate ideas?
10. What factors in the subject's life and/or environment might increase or decrease the likelihood that the subject will attempt to attack a target or targets?¹⁵⁰

These questions are designed to help understand the mental process of the subject in an attempt to decide if the individual is moving toward a path of violence. These questions are also designed to provide a baseline about a "subject's thinking and actions at

¹⁵⁰ Fein and Vossekuil, 50.

a certain point in time.”¹⁵¹ This information can be very important if at a later date the subject is the focus of another investigation to determine a possible change in thoughts or behaviors.¹⁵² While these questions make up the core information to be obtained during a threat investigative interview, they do not preclude other questions that should address any unresolved issues for a particular case.¹⁵³

C. COMPARATIVE UNITED KINGDOM THREAT ASSESSMENT MODEL

The United Kingdom, the closest ally to the United States in the war against terror, has also suffered a series of significant terrorist attacks. These attacks have included the subway bombing in 2005 that killed 52, and injured more than 700, and the attack in Manchester following a concert by a radicalized lone wolf who killed 23.¹⁵⁴ A Europol annual report revealed that in 2017, the United Kingdom experienced 36 casualties, more than any other European country that year due to terrorist attacks.¹⁵⁵ These victims resulted from ISIS inspired attacks in Westminster, London Bridge, Finsbury Park, and the previously mentioned Manchester attacks. The report also stated that the United Kingdom experienced the highest number of attacks both completed and disrupted and had the most prosecutions of terrorists at 125.¹⁵⁶ The attacks are said to target crowds of people to cause higher casualty rates. According to the report, the majority of these attackers were radicalized within the United Kingdom without traveling abroad.¹⁵⁷

In addition to sharing the challenges of dealing with terrorism and lone offenders, the United Kingdom shares similarities within its legislative, legal, law enforcement and

¹⁵¹ Fein and Vossekuil, 52.

¹⁵² Fein and Vossekuil, 52.

¹⁵³ Fein and Vossekuil, 51–52.

¹⁵⁴ “July 7 2005 London Bombings Fast Facts,” CNN, updated July 2, 2019, <https://www.cnn.com/2013/11/06/world/europe/july-7-2005-london-bombings-fast-facts/index.html>.

¹⁵⁵ Lizzie Dearden, “UK Suffered More Terror Attack Deaths than Any Other EU Country in 2017, Report Finds,” *Independent*, June 20, 2018, <https://www.independent.co.uk/news/uk/crime/uk-terror-attacks-deaths-most-eu-2017-europol-threat-laws-human-rights-a8408821.html>.

¹⁵⁶ Dearden.

¹⁵⁷ Dearden.

health care systems to that of the United States, so its programs will have the same type of challenges in terms of the rights of its citizens and privacy protections. In 2006, the United Kingdom created a Fixated Threat Assessment Center (FTAC) in London to respond to threats to public figures from lone attackers who are mentally ill or pathologically fixated. This center combined mental health workers from the National Health Service (NHS) and police from the Metropolitan Police Service who work together to discover and address individuals' mental illness that can pose a threat.¹⁵⁸

The creation of this center was founded with the realization that in contrast to groups whose motives were frequently understandable, lone offenders, especially those with mental illness, had motivations that were difficult to understand, and were unpredictable. This program identified that for these cases, traditional law enforcement investigative strategies did not have a high level of success, and that education and combining different expertise was needed.¹⁵⁹ The pilot program was funded following a three-year research study that examined behaviors of individuals who attacked elected officials and members of the Royal Family in the United Kingdom and determined that the main risk to public figures in the United Kingdom was not terrorists, but from lone individuals with mental disorders of pathological fixation.¹⁶⁰

The operation of the FTAC begins as individuals are referred to the center. The second step involves a joint assessment, followed by appropriate intervention and long-term management. The center does not detain individuals but refers them for mental health treatment or legal intervention.¹⁶¹ Follow up from the center includes home visits, family contact, and liaison with regional forensic psychiatric services. Part of the pilot program involved the center conducting a statistical study of the individuals it encountered. Some of those statistics showed that 53% of the people referred to the center resulted in

¹⁵⁸ David James et al., "The Fixated Threat Assessment Centre: Preventing Harm and Facilitating Care," *The Journal of Forensic Psychiatry & Psychology* 21 (August 1, 2010): 521–36, <https://doi.org/10.1080/14789941003596981>.

¹⁵⁹ James et al., 522–523.

¹⁶⁰ James et al., 522–523.

¹⁶¹ James et al., 530–532.

compulsory admission to a hospital, 26% were referred to mental health teams for treatment, 4% for FTAC management, while just 2% were arrested and prosecuted.¹⁶² Threat levels of the FTAC evaluate subjects as high, medium, and low. The study reported that the FTAC had managed 80% of the cases referred down to low levels of concern from the original high and medium assessment.¹⁶³

The report discusses the strengths of the program as:

The power of FTAC's intervention lies in producing detailed packages of information about each individual, which provide evidence of the underlying problems and/or pathology, and also point to possible management and treatment options. The combination of information from policing sources with information available to local psychiatric services is illuminating and amounts to more than the sum of its individual parts.¹⁶⁴

The FTAC has the important role of follow through, case management, and ensuring that individuals who pose a threat do not slip through the cracks between the law enforcement and medical realms. The study concluded with the statement that the pilot program had been a resounding success, won a 2009 Association of Chief Police Officers Excellence award, and recommended the expansion to stalking and homicide prevention.¹⁶⁵

David James, who was a member of the study conducted on fixated people that led to the development of the FTAC, and is part of the center operations, stated that of the 24 violent attacks in Europe not related to terrorism, mentally disordered individuals "were responsible for most of the fatal incidents and serious injuries, and most had given warnings which had gone unrecognized."¹⁶⁶ Some of the operational advantages of the FTAC revolve around the doctors from the NHS, as they can establish a medical history on

¹⁶² James et al., 530–532.

¹⁶³ James et al., 533.

¹⁶⁴ James et al., 534.

¹⁶⁵ James et al., 535.

¹⁶⁶ David Rose, "'I've Given You the Chance to Help, but You Haven't, Now Someone Is Going to Have to Die,'" *The Observer*, August 26, 2007, <https://www.theguardian.com/theobserver/2007/aug/26/features.magazine67>.

individuals otherwise unavailable to police. This medical background can be combined with the police background check to provide the doctors with the knowledge of the crimes that the person has committed. This background information can also clarify the overall picture and give the FTAC the ability to obtain a complete understanding of the potential threat in a fraction of the time it takes under the old method.¹⁶⁷ In many cases, the FTAC is simply putting people back into the mental health services after they ceased treatment too soon, or is introducing individuals to a mental health service that had not previously been available. A 1996 example provided the case of Thomas Hamilton who wrote to the Queen that he “felt ostracized from his fellow men;” a week later he killed 16 children and a teacher at a school in Dunblane.¹⁶⁸ According to police in the unit, the FTAC gives them an avenue to be part of the solution. Normally, police are unable to take action against mentally ill people if they are not acting on their delusions. Thus, authorities have few options available to them to intercede, but with the FTAC, they can intervene and help people before they turn violent.¹⁶⁹

An additional benefit of the FTAC has included the reduction of concerning behaviors, which decreases the number of police call outs that potentially allows police resources to focus on more important crimes and keeps mentally ill people out of the criminal justice system, which has led to wasted resources, time, and expense.¹⁷⁰ The FTAC, like other threat assessment units, understands that threat management is a continuing process and not a single event. The center operates with the understanding that

¹⁶⁷ Rose.

¹⁶⁸ Rose.

¹⁶⁹ James et al., “The Fixated Threat Assessment Centre,” 521–36.

¹⁷⁰ David V. James and Frank R. Farnham, “Outcome and Efficacy of Interventions by a Public Figure Threat Assessment and Management Unit: A Mirrored Study of Concerning Behaviors and Police Contacts before and after Intervention,” *Behavioral Sciences & the Law* 34, no. 5 (September 1, 2016): 660–80, <https://doi.org/10.1002/bsl.2255>.

it is also very hard to quantify results, as ultimately, it is not possible to know if the individual will carry out the attack.¹⁷¹

In 2017, Victoria expanded the use of the FTAC to prevent radicalization and target lone wolf attacks. The 31-million-dollar center will have 25 investigators, intelligence analysts, and forensic mental health experts working together to address people who “make threats, are socially isolated and who could pose a risk of committing acts of terror or extreme violence.”¹⁷²

Another related pilot program, which began in 2016, combined NHS mental health practitioners with counter terrorism police. The objective of the pilot program is to improve police and health professionals’ knowledge of mental health considerations that lead to radicalization. The focus is on what support can be provided and how to best manage the risk of radicalization.¹⁷³

The Channel program is another effort in the United Kingdom designed to support individuals vulnerable to radicalization. The program exists in both England and Wales and is intended to combat all forms of extremism.¹⁷⁴ The program is an early intervention attempt to steer people away from extremist viewpoints before they turn to violence. If a person is possibly becoming radicalized, that person can be referred by anyone to the local authorities or police.¹⁷⁵ Following a referral, the case is discussed by the Channel Program panel, which is made up of representatives from personnel in health care, education, and law enforcement. The panel will then decide if the referred person needs assistance; if they determine the person is not at risk, the case is closed. If the panel determines that the person

¹⁷¹ David V. James, Frank R. Farnham, and Simon P. Wilson, “The Fixated Threat Assessment Centre: Implementing a Joint Policing and Psychiatric Approach to Risk Assessment and Management in Public Figure Threat Cases,” in *International Handbook of Threat Assessment*, ed. J. Reid Meloy and Jenn Hoffman (New York: Oxford University Press, 2014).

¹⁷² “New Unit to Prevent Lone Wolf Attacks Set up in Victoria,” ABC News, October 4, 2017, <http://www.abc.net.au/news/2017-10-04/new-unit-to-prevent-lone-wolf-attacks-in-victoria-set-up/9013942>.

¹⁷³ “Mental Health Pilot Hubs,” National Police Chief’s Council, accessed August 19, 2018, <http://www.npcc.police.uk/NPCCBusinessAreas/TAM/MentalHealthPilotHubs.aspx>.

¹⁷⁴ “The Channel Programme,” United Kingdom Home Office, November 9, 2017, <https://www.gov.uk/government/case-studies/the-channel-programme>.

¹⁷⁵ United Kingdom Home Office.

needs assistance, a support package, which can include education, employment, healthcare, and ideological mentoring, will be offered. The program is confidential for both the reporting person and the subject referred to the program, and participation by the referred person is completely voluntary.¹⁷⁶

Another important component of the program is that those accepted for assistance are monitored on a monthly basis until such a time that they leave the program. This step is vital because people on a path to violence change over time, with consistent monitoring being the only reliable way to measure such change. The program started as a pilot in 2006 and was extended to all jurisdictions in 2012, which culminated in 2015 when it was given statutory status under the Counter-Terrorism and Security Act of 2015.¹⁷⁷ From the period of January 2015 through December 2016, 7,631 individuals were referred to Channel. Out of this number, only 1,072 (14%) were discussed by a panel, and of that number, 381 were referred for support.¹⁷⁸ Of the 381 who received support, 365 (96%) left the program, with 302 deemed a successful reduction of their vulnerability, and 63 of their own volition. Those who leave on their own can be referred to the police if the threat is deemed to rise to a concerning level.¹⁷⁹ Due to the confidentiality of the program, it is hard to determine the statistical success rates, but the expansion suggests that the United Kingdom has considered the program to be advantageous, which in and of itself, warrants further examination for its use in the United States.

The United Kingdom's method of having medical professionals and law enforcement officers work together and trained in their respected areas of expertise in threat assessment and management, shows far greater promise than current methods being employed in the United States to detect and prevent attacks by lone offenders. This method shows potential in expediting and providing information into an investigation where

¹⁷⁶ United Kingdom Home Office.

¹⁷⁷ United Kingdom Home Office, *Individuals Referred to and Supported through the Prevent Programme, April 2015 to March 2016* (London: United Kingdom Home Office, 2017), 6, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/677646/individuals-referred-supported-prevent-programme-apr2015-mar2016.pdf.

¹⁷⁸ United Kingdom Home Office, 4.

¹⁷⁹ United Kingdom Home Office, 5–6.

everything is important and each piece of information increases the chance of success. It successfully removes important barriers and reinforces the fact that cooperation among different sectors in threat assessment is vital.

The case of James Eagan Holmes is an example of the necessity of creating a collaborative unit of law enforcement and mental health professionals working together to mitigate mental health threats. On July 20, 2012, Holmes, dressed in black tactical gear and wearing a gas mask, entered an Aurora Colorado movie theater through an exit door that he had propped open, tossed in two gas canisters, and opened fire on the crowd during the midnight showing of “The Dark Knight Rises.”¹⁸⁰ His shooting spree killed 12 people and injured 70 others, many of them severely.¹⁸¹

Holmes’s background included no previous criminal history or acts of violence prior to the shootings at the Century 16 movie theater. He had graduated in the top 1% of his class at the University of California Riverside, and was a PhD student attending the University of Colorado Anschutz Medical Campus in Aurora, a suburb of Denver.¹⁸² During his subsequent trial, Holmes was diagnosed by a court appointed psychiatrist with schizoaffective disorder combined with a social anxiety disorder, and that he understood right from wrong on the night of the shooting.¹⁸³ Based on this diagnosis, the court rejected Holmes’s defense of insanity and found him guilty.¹⁸⁴

Holmes’s classmates describe a concerning change in his personality in the spring of 2012. On May 22, 2012, Holmes began to acquire weapons with a purchase of a semi-

¹⁸⁰ Erica Goode et al., “Before Gunfire, Hints of ‘Bad News,’” *New York Times*, August 26, 2012, <https://www.nytimes.com/2012/08/27/us/before-gunfire-in-colorado-theater-hints-of-bad-news-about-james-holmes.html>.

¹⁸¹ Goode et al.

¹⁸² Carol Leonning and Joel Achenbach, “James Holmes, Held in Colorado Shooting, Had Academic Promise but Was Struggling,” *The Washington Post*, July 20, 2012, https://www.washingtonpost.com/national/health-science/james-eagan-holmes-held-in-colorado-shooting/2012/07/20/gJQA213UyW_print.html.

¹⁸³ Maria La Ganga, “James Holmes Jury Finds Aggravating Factors Exist, Moves on to Second Phase,” *Los Angeles Times*, July 23, 2015, <https://www.latimes.com/nation/la-na-james-holmes-phase-one-deliberations-20150723-story.html>.

¹⁸⁴ La Ganga.

automatic handgun.¹⁸⁵ Six days later, he purchased a shotgun, and then on June 7, Holmes, purchased an AR-15 assault rifle.¹⁸⁶ His final purchase was for another semi-automatic handgun on July 6, as was the case with all four weapons purchases, Holmes bought the guns legally and passed the required background screening.¹⁸⁷ During this time period, Holmes also began acquiring ammunition through purchases on the internet. He bought 3,000 rounds for the rifle, 350 shells for the shotgun, and 3,000 rounds of handgun ammunition.¹⁸⁸ Finally, Holmes bought magazines including a 100 round drum magazine for the AR-15 rifle, and on July 2, purchased tactical vests, pouches, and a knife from an online store.¹⁸⁹

Holmes kept detailed information in a notebook, which he mailed to his psychiatrist at the University of Colorado hours before his attack.¹⁹⁰ The notebook discusses his decision to attack a mass gathering and details his planning of the attack with diagrams of the different theaters in the complex that include his eventual target.¹⁹¹ He visited the theater two weeks before the attack and wrote in the notebook that a police station was three minutes away, and a “99 percent” chance existed that he would be caught.¹⁹²

Holmes’s psychiatrist at the University of Colorado, Dr. Lynne Fenton, testified during the trial, “Holmes told her he wanted to kill as many people as possible, but that she did not believe she had the legal authority to place him on a mental-health hold because he

¹⁸⁵ Ivan Moreno, “Police: Colo. Shooting Suspect Bought Guns Legally,” *ABC News*, July 21, 2012, <https://web.archive.org/web/20120722041017/http://abcnews.go.com/US/wireStory/police-colo-shooting-suspect-bought-guns-legally-16826588>.

¹⁸⁶ Moreno.

¹⁸⁷ Moreno.

¹⁸⁸ Jack Healy, “Suspect Bought Large Stockpile of Rounds Online,” *New York Times*, July 22, 2012, <https://www.nytimes.com/2012/07/23/us/online-ammunition-sales-highlighted-by-aurora-shootings.html>.

¹⁸⁹ Healy.

¹⁹⁰ Steve Almasy, “James Holmes Notebook Read to Jury in Colorado Movie Massacre Trial,” *CNN*, May 26, 2015, <https://www.cnn.com/2015/05/26/us/james-holmes-trial-notebook/>.

¹⁹¹ Almasy.

¹⁹² Almasy.

did not specify a target or plan.”¹⁹³ Following the last time, she saw Holmes as a patient on June 11, 2012, Dr. Fenton reported Holmes as possibly dangerous to the university’s threat assessment team.¹⁹⁴ Dr. Fenton testified that Holmes stated he was “having thoughts of killing people 3–4 times a day.”¹⁹⁵ An official for the university stated that nothing that Holmes disclosed in his sessions with Dr. Fenton rose to the level of involuntary hospitalization under Colorado law. Dr. Fenton also contacted university police and inquired if Holmes had a criminal record, which he did not.¹⁹⁶ The police officer contacted reported that Dr. Fenton “decided against an involuntary commitment because she thought Holmes was borderline,” and such an action would be inflammatory.¹⁹⁷ The university police officer deactivated Holmes’s school identification card to ensure he could not enter any locked buildings.¹⁹⁸ Neither the School police nor the school threat assessment team interviewed Holmes prior to his attack.

This case highlights the challenges for both law enforcement and mental health professionals, who can find themselves in a position of trying to balance patient rights with their responsibilities to inform others of dangers. Holmes’s case also highlights a need for a system where law enforcement and mental health professionals can work together to prevent subjects from committing violent attacks. Finally, lessons should be learned to have both law enforcement and mental health professionals specialize in these types of investigations, because important aspects require experience.

¹⁹³ Carol McKinley, “James Holmes Had Homicidal Thoughts 3–4 Times a Day, Psychiatrist Testifies,” *ABC News*, June 16, 2015, <https://abcnews.go.com/US/james-holmes-homicidal-thoughts-times-day-psychiatrist-testifies/story?id=31814357>.

¹⁹⁴ McKinley.

¹⁹⁵ McKinley.

¹⁹⁶ Keith Coffman, “Psychiatrist for Colorado Movie Gunman Thought Mental Hold Might ‘Inflate’ Him,” *Reuters*, September 2, 2015, <https://news.yahoo.com/psychiatrist-colorado-movie-gunman-thought-mental-hold-might-024609685.html>.

¹⁹⁷ Coffman.

¹⁹⁸ Coffman.

