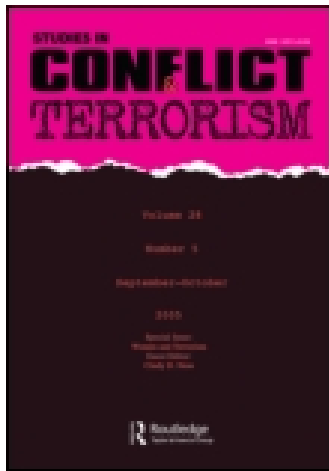


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### Key Issues and Research Agendas in Lone Wolf Terrorism

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## Key Issues and Research Agendas in Lone Wolf Terrorism

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*This article builds on recent contributions to the academic literature on lone wolf terrorism to critically examine key issues that are germane to the current state of play in this field of study. It finds that, overall, the recent academic literature still suffers from considerable problems regarding quality and rigor, including definitional, conceptual, methodological, and inference issues. By providing a critique of these issues, the article attempts to advance the scholarly debate on lone wolf terrorism and inspire greater dialogue and collaboration between scholars. Directions for future research are also outlined.*

The issue of terrorists acting alone or in small cells has been attracting growing scholarly, political, and public attention in recent years. The recent academic literature has enhanced our understanding of key aspects of “lone wolf” terrorist activity, including its extent and impact, historical development, motivations, ideologies, psychological and sociodemographic circumstances, modus operandi, radicalization, and interdiction and prevention strategies.<sup>1</sup> One of the latest contributions to this scholarly debate is Michael Becker’s

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study of lone wolf target selection, published in this journal.<sup>2</sup> Lone wolf terrorists, Becker argues, are what might be called “weak opportunists” whose target selection is predominantly driven by ideology,<sup>3</sup> but constrained by their relative weakness, which leads many of them to strike in areas with which they have some familiarity based on the “nodes, paths and edges”<sup>4</sup> of their physical environment and action spaces. They are more likely to attack civilian targets than government or military targets, and are less concerned than group-based terrorist actors with garnering public support. Becker’s analysis confirms the finding from previous studies that lone wolf terrorists in the United States “disproportionately use firearms as the means of attack,”<sup>5</sup> however, he also signals the growing use of explosive devices in lone wolf terrorist attacks as “the most visible trend” in the post-9/11 era.<sup>6</sup>

Becker bases his conclusions on deductive analysis of 84 lone wolf terrorist attacks that occurred in the United States between 1940 and 2012. These 84 cases are taken from previous studies,<sup>7</sup> from the Global Terrorism Database,<sup>8</sup> and from Becker’s own research using open-source material. His analysis takes the form of simple descriptive statistics involving frequencies (counts and percentages) for individual variables, such as the nature of the target (civilian, government, military), ideology (Anti-Black Racism, Anti-White Racism, Anti-Abortion Sentiment, etc.), and the primary weapon used (firearm, bomb, other).

Becker’s article brings into sharp relief a number of key issues regarding the quality and rigor of lone wolf terrorism research that are germane to any scholarly analysis of this crime. Two broad sets of issues, or problems, that this article would like to highlight, and elaborate on, are definitional and conceptual issues, and methodological and inference problems. In so doing, this article aims to provide a comprehensive critique of lone wolf terrorism research. Although recent works such as Becker’s acted as the catalyst for this article, the objective is to make sense, and provide a critique, of current academic literature on lone wolf terrorism more generally. As such, this article is complementary to Becker’s in that it seeks to move the scholarly debate on lone wolf terrorism forwards. To this end, the article also outlines directions for future research.

### **Definitional and Conceptual Issues**

Defining lone wolf terrorism is an important task because it determines what we focus our analytical attention on, what actions, subjects, or relationships we include or exclude from our gaze, and how we assess and respond to these. Considering that the definitional conundrum with respect to terrorism has not waned, it is unsurprising that there is no single, universally accepted of lone wolf terrorism. This is not, as Becker claims, because the literature on lone wolf terrorism “suffers from a lack of a clear definition,”<sup>9</sup> but because the multiple existing definitions of the crime vary on key points. While each study individually may have merit as long as it is reviewed within the confines of its specific definition, the diverging definitions of lone wolf terrorism make comparisons between studies problematic.