1. Threat Management

The goal of threat assessment is to identify people who will commit an act of targeted violence. The result of a threat assessment will lead an investigator to conclude that a subject is either not a threat or can be classified as one of three categories as defined in the *Preventing Assassination Study*.¹⁹⁹ These categories include “Identification of persons who might pose a threat; assessment of persons who are identified as a potential threat; and case management of persons and groups deemed a threat to a protected person.”²⁰⁰

To be successful, threat assessment programs should include a corresponding protective intelligence and threat management program.²⁰¹ Threat management entails ensuring that an at-risk subject does not commit an act of targeted violence. Threat management can include many different aspects including surveillance and monitoring, as well as mental health and family involvement.²⁰² In many instances, subjects who come to the attention of threat management investigators are experiencing personal crises, and just the act of reconnecting them with family, who may be unaware of their crises, or getting them help from a mental health professional, can break the grievance cycle before it enters the pathway to violence.²⁰³ The first priority of any threat management program is to prevent subjects deemed to be a threat, or those determined potentially to be a threat from completing a violent act.²⁰⁴

2. Expanding the Use of Threat Assessment

Within the academic community, considerable research has been conducted on various types of individuals who have committed public acts of violence, including lone-

¹⁹⁹ Fein and Vossekuil, *Protective Intelligence and Threat Assessment Investigations*, 24.

²⁰⁰ Fein and Vossekuil, 24.

²⁰¹ Fein and Vossekuil, 24.

²⁰² Fein and Vossekuil, 24–28.

²⁰³ Fein and Vossekuil, 24–28.

²⁰⁴ Fein and Vossekuil, 24–28.

actor terrorists, assassins, mass murderers, and school shooters.²⁰⁵ Just one of these categories, the lone wolf terrorist, has been broken into four subcategories. The first is isolated individuals operating outside of any command and control called loners.²⁰⁶ The second classification is designated as a lone wolf, described as subjects who acted alone, but had assistance and direction from an extremist group.²⁰⁷ The third category is the lone wolf pack, which is formed when a small group self radicalizes.²⁰⁸ The final group is individuals directly controlled by extremist groups but carry out their attacks alone.²⁰⁹ While the first group would be challenging for a SNA assessment, the second and third groups would likely result in maps that would prove invaluable to investigators.

In studying these profiles, many different terms and definitions have been developed. For example, just the term “lone offender” has a multitude of meanings within the research community. In some studies, lone offenders are categorized as individuals who have acted alone and independent of a greater group, while some allow group contact within the definition if the act was committed alone. Others allow for one accomplice, and some do not allow for any accomplices.²¹⁰ When categorizing lone-actor terrorism, some studies only include the traditional political or sociological motivation, while others recognize the legitimacy of personal motivations.²¹¹ In looking at the ways that threat assessment models can be used to help those in law enforcement better understand and ultimately attempt to intervene before an act of violence occurs, the definition and ultimately the motivation are not as important as identifying the clues that suggest a person has or may enter a pathway to violence. Borum suggests that definitions that identify and set parameters for the concept of lone-offender

²⁰⁵ Fein and Vossekuil, *Threat Assessment*, 1; Vossekuil et al., *The Final Report and Findings of the Safe School Initiative*, 3.

²⁰⁶ Raffaello Pantucci, “A Typology of Lone Wolves: Preliminary Analysis of Lone Islamist Terrorists,” *International Centre for the Study of Radicalisation and Political Violence*, March 2011, 14–16.

²⁰⁷ Pantucci, 19–23.

²⁰⁸ Pantucci, 24–28.

²⁰⁹ Pantucci, 29–32.

²¹⁰ Borum, “Informing Lone-Offender Investigations,” 103–112.

²¹¹ Borum, 103–112.

terrorism only matter to the extent “that they facilitate or obscure effective policies or practices.”²¹² Since known profiles are not available, it may be more useful to analyze cases by their features rather than by type or category.

The following section compares the statistics from previous case studies conducted on persons who have committed targeted violence and have relevance to threat assessment investigations. Table 1 has four columns. The first column is taken from the *Preventing Assassination: Secret Service Exceptional Case Study Project*. This case study examined 83 persons who had attempted or succeeded in assassinating public officials in the United States between 1949 and 1997. The second column is taken from *Bombing Alone: Tracing the Motivations and Antecedent Behaviors of Lone-Actor Terrorists*, a study based on 119 cases of lone-actor terrorist in Europe and North America between 1978 and 2015. The third column’s information is derived from *Shooting Alone: The Pre-Attack Experiences and Behaviors of U.S. Solo Mass Murderers*, which examined 115 mass murderers between 1990 and 2014. The fourth and final column draws data from *The Final Report and Findings of the Safe School Initiative: Implications for the Prevention of School Attacks in the United States*, which identified 37 incidents and works backward from 2000 to the first school-based incident in 1974.

Table 1. Comparison of Assassins, Lone Actor Terrorists, Mass Murderers, and School Shooters

	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>
Planning				
Prior to attack	80%	N/A	85%	93%
Mental Health				
Diagnosed Mental Health Disorder	38%	32%	41%	17%
History of depression/Stress	44%	74%	63%	61%
Suicide thoughts or attempts	65%	N/A	N/A	78%
Gender				
Men	86%	96%	96%	100%
Women	14%	4%	4%	0%

Table 1 continued on next page

²¹² Borum, 104.

Table 1 continued from previous page

Age				
Average	35	33	33	N/A
Range	16–73	15–69	15–69	11–21
Marital Status				
Married	26%	25%	17%	N/A
Single/Never Married	51%	50%	43%	N/A
Separated/Divorced/Widowed	23%	19%	13%	N/A
Education				
High School or Tech School Grad	31%	25%	25%	N/A
College Graduate		15%	22%	11%
Attended Graduate School	6%	20%	4%	N/A
Military History				
Military Service	42%	26%	18%	N/A
No Service	58%	74%	72%	N/A
Employment				
Unemployed	52%	40%	40%	N/A
Employed Full Time	35%	50%	50%	N/A
Disabled/Retired/Student	13%	10%	N/A	N/A
Social Network				
Socially Isolated	60%	53%	26%	34%
History of Arrest				
Prior Arrest Juvenile or Adult	66%	41%	43%	27%
History of Violence	20%	38%	38%	31%
Substance Abuse History				
History of Substance Abuse	39%	23%	44%	24%
History of Grievances				
Grievances against Others	97%	N/A	56%	81%
Communication of Threat				
Communicated Threat to Others	92%	64%	31%	81%

Column A—Preventing Assassination: Secret Service Exceptional Case Study Project. This case study examined 83 persons who had attempted or succeeded in assassinating public officials in the United States between 1949 and 1997.

Column B—Bombing Alone: Tracing the Motivations and Antecedent Behaviors of Lone-Actor Terrorists. This case study examines 119 cases of lone actor terrorists in Europe and North America between 1978 and 2015.

Column C—Shooting Alone: The Pre-Attack Experiences and Behaviors of U.S. Solo Mass Murderers. This case study examined 115 cases of mass murderers between 1990 and 2014.

Column D—The Final Report and Findings of the Safe School Initiative: Implications for the *Prevention of School Attacks in the United States*. This case study includes 37 cases of school shooters in the United States between 1974 and 2000.

While the threat assessment model developed from *Preventing Assassination: Secret Service Exceptional Case Study Project* was designed to identify assassins before they could act, evidence shows that each of these lone actor types share similar traits that may allow the threat assessment models to be used successfully across differing lone-actor categories.

As the provided statistics indicate, while similarities exist between the classifications of targeted violence actors, no percentages in any category (aside from a male dominated category) suggests that a threat assessment may produce a single profile on which investigators can concentrate their efforts. For an investigator, focusing on the fact that males predominantly commit acts may cause an investigative bias, which can then lead to overlooking someone like Sarah Jane Moore, who attempted to assassinate President Gerald Ford on September 22, 1975.²¹³ In fact, the statistics can be interpreted by deciding that investigations must look at all subjects under a different light, and examine their mental state for possible grievances and motivations, be it political or personal, etc. It also must be asked whether the subject is becoming radicalized, before attempting to render any conclusions about the subject. It is also important for the investigator to understand any possible motivation or grievance of the subject since motivations can provide insight into a potential target.

The provided data should be analyzed with the understanding that target selection can change due to external circumstances, as in the case of Arthur Bremer, who originally traveled to Canada to attempt to assassinate then President Nixon.²¹⁴ Finding that security measures prevented him from his goal, he then shifted his attention to presidential candidate George Wallace, whom he shot in May 1972.²¹⁵ Almost half of the subjects in the *Preventing Assassination Study* considered attacking a target other than their eventual

²¹³ Fein and Vossekuil, *Preventing Assassination*, 74.

²¹⁴ Fein and Vossekuil, 49.

²¹⁵ Fein and Vossekuil, 49.

ultimate target, as was the case of Mark Chapman who killed singer John Lennon in December 1980.²¹⁶ Chapman considered other celebrities and a public official as a target before deciding on Lennon.²¹⁷

One of the most consistent findings among the various studies is that no matter which category the person falls into, targeted violence offenders have a high percentage of “leaking” or communicating their intentions to others. As shown in Table 1, the likelihood of this behavior is extremely high, as 92% of those studied in *Preventing Assassination*, and 81% of those studied in *The Final Report and Findings of the Safe School Initiative* communicated their intentions to commit an attack beforehand. The *Bombing Alone* study also showed that lone-actor terrorists had a significant communication of intent with 64% of those studied doing so before their attacks. Finally, the *mass murders* studied in *Shooting Alone*, while reporting the lowest number at 31% of those studied communicating intent, still reflects almost one third of the studies’ raw data.²¹⁸

Numerous examples of high-profile targeted violence events occurred before which the attackers directly informed a friend or family member of their intentions to act. Thus, understanding the subjects’ social network is all the more important to be able to identify the people with whom they have the most contact and thereby most likely to share important information.²¹⁹ Examples of attacks that could have been prevented if people close to the subject had come forward include those of Timothy McVeigh and Mark Chapman.²²⁰ The case of Ted Kaczynski, often referred to as the “Unabomber,” who mailed bombs to targets from 1978 to 1995, was solved by his family.²²¹ Kaczynski’s brother, who did not have prior knowledge of the attacks, recognized a manifesto published by the *New York Times* and *Washington Post*, at Kaczynski’s direction, as possibly being

²¹⁶ Fein and Vossekuil, 32.

²¹⁷ Fein and Vossekuil, 32.

²¹⁸ Gill et al., “Shooting Alone,” 712–713.

²¹⁹ Fein and Vossekuil, *Preventing Assassination*, 33–35.

²²⁰ Michel and Herbeck, *American Terrorist*.

²²¹ David Kaczynski, “My Brother, The Unabomber,” *Psychology Today* 49, no. 1 (February 2016): 68–76.

the work of his brother, who was living in a cabin in Montana and completely cut off from society.²²² These cases highlight the fact that in threat assessment, one of the most important tools available to an investigator is communication with those closest to the subject.

For investigators, it is essential to exploit the fact that suspects provide information to those close to them. The first step in that process is to identify those who are close enough to the subject to receive information that the person does not want shared with authorities. Next, the investigator must understand the conflict that a family member or friend will feel about sharing information that may be damaging to the subject. Borum states, “Those with kinship bonds may not approve at all of the attacker’s intent, but they may feel restrained from acting because of love and loyalty or concern about the consequences.”²²³ This idea was reflected in the words of David Kaczynski when he first read his brother Ted’s manifesto in the *Washington Post*, and wrestled with the idea that his brother could be the serial mail bomber popularly known as the Unabomber. He wrote:

the conflict between our moral obligation and my love for Ted could not be reconciled. A decision could not be made without sacrificing one for the other. We wrestled with these questions by day and by nightfall felt even more confused and upset. If Ted was the Unabomber, it meant he was responsible for wanton, cruel attacks on innocent people, yet I couldn’t uncover any memories that revealed such deep-seated evil in him.²²⁴

Taking into account the importance of shared information, threat assessment programs should carefully consider implementing better systems for people to report concerning behavior. These reporting systems should account for anonymity and ease of accessibility, and also provide multiple methods of reporting.²²⁵ It is important for the system to maintain continued credibility, which will be ensured if those who report feel

²²² Kaczynski, 71.

²²³ Borum, “Informing Lone-Offender Investigations,” 108.

²²⁴ Kaczynski, “My Brother, The Unabomber,” 72.

²²⁵ Gill et al., “Shooting Alone,” 713.

that they will be protected as confidential informants by investigators who appreciate that by coming forward, those informants may be jeopardizing their safety.²²⁶

Mental health, which has been shown in the included studies to be an influencing condition in about half of the examined subjects, is not necessarily an overriding motivating factor, and does not attribute to a higher level of threat, despite popular belief.²²⁷ Hence, a large number of persons known to have mental illnesses were still capable of planning and executing complex coordinated attacks. An important task for investigators conducting a threat assessment on potentially mentally ill persons is to determine if they are capable of a level of organization that may allow them to conduct an attack.²²⁸ This determination is more relevant to ascertaining a potential threat than the diagnosis of any particular conditions the subjects may have.

It is important for threat assessment investigators to learn not only from failures, but also from successes. Strom et al. conducted a study that examined 86 cases of terrorism plots from 1999–2009. They found 86 plots that caused, or were intended to cause casualties; of these cases, 18 plots were carried out, while 68 were stopped prior to successful execution.²²⁹ Of these cases, 35 were attributed to lone offenders, with a result of 10 executed plans, and 25 with intercession prior to the attacks.²³⁰ The study found that lone offenders were more successful in reaching execution, or 30% compared to 16% success by groups.²³¹

The study concluded that the 17,000 state and local U.S. law enforcement agencies are not being used to their potential despite the fact that more than 80% of thwarted plots

²²⁶ Gill et al., 713.

²²⁷ Borum, Fein, and Vossekuil, “A Dimensional Approach to Analyzing Lone Offender Terrorism,” 395.

²²⁸ Borum, Fein, and Vossekuil, 395.

²²⁹ Kevin Strom et al., *Building on Clues: Examining Successes and Failures in Detecting U.S. Terrorist Plots, 1999–2009* (Research Triangle Park, NC: Institute for Homeland Security Solutions, 2010), 1–6, http://www.emptywheel.net/wp-content/uploads/2011/02/101001-Building_on_Clues_Strom.pdf.

²³⁰ Strom et al., 1–6.

²³¹ Strom et al., 8.

were stopped by these groups and by the general public.²³² The report found that approximately “one in five plots were foiled ‘accidentally’ during investigations into seemingly unrelated crimes.”²³³ This study recommends further training for local law enforcement to help them identify terrorism related activity when investigating other criminal acts and an increased amount of federal guidance for standardization for the collection and dissemination of suspicious activity at the local levels is advocated for as well.²³⁴ The study also found that nearly 40% of plots were prevented as a result of information derived from the general public, which highlights the importance of building trust between investigators and persons involved in radical movements.²³⁵

Additional results of the study revealed that a key component for success in these cases was successfully handling the initial clue in the case.²³⁶ Conversely, mishandling the initial clue resulted in some significant failures.²³⁷ The study found mishandled initial clues that could have stopped seven of the 18 executed attacks, with four of the cases resulting in the initial clues not being fully investigated or forwarded to the correct agency.²³⁸

One of these missed opportunities includes the attempted bombing of Northwest Airlines Flight 253 by Umar Farouk Abdulmutallab on December 25, 2009. Abdulmutallab, a Nigerian national, attempted to detonate explosives that he had hidden in his underwear while the flight was underway.²³⁹ He was subdued by a fellow passenger on the plane, and was unsuccessful in this attack, for which Al-Qaeda in Yemen took credit.²⁴⁰ The follow-up investigation found that Abdulmutallab’s father had reported to

²³² Strom et al., 1.

²³³ Strom et al., 1.

²³⁴ Strom et al., 18–19.

²³⁵ Strom et al., 18–19.

²³⁶ Strom et al., 16–18.

²³⁷ Strom et al., 16–18.

²³⁸ Strom et al., 16–18.

²³⁹ Strom et al., 17.

²⁴⁰ Strom et al., 17.

U.S. State Department officials that his son held extremist views, had recently disappeared, and may have travelled to Yemen.²⁴¹ This interview and the resulting intelligence was recorded with the National Counterterrorism Center, but was not added to the terrorist screening database due to incomplete information.²⁴²

Another missed opportunity also occurred in 2009, involving Nidal Hasan, a U.S. Army Major, and psychiatrist, who killed 13 people and injured 30 additional at Fort Hood in Texas.²⁴³ The FBI was aware that Hasan had been exchanging emails with Anwar al-Awlaki who was suspected of having strong ties to Al-Qaeda in Yemen, and that his colleagues were aware of his increasingly radical views.²⁴⁴ After screening the messages, the FBI decided that the emails were for a research paper that Hasan was writing and judged him not to be a threat.²⁴⁵

Another incident in which the original clues were missed, with lethal consequences, involved the Columbine High School attack in Colorado in 1999. In 1998, an investigator with the Jefferson County Sheriff's Office looked into a complaint against Eric Harris, one of the two eventual attackers of the high school, by a mother who said he threatened her son.²⁴⁶ The investigation revealed threats made on a website by Harris and included a description of pipe bomb, of which an actual device was found near his home.²⁴⁷ A search warrant for the home was drafted, but the department stated that it could not be completed due to a lack of probable cause, and the case was not furthered.²⁴⁸

Since the completion of this study in 2009, at least three other high-profile cases in the United States have occurred in which eventual targeted violence actors were identified

²⁴¹ Strom et al., 17.

²⁴² Strom et al., 17.

²⁴³ Strom et al., 17.

²⁴⁴ Strom et al., 17.

²⁴⁵ Strom et al., 17.

²⁴⁶ Strom et al., 17.

²⁴⁷ Grand Jury Report: Investigation of Missing Guerra File, No. 03CR0002 (District Court, City and County of Denver, Colorado September 2, 2004).

²⁴⁸ Grand Jury Report: Investigation of Missing Guerra File.

as possible threats, but were either not investigated, or were investigated and deemed not to be a threat.

3. Dimensional Classification

Borum et al. suggested focusing the study of non-group targeted violence offenders in three categories: loneness, direction, and motivation.²⁴⁹ This method of classification and study may be more effective than the earlier listed studies on classes of assassins, mass murderers, lone terrorists, and school shooters. Studying offenders based on Borum's three categories can potentially eliminate the missed comparisons of similar offenders based solely on target selection.²⁵⁰ The case of Anders Breivik is a good example; under the listed studies, he would have fallen into the category of a lone terrorist or lone wolf. However, Breivik intended to assassinate Jens Stoltenberg, the Norwegian Prime Minister, and altered his plans when Stoltenberg was not at the location that Breivik expected him to at the time of the attack.²⁵¹

Borum described measuring "loneness" as the extent to which the subject receives assistance in the initiation, planning, and execution of an attack.²⁵² This category also measures the degree of contacts that the attacker has with those who assist, influence, inspire, or support the activity.²⁵³ Support was defined as either material or expressive, and referred to both social and emotional acts that created receptive conditions.²⁵⁴ Borum's dimensional model placed those who received no outside assistance as solo offenders, and

²⁴⁹ Borum, Fein, and Vossekuil, "A Dimensional Approach to Analyzing Lone Offender Terrorism," 389–96.

²⁵⁰ Borum, Fein, and Vossekuil, 389–396.

²⁵¹ Raffaello Pantucci, "What Have We Learned about Lone Wolves from Anders Behring Breivik?," *Perspectives on Terrorism* 5, no. 5–6 (December 2011): 27–42.

²⁵² Borum, "Informing Lone-Offender Investigations," 393–394.

²⁵³ Borum, 393–394.

²⁵⁴ Borum, 393–394.

those who received assistance from one or two other people in the initiation, planning, and preparation of the attack as lone offenders.²⁵⁵

The second category of direction describes the subject's independence in making decisions about the attack, from formulation of the idea to execution of the plan.²⁵⁶ This model takes into account the influences others played in the attacker's plan, and the degree of influence they held over the subject. If the subjects did not receive personal guidance on target selection from a member of an extremist group, they would be classified as non-directed. If the subjects did receive personal direction, the classification would be group directed.²⁵⁷

The third category is an understanding of the subject's motivation, and the degree to which the attack was driven by a "political, social, or ideologically based grievance, not solely by revenge or some other personal motive."²⁵⁸ If the attack were motivated by revenge or a personal grievance, and not significantly motivated by political, social, or ideological factors, then the person would be classified as non-ideological. If the converse were the motivating factor, then the attack would be classified as ideological.²⁵⁹

Targeted violence offenders mentioned throughout this study are classified under Borum's dimensional classification parameters, included as follows.

Timothy McVeigh would be considered a lone-non-directed-ideological attacker. This classification is derived from the fact that Terry Nichols and Mike Fortier assisted McVeigh in the planning and preparation of his attack.²⁶⁰ He is classified as non-directed, because while he was reported to have had contact with militant groups, no evidence has been found that they provided him with any instruction or guidance in target or weapons

²⁵⁵ Borum, Fein, and Vossekuil, "A Dimensional Approach to Analyzing Lone Offender Terrorism," 393–394.

²⁵⁶ Borum, "Informing Lone-Offender Investigations," 394–395.

²⁵⁷ Borum, Fein, and Vossekuil, "A Dimensional Approach to Analyzing Lone Offender Terrorism," 394–395.

²⁵⁸ Borum, "Informing Lone-Offender Investigations," 395.

²⁵⁹ Borum, 395.

²⁶⁰ Michel and Herbeck, *American Terrorist*, 159–205.

selection.²⁶¹ McVeigh was heavily motivated by his grievance against the ATF and federal government for their perceived attack on individual freedom and gun rights, which makes him an ideological attacker.²⁶²

Anders Breivik would be considered a solo/non-directed/ideological attacker. The solo classification is derived from the fact that Breivik was not assisted in the planning and preparation of his attack.²⁶³ He is classified as non-directed, because although he stated that he was a member of the Norwegian Knights Templar group, Norwegian authorities found no evidence that this group actually existed.²⁶⁴ Breivik can be categorized as an ideological attacker, because in the 1,500-page manifesto that he left behind, 700 pages were devoted to attacking the Muslim religion.²⁶⁵ In fact, the title of the document 2083, relates to a 1683 battle in which European Christendom forces defeated the Ottoman Empire. He blamed the Norwegian government for allowing what he called the [sic] “Islamisation” of Europe.²⁶⁶

James Holmes would be considered a solo/non-directed/non-ideological attacker. He acted without any assistance in carrying out or deciding on his target selection. He is classified as non-ideological attacker due to the writings in his notebook, in which he wrote, “Terrorism isn’t the message, the message is, there is no message.”²⁶⁷ Holmes also wrote that people would wrongly interpret his problems with relationships and jobs as the cause, stating that those reasons were catalysts, but not the reason.²⁶⁸ He offered his

²⁶¹ Michel and Herbeck.

²⁶² Michel and Herbeck, 117–158.

²⁶³ Asne Seierstad, *One of Us: The Story of Anders Breivik and the Massacre in Norway* (New York: Farrar, Straus and Giroux, 2013).

²⁶⁴ Pantucci, “What Have We Learned about Lone Wolves from Anders Behring Breivik?,” 27–42.

²⁶⁵ Kerstin von Brömssen, “‘2083—A European Declaration of Independence’—An Analysis of Discourses from the Extreme,” *Nordidactica—Journal of Humanities and Social Science Education* 1 (January 2013): 12–33, <http://www.diva-portal.org/smash/get/diva2:623531/FULLTEXT03.pdf>.

²⁶⁶ Berwick, 2083.

²⁶⁷ Almasy, “James Holmes Notebook Read to Jury in Colorado Movie Massacre Trial.”

²⁶⁸ Almasy.

motivation for the attack writing, “The causation being my state of mind for the past 15 years.”²⁶⁹

Tamerlan Tsarnaev would be considered a lone/non-directed/ideological attacker. He is considered lone because his brother assisted him in the attack.²⁷⁰ He is non-directed because even though he had contact with Chechen extremists, the target selection appears to be of his choosing.²⁷¹ Tsarnaev is classified as ideological due to his following of Islamic extremists, and his desire to become a jihadist.²⁷²

Classifying the study of non-group targeted violence offenders in the directional method, as suggested by Borum, allows for the further study of individuals who commit violent acts based on motivation instead of target selection.²⁷³ This method allows for comparative studies that may help future investigators better understand the minds of potential violent actors. In the aforementioned referenced targeted violence offenders, only McVeigh and Tsarnaev have similarities in all three of the suggested categories. The study of each category may prove valuable insight into the individual methods of radicalization and the pathways to violence.

²⁶⁹ Almasy.

²⁷⁰ Rohan Gunaratna and Cleo Haynal, “Current and Emerging Threats of Homegrown Terrorism: The Case of the Boston Bombings,” *Perspectives on Terrorism* 7, no. 3 (2013): 44–63.

²⁷¹ Gunaratna and Haynal, 44–63.

²⁷² Gunaratna and Haynal, 44–63.

²⁷³ Borum, Fein, and Vossekuil, “A Dimensional Approach to Analyzing Lone Offender Terrorism,” 395.

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III. SOCIAL NETWORK ANALYSIS

A. SNA USE IN THREAT ASSESSMENT

SNA has been used to understand how members of terrorist organizations are radicalized and motivated to commit violent acts. In a case study of two organizations, Ahmed Ressam's Montreal Group and the Hamburg Group, SNA was used to map the progression of the individuals with the groups.²⁷⁴ Ressam was an Algerian born Al-Qaeda member who organized the failed Millennium Attack plot to bomb the Los Angeles Airport on New Year's Eve in 1999.²⁷⁵ The Hamburg group was a small group of Muslim students who were members of a mosque in Germany, who later joined Al-Qaeda, and eventually, became three of the four pilots on September 11, 2001. The study explains how the use of SNA can mathematically map almost any form of relationship, depending on contact or the absence of contact, between nodes. Nodes are often described as representing individuals, but can be places, objects, or anything with an interconnected relationship. The relationships are shown as a visual graph, with centrality, or the level of connectivity as a key identification of the individual nodes in the network, and the flow of information between nodes. The article shows the radicalization process for both groups through the social connections that led them to join Al-Qaeda.²⁷⁶ The groups start from different places, Ressam from a criminal organization, and the Hamburg group from a religious background, but end up at the same place due to the influence of radicalized members of the established group. SNA, in this case, was able to map the group's social isolation, increased in-group dependence, and out-group disassociation, which led to stronger bonds and coalition with like-minded members. One of the key repetitive factors is that both groups have no competing social memberships that would have restrained them from terrorism or provided a competing perspective.

²⁷⁴ Sam Mullins, "Social Network Analysis and Counter-Terrorism: Measures of Centrality as an Investigative Tool," *Behavioral Sciences of Terrorism and Political Aggression* 5, no. 2 (2013): 115–136.

²⁷⁵ Mullins, 115–136.

²⁷⁶ Mullins, 115–136.

In the 2018 study by Gill et al., it was found that 62% of lone actors held social ties with radical, extremists, or terrorist groups, which were influential during the formulation of motivation needed to carry out violent attacks.²⁷⁷ In some cases, these ties remained influential during the preparation phase of the attack. The study also found that 33% had social ties to the leaders of the extremist groups, and 31% were members of the groups at some point in time.²⁷⁸

The study findings challenged a popular conception that lone actors operated in complete isolation with limited ways to detect them before they acted.²⁷⁹ It stands to reason that if lone actors are maintaining social ties, then those ties are important to building a complete threat assessment picture. Lone actors were frequently described as participating on the fringe of groups but were still heavily influenced by the identity and goals of the group, which could influence motivation against the out-group, and assist with overcoming moral barriers to commit acts of violence.²⁸⁰ Timothy McVeigh and Terry Nichols would be a relevant example of this finding, as they saw them themselves as part of the anti-government movement but remained on the fringe of an actual organized group.²⁸¹ The study also found that even when actors leave the group, they are still likely to emulate those they consider leaders because of their past willingness and ability to commit violent attacks successfully.²⁸² Of all the lone actors examined in the study, 78% were encouraged to commit violent acts by the either online or by extremist leaders, and at a minimum, drew inspiration from the larger radical group that eventually led to emulation of those groups' actions.²⁸³

As a tool designed to further threat assessment investigations, SNA has the potential to provide invaluable insights into the subject. Knowing the social ties of the subject would

²⁷⁷ Bakker, Gill, and Bouhana, "Lone Actor Terrorist Attack Planning and Preparation," 1195.

²⁷⁸ Bakker, Gill, and Bouhana, 1195.

²⁷⁹ Bakker, Gill, and Bouhana, 1195.

²⁸⁰ Bakker, Gill, and Bouhana, 1198.

²⁸¹ Hoffman, *Inside Terrorism*, 101–108.

²⁸² Bakker, Gill, and Bouhana, "Lone Actor Terrorist Attack Planning and Preparation," 1195.

²⁸³ Bakker, Gill, and Bouhana, 1195.

allow an investigator to question a subject about suspicious ties and analyze their meanings, especially if the subject were not truthful or forthcoming. A SNA program designed for use in threat assessment cases should identify not only the people in the threat subjects' network, represented as ties, but tools, such as Organizational Risk Analyzer (ORA),²⁸⁴ should identify the strength of those ties.²⁸⁵ An investigator can use this information to recognize those ties most important and potentially influential in the subject's life. This information can help direct the investigation in determining who to interview to obtain information about the subject, or decide what other people in the network may themselves need to be investigated to complete the picture.²⁸⁶

Organizations that the subject may belong to should be identified and analyzed to see if they are potentially ties that may push or pull the subject towards or away from violent actions.²⁸⁷ Similarly, the subject's online network can also be important in determining if ties are a potential positive or negative influence.²⁸⁸ A benefit of using a social network tool is that the information contained in the analysis can be stored, and after a period of time, compared to the subject's current network to identify changes. This information can be useful if it shows that the subject has withdrawn from social contacts, as was the case of Tamerlan Tsarnaev and Anders Breivik.²⁸⁹ Conversely, the information stored can also be useful if the subject's social network has expanded to include more extremist or militant people or organizations. The information can also show that the person is moving away from extremist people or organizations, which can also help to shape the way that the investigator evaluates the person as a threat.²⁹⁰

²⁸⁴ Kathleen M. Carley et al., *Organizational Risk Analyzer*, CMU-ISR-13-108 (Pittsburg, PA: Carnegie Mellon University, 2013), <http://www.casos.cs.cmu.edu/publications/papers/CMU-ISR-13-108.pdf>.

²⁸⁵ Cunningham, Everton, and Murphy, *Understanding Dark Networks*, 141–167.

²⁸⁶ Cunningham, Everton, and Murphy, 141–167.

²⁸⁷ Cunningham, Everton, and Murphy, 141–167.

²⁸⁸ Cunningham, Everton, and Murphy, 141–167.

²⁸⁹ Erin Hug, "The Role of Isolation in Radicalization: How Important Is It?" (master's thesis, Naval Postgraduate School, 2013), 55–66, https://calhoun.nps.edu/bitstream/handle/10945/38949/13Dec_Hug_Erin.pdf?sequence=1&isAllowed=y.

²⁹⁰ Cunningham, Everton, and Murphy, *Understanding Dark Networks*.

B. SNA PROJECT CREATION

The following information on how to create an SNA project is taken directly from the Common Operational Research Environment, CORE, Laboratory, located at the Naval Postgraduate School in Monterey, California.²⁹¹

The project should begin with a clearly defined problem statement that defines the social system to be mapped and studied. The problem statement can be defined with the help of the following information: who is the group of interest, what is the goal of the investigation, when did the group form and become operational, where is the group operational and where is it unable to operate, and why is the group relevant. Potential objectives of SNA research include creating understanding, providing an explanation for an act, categorizing the type of network, evaluating the impact of policy on the network, and predicting changes to the network if specific actions are taken.²⁹²

After the problem has been defined, the next step in the process is to form a research question. Questions frequently used in this process include how do network partners affect individuals, how do the positions of individuals affect their outcome; how do individuals affect network structure, how did the network structure come into existence, was it random or as a result of a certain set of conditions, and does the network have a clear command-and-control structure or not. More specific questions would address the network structure and its impact on resiliency, the flow of information, resources, and finances, the cohesiveness of subgroups within the network, and an identification of the most important or central actors in the network including brokers between groups, and those with access to information.²⁹³

The next step is including assumptions based on the prior knowledge of the network and considering the following: the perceived results of studying the network, assumptions about the target population, and the expectation of how data input will shape the ultimate result.²⁹⁴

The boundaries of the project form the next step in the research to include the determination of which actors are included in the investigation. Questions to be considered for this section encompass determining the direction of the investigation of an ego-network or entire group, defining

²⁹¹ “SNA for Law Enforcement,” Google, accessed November 2, 2019, <https://sites.google.com/view/sna4le>.

²⁹² Google.

²⁹³ Google.

²⁹⁴ Google.

the geographical boundaries of the network and period of time for examination, and reviewing any additional attributes of the focus network to narrow the scope to relevant members.²⁹⁵

The next section involves identifying the actors and relationships important to the problem statement. In identifying the relevant ties, the following should be considered: the types of relationships that are relevant, communications ties, kinship ties, etc., the network distance between these ties, and whether the expected relationships can be defined and quantified.²⁹⁶

While not the focus of an SNA research project, attributes can help enhance both the visual and statistical analysis. Considerations for this category include deciding on the need for individual characteristics, such as age, sex, etc., and determining the benefit of adding the information.²⁹⁷

Data sources encompass the inclusion of all sources of information to be included in the research. Questions include which data sources are to be used, covering human intelligence, or limiting the research to quantifiable information from an established records management system.²⁹⁸

Challenges or limits to the research project are the final listed category in the creation of an SNA project. What are the restrictions in obtaining data, due to classification or other reasons, is variable or not quantifiable information expected, and what are any foreseen barriers, such as organizational, legal, or cross-jurisdictional to be encountered.²⁹⁹

C. COMPUTER DATABASE ALERTS USE IN THREAT ASSESSMENT

As the United States increasingly moves to become a digital society, the uses of stored information are a potential for expediting processes that previously took much longer to accomplish. For example, the process for probation officers to receive information that one of the subjects that they supervised had been arrested could formally take weeks if not months to find out, and sometimes, the officers never found out due to how the arrest information was recorded and disseminated. Today, programs exist that will

²⁹⁵ Google.

²⁹⁶ Google.

²⁹⁷ Google.

²⁹⁸ Google.

²⁹⁹ Google.

send these officers digital alerts when those they supervise come into contact with law enforcement. These alerts are methods that should be examined for use in threat assessment. As previously mentioned, and seen in cases, such as Tamerlan Tsarnaev, potential threats can be deceptive in their intentions, or continue to radicalize so that they then evolve into a threat after contact with law enforcement.³⁰⁰ It is important to create alerts within the threat assessment field to focus attention back on those subjects whose level of concern did not provide for continuous monitoring.

Keeping privacy concerns in mind, these alerts should only be imposed upon those subjects deemed to be a potential threat; lawmakers would have the rights to impose limitations, such as requiring a judge to be presented with facts that the person does potentially pose a threat. Any regulation imposed on the process should involve the education of threat assessment investigations to all persons involved in the determination including judges. This system would be helped by having joint threat assessment teams, based on the United Kingdom system, which includes health care professionals. In this system, cases would benefit from the experience and education of having dedicated personnel.

Systems that should be researched for possible inclusion into these alerts are criminal databases, which alert the threat case investigator if the subject is arrested or suspected of a crime. This alert can be expanded to include alerts following the arrest of subjects within the threat suspects' social network, especially involving crimes of violence, theft of weapons, or explosive materials.

Another database to be considered is the National Instant Criminal Background Check System (NICS). Created following the passage of the Brady Handgun Violence Prevention Act of 1993, the FBI created this database in 1998.³⁰¹ Federal firearms licensees use the NICS to determine whether a prospective buyer is eligible to purchase a

³⁰⁰ Massachusetts State Police, *After Action Report for the Response to the 2013 Boston Marathon Bombings* (Commonwealth of Massachusetts: Massachusetts State Police, 2014), 1–126, <https://www.mass.gov/files/documents/2016/09/uz/after-action-report-for-the-response-to-the-2013-boston-marathon-bombings.pdf>.

³⁰¹ “National Instant Criminal Background Check System,” Federal Bureau of Investigation, accessed March 16, 2019, <https://www.fbi.gov/services/cjis/nics>.

firearm.³⁰² If a suspected threat attempts to purchase a firearm, the NICS should deny the sale until the case investigators can determine the subject's current threat level. This database would not be effective for purchases involving private sales, or illegally obtained firearms, but could potentially stop a threat from purchasing through a gun store. This alert would be the same currently in use with the FBI's terrorism watch list.³⁰³ Senator Ron Johnson, chairman of a Senate homeland-security committee, in calling for a review of the FBI's investigation of the Omar Mateen case, noted that if he had remained on the watch list, officials would have been notified of his gun purchase prior to the Pulse nightclub shooting.³⁰⁴

Travel of potential threats should be monitored, and case investigators alerted, especially for cases similar to Tamerlan Tsarnaev where the threat suspect travels to a country like Chechnya with a large militant radical population. Databases, such as the Transportation and Security Administration's Secure Flight, can act as an alert system when threat suspects travel to watch listed countries, and more importantly, when they return.³⁰⁵

The final category recommended for consideration is a mental health alert. An alert would be triggered if the suspected threat subject were committed or treated for a significant mental health issue. In understanding the need for laws that provide citizens protection against government intrusion into their medical history, it is also necessary to balance privacy with keeping people from harming themselves and others. The proposed United Kingdom styled model, which allows mental health professionals to work in conjunction with threat investigators, has the potential, if correctly regulated, to balance these two goals.³⁰⁶ It is also important to note that the goal of these investigations is, first

³⁰² Federal Bureau of Investigation.

³⁰³ Cherney, "Senator: FBI Investigations into Pulse Gunman Need Review."

³⁰⁴ Cherney.