The term “lone wolf” is itself contested, not least by law enforcement officials who may argue that it glamorizes this type of terrorist activity. For example, the United Nations Counter-Terrorism Committee Executive Directorate (CTED) instead uses the phrase “terrorists acting alone,” which it considers to be a more neutral description of the issue at hand.<sup>10</sup> Moreover, the label “lone wolf” is a construct of the media and of radical political actors themselves, rather than a social science concept or legal terminology. With regard to the latter, it is striking for example that in some countries “lone wolf” or

“solo actor” are meaningful legal terms only if there is a connection with a (foreign) terrorist organization, whereas in a scholarly sense these terms are meant to denote the exact opposite; that is, political violence carried out by individuals with no direct connection to a terrorist group or network.

Academic treatment of the crime has not necessarily helped to clarify the matter. Rather, it has often made the definitional conundrum more complex, more arbitrary, and more contradictory. Let us rehearse a sample of buzzwords that characterize academic discourse on lone wolf terrorism: loner, lone actor, solo actor, solo terrorist, solitary, freelancer, self-starter, lone offender, lone avenger, leaderless, self-directed, self-motivated, lone wolf pack, one-man wolf pack, self-activating, idiosyncratic. These terms are often used interchangeably to refer to an individual (or a small cell) who perpetrates political violence, acting independently, with no clear connection to the leadership of a terrorist group and/or outside an organizational hierarchy. Theoretically and practically, however, these terms can mean quite different things.

Becker’s study has particular merit in this respect due to its relatively tight definition of the crime: “ideologically driven violence, or attempted violence, perpetrated by an individual who plans and executes an attack in the absence of collaboration with other individuals or groups.”<sup>11</sup> This definition is sensible and preferable to the broadly conceived definitions proposed by some scholars. For example, the recent definition proposed by Simon includes violence that is not ideologically or politically motivated and that is undertaken to further a financial or other related goal.<sup>12</sup> This broad definition leads Simon to incorporate in his typology of lone wolf terrorists what he calls “criminal lone wolves,” who perpetrate their violence “for purely personal or financial gain.”<sup>13</sup> Furthermore, Simon refers to lone wolf terrorists as individuals “acting alone or with minimal support from one or two other people.”<sup>14</sup> In a similar vein, Hewitt defines a terrorist group as consisting of at least four people. Therefore, in addition to individuals, couples and trios are also counted as lone wolf terrorists.<sup>15</sup>

Arguably, if two or three people carry out an act of terrorism, then it is no longer a “lone” act of violence committed by “unaffiliated” individuals since there were multiple perpetrators who were at least affiliated with one another. Such a methodology can potentially inflate the incidence of lone wolf terrorism. The conflation of lone wolves with small cells or “lone wolf packs,”<sup>16</sup> which similarly lack hierarchical organizational structure, confuses, rather than clarifies, definitional and conceptual boundaries. It can also render invisible important differences and nuances that, as Gruenewald et al. rightly note, law enforcement and policymakers need to keep in mind as they develop interdiction and prevention strategies.<sup>17</sup> As Borum et al. argue, conceptually grouping small cells together with isolated actors “may not improve investigators’ ability to think more clearly about lone offender terrorism.”<sup>18</sup> This critique equally applies to the narrower, yet still problematic, definition proposed by Gill et al., whose sample includes “individual terrorists (with and without command and control links) and isolated dyads,” that is, pairs of individuals who operate independently of a group.<sup>19</sup> Gill et al. justify the inclusion of these dyads by arguing that while not technically lone actors, they “are often formed when one individual recruited the other specifically for the terrorist attack,” and that “the formation of a dyad, in some cases, may be a function of the type of terrorist attack planned.”<sup>20</sup>