³⁰⁵ "Privacy Act of 1974: System of Records; Secure Flight Records," Federal Register, November 9, 2012, <https://www.federalregister.gov/documents/2012/11/19/2012-28058/privacy-act-of-1974-system-of-records-secure-flight-records>.

³⁰⁶ James et al., "The Fixated Threat Assessment Centre," 521–36.

and foremost, to prevent an attack, which will likely be better served through additional help than through the criminal justice system.³⁰⁷

An example of a case that could have benefitted from this proposed mental health alert was that of Virginia Tech college student Seung-Hui Cho. On April 16, 2007, Cho killed 32 students and faculty, and wounded another 17 before turning the gun on himself.³⁰⁸ Following the Columbine school shooting in April 1999, Cho wrote a school paper that referenced his ideas of suicide and indicated that he wished to repeat Columbine.³⁰⁹ In December 2005, following repeated incidents of stalking type behavior with different female students and a suicide threat, police had Cho hospitalized involuntarily. The hospital determined that he was an imminent danger to himself and others.³¹⁰ After he was discharged by the hospital, Cho was judged by a special justice to be “an imminent danger to himself as a result of mental illness,” and ordered Cho to attend outpatient treatment.³¹¹ Cho ignored the order and continued to have concerning mental health problems, including a social withdrawal and homicidal themes in his schoolwork.³¹² Cho’s preparation for the attack began with gun purchases 14 months after being found by the hospital and court to be dangerous to himself and others, with no follow-up contact on his progress.³¹³

Cho’s case shows the importance of cooperation between the courts, mental health workers, and law enforcement in preventing future similar cases from having the same result. It is easy without the cooperation of mental health workers to consider this case a law enforcement problem, and vice versa, and unless a vehicle is available to them to work together, some attackers will fall through the cracks. A system of notifications and alerts

³⁰⁷ James et al., 521–36.

³⁰⁸ J. Reid Meloy et al., “The Concept of Identification in Threat Assessment,” *Behavioral Sciences and the Law* 33 (February 27, 2015): 213–37, <https://doi.org/10.1002/bsl.2166>.

³⁰⁹ Meloy et al., 224–228.

³¹⁰ Meloy et al., 224–228.

³¹¹ Meloy et al., 224–228.

³¹² Meloy et al., 224–228.

³¹³ Meloy et al., 224–228.

should be implemented between courts, hospitals, and law enforcement to ensure that each is made aware when subjects deemed dangerous are released unconfined.

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IV. ANALYSIS—CASE STUDIES

A. TARGETED VIOLENCE CASE STUDIES

In examining these cases, it should be noted that this paper is not an attempt to second guess an investigation or methods used, or possible clues missed. It is very easy to fill in facts once the answers are known and then assume that it may have been done better. This research has the opposite purpose and acknowledges that this process is extremely difficult. Overall, the objective is to learn and improve, not second guess.

1. Timothy McVeigh

On April 19, 1995, Timothy J. McVeigh detonated a 7,000-pound truck bomb in front of Oklahoma City's Alfred P. Murrah Federal Building that killed 168 people, 19 of whom were children.³¹⁴ McVeigh was a former U.S. Army veteran who developed a deep grievance against the U.S. government and the Bureau of Alcohol Tobacco and Firearms, for what he perceived to be the unlawful erosion of individual freedoms and Second Amendment gun rights.³¹⁵

McVeigh was not diagnosed with a mental disease prior to arrest and had not suffered the loss of a loved one or any other typical mental stress indicator.³¹⁶ McVeigh's social ties shared his views of the government that would have strengthened his extremist ideology. McVeigh has been the frequent subject of analysis because he, unlike many lone attackers, survived his attack and gave extensive interviews about himself and his motivations.

³¹⁴ Michel and Herbeck, *American Terrorist*, 223–247.

³¹⁵ Michel and Herbeck, 95–159.

³¹⁶ Michel and Herbeck.

a. Threat Assessment of Timothy McVeigh

- (1) “What motivated the subject to make the statement or take the action that caused him or her to come to attention?”³¹⁷

McVeigh was deeply concerned with gun rights and following the passage of the Federal Assault Weapons Ban, he made the decision to commit an attack against the U.S. government.³¹⁸ Following the standoff in Waco, Texas between the Alcohol, Tobacco, Firearms and Explosives (ATF), FBI, and Branch Davidians, McVeigh traveled to Waco. While in Waco, he was interviewed by a reporter from a student newspaper stating, “I believe we are slowly turning into a socialist government. The government is continually growing bigger and more powerful, and the people need to prepare themselves against government control.”³¹⁹

On February 11, 1992, he sent a letter to the local newspaper and his congressman and ended the letters with his signature.³²⁰ The letter was about the high rates of crime, high taxes, overpaid politicians, and a healthcare system that was unfair to the poor. In the letter, he wrote, “Do we have to shed blood to reform the current system? I hope that it doesn’t come to that, but it might.”³²¹

- (2) “What, if anything, has the subject communicated to someone else (target, law enforcement, family, friends, colleagues, associates) or written in a diary or journal concerning his or her intentions?”³²²

In July 1994, McVeigh wrote a letter to a former friend Steve Hodge and expressed his anger at the federal government over Waco and government efforts to limit personal freedoms. “Those who betray or subvert the constitution are guilty of sedition and/or treason, are domestic enemies and should and will be punished accordingly.”³²³ He went

³¹⁷ Fein and Vossekuil, *Protective Intelligence and Threat Assessment Investigations*, 50.

³¹⁸ Michel and Herbeck, *American Terrorist*, 117–159.

³¹⁹ Michel and Herbeck, 120.

³²⁰ Michel and Herbeck, 95–159.

³²¹ Michel and Herbeck, 99.

³²² Fein and Vossekuil, *Protective Intelligence and Threat Assessment Investigations*, 50.

³²³ Michel and Herbeck, *American Terrorist*, 153.

on to write, “I have come to peace with myself, my God and my cause. Blood will flow in the streets, Steve. Good vs. evil. Free Men vs. Socialist Wannabe Slaves. Pray it is not your blood, my friend.”³²⁴

In September 1994, the assault weapons ban became law. In the same month, McVeigh wrote to his friend Mike Fortier about his plan to take offensive action against the government and asked for help.³²⁵ Two weeks later, McVeigh met with Fortier and asked him to help blow up a federal building. McVeigh later told Fortier and his wife that he would make a truck bomb and detonate it at the Alfred P. Murrah Federal Building in Oklahoma City on April 19, 1995, the anniversary of Waco.³²⁶

McVeigh’s father repeatedly heard him make anti-government comments, including comments against the president by saying, “someone should kill the son of a bitch,” but did not consider it a real threat, even though he acknowledged that he noticed his son’s hatred for government continually intensifying.³²⁷

In November 1994, he told his sister Jennifer that he was moving to the action phase against the government. He did not give her specifics, but he had her help him write a letter to an American Legion post saying that militia groups had the right to react with violence when government agents drew first blood.³²⁸

- (3) “Has the subject shown an interest in any of the following? Assassins or assassinations; weapons; militant or radical ideas/groups; murders, murderers, mass murderers, and workplace violence and stalking incidents.”³²⁹

Following his senior year in high school, McVeigh read *The Turner Diaries* and began to circulate the book amongst his friends. The book was written by former American

³²⁴ Michel and Herbeck, 154.

³²⁵ Michel and Herbeck, 159–205.

³²⁶ Michel and Herbeck, 159–205.

³²⁷ Michel and Herbeck, 95–117.

³²⁸ Michel and Herbeck, 159–205.

³²⁹ Fein and Vossekuil, *Protective Intelligence and Threat Assessment Investigations*, 50.

Nazi Party official William Pierce, about a gun rights enthusiast who reacts to gun control by destroying FBI headquarters in Washington, DC with a truck bomb. The book is sympathetic to Adolph Hitler, and advocates killing African Americans and Jews.³³⁰ He gave the book to other soldiers while in the Army, and later sold it at gun shows.³³¹

In 1991, he paid \$20 for trial membership to the Ku Klux Klan (KKK), although he did not renew when the first year was up, and later stated that he thought the KKK stood for individual freedom and gun rights.³³² McVeigh stated that he did not renew the membership because the group was more interested in racism than individual freedom and was not in line with his way of thinking.³³³

- (4) “Is there evidence that the subject has engaged in menacing, harassing, and/or stalking-type behaviors? These behaviors combine an inappropriate interest with any of the following: developing an attack idea or plan; approaching, visiting, and/or following the target; approaching, visiting, and/or following the target with a weapon; attempting to circumvent security; assaulting or attempting to assault a target.”³³⁴

McVeigh scouted federal buildings for potential targets. He also recruited Fortier, who scouted federal buildings in Phoenix, and Nichols, who checked the federal building in Kansas City, Missouri.³³⁵ In December 1994, McVeigh scouted a federal building in Little Rock Arkansas before deciding on Oklahoma City as his target. In December 1994, McVeigh, accompanied by Fortier, surveilled the Murrah building, and on April 12, 1995, McVeigh made his final preparatory survey of the Murrah building in Oklahoma City.³³⁶

In 1994, McVeigh, with help from Terry Nichols, rented a storage locker in Arizona, and began to steal explosives from a quarry in Kansas.³³⁷ In September and

³³⁰ Hoffman, *Inside Terrorism*, 113.

³³¹ Michel and Herbeck, *American Terrorist*, 36–49.

³³² Michel and Herbeck, 81–95.

³³³ Michel and Herbeck, 81–95.

³³⁴ Fein and Vossekuil, *Protective Intelligence and Threat Assessment Investigations*, 50.

³³⁵ Michel and Herbeck, *American Terrorist*, 159–205.

³³⁶ Michel and Herbeck, 205–223.

³³⁷ Michel and Herbeck, 159–205.

October of the same year, McVeigh and Terry Nichols purchased thousands of pounds of ammonium nitrate using the alias Mike Havens. They conducted a small test of the explosive in the dessert outside Fortier's home.³³⁸

- (5) "Does the subject have a history of mental illness involving command hallucinations, delusional ideas, feelings of persecution etc., with indications that the subject has acted on those beliefs?"³³⁹

McVeigh did not have a history of mental illness; however, he did feel that the U.S. government was persecuting him over his Second Amendment rights.

- (6) "How organized is the subject? Does the subject have the ability to plan and execute a violent action against a target?"³⁴⁰

McVeigh was very organized, and with his military training, clearly had the ability to plan and execute violent actions.

- (7) "Is there evidence that the subject is experiencing desperation and/or despair? Has the subject experienced a recent personal loss and/or loss of status? Is the subject now, or has the subject ever been suicidal?"³⁴¹

McVeigh had trouble throughout his life with job-related satisfaction; outside of his time in the Army, he felt as though he spent an exhaustive amount of time in numerous menial jobs that did not utilize his skills.³⁴² He did have suicidal feelings after developing a gambling problem and losing more money than he could afford. His failure to obtain satisfactory employment led him frequently to live with friends, which gave him the feeling that he did not have a home. He was never able to establish a relationship with a woman, and he felt as though he had post-traumatic stress disorder after his time in the Army, although he was never officially diagnosed.³⁴³ McVeigh's only personal loss was his

³³⁸ Michel and Herbeck, 159–205.

³³⁹ Fein and Vossekuil, *Protective Intelligence and Threat Assessment Investigations*, 50.

³⁴⁰ Fein and Vossekuil, 50.

³⁴¹ Fein and Vossekuil, 50.

³⁴² Michel and Herbeck, *American Terrorist*, 36–159.

³⁴³ Michel and Herbeck, 95–117.

grandfather, with whom he was close, but not likely a motivating reason for his actions. Following his separation from the Army, he never again held a job that would provide him the same status and security.³⁴⁴

- (8) “Is the subject’s story consistent with his or her actions?”³⁴⁵

Law enforcement officers did not interview McVeigh prior to his attack, so he did not have a story to tell.

- (9) “Are those who know the subject concerned that he or she might act based on inappropriate ideas?”³⁴⁶

McVeigh conveyed his anti-government ideas to those closest to him, but those who knew of his ideas were like-minded in their dislike of the government and would not have approached law enforcement with concerns of his potential actions.

- (10) “What factors in the subject’s life and/or environment might increase or decrease the likelihood that the subject will attempt to attack a target or targets?”³⁴⁷

Due to McVeigh’s social isolation, he was very unlikely to come into contact with, or listen to, anyone who had differing opinions on gun control and government issues. His environment of working at gun shows and tendency only to socialize with people who shared his views acted as an echo chamber to reinforce his beliefs.³⁴⁸ His social identity was that of the person who would stand up to government oppression, which he felt was causing America to become an over-taxed police state; in his view, he was fighting for freedom.³⁴⁹

³⁴⁴ Michel and Herbeck, 95–117.

³⁴⁵ Fein and Vossekuil, *Protective Intelligence and Threat Assessment Investigations*, 50.

³⁴⁶ Fein and Vossekuil, 50.

³⁴⁷ Fein and Vossekuil, 50.

³⁴⁸ Michel and Herbeck, *American Terrorist*, 117–159.

³⁴⁹ Michel and Herbeck, 117–159.

b. Timothy McVeigh Threat Assessment Conclusion

The totality of McVeigh's life certainly paints a picture of a person who becomes increasingly anti-government and escalates his threats up until September 1994, when he shifts from just expressing anti-government views to planning a violent attack actively. The timing of entering into the planning phase corresponds to the passage of the assault weapons ban. His first action was to tell his close friends about his plan and enlist their help. His second action occurred in October when he purchased a storage locker and placed explosives stolen from a quarry in Kansas inside the locker. McVeigh never came to the attention of law enforcement, so any possible investigation or threat assessment is hypothetical. If someone close to McVeigh had reported him, however as a potential threat before September 1994, an investigator would likely have concluded that McVeigh held deep anti-governmental views on gun control laws, but might not have concluded that he was a threat based on the numbers of other people who also shared anti-government views who never committed violent actions.

Between September 1994 and April 1995, when the attack occurred, if McVeigh had come to the attention of law enforcement, the discovery of the attack planning activities, combined with McVeigh's anti-government views and personal history, could have led investigators to determine his intent and intervene before he completed his attack. However, what this model does not fully account for is the tracking of others within McVeigh's social network for clues to use to assess the potential threat fully. For example, if McVeigh came to attention of law enforcement for his anti-government comments, and an investigator felt a threat assessment was warranted, but did not yet rise to the level of being able to bring criminal actions, said investigator would potentially benefit from finding out about Terry Nichols or Mike Fortier committing overt acts to accomplish McVeigh's plan.

In short, when dealing with investigations that offer very few clues, and limited windows in which to detect actions that can lead to devastating results, having every piece of information possible is critical. While not a new idea, the tools used to piece together these types of clues have previously been very limited, and regulated to written reports, or individual electronic case reports.

c. SNA Enhancement

Question number 10 in this threat assessment, regarding “factors in the subject’s life and/or environment that might increase or decrease the likelihood that the subject will attempt an attack,” would be the element most closely tied to social network formulas.³⁵⁰ As previously stated, the vast majority of subjects from the exceptional case study exhibited change over time before finally reaching the planning and execution phase of their attacks. In this regard, Timothy McVeigh was no different; prior to September 1994, he held anti-government views regarding gun control issues shared by thousands of other people.

In McVeigh’s case, once he separated from the Army, his social network never included many individuals who held differing views from his regarding gun control. However, as he continued to become more radicalized, his social ties shrank to only those whose views were strongly anti-government. Case in point, the National Rifle Association, a group known as a fervent detractor of the government and gun regulation, was a group that McVeigh felt was too soft on gun rights, which caused him to cancel his membership in 1994.³⁵¹ Additionally, McVeigh was reported to have ties to both the Michigan Militia and Arizona Patriots; understanding why he was drawn to these groups and ultimately why he may have left the groups would be important information in assessing his movement towards or away from potential violence.³⁵²

d. Social Network Mapping of Timothy McVeigh

Based on the previously mentioned section on creating an SNA research project using guidelines from the CORE laboratory, the following information is used for an SNA examination of Timothy McVeigh. The goal of the research is to ascertain if using an SNA map of McVeigh’s social network can provide information to an investigator conducting a threat assessment relevant enough to inform a decision. The data for McVeigh’s network

³⁵⁰ Fein and Vossekuil, *Protective Intelligence and Threat Assessment Investigations*, 50.

³⁵¹ Dale Russakoff and Serge F. Kovalski, “An Ordinary Boy’s Extraordinary Rage,” *The Washington Post*, July 2, 1995, <https://www.washingtonpost.com/wp-srv/national/longterm/oklahoma/bg/mcveigh.htm>.

³⁵² Hoffman, *Inside Terrorism*, 108.

was obtained from open source material, most notably the book *American Terrorist*.³⁵³ The data is separated into two time periods in McVeigh's life, and the SNA maps are created for both periods as an ego analysis, as well as an extended analysis to examine the ties held by his network. The visualizations are a two-mode network and map both people and organizations. This project is limited because the subject of the examination is already known to have committed a violent act and is intended to provide a starting point for possible future research in the field of threat assessment.

Using the information gathered on McVeigh's social ties allows for the creation of a visual network of his life. The network has been broken up into two different time periods. The first, described as pre-radicalization is from 1987, just after his high school graduation, until February 28, 1993, the day of the ATF raid in Waco Texas, shown in Figure 1. The post-radicalization time period starts on February 28, 1993 and culminates on April 19, 1995 with the bombing of the Alfred P. Murrah Federal Building in Oklahoma City, shown in Figure 2.

³⁵³ Michel and Herbeck, *American Terrorist*.

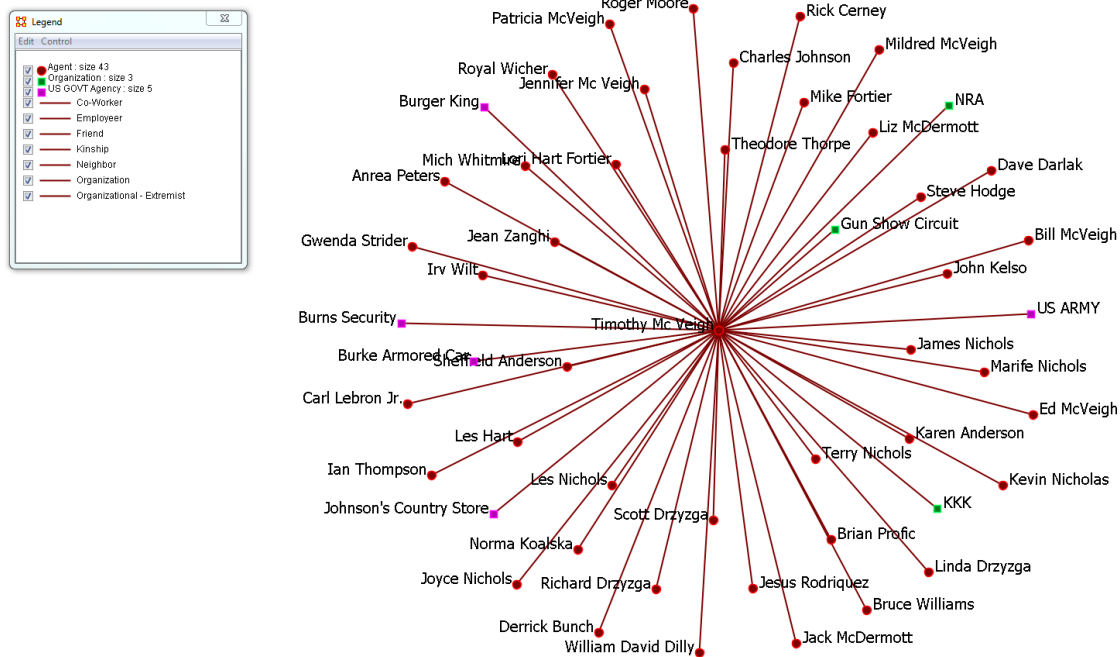


Figure 1. Ego Network—Pre-Radicalization, 1987–2/28/1993 (ORA v2.3.6)

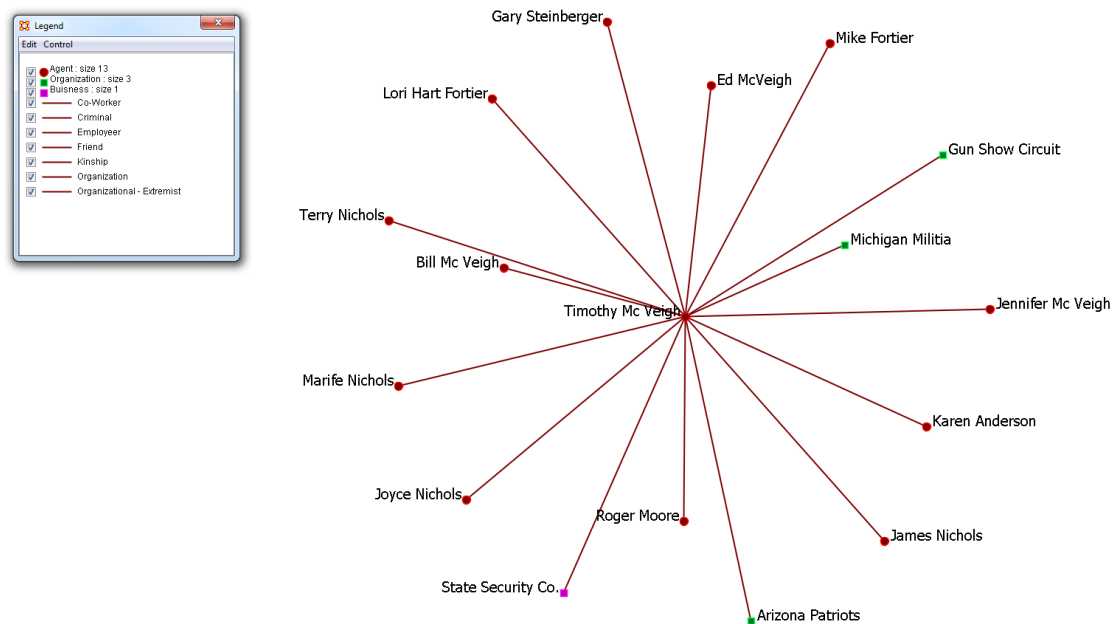


Figure 2. Ego Network—Post-Radicalization, 2/28/1993–4/19/1995 (ORA v2.3.6)

In examining the two social network maps of McVeigh, an investigator could reasonably conclude that in the post-radicalization period, he had far fewer contacts with persons holding pro-government views, and that his contacts were more isolated and more likely to echo his radical beliefs. It would be important to note that in his post-radicalization period, he still had a social network and did not fall into a withdrawn “lone” category, such as that of a Theodore Kaczynski. However, he clearly did withdraw from numerous people who held opinions not in line with his. As a tool, the social network mapping clearly shows the size of the subject’s network, and more clearly defines those individuals important in that network. This definition is more clearly defined in Figure 3, in which the subjects of McVeigh’s social network are then connected to their own social network using degree centrality. This visualization shows the persons connected to McVeigh, namely Terry Nichols, who have concerning contacts, and allows for the streamlining of leads concerning people who an investigator may focus on during an investigation.

The further definition of McVeigh’s network shown in Figures 3 and 4 clearly illuminates those contacts’ ties within the different groups that make up McVeigh’s associations. This connection is further highlighted in Figure 4, which shows that the person having the most prior knowledge of McVeigh’s attack, Terry Nichols, has the most ties (13) in the diagram of anyone except for McVeigh.

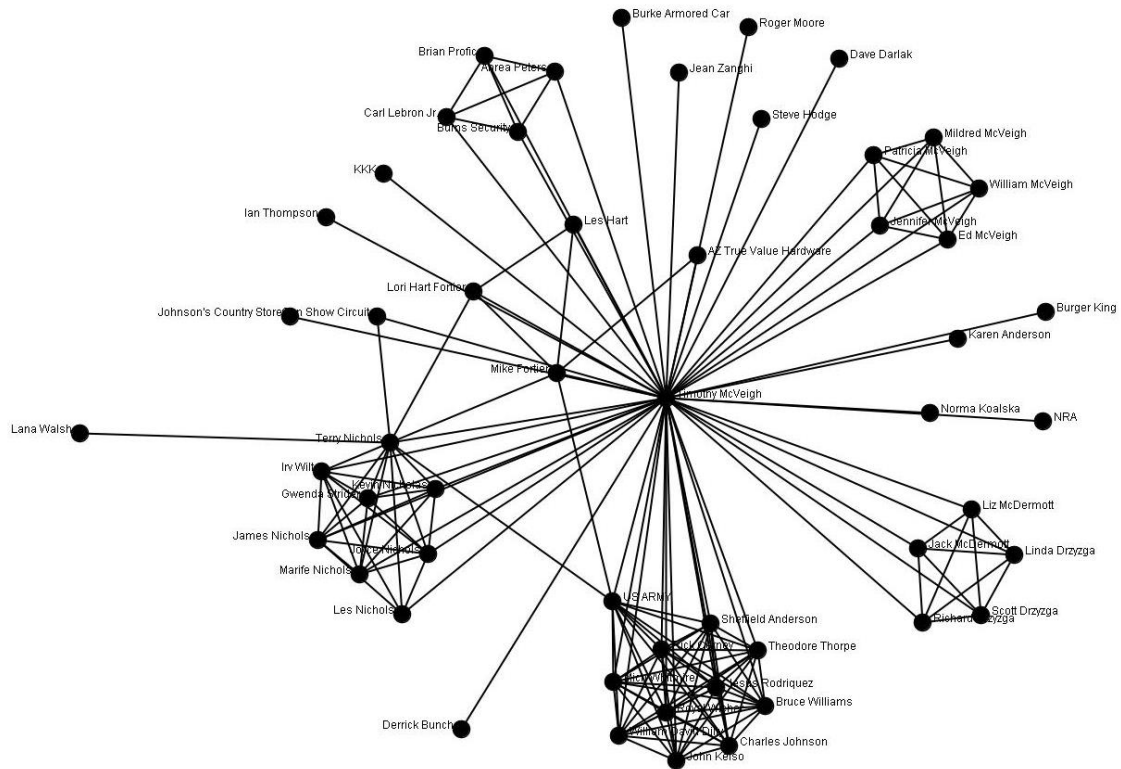


Figure 3. Extended Network—Pre-Radicalization, 1987–2/28/1993
(ORA v2.3.6)

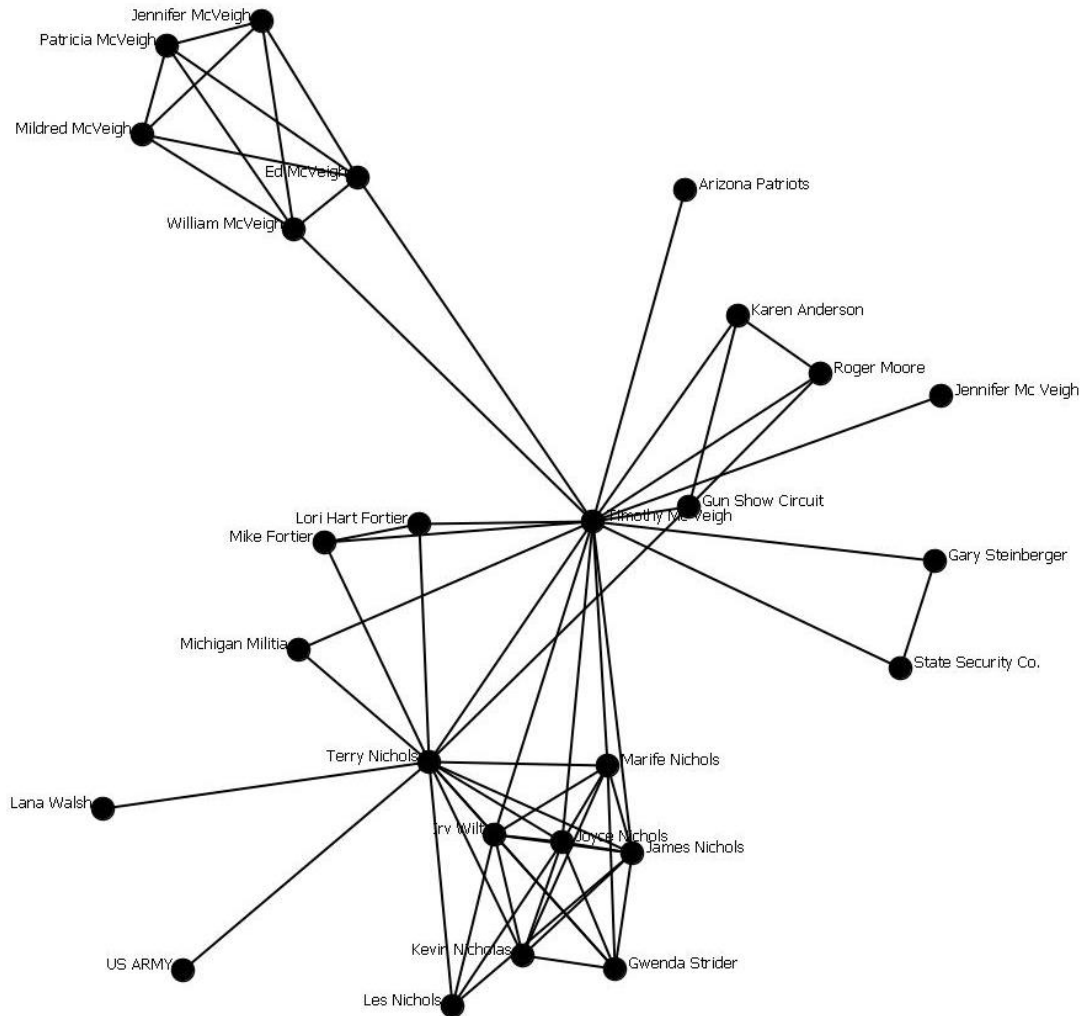


Figure 4. Extended Network—Post-Radicalization, 2/28/1993–4/19/1995 (ORA V2.3.6)

Using the mapping in conjunction with SIT, it can be seen that McVeigh’s departure from the U.S. Army may have also greatly impacted his radicalization process.³⁵⁴ Brannan explains, “the experience of belonging to a group determines the identities of most individuals in a powerful way. When we join or leave groups that are important to us, we redefine who we are.”³⁵⁵ In interviews, McVeigh stated that the Army was an important part of his life, and certainly affected the framework of his self-

³⁵⁴ Michel and Herbeck, *American Terrorist*, 81–95.

³⁵⁵ Brannan, Darken, and Strindberg, *A Practitioner’s Way Forward*, 51.

identity.³⁵⁶ While he mistrusted the government over gun rights ideology, prior, during, and after his military time, the intensity of his mistrust deepened following his separation from service, which suggests a contribution to the change in his identity from a soldier to a self-described defender of the Second Amendment and personal freedom.³⁵⁷ As a member of the U.S. Army, he might have disagreed with gun laws, but it seems far less likely that he would have resorted to violence while he identified as being a soldier. However, his separation from the military took away that restraint, and changed his in-group to the patriot movement, and made his out-group focus the U.S. government.

This tool would be most effective as a picture of differing moments in time. For example, if for McVeigh, his social network each year could be mapped, the resulting picture of further social isolation could lead an investigator to conclude that he was moving towards radicalization and lead to further investigation. The results of SNA mapping on a potential threat could yield numerous results, with one being a determination of whether, like McVeigh, subjects were shrinking their network and only engaging with people, groups, or institutions that would lead the subjects further towards radicalization. SNA also allows for the mapping of online network connections, which has increasingly become the primary radicalization medium.³⁵⁸

Another result would show that a person's social network was expanding, and within that expansion, the subject might be contacting more people who could be considered a negative contact with the result of further influencing the individual towards radicalization. Conversely, the person's expanding network might show that they were coming into contact with positive influences that might push the subject away from violence. Often times, persons who move from grievance to a pathway of violence are isolated and unhappy, but the mere change in becoming involved in a relationship may have the effect of making the grievance less personally significant.

³⁵⁶ Michel and Herbeck, *American Terrorist*, 81–117.

³⁵⁷ Michel and Herbeck, 81–117.

³⁵⁸ Gunaratna and Haynal, "Current and Emerging Threats of Homegrown Terrorism," 44–63.

The extreme difficulty in these cases is determining the difference in McVeigh versus all the others who have held similar views but never committed an act of violence. A potential answer lies in having investigators trained and experienced in working these types of cases, and continuously monitoring the subject with the clearest picture available. Examining a person's social network may provide clues to a person's mental health and help determine if that person is moving towards or away from a path of violence.

e. Operational Vulnerabilities

One possible way to expand threat assessment is to identify where potential attackers are vulnerable in the planning and execution of their attacks, and to learn from these potential vulnerabilities and develop strategies that address future investigative opportunities. In McVeigh's case, the biggest vulnerability of being caught prior to his attack rested in the information about the attack that he leaked to those within his social network.

McVeigh informed three people of his intentions to detonate a bomb at a federal building. Terry Nichols, Mark Fortier, and Lori Fortier all knew of his intentions prior to the attack and any one of them could have alerted authorities and averted the bombing. McVeigh knew that telling people would have left him vulnerable to detection before he had a chance to carry out his plan, so his selection of these three people would be based on their being like-minded individuals, who shared his ideals, and who would not inform anyone else, especially law enforcement, about his plans. For law enforcement, finding the right people to interview to obtain relevant information about the subject of the investigation is critical to its success. As stated earlier in this report, incidents of subjects providing information to those they trust prior to an attack are consistently prevalent in directed attacks. The use of SNA to identify more efficiently those persons, who are likely to be close enough to the subject to be trusted enough to receive important information, is of the utmost importance.

Typically, family members are considered good sources of information, but as McVeigh's case highlights, should not be relied upon too heavily. Of McVeigh's family members, only his sister Jennifer would have had an indication that he was possibly

planning an attack, and she would not have been able to provide specific information.³⁵⁹ McVeigh was not especially close to the members of his family except for his grandfather who McVeigh described as the only person he ever really cared about, when interviewed.³⁶⁰ McVeigh wanted his grandfather's approval, so he likely would not have told him about his plans, and therefore, he would not have been a good source for accurate information. His grandfather's death in October 1994 may have removed the last of the social constraints on McVeigh that had previously prevented him from action, because he would no longer have to deal with his grandfather's disappointment in him following the attack.³⁶¹

The SNA visual maps show that McVeigh's ties to the people who made him vulnerable to discovery prior to his attack were close to him, had been close to him in both the pre- and post-radicalization period, and closely shared the same beliefs and organizational ties.

2. Anders Behring Breivik

On July 22, 2011, Anders Behring Breivik initiated an attack culminating years of planning with the detonation of a vehicle laden with explosives next to a government building in downtown Oslo, Norway.³⁶² The resulting explosion killed eight people and injured nine others. Breivik then traveled directly to the small island of Utøya, posed as a police officer to access the ferry, and opened fire on a youth summer camp for the Norwegian Labor Party.³⁶³ Breivik killed 69 additional people on the island and convinced some of those victims to come out of hiding by telling them that he was a policeman, only to shoot them when they complied.³⁶⁴ After 70 minutes of terror, he surrendered to Norwegian authorities. During his initial interview with authorities, Breivik stated that he

³⁵⁹ Michel and Herbeck, *American Terrorist*, 159–205.

³⁶⁰ Michel and Herbeck, 159–205.

³⁶¹ Michel and Herbeck, 159–205.

³⁶² Seierstad, *One of Us*, 279–282.

³⁶³ Seierstad, 294–345.

³⁶⁴ Seierstad, 340–345.

was the “commander of the Knights Templars Norway,” and that the people on the island were considered “category C traitors.”³⁶⁵

Following his arrest, Breivik was the subject of two forensic evaluations. The first evaluation resulted in a diagnosis of paranoid schizophrenia, which, being a psychotic disorder, would have made him legally unaccountable for his actions under Norwegian law.³⁶⁶ The second diagnosis was that of severe narcissistic personality disorder with a compulsion towards pathological lying; this diagnosis would have made him legally accountable under Norwegian law.³⁶⁷ The resulting criminal trial found in favor of the personality disorder evaluation and Breivik was sentenced to the maximum allowable sentence of 21 years in prison.³⁶⁸

During his trial, Breivik provided reasons for his attack, which included a wish to direct attention to the cause and distribution of his compendium, and to make those who promoted multiculturalism in Norway accountable.³⁶⁹

a. Threat Assessment of Anders Behring Breivik

- (1) “What motivated the subject to make the statement or take the action that caused him or her to come to attention?” ³⁷⁰

Breivik did not make any statements that brought him to the attention of Norwegian law enforcement prior to his attack, but in March 2011, he was added to a watch list following the purchase of a large amount of fertilizer from an online store in Poland.³⁷¹ Police later determined that he had purchased the fertilizer for a farm that he rented and

³⁶⁵ Ingrid Melle, “The Breivik Case and What Psychiatrists Can Learn from It,” *World Psychiatry* 12, no. 1 (February 2013): 16–21.

³⁶⁶ Melle, 17.

³⁶⁷ Melle, 17–18.

³⁶⁸ Melle, 19.

³⁶⁹ Pantucci, “What Have We Learned about Lone Wolves from Anders Behring Breivik?,” 27–42.

³⁷⁰ Fein and Vossekuil, *Protective Intelligence and Threat Assessment Investigations*, 50.