The recent study by Teich offers a striking illustration of this conceptual problem.<sup>21</sup> Teich, who seeks to identify trends and developments in lone wolf terrorism in western societies, includes in her dataset duos and trios, and “individuals who had some contact with terrorists—but were officially unaffiliated with the terrorist organization.”<sup>22</sup> This expansive definition causes distortions in the author’s findings. For example, Teich’s

conclusion that the number of injuries caused by lone wolf terrorist attacks has “dramatically increased” in recent years is undercut by her inclusion of the 2013 Boston Marathon bombing, which was carried out by two brothers, Dzhokhar and Tamerlan Tsarnaev, who appear to have operated as the type of “isolated dyad” that Gill et al. refer to. Resulting in three fatalities and 264 people injured, this attack constitutes the full 100 percent of the total number of injuries caused by “lone wolf” terrorist attacks in Teich’s dataset for the 2010–2013 period. If one were to exclude this attack from the analysis, *pace* Becker’s definition, the suggested “dramatic increase” in injuries would evaporate completely.

The same conceptual problems plague the case study component of the Teich research. Depending on one’s definition, three of the five case studies presented in the study arguably do not qualify as lone wolf terrorism or are at least ambiguous cases. In addition to the Boston Marathon bombing, these include John Allen Muhammad and Lee Malvo, who in 2002 jointly engaged in a series of shooting attacks across the United States that killed 17 people and injured 10 others,<sup>23</sup> as well as Mohammed Merah, who carried out three attacks in France in March 2011, killing eight people and injuring five others. Both cases, and especially the former, would seem to fall outside of the scope of narrow definitions of lone wolf terrorism, including Becker’s. Although Merah operated independently, he had been trained in Afghanistan by Al Qaeda and instructed to commit crimes.<sup>24</sup> He also received some help from his brother in the preparatory stages, for example in stealing a scooter that he later used in the attacks.

These examples highlight the importance of nuance and analytical rigor on the twin issues of lone wolf versus small cell or group-based terrorism, and individual initiative versus external directives.<sup>25</sup> Becker’s reference to lone wolf terrorist attacks occurring “in the absence of collaboration with other individuals or groups” does not mean that lone wolves are truly alone in their cause,<sup>26</sup> or that they operate in a social or political vacuum.<sup>27</sup> Put differently, lone wolf terrorism must be placed within the broader context of the individual’s personal history, social relations, and political or religious struggles. A degree of external social influence is often employed during the terrorist attack cycle, notably at the level of ideological formation and (online and/or offline) communication with outsiders, including engagement with extremist materials or “terrorist PR.”<sup>28</sup> While Becker contends that “lone wolves, by definition, do not rely on resources or support from other individuals,”<sup>29</sup> this is not necessarily true. Many lone wolf terrorists rely on the moral and sometimes tactical support of enablers, which can occur indirectly by people who provide inspiration for political violence.<sup>30</sup> Prominent examples of indirect enablers are Anwar al-Awlaki, the late Yemen-based American Islamic cleric, for Al Qaeda-inspired lone wolf terrorists, and William Pierce, National Alliance founder and author of *The Turner Diaries*, for antigovernment extremists of the post-9/11 period.

In this respect, Feldman aptly describes lone wolf terrorism as deriving from “a variable amount of external influence and context (notably now online), rather than external command and control.”<sup>31</sup> This conceptualization conveys the main idea that whereas in the past terrorists communicated with dozens of people by virtue of their group membership and organizational embeddedness, they may now communicate with only a few, and possibly only online (although “self-radicalization” via the Internet with no relation to the physical world rarely happens<sup>32</sup>). Thus, there is still flexibility regarding the possibility of points of interaction, and in the vast majority of cases there are at least some interaction points with the individual’s significant others in the outside world. The dimensional approach proposed by Borum et al., which considers three key dimensions of lone wolf terrorism (i.e., liveness, or independence of activity; direction, or autonomy of decision making; and motivation, or clarity of causation/purpose) across a continuum,

is instructive in this regard.<sup>33</sup> It sensitizes us to the fact that, even in a narrow definition of lone wolf terrorism, a wide spectrum of lone actors exist.

However, even when considered along a continuum or sliding scale as opposed to categorical distinctions, for analytical purposes is crucial to maintain a clear and rigorous definition that distinguishes lone wolf terrorists from terrorists who operate under the auspices of autonomous cells, organizations, or states, as well as from those whose violence is perpetrated for purely personal or financial gain. In the absence of such a definition, it is extremely difficult to exercise the necessary rigor in vetting cases, discerning theoretically meaningful patterns, and developing effective prevention strategies. It is to the issue of data and inference problems that this article now turns.