³⁷¹ Pantucci, “What Have We Learned about Lone Wolves from Anders Behring Breivik?,” 35.

removed him from the watch list without further investigation.³⁷² Breivik obtained the farm for disguising the fertilizer purchase from police. After examining Breivik, the Norwegian Security Service determined that he was not a threat, as he did not make violent statements in online chats, was not a member of an extremist group, registered his guns, did not show signs of being a terrorist, and lacked any criminal record.³⁷³

- (2) “What, if anything, has the subject communicated to someone else (target, law enforcement, family, friends, colleagues, associates) or written in a diary or journal concerning his or her intentions?”³⁷⁴

Breivik intentionally distanced himself from his friends to resist the urge to tell them about his plans. He was extremely successful in maintaining operational secrecy, to the extent that no one had any idea of what he was planning.³⁷⁵ He also stated in his interview that telling his friends would have been a violation of his oath as a Templar Knight.³⁷⁶ Starting in 2002, Breivik wrote about his plans and ideas, and from 2006 to 2009, he included specific targeting information in the document that he released through Facebook on the day of the attack.³⁷⁷

Breivik’s writings included complex planning for all phases of his eventual attack, including how to set up a vehicle bomb, which he detonated in the government district of Oslo.³⁷⁸ His manifesto also detailed instructions on wearing a police uniform, which he did to gain access to the island of Utøya where he conducted his second attack.³⁷⁹ Breivik wrote, “the police illusion will also act as a deterrent towards preventing potential civilian

³⁷² Pantucci, 35.

³⁷³ Walter Lee, “Finding the Wolves in Sheep’s Clothing: Ways to Distinguish and Deter Lone-Wolf Terrorist” (master’s thesis, Naval Postgraduate School, 2015), 39, https://calhoun.nps.edu/bitstream/handle/10945/45218/15Mar_Lee_Walter.pdf?sequence=1&isAllowed=y.

³⁷⁴ Fein and Vossekuil, *Protective Intelligence and Threat Assessment Investigations*, 50.

³⁷⁵ Seierstad, *One of Us*, 151–172.

³⁷⁶ Seierstad, 151–172.

³⁷⁷ Seierstad, 151–172.

³⁷⁸ Berwick, 2083.

³⁷⁹ Berwick.

charges.”³⁸⁰ On the island, he was able to convince people to come out of hiding because he was a police officer, only to shoot them when they emerged.³⁸¹

In his writing, Breivik also references plans to assassinate the Prime Minister, Jens Stoltenberg, as Stoltenberg visits Utøya every summer as part of the political party’s youth camp.³⁸² Political assassination was Breivik’s original target for the island of Utøya; he hoped to behead three top Norwegian politicians who were visiting the camp that day. However, when he arrived at the island to conduct his attack, they were not there, and he chose to proceed without his original targets present.³⁸³

- (3) “Has the subject shown an interest in any of the following? Assassins or assassinations; weapons; militant or radical ideas/groups; murders, murderers, mass murderers, and workplace violence and stalking incidents.” ³⁸⁴

Breivik did extensive research on all the aforementioned categories, wrote about ways to commit assassinations, and went to great lengths to hide his research.³⁸⁵ In his manifesto, he wrote:

for assassinations or for intelligence gathering prior to a mission. [sic]Infiltration of enemy organizations might prove an easy way to get close to otherwise impossible targets (prime minister or ministers) or to learn their [sic]programme. Getting a job at the youth camp connected to the largest political party is one way of doing this. The prime minister usually visits during summer season. Infiltration can take as long as 24 months.³⁸⁶

Breivik wrote about those he classified as traitors, “Category A traitors are usually any current Heads of State, ministers/senators, directors and leaders of certain [sic]organisations/boards etc., who are guilty of charges 1–8. Category A traitors consist

³⁸⁰ Berwick.

³⁸¹ Pantucci, “What Have We Learned about Lone Wolves from Anders Behring Breivik?,” 35.

³⁸² Berwick, 2083.

³⁸³ Seierstad, *One of Us*, 272–345.

³⁸⁴ Fein and Vossekuil, *Protective Intelligence and Threat Assessment Investigations*, 50.

³⁸⁵ Berwick, 2083.

³⁸⁶ Berwick.

of the most influential and highest profile traitors.”³⁸⁷ “Category B traitors” were defined as “cultural Marxist and multiculturalist politicians, primarily from the alliance of European political parties, and parliamentarians.”³⁸⁸ He also classified these:

traitors as individuals from various professional groups including (but not limited to): journalists, editors, teachers, lecturers, university professors, various school/university board members, publicists, radio commentators, writers of fiction, cartoonists, and artists/celebrities. They could also be individuals from other professional groups such as: technicians, scientists, doctors and even religious leaders.³⁸⁹

Breivik further defined his intentions, writing:

we know who you are, where you live and we are coming for you. If not today, then tomorrow, if not in 10 years, then in 50 years. We are in the process of flagging every single multiculturalist traitor in Western Europe. You will be punished for your treasonous acts against Europe, and Europeans. We will ensure that all category A and B traitors, the enablers of [sic]Islamisation and the destroyers of our cultures, nations and societies, will be executed and your property expropriated. No mercy will be shown for category A, B and C traitors. The punishment for high treason is the same whether you are a hardcore Marxist, cultural Marxist, suicidal humanist, career [sic]cynicist or a capitalist globalist.³⁹⁰

- (4) “Is there evidence that the subject has engaged in menacing, harassing, and/or stalking-type behaviors? These behaviors combine an inappropriate interest with any of the following: Developing an attack idea or plan; approaching, visiting, and/or following the target; approaching, visiting, and/or following the target with a weapon; attempting to circumvent security; assaulting or attempting to assault a target.”³⁹¹

In this case, Norwegian authorities had no prior evidence that Breivik was planning his attack. However, from 2002 to 2009, he was planning and recording his ideas in his journal, which he published online on the day of the attack. He discussed the planning phase and wrote, “gain as much knowledge of the terrain as possible: know every street.

³⁸⁷ Berwick.

³⁸⁸ Berwick, 2083.

³⁸⁹ Berwick.

³⁹⁰ Berwick.

³⁹¹ Fein and Vossekuil, *Protective Intelligence and Threat Assessment Investigations*, 50.

Be prepared in case anything goes wrong. What will you do if a vehicle breaks down, what will you do if you get injured or flanked?”³⁹²

- (5) “Does the subject have a history of mental illness involving command hallucinations, delusional ideas, feelings of persecution etc., with indications that the subject has acted on those beliefs?”³⁹³

At a young age, the Child Psychiatric Services examined Breivik, after his mother complained that he was an extremely difficult child.³⁹⁴ His parents divorced when he was one-year old, and Breivik was raised by his mother.³⁹⁵ His home situation during this period was disruptive enough for the examiner to recommend that Breivik be placed in foster care to protect against what he termed “developing psychopathology.”³⁹⁶ The final recommendation from Child Welfare Services determined that he should remain in his home and the case was closed a year later.³⁹⁷ Breivik did not undergo any additional psychological evaluations prior to his attack; however, his mother testified during his trial that from the time that he moved back in with her in 2006, he acted erratically, and was obsessed with politics and history.³⁹⁸ In the year leading up to the attack, he began to wear an antiseptic face mask in the house for fear that she would infect him.³⁹⁹ At one point, Breivik even made an appointment with a doctor because he believed that his mother had infected his sinuses; however, he ultimately failed to show up for the appointment.⁴⁰⁰

³⁹² Berwick, 2083.

³⁹³ Fein and Vossekuil, *Protective Intelligence and Threat Assessment Investigations*, 50.

³⁹⁴ Melle, “The Breivik Case and What Psychiatrists Can Learn from It,” 16.

³⁹⁵ Richard Orange, “Anders Behring Breivik Was Insane Five Years Ago, Mother Says,” *The Telegraph*, November 30, 2011, <https://www.telegraph.co.uk/news/worldnews/europe/norway/8925203/Anders-Behring-Breivik-was-insane-five-years-ago-mother-says.html>.

³⁹⁶ Melle, “The Breivik Case and What Psychiatrists Can Learn from It,” 16.

³⁹⁷ Melle, 16.

³⁹⁸ Orange, “Anders Behring Breivik Was Insane Five Years Ago, Mother Says.”

³⁹⁹ Orange.

⁴⁰⁰ Orange.

During the psychological evaluation following the attack, the examiners found “no outward signs of depression, mania, auditory hallucinations or ideas of reference, influence phenomena or ideas of thought insertion.”⁴⁰¹ Two evaluations were completed, in which both examiners concluded that Breivik had pathological self-aggrandizement. In the first evaluation, they found the “presence of bizarre grandiose delusions” and concluded that he suffered from paranoid schizophrenia.⁴⁰²

- (6) “How organized is the subject? Does the subject have the ability to plan and execute a violent action against a target?”⁴⁰³

Breivik was extremely organized and spent at least nine years planning every detail of his operation. An example of his planning was detailed in his writings, which he categorized into a research phase, logistical phase, assembly phase, and implementation/execution of operation. Breivik also had security measures built into each phase of the operation. For security of the research phase, Breivik wrote:

before you start the logistics phase you need to store all relevant research/information on a memory stick and get rid of it (bury it in a moist proof sealed container far away from your home, you will acquire it again in phase 3). The reason is that any written plans combined with weapons or explosives are considered solid evidence. Also, you need to replace (get rid of or destroy) your physical PC hard drive. Deleting the information is not sufficient. You need physically destroy it, submerge it in liquid and dump it on the other side of town.⁴⁰⁴

For operational security of the logistics phase, he instructs, “acquire the necessary weapons, ammo, body armor and explosives.”⁴⁰⁵ He described the “shopping phase” as lasting up to 12 months, so he advised dividing the purchases and sealing “it in a container

⁴⁰¹ Melle, “The Breivik Case and What Psychiatrists Can Learn from It,” 17–18.

⁴⁰² Melle, 17–18.

⁴⁰³ Fein and Vossekuil, *Protective Intelligence and Threat Assessment Investigations*, 50.

⁴⁰⁴ Berwick, 2083.

⁴⁰⁵ Berwick.

and bury far from your home/base.”⁴⁰⁶ He further stated, the “essence is to avoid having weapons/[sic]armour (evidence) in your base/home as it will incriminate you.”⁴⁰⁷

In addressing the assembly phase Breivik wrote, “This is the most risky phase. You are vulnerable as you will have all the equipment (evidence) you have acquired readily available. Ensure that the assembly phase does not last longer than it should (7 days maximum).”⁴⁰⁸

Breivik created a checklist for every aspect of research acquisition and implementation of his plan, even going as far as to plan for unexpected problems, writing, “plan for emergency procedures such as vehicle breakdown, injury etc. Allow plenty of time when estimating the rate of progress. Pressure to keep to an over-ambitious schedule leads to exhaustion and errors of judgement.”⁴⁰⁹

Breivik also planned his drug consumption to ensure that he was at his peak physical performance level and stated that for the attack, he should “be in the middle of a steroid cycle and take an ECA stack capsule 20 minutes prior to the initiation of the mission (ephedrine, caffeine, aspirin stack) which increases our strength and agility by 50–100% for 2 hours.”⁴¹⁰

- (7) “Is there evidence that the subject is experiencing desperation and/or despair? Has the subject experienced a recent personal loss and/or loss of status? Is the subject now, or has the subject ever been suicidal?”⁴¹¹

In 2006, Breivik was forced to move back into his mother’s house, after declaring financial bankruptcy. According to his friends, his behavior changed from this time onward. His friends stated that he became increasingly withdrawn, cut contact with them,

⁴⁰⁶ Berwick.

⁴⁰⁷ Berwick.

⁴⁰⁸ Berwick.

⁴⁰⁹ Berwick.

⁴¹⁰ Berwick.

⁴¹¹ Fein and Vossekuil, *Protective Intelligence and Threat Assessment Investigations*, 50.

and was playing the video game World of Warcraft online for a large portion of his day.⁴¹² His friends also worried that he might have an addiction to gambling. No evidence shows that Breivik was ever suicidal, and the mental evaluation following his arrest found no evidence of depression or despair.⁴¹³

However, according to Breivik's writings, all the changes noticed by his friends were part of his operation security measures. He wrote that in an effort to justify his isolation and travel while in the planning phase, "tell them that you have started to play World of Warcraft or any other online MMO game and that you wish to focus on this for the next months/year. This 'new project' can justify isolation and people will understand somewhat why you are not answering your phone over long periods."⁴¹⁴

He also saw the game as a useful cover, which enabled him to manipulate his friends unknowingly to help conceal his true intentions. Breivik described video game addiction as shameful in common society, and by claiming to be hooked on video game playing, he had an inconspicuous reason to ask friends to keep his secret. Breivik described this deception writing, "by revealing this secret to your close ones you are therefore (to them at least) entrusting them with your innermost secret."⁴¹⁵ He saw this deception as providing further cover from investigation by having people within his social circle provide an unknowing alibi and keeps his true intentions a secret.⁴¹⁶

(8) "Is the subject's story consistent with his or her actions?"⁴¹⁷

Law enforcement officers did not interview Breivik prior to his attack, so he did not have a story to tell.

⁴¹² Melle, "The Breivik Case and What Psychiatrists Can Learn from It," 16–17.

⁴¹³ Melle, 18.

⁴¹⁴ Berwick, 2083.

⁴¹⁵ Berwick.

⁴¹⁶ Berwick.

⁴¹⁷ Fein and Vossekuil, *Protective Intelligence and Threat Assessment Investigations*, 50.

- (9) “Are those who know the subject concerned that he or she might act based on inappropriate ideas?”⁴¹⁸

Breivik’s mother stated in an interview following his arrest that starting in 2005 when he moved back to her house, he had exhibited strange behavior, and became obsessive over politics and history.⁴¹⁹ She described his political rants as “totally beyond reason” and that he believed “all the nonsense he said.”⁴²⁰ She also stated that he was still living at home by April 2011 and “had started acting in an even stranger manner, wearing an antiseptic mask around the house, refusing to eat food she had cooked for him, and calling the family doctor accusing her of infecting him with some illness.”⁴²¹ While his mother clearly suspected that he was having mental health issues, she did not suspect that he had violent intentions. Likewise, his friends stated that the period when he moved back into his mother’s house coincided with his company going bankrupt. They describe him as depressed from that point on and never really being the same person. According to Breivik, the bankruptcy was not a significant event in his life. Like the situation with his mother, his friends were concerned about him, but did not suspect that he would become violent.

- (10) “What factors in the subject’s life and/or environment might increase or decrease the likelihood that the subject will attempt to attack a target or targets?”⁴²²

Breivik stated that prior to writing his manifesto, he realized that immigration, especially by Muslims, would result in Europeans becoming a minority. He believed that democratic attempts would not work to prevent a “Muslim takeover of Europe,” and he ultimately decided on an armed resistance.⁴²³ A change in Norway’s political or immigration status would likely have been the only outside influence that could have possibly affected Breivik’s grievance, and potentially changed the outcome.

⁴¹⁸ Fein and Vossekuil, 50.

⁴¹⁹ Orange, “Anders Behring Breivik Was Insane Five Years Ago, Mother Says.”

⁴²⁰ Pantucci, “What Have We Learned about Lone Wolves from Anders Behring Breivik?,” 38.

⁴²¹ Pantucci, 38.

⁴²² Fein and Vossekuil, *Protective Intelligence and Threat Assessment Investigations*, 50.

⁴²³ Seierstad, *One of Us*, 190–209.

b. *Anders Breivik Threat Assessment Conclusion*

Anders Breivik developed a grievance against the Norwegian Labor Party for its open immigration policy, and acceptance of Muslims. This grievance may have started early in his life, as he mentioned witnessing ethnic Norwegians being the victims of violence at the hands of Muslim immigrants.⁴²⁴ According to his writings, he was the victim of attacks by Muslim youths on nine separate occasions, and also made reference to an ethnic Norwegian girl who was gang raped by immigrant boys from Pakistan.⁴²⁵ However, Norwegian authorities have deemed much of what he wrote in his manifesto to be fabrications.⁴²⁶ Breivik's first attempt to address his grievance was to join the anti-immigration Progress Party. When he decided that democratic avenues were not an effective method by which to accomplish his goals, he moved to the path of violence. He claimed to be a defender of "European identity that is being overwhelmed by Muslim masses."⁴²⁷ Breivik claimed that the NATO war on Serbia was the "tipping point" for his ideological direction and was later inspired by a meeting with a Serbian national in Liberia in 2002. Around this period, he claims to have become a member of two secret organizations, the Armed European Resistance Movement, and the PCCTS Knights Templar, formed to fight the takeover of Europe by Muslims. Breivik claimed these organizations met to plan attacks, although Norwegian authorities were never able to verify the existence of the groups.⁴²⁸

He began writing a manifesto of his ideas, which he described as a "compendium" as early as 2002, titled *2083 A European Declaration of Independence*, penned under the name of Andrew Berwick, in which he includes specific targets and attack planning information.⁴²⁹ Breivik wrote, "I've spent a total of 9 years of my life working on this project. The first five years were spent studying and creating a financial base, and the last

⁴²⁴ Pantucci, "What Have We Learned about Lone Wolves from Anders Behring Breivik?" 30.

⁴²⁵ Pantucci, 30.

⁴²⁶ Seierstad, *One of Us*, 151–171.

⁴²⁷ Pantucci, "What Have We Learned about Lone Wolves from Anders Behring Breivik?" 31.

⁴²⁸ Seierstad, *One of Us*, 151–171.

⁴²⁹ Seierstad, 151–171.

three years was spent working full time with research, compilation and writing. Creating this compendium has personally cost me a total of 317 000 Euros.”⁴³⁰

Following the completion of his writing in 2009, he began the operational planning phase of his attack that included registering the agricultural company Breivik Geofarm in May 2009, which allowed him to purchase fertilizer and chemicals used in explosives.⁴³¹ He legally purchased guns in November 2010 and March 2011, under the guise of using them for hunting. He originally attempted to purchase the guns from criminal organizations before deciding it was much easier simply to purchase them in Norway legally. In 2010, he also purchased a Norwegian Police insignia from a print shop in Prague.⁴³² In 2011, Breivik moved from his mother’s home to the farm that he had rented and began to build the bombs that he intended to use in the attack. His original strategy called for three different bombs, but he had trouble constructing these explosives, which resulted in a change of plan. He settled on one bomb and an attack on the island of Utøya because he knew that Labor Party leaders would be attending, and that the youth attending the camp would support the party’s multiculturalism platform.⁴³³ Breivik stated during his trial that his goal was to kill 600 people on the island. During this period, Breivik ordered explosive chemicals from Poland, which brought him to the attention of Norwegian authorities, who later determined that the purchase did not warrant further investigation and removed him from their watch list.

From an investigative viewpoint, Breivik did not have a serious criminal history, as his only arrest was for graffiti at the age of 14. He did not express extremist viewpoints that would have brought him to their attention and did not “leak” information by telling people close to him of his intentions. While his actions raised concerns for his mental health among his mother and friends, it did not raise to the level that they involved mental health professionals.

⁴³⁰ Berwick, 2083.

⁴³¹ Seierstad, *One of Us*, 221–251.

⁴³² Seierstad, 221–251.

⁴³³ Seierstad, 221–251.

Breivik's case shows the difficulty and complexity for investigators faced with making critical conclusions about persons who have mental health issues. In this case, Breivik had two separate mental health evaluations following his arrest, which resulted in two differing results. The first evaluation determined that he had a psychotic disorder and the second that he had severe narcissistic personality disorder, a non-psychotic disorder. These evaluations, conducted by trained mental health professionals, illustrate how complicated it can be to determine a subject's mental condition even by doctors trained to do so, much less by members of law enforcement.

Breivik's case highlights that for threat assessment investigators, in attempting to determine an individual's mental state, the primary focus should be to identify whether or not that subject has the mental capability to plan, organize, and carry out an attack. In this case, no matter what his mental issues were, Breivik clearly demonstrated the ability not only to do all three, but the discipline to engage in operation security methods like withdrawing from those close to him, and not sharing any attack related information with them for at least five years while he planned the attack.

Breivik was also able to anticipate the Norwegian Security Service's reaction to his purchase of explosives and outsmart them by obtaining a farm. He correctly reasoned that they would assume it was for farm work, since he had no real criminal history, was not on any terrorist watch list, and was not known as an extremist in his online chats. In making this assumption, they made grave errors from which future threat assessment investigators should learn. Their first error was to make assumptions about the use of possible explosive materials without any verification or follow-up information, which would have been necessary to make an informed decision regarding Breivik's potential as a threat.

Following up on every lead can be very manpower intensive and will undoubtedly result in investigating many who are not threats, which is why cooperation needs to occur between all law enforcement agencies. It is unreasonable and irresponsible to rely solely on one agency to address such threats. The second lesson is not to base an assessment on only what has been done in the past. Norway had never experienced this type of attack prior to Breivik's case, and assuming that someone is not smart enough to think of new ways to execute an attack and disguise their means is very dangerous. The studies reviewed

on lone actors show that many of them, like Breivik, do not have a violent history, so basing an assessment solely on past behaviors is a grave mistake.⁴³⁴ It is important to note that Breivik did not intend to get away with his crimes and stated that the arrest would be the beginning of the propaganda phase in which he would have attention and a large audience with which he could disseminate his message.⁴³⁵

c. SNA Enhancement

Question number 10 in this threat assessment, regarding “factors in the subject’s life and/or environment that might increase or decrease the likelihood that the subject will attempt an attack,” would be the element most closely tied to social network formulas.⁴³⁶ Anders Breivik, similar to Timothy McVeigh, and the vast majority of subjects from the exceptional case study, exhibited change over time before finally reaching the planning and execution phase of his attack. Prior to 2006, he held anti-immigration views against Muslims shared by others in Norway and across Europe.⁴³⁷

In Breivik’s case, once he began to withdraw in 2006, closing his business, withdrawing his membership in the Progressive Party, and moving in with his mother, his social network included fewer individuals who held differing views.⁴³⁸ As he continued to become more radicalized, his majority of his social ties was found on the internet and of a similar mindset regarding his political grievances.⁴³⁹ His failure to gain a position or acceptance in the group to which he likely held the strongest allegiance, the Progressive Party, should be strongly considered as a significant factor in setting him on a path to violence.⁴⁴⁰

⁴³⁴ Gill et al., “Shooting Alone,” 712–713.

⁴³⁵ Berwick, 2083.

⁴³⁶ Fein and Vossekuil, *Protective Intelligence and Threat Assessment Investigations*, 50.

⁴³⁷ Seierstad, *One of Us*, 95–107.

⁴³⁸ Seierstad, 107–131.

⁴³⁹ Seierstad, 107–131.

⁴⁴⁰ Seierstad, 100–105.

d. Social Network Mapping of Anders Behring Breivik

The following information is used for a SNA examination of Anders Breivik. The data for Breivik's network was obtained from open source material, most notably the book *One of Us*.⁴⁴¹ The data is separated into two time periods in Breivik's life, and the SNA maps are created for both periods as an ego analysis, as well as an extended analysis to examine the ties held by his network. An additional ego SNA map was created from the post-radicalization period, which includes his internet connections, shown in Figure 7. The visualizations are a two-mode network, which maps both people and organizations. This project is limited because the subject of the examination is already known to have committed a violent act and is intended to provide a starting point for possible future research in the field of threat assessment.

Using the information gathered on Breivik's social ties allows a visual network of his life to be created. The network has been broken up into two different time periods. The first, described as pre-radicalization is from 1989, when he was in school, until 2006, which is denoted by the prosecutor in his case as the point at which he began to change, shown in Figure 5.⁴⁴² The post-radicalization time period starts in 2006, and culminated on July 22, 2011, with the completion of his attack, shown in Figure 6.⁴⁴³

In Figure 7, Breivik's online connections are included into a map of his ego network. The map with the inclusion of the internet network shows that Breivik had more ties online than in person. This added information would allow for an expanded amount of leads concerning people that an investigator would focus on during an investigation, and a better understanding of influencing ties.

⁴⁴¹ Seierstad.

⁴⁴² Seierstad, 1–120.

⁴⁴³ Seierstad, 121–345.

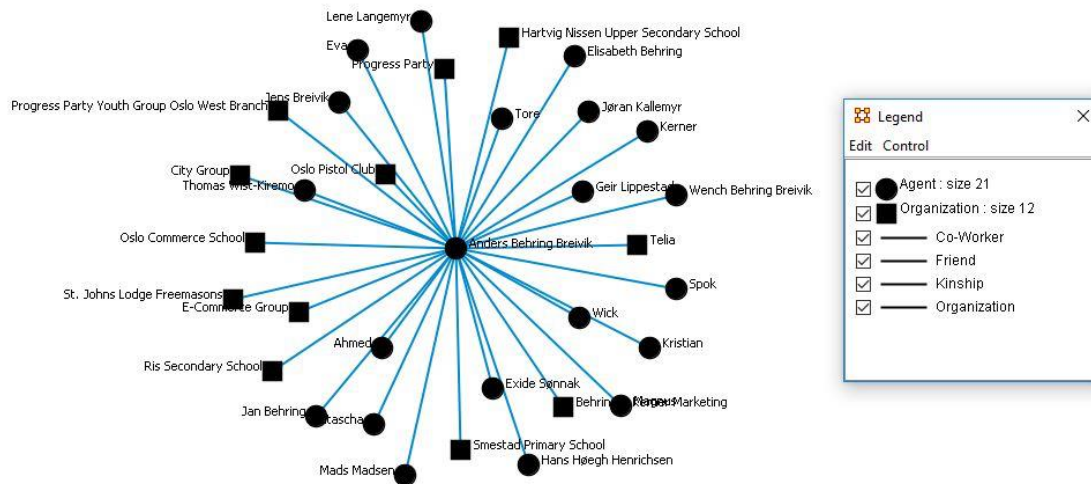


Figure 5. Ego Network—Pre-Radicalization, 1/1/1989–1/1/2006 (ORA v2.3.6)

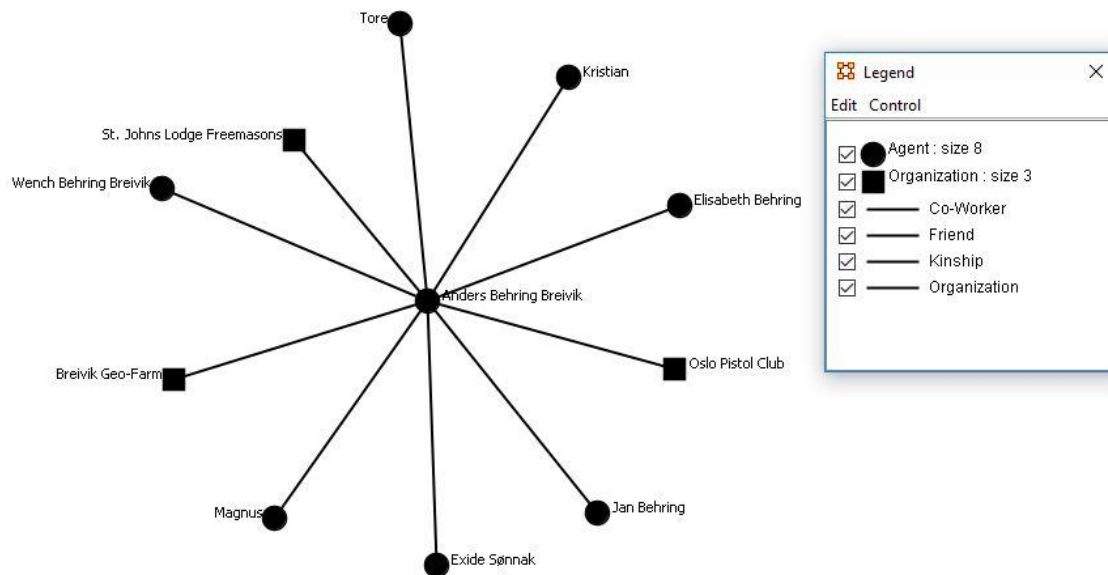


Figure 6. Ego Network—Post-Radicalization, 1/1/2006–7/22/2011 (ORA v2.3.6)

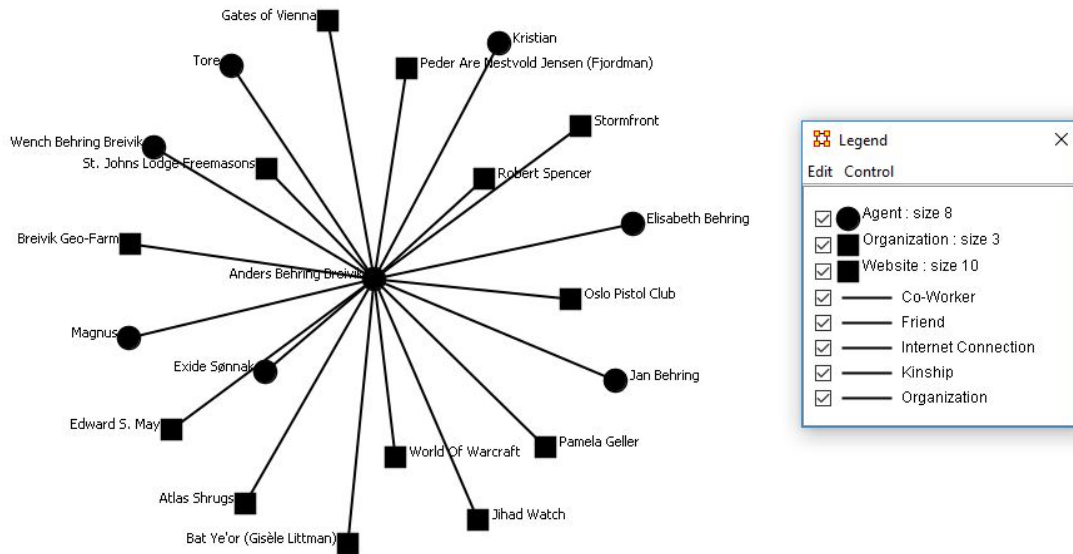


Figure 7. Ego Network (Including Internet)—Post-Radicalization, 1/1/2006–7/22/201 (ORA v2.3.6)

In examining the two social network maps of Breivik, it is clear that in the post-radicalization period, he has a much smaller total network. It would be important to note that like McVeigh, during his post-radicalization period, he still had a social network and did not fall into a withdrawn “lone” category. However, he clearly did withdraw from groups like the Progressive Party that previously had been very important to him.⁴⁴⁴ His network was reduced to mostly his mother and some friends, as his sister had moved to the United States, and he did not see his father after 1984.⁴⁴⁵ The one group he did remain a part of was the St. Johns Lodge Freemasons, but he was not an active member and would leave this group in 2009 as well.⁴⁴⁶

The further definition of Breivik’s network shown in Figures 8, 9 and 10 illuminates the extended network ties within the different groups that make up his associations. Using the mapping in conjunction with SIT, it can be seen that while the size of Breivik’s network certainly shrank, it may be the loss of one tie that affected him more than all the other ties

⁴⁴⁴ Seierstad, 83–107.

⁴⁴⁵ Seierstad, 202.

⁴⁴⁶ Seierstad, 125–131.

combined. His membership in the Progressive Party was clearly important to his identity and undoubtedly constrained his behavior and speech to conform to that group. His failure to gain a position could very well be the failure that started him on the path to violence. It is also important that when he cut ties by ending his party dues payments in 2006, he did not join another significant group.⁴⁴⁷ Breivik started the process of joining the Freemasons because of a relative who was a high-ranking member, but rarely attended meetings, and eventually discontinued his membership.⁴⁴⁸ Following his departure from the Progressive Party, his social influences were mainly in the form of online websites, which likely enhanced his ever-growing grievance.⁴⁴⁹ The results of SNA mapping on Breivik's network show a person whose positive ties, or those acting as constraints against violence, are shrinking. Meanwhile, the number of negative ties in his network, especially those online leaning towards radicalization, are significantly increasing.

⁴⁴⁷ Seierstad, 83–106.

⁴⁴⁸ Seierstad.

⁴⁴⁹ Seierstad.

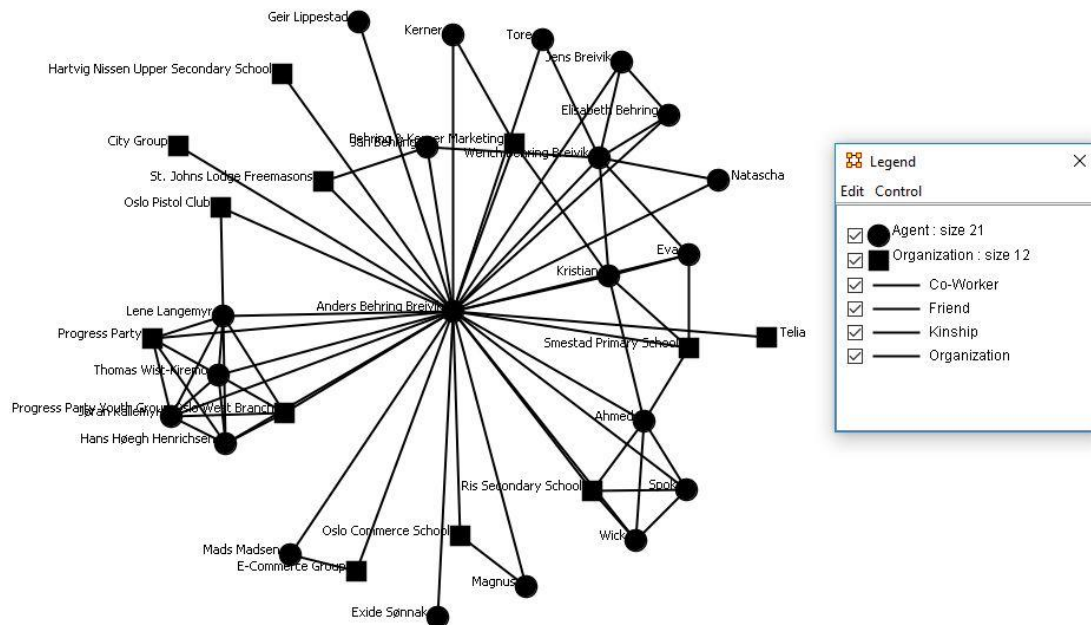


Figure 8. Extended Network—Pre-Radicalization, 1/1/1989–1/1/2006 (ORA v2.3.6)

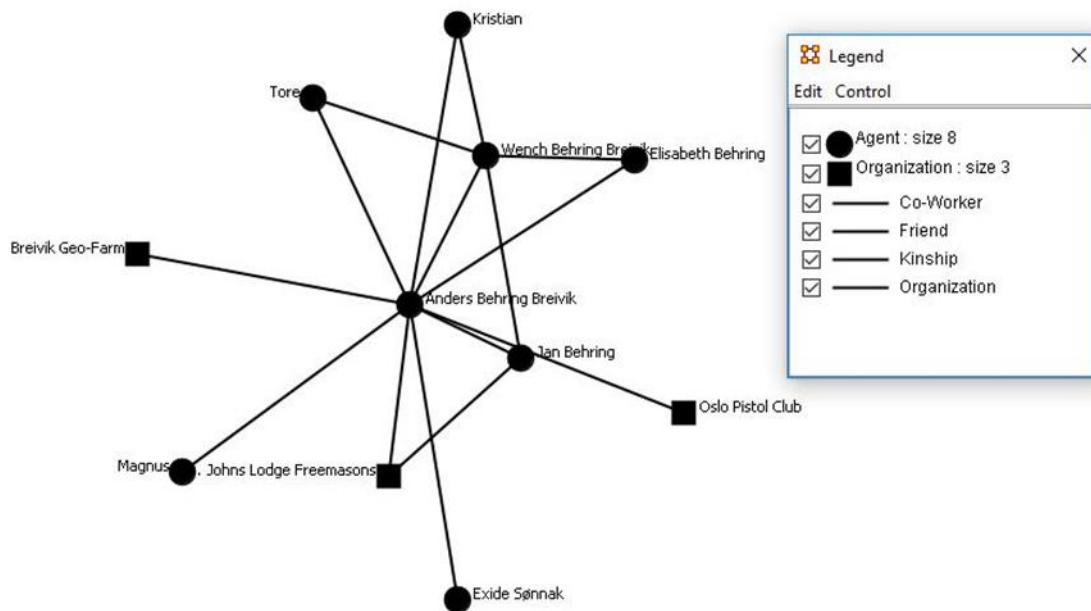


Figure 9. Extended Network—Post-Radicalization, 1/1/2006–7/22/2011 (ORA v2.3.6)

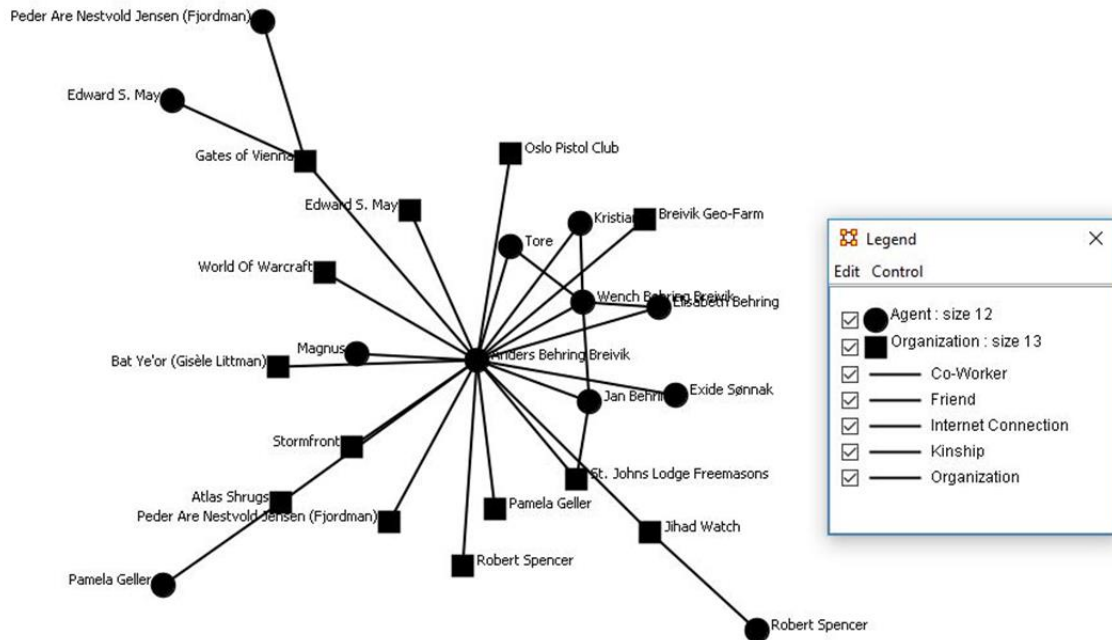


Figure 10. Extended Network (Including Internet)—Post-Radicalization, 1/1/2006–7/22/2011 (ORA v2.3.6)

e. *Operational Vulnerabilities*

One possible way to expand threat assessment is to identify where potential attackers are vulnerable in the planning and execution of their attack, and to learn from these potential vulnerabilities and develop strategies that address investigative opportunities. Breivik stated in court that he learned from the mistakes of a white supremacy group called eOrder, which had been successfully prosecuted in the 1980s, and from this prosecution, he decided that a one-man cell offered the best chance at success.⁴⁵⁰ As targeted violence actors are learning from mistakes made by other attackers, it is vital that law enforcement learn from successful actors as well.