### Methodological Problems

Existing research on lone wolf terrorism varies greatly with regard to methodology, again making comparisons between the studies problematic. A first issue involves the units of analysis employed in the studies. The aforementioned Hewitt study, for instance, conflates the number of attacks with the number of fatalities. Doing so can obscure the incidence of lone wolf terrorism, as in Hewitt's conclusion a "significant portion" of terrorist attacks in the United States are carried out by lone wolves, a conclusion he arrives at by examining the number of victims killed in the attacks.<sup>34</sup>

This issue is also evident in the study by Becker who, as noted earlier, analyzed 84 attempted and perpetrated lone wolf terrorist attacks. Becker states that each case under consideration "entails an instance (or multiple instances perpetrated by the same actor) of ideologically driven violence or attempted violence."<sup>35</sup> His unit of analysis is "a lone wolf terrorist attack (or, in rare cases, a series of related attacks perpetrated by one individual)."<sup>36</sup> The problem here is that Becker conflates attacks with perpetrators, with significant consequences for the temporal trends he identifies. For example, Becker claims that the post-9/11 period "saw lone wolf incidents accelerate even more rapidly" in the United States.<sup>37</sup> While this perceived trend is true for the total number of identified lone wolf *perpetrators* (i.e., individuals), it is false for the total number of *attacks*. What is being missed here is that while multiple attackers were prominent in the pre-9/11 era, the single attacker rose to prominence after 9/11. Current research by Hamm and Spaaij finds that from 1940 through to 2000, 38 lone wolf terrorists committed 171 attacks.<sup>38</sup> Roughly 60 percent of them committed a single attack and 40 percent committed multiple attacks, including such prolific terrorists as Theodore Kaczynski who committed 16 bombings over a 17-year period, the racist serial killer Joseph Paul Franklin responsible for an estimated 23 attacks over four years, and Muharem Kurbegovic, the "Alphabet Bomber," who launched ten attacks in two years. The data indicate that the incidence of lone wolf terrorism in the United States, in terms of the number of perpetrated *attacks*, is not on the rise.

### Sting Operations

Arguably a more pressing issue is the inclusion of law enforcement sting operations within Becker's dataset of lone wolf terrorist attacks. To be fair, this issue applies not only to Becker's study, but also to other recent research, including the Teich study.<sup>39</sup> A significant proportion of "lone wolf" terrorist incidents in the post-9/11 period were law enforcement sting operations involving confidential informants and undercover agents. Twelve of the 84 attacks included in Becker's dataset fit this description. Hamm and

Spaaij find that there have been 15 such cases in the United States for the period 2001 through 2013, amounting to a full 25 percent of the post-9/11 lone wolf terrorist cases.<sup>40</sup> These cases do not qualify as authentic lone wolf terrorist attacks since more than one individual was involved and because, in the mind of the perpetrator, he or she was acting with a like-minded individual as part of a small group or cell.

Becker's claim that Demetrius "Van" Crocker, who sought to target the U.S. Congress in 2004, "conspired to attack" highlights this issue.<sup>41</sup> Conspired with whom? How can a lone actor conspire with anyone? In early 2004, Crocker came to the attention of the Tennessee Drug Task Force for dealing methamphetamine. In a conversation with an undercover agent, Crocker said that Timothy McVeigh "[did] things right," adding that he wanted to follow McVeigh's example by killing the Black population of Jackson, Tennessee, with mustard gas.<sup>42</sup> The drug informant introduced Crocker to an undercover Federal Bureau of Investigation (FBI) agent who posed as a fellow White supremacist and a security employee at the weapons arsenal in Pine Bluff, Arkansas. Crocker told the agent that he wanted to use a radioactive bomb to attack the U.S. Capitol while the House and Senate were in session, and the agent offered to help Crocker obtain precursor materials to sarin nerve gas. After several more meetings in which Crocker was provided an opportunity to back out, Crocker paid the informant \$500 for the sarin precursors, leading to his arrest on federal charges.<sup>43</sup> The seven-month investigation of Crocker was an FBI sting operation.