Breivik was highly skilled in identifying and limiting his operational vulnerabilities. The few instances in which he was vulnerable include the 2002–2009 period while he was writing his journal and describing his plans, the explosives chemical purchase, and in his online chats and research. Since he realized that he was vulnerable in

⁴⁵⁰ Berwick, 2083.

these aspects of his operation, he devised and implemented countermeasures to safeguard himself from each of these operational threats. He understood law enforcement techniques and terrorism laws enough to write, “any written plans combined with weapons or explosives are considered solid evidence.”⁴⁵¹ He also understood the need to safeguard himself from computer evidence, writing that it was not enough to delete the information and wrote about methods that would prevent law enforcement from extracting this information.⁴⁵²

The journal or compendium that he wrote, if discovered prior to its intended release on the day of the attack, would have been detrimental to his secret plan. Breivik was aware of this possibility and wrote:

storing certain information electronically in shorter or longer periods is unavoidable during the research phase (logistical strategies and bomb/weapon schematics etc.). This information is usually stored on the individual’s PC while doing research. Keep in mind that the planning of military operations/attacks (under terrorism laws) is illegal. A schematic or vague indication of a plan are not considered solid evidence unless backed by either witness testimony or either weapons or explosive components together with verifiable affiliations to terror groups.⁴⁵³

He further attempted to safeguard the journal by writing:

the book should therefore never be considered anything else than fiction (not real). Please note that in order to do some of the research in this compendium the author had to visit/seek several controversial websites/sources in order to gain access to the information. This does not mean that the author or distributor have any sympathy or empathy for any specified or un-specified violent or non-violent groups. All “threats” etc in these fictional books are “in character” and its primary goal is to give an impression of what it would be like if we were under threat by an extremist [sic]organisation. It is therefore no need for concern by any police/state/government prosecutors or intelligence agencies about the content of this book due to its fictional nature.⁴⁵⁴

⁴⁵¹ Berwick.

⁴⁵² Berwick.

⁴⁵³ Berwick.

⁴⁵⁴ Berwick.

Breivik was the most vulnerable in the purchase of the explosive chemicals used to make the vehicle bomb. While his ruse of obtaining a farm was successful in eluding Norwegian authorities, had they investigated the farm and found evidence that it was not actually being worked as a farm, or interviewed him about his knowledge of farming and his use of the explosive, it could have raised red flags. While sending an investigator to have a conversation with Breivik at his farm and verifying that it was in fact a working farm might have stopped the attack before it happened. It is also possible that an investigator may have been fooled due to Breivik's extensive preparation to cover his true intentions.⁴⁵⁵

Breivik shows his depth of understanding operational security in his manifesto, writing:

as for creating an agriculture cover relating to the acquisition of substantial amounts of nitro-fertilizer; I originally had planned to create yet another agriculture prospectus and website etc., for use in the fertilizer-acquirement phase. However, I will instead just educate myself concerning a realistic case study involving growing sugarbeets on 5–20 acres (fertilizer intensive crop) in either my own country or my neighbouring country.⁴⁵⁶

In doing so, not only did he give a valid reason for obtaining the explosives, but he also anticipated a possible interview and prepared to speak intelligently about the need for explosive materials and general knowledge about farming.⁴⁵⁷

The final place in which he was potentially vulnerable was in his online discussions and searches. While Breivik made sure not to post anything in open chat forums that would have labeled him as an extremist, he might have been more open if he believed he was communicating directly with a like-minded person. He addressed this topic in his writing by stating the importance of using aliases when corresponding while doing research.⁴⁵⁸ He

⁴⁵⁵ Seierstad, *One of Us*, 221–252.

⁴⁵⁶ Berwick, 2083.

⁴⁵⁷ Seierstad, *One of Us*, 221–252.

⁴⁵⁸ Berwick, 2083.

further advised to use IP address masking software while researching via the internet, such as the Tor network.⁴⁵⁹ Regarding online security, he wrote:

be extra careful when researching for bomb schematics ([sic]fertiliser bombs) as many terms will trigger electronic alerts. You can consider using other people's networks remotely via laptop by parking outside their apartment/house. You can also buy an anonymous laptop and browse free from your local McDonalds etc. Use software to remove spy ware, cookies etc.⁴⁶⁰

For law enforcement in this type of situation, having informants or undercover operatives with established online personas has the potential to uncover clues that can illuminate someone trying to operate in the shadows. However, Breivik was aware of how he was vulnerable in this realm and took very effective steps to negate his exposure. He even wrote about the people he needed to associate himself with to safeguard his mission, stating:

The first of which is to surround yourself (either online or in real life) with people who support your political ideology but who at the same time does not [sic]jeopardise your security in any way. You should therefore avoid any affiliations with known extremists or such groups as they are most likely flagged (individuals and groups who are monitored by your national intelligence agency on so called "watch lists"). The reason why you should surround yourself with "moderate [sic]sympathisers" is because you will need a minimum of moral support.⁴⁶¹

Breivik understood his possible vulnerabilities and adapted his planning and implementation to neutralize almost every trace of his operation. The purchase of the explosive chemicals, which brought him to the attention of Norwegian authorities, was his most vulnerable aspect of the entire operation. The lesson for law enforcement is that the planning and methods employed by Breivik and anyone who uses his compendium as a guide will successfully hide them from scrutiny, but the weapons and explosive acquisition are concrete activities that can be monitored and tracked. The best outcome in this case would have been to interview Breivik after the purchase of the chemicals to allow an

⁴⁵⁹ Berwick.

⁴⁶⁰ Berwick.

⁴⁶¹ Berwick.

investigator to judge his responses for validity, and potentially lead an investigator to determine that he was a threat.

For law enforcement, this case shows the difficulty in illuminating someone as calculating as Breivik and intervening before he is able to commit his violent attack successfully. This case also suggests that the best course of action is to concentrate intelligence investigations on concrete actions like the purchase and thefts of explosives and weapons.

B. CASE STUDIES CONCLUSION

An analysis of these two cases reveals striking similarities between the backgrounds of McVeigh and Breivik. During their childhood development, both individuals lived in homes with troubled marriages, which eventually led to one parent leaving the family. McVeigh's mother left home when he was 10 years old and Breivik's parents separated before he was two years old.⁴⁶² Breivik had minimal contact with his father and would last see him at the age of 15.⁴⁶³ Neither subject did well in school, nor did they have any real success in any aspect of their lives during this period. Neither subject had any significant criminal activity prior to the planning and implementing of their attacks. Both subjects did have some success after leaving school. McVeigh was a decorated soldier in the U.S. Army, who was promoted to the position of Sergeant, and Breivik operated a business that sold fake diplomas, which was financially successful for a period before eventually going bankrupt.⁴⁶⁴

Both subjects suffered failures with the most significant groups in their lives, McVeigh when he failed Army Special Forces Selection School and Breivik when he failed to obtain a position with the Progressive Party.⁴⁶⁵ After these failures, while both saw a significant decrease in their social networks, they were not isolated and still maintained a

⁴⁶² Seierstad, *One of Us*, 1–12; Michel and Herbeck, *American Terrorist*, 7–36.

⁴⁶³ Seierstad, 202.

⁴⁶⁴ Michel and Herbeck, *American Terrorist*, 49–81; Seierstad, *One of Us*, 107–120.

⁴⁶⁵ Michel and Herbeck, 81–95.

social network. However, both of their network ties from that point were heavily weighted towards those who shared the same extremist views, and neither was a member of a group that would have constrained their violent behavior. Both subjects were motivated by long-standing grievances against the government that evolved over an extended period of time. Many of the contacts that both had after leaving the groups that were important to their identities would have pushed them on a continued path of violence rather than constraining violent ideas.

Both subjects gravitated to others who shared similar extremist views, but eventually determined that they were the one who needed to lead the way with actions because the others were incapable.⁴⁶⁶ They were similar in their grandiose ideas of self-importance, which did not coincide with the lens of failure through which the rest of society viewed them.⁴⁶⁷ Both spent considerable time planning and coordinating their attacks, and both used extensive operational security methods to conceal acquiring the explosives needed for their attacks. Both subjects used similar bombing attacks, although Breivik was clearly influenced by McVeigh's attack, and expanded his own attack in a much more personal way than McVeigh. In this regard, he was likely attempting to eclipse McVeigh for the shocking nature of the attack, and thereby bring more attention to himself.⁴⁶⁸

In a comparison of mental health issues, the subjects have some notable differences, but their similarities are likely more significant. McVeigh had some suicidal thoughts prior to his attack, but was not diagnosed with a mental health issue.⁴⁶⁹ Breivik, on the other hand, did not have suicidal thoughts, and was evaluated twice following his attack. In the first evaluation, they found that he suffered from paranoid schizophrenia that made him criminally innocent, but in the second opinion, which the court sided with, Breivik was found to have pathological self-aggrandizement, and was found criminally responsible.⁴⁷⁰

⁴⁶⁶ Michel and Herbeck, 117–205.

⁴⁶⁷ Seierstad, *One of Us*.

⁴⁶⁸ Seierstad.

⁴⁶⁹ Michel and Herbeck, *American Terrorist*, 95–117.

⁴⁷⁰ Melle, "The Breivik Case and What Psychiatrists Can Learn from It," 17–18.

Whatever their medical diagnoses, both men had the capacity to plan, organize, and carry out an attack, and neither was hindered in that regard by any mental incapacity. If anything, possible feelings of paranoia may have caused them to add layers of operational security into their plans, which thereby made them harder to detect.

The subjects differed in the fact that McVeigh leaked information to others prior to committing the attack and Breivik did not.⁴⁷¹ McVeigh also enlisted the help of the people he had leaked the information to in assembling the truck bomb, whereas Breivik made his preparations and assembly alone. Both subjects did extensive amounts of research, and both visited the eventual location prior to the attack.⁴⁷²

Both subjects struggled with employment related issues, and both likely felt a loss of status before radicalization. Neither subject suffered a significant personal loss prior to radicalization; however, McVeigh lost his grandfather in the year prior to his attack, whom he described as the only person he ever loved, which may have removed any final possible restraint for the attack.⁴⁷³ Breivik did not have anyone in his life whom he cared about enough to act as a restraint; he was closest to his mother but had a complicated relationship with her. Neither subject dated very much, nor had any significantly important romantic relationship, which has been linked to long-term feelings of inadequacy.⁴⁷⁴

⁴⁷¹ Michel and Herbeck, *American Terrorist*, 159–223.

⁴⁷² Michel and Herbeck, 159–223; Seierstad, *One of Us*, 272–345.

⁴⁷³ Michel and Herbeck, 159–205.

⁴⁷⁴ John Kifner, “McVeigh’s Mind: A Special Report; Oklahoma Bombing Suspect: Unraveling of a Frayed Life,” sec. 1, *New York Times*, December 31, 1995.

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V. CONCLUSION

Specialized units need to be created within law enforcement that better understand threat assessment investigations, and gain experience conducting them. Threat assessment investigations are more closely tied to intelligence gathering investigations than to normal investigations, with an end result of formal criminal charges. In addition to utilizing normal investigative techniques, a threat assessment investigator needs to understand both mental health issues and grievances in people who may be attempting to hide their true intentions. Threat assessment investigations involve gaining as much information possible about a person to determine if this person will at some point, maybe years down the line, commit an act of violence. In addition to the threat assessment model provided by the assassination case study, additions should include the added help of mental health providers working in conjunction with investigators, as well as computerized mapping of the subject's social networks.

A. ANALYSIS

The United Kingdom model for combining mental health professionals and law enforcement shows great promise in attempting to understand all aspects of a subject fully who is under assessment. This model should be studied for use in this country. Threat assessment groups should include representatives from all relevant law enforcement agencies sharing information. The more information gathered results in a clearer picture, which will result in a better understanding and analysis. These threat assessment groups should investigate all types of targeted violence including lone wolves and school shooters. For school threat assessment subjects, officials in the educational system should be included and consulted by the assessment groups. Computer case models, which alert the investigator if the subject under threat assessment does something that requires immediate attention, such as the purchase of a gun or explosives, should also be utilized. This SNA would have the benefit of providing an investigator with the best contacts to interview to gain insight into the subject's mental state and possible motivations and grievances. Understanding the people closest to the subject is also important because one of the

statistics found across various studies shows that a high percentage of targeted violence offenders communicate their intentions to commit violence to people close to them. An SNA can also provide investigators with a picture to identify changes over time, which is important since many targeted violence actors take years from the time they develop the grievance until they move to an actual pathway of violence.

The FBI may be overtasked and not able to handle this problem by itself, as the results of Stoneman Douglas, the Boston marathon bombing, and the Pulse nightclub, have highlighted. Approximately 14,000 FBI agents are tasked with multiple assignments, as are more than 750,000 local and state law enforcement officers.⁴⁷⁵ These local departments have an equal stake in protecting their citizens, and frequently, with a better understanding of local intelligence. The best solution to this very complex problem is to utilize all the available assets.

SNA has the potential for great success within the field of threat assessment. As the case studies in this research show, the SNA model provides an investigator with a simple visual map of the important people and groups within a subject's network. These important ties are vital to understanding those who influence and constrain the subject's actions. At the core of any inquiry, the more information that the investigators have, the more accurate they will be with the direction of the investigation itself. This mapping converts raw information into a digestible and more easily understandable format. This tool not only shows the size of the subjects' network, it can also be used as snapshots of time to show if subjects are withdrawing from their networks. SNA should be used in conjunction with SIT to understand how the network data collected by SNA will act as a pathway or constraint on the subject of the analysis.

As a tool, SNA would also make the transfer of cases potentially easier. As mentioned, many subjects have taken years to move from their original grievance to their pathway to violence, during which time it is possible that the original investigator would

⁴⁷⁵ "Fiscal Year 2017 Budget," Department of Justice, Federal Bureau of Investigation, accessed October 10, 2019, <https://www.justice.gov/jmd/file/822286/download>; Duren Banks et al., *National Sources of Law Enforcement Employment Data* (Washington, DC: Department of Justice, 2016), 2, <https://www.bjs.gov/content/pub/pdf/nsleed.pdf>.

no longer be assigned to the case. A social network map from the original investigation would be extremely helpful in identifying the current influential people in the subjects' lives, and determining if the network is becoming more conducive to radicalization.

B. RECOMMENDATIONS FOR FUTURE RESEARCH

It is the recommendation of this thesis that continued research be done to explore the creation of threat assessment groups similar to the United Kingdom model to combat the growing problem of homegrown radicalized terrorism, lone wolf attackers, and school shooters. These groups should be made up of medical health professionals, educators, and members of law enforcement. The law enforcement members should be a combination of local, state, and federal.

The model should provide training for all members of the team in threat assessment and threat management. Funding should be provided to this group to support prevention programs modeled on the United Kingdom Channel program to address de-radicalization and community support. When those with mental illnesses come to the attention of the threat assessment group, if they are deemed not to be a threat, they should be assisted in finding help within the mental health system. The program should focus on continued periodic monitoring of anyone deemed a threat to such time as the decision is made that they no longer pose a threat.

The focus of the group mission should prioritize prevention over successful prosecution after an attack. Due to Health Insurance Portability and Accountability Act (HIPPA) laws protecting the medical records of subjects of the threat assessment group, the path should follow one of two tracks. First, the medical professionals should review the records. Following this review, the medical staff should share the information based on 45 CFR 164.512(j)(1)(i); which allows information to be shared with a law enforcement official who is "reasonably able to prevent or lessen a serious and imminent threat to the health or safety of an individual or the public."⁴⁷⁶ If the threat from the subject is not

⁴⁷⁶ "Uses and Disclosures for Which an Authorization or Opportunity to Agree or Object Is Not Required," Department of Health and Human Services, Code of Federal Regulations, title 45 (2004 comp.): 164.512, <https://www.govinfo.gov/app/details/CFR-2004-title45-vol1/CFR-2004-title45-vol1-sec164-512>.

imminent but the medical professionals feel that the information needs to be shared with the law enforcement members, then a court order permitting the records to be reviewed should be obtained based on public safety. It is important that the model include the methods in which different groups share information, both intelligence on subjects who pose threats, as well as methods, practices, and strategies. Ideally, these threat assessment groups should include a representative from every law enforcement agency that conducts any type of threat assessment, such as the FBI and United States Secret Service, to share information and reduce the amount of duplicated effort.

It is also recommended that further research be done in the use of SNA and SIT to inform threat assessment investigations better. The ultimate goal of the research is to ensure that future threat subjects have an SNA included as part of their threat assessments. Threat assessment investigators should be educated in SIT to assist in understanding the SNA results. A case management system should incorporate the SNA information, and include computer-monitoring files that will notify the investigator when certain triggers occur, such as the subject purchasing a gun or explosives, being arrested, or having someone close to the subject experience one of the triggers. These triggers should act as an immediate flag that initiates an investigative response to check on the mental or situational status of the subject and determine if the subject should be reclassified as a threat requiring more monitoring and further investigation. It is also recommended that social network postings for the subject be monitored to assess if the subject may be moving towards a path of violence and need further contact and or a follow-up investigation.

APPENDIX. SNA SUB GROUPS

The following subgroups are taken directly from *Understanding Dark Networks*, Appendix 2.⁴⁷⁷

Clique: A clique is maximal complete subnetwork containing three or more actors. The term “maximal” means that no other actor can be added to the clique without destroying its defining characteristic, which in this case means that each actor must be tied to each other actor.

Community Detection: Community detection algorithms are a series of clustering algorithms that detect subgroups such that there are more ties within the subgroups than across them than one would expect in a random graph of the same size with the same number of ties. The optimal number of subgroups generally uses modularity as a measure of fit.

Faction: A faction is a subnetwork where each actor is tied to all other actors within their own subnetwork but have no ties to actors in other subnetworks.

K-Core: Formally, a k-core is a maximal group of actors, all of who are connected to some number (k) of other group members.

Strong Component: In a strong component, each pair of actors is connected by a (directed) path and no other actor can be added without destroying its connectedness.

Weak Component: In a weak component, each pair of actors is connected by an undirected path (i.e., a semi-path) and no other actor can be added without destroying its connectedness.

⁴⁷⁷ Cunningham, Everton, and Murphy, *Understanding Dark Networks*, 323–331.

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