It is important that cases such as this be distinguished from "authentic" lone wolf terrorism cases for analytical purposes. Because the stings are controlled operations run by law enforcement, no one is killed or injured in the attacks. Moreover, as in the Crocker example, the informants and undercover agents exert considerable influence on the attack cycle, including the means and opportunity for the terrorist plot, as well as the target selection process examined in Becker's article.

Amine El Khalifi, who is included in both the Becker and Teich studies as an "authentic" lone wolf terrorist, further illustrates this point (as does Hosam Smadi, another case examined in the Becker study). His is one of a number of cases in which the FBI reached out to an isolated young Muslim extremist and provided him with ideological validation, a sense of belonging, and materials needed to carry out an attack on American soil. El Khalifi came to the attention of law enforcement officials in early 2011, when they introduced him to two FBI undercover agents. El Khalifi believed that the two men he associated with were his Al Qaeda handlers and that he was therefore working with Al Qaeda. The three men met repeatedly and discussed El Khalifi's desire to conduct an operation in which he would use a gun and kill people face-to-face. For more than a year, El Khalifi considered attacking targets including a synagogue, an Alexandria building with military offices, and a Washington restaurant frequented by military officials. In January 2012, following conversations with and advice from his "handlers," El Khalifi reportedly stated that he had modified his plans for his attack, and he now wanted to conduct a suicide attack at the U.S. Capitol Building.<sup>44</sup> On 17 February 2012, El Khalifi traveled with the undercover agents to a parking garage near the building, where he took possession of an automatic weapon and a bomb vest that had been provided to him by one of the undercover agents. Unbeknownst to El Khalifi, both the firearm and the bomb had been rendered inoperable. He was arrested as he walked from the vehicle toward the U.S. Capitol.<sup>45</sup>

Including sting cases in the list of "authentic" lone wolf terrorist attacks can skew the data and subsequent inferences and conclusions. Becker's findings with regard to the choice of weapons should be viewed in this light. Becker states that of the "30 bomb attacks in the universe of cases, 22 occurred after 9/11." This leads him to conclude that

there has been a “precipitous rise in bomb and explosive attacks” after 9/11, and that “lone wolf terrorists have shown an increasing capability to acquire bombmaking materials and build a functional device.”<sup>46</sup> The reason for this is that Becker includes 12 sting cases, all classified as attempted bombings. The trouble with this approach is that in most sting cases the FBI’s confidential informants and/or undercover agents played an important role in both coming up with the bombing idea and supplying fake explosives. If one excludes these twelve cases from the analysis, the “trend” becomes far less pronounced.

This does not mean that sting cases should be disregarded in research on lone wolf terrorism. Quite the opposite: they indicate one of the most important current trends in lone wolf and small cell terrorism. Sting operations against standalone extremists have become a major component of domestic counterterrorism in the United States since 9/11. Indeed, individuals rounded up in stings are typically described by law enforcement agencies as “lone wolf terrorists.”<sup>47</sup> This trend further signals important parallels between the fight against lone wolf terrorism and the way in which, for example, so-called “foreign fighters” are combated. Dozens of American citizens have been arrested in recent months in stings, all attempting to travel to Syria or Iraq to join Islamic State (IS) militants.<sup>48</sup> In both cases, the FBI relies on sting operations to catch potential aspiring terrorists and to sow distrust in extremist communities and prevent them from recruiting inside the United States. With regard to lone wolf terrorism in the United States, while stings are “not a magic solution,” as one senior prosecutor put it to the authors, they certainly are a favored and widely used strategy, unlike in most other Western societies where the use of sting operations is prohibited by law. This raises vital questions for future research, notably with regard to the relationship between public safety and civil liberties, and, more specifically, as to whether, as investigative journalist Trevor Aaronson argues in his critically acclaimed book *The Terror Factory*, such “manufactured” lone wolf terrorist plots stretch the definition of terrorism beyond its limits.<sup>49</sup>

### ***Sloppy Research***

The above issues point to the more general problem of the quality and rigor of research methodologies. In this respect, lone wolf terrorism research suffers from some of the same problems that affect the wider field of terrorism studies.<sup>50</sup>

Arguably, one of the most salient lessons to be learned from existing research is that scholars should not take the secondary-source, descriptive information that is available in databases, such as the Global Terrorism Database, at face value.<sup>51</sup> While useful for providing leads on possible cases of lone wolf terrorism, the limitations of such databases for the study of lone wolf terrorism are well established.<sup>52</sup> The recent START study by Asal et al. is a prime example of why taking the information (not) contained in databases at face value is a bad idea. Drawing on data from the Global Terrorism Database, this study found that “lone-actor terrorist attacks [in the United States] were extremely rare between 2005 and 2010, with either zero attacks or one attack per year.”<sup>53</sup> For example, according to the study, there were no attacks in 2009. Yet 2009 was the year of Carlos Bledsoe’s military shooting in Little Rock, Nidal Hasan’s historic massacre at Fort Hood, Richard Poplawski’s police shooting in Pittsburgh, Joshua Cartwright’s police shooting in Florida, James von Brunn’s shooting at the Holocaust Memorial Museum, and a Massachusetts killing spree by the neo-Nazi Keith Luke, who also raped a young Black woman, attempted to commit mass murder at a synagogue, and then engaged in a police shootout until he was captured. All told, 20 police and military officers were killed in these 2009 lone wolf attacks and 33 were wounded. Another three civilians were killed and wounded by Luke.<sup>54</sup>

Becker's research, drawing heavily on Hamm, includes all of these cases and more.<sup>55</sup> Indeed, a simple Google or LexisNexis search of "lone wolf terrorism 2009" brings up most of these names. Yet, because the cases were not in the Global Terrorism Database, Asal et al. did not know about them. Ignoring these attacks not only misrepresents the threat of lone wolf terrorism in the United States, but it also disregards the motives behind this new incarnation of the American lone wolf terrorist; namely, antigovernment and White supremacist rage over the election of President Obama, and Al Qaeda-inspired anger over the wars in Iraq and Afghanistan.

At the same time, the aforementioned issues of sting operations and the inclusion of attacks committed by duos or trios (e.g., the John Allen Muhammad and Lee Boyd Malvo shooting spree, or the Boston Marathon bombing<sup>56</sup>) suggest that cases that do appear in databases also need to be scrutinized closely in order to determine to what extent they fit the definition at hand. Researchers should familiarize themselves as much as possible with the cases they analyze, preferably through a combination of primary and secondary research. Failing to do so can lead not only to sloppy datasets, but also to inference problems. Becker's study illustrates this point well. He claims that lone wolf terrorists' target selection is "overwhelmingly an ideologically driven process, as most lone wolves chose targets that clearly corresponded with the class of 'enemies' that they identified using their ideology."<sup>57</sup> This is an interesting finding that deviates, to a degree, from existing evidence that lone wolves are influenced by a complex and evolving personal/political dynamic, and often combine personal grief or grievances with wider political agendas.<sup>58</sup> Mir Aimal Kansi, one of the cases described in Becker's article,<sup>59</sup> is a prime example of the latter. As Jessica Stern points out, Kansi's motive for the killing of two CIA employees in 1993 was clearly more complex than simply ideological: the political is personal, but the personal is also political.<sup>60</sup> Stern's account highlights the difficulties of assigning clear-cut motives to lone wolf terrorist attacks, even when the researcher has gone "up close and personal" with the perpetrator. She remains unsure about Kansi's primary motivation for the attack, despite conducting an in-depth interview with him.<sup>61</sup>

Still, the type of primary research undertaken by Stern holds major promise for the study of lone wolf terrorism, and could go some way in counteracting or minimizing the kinds of sloppy research procedures discussed in this article. The database-driven approach to lone wolf terrorism research has merit; yet, as noted, it also has considerable limitations, especially when the publicly available information on a case is limited. These limitations can be reduced through a rigorous, in-depth examination of each case. Qualitative approaches, such as the case study method, are particularly suited to this task. Not only do they equip researchers to analyze in detail a small number of cases, but they also have the ability to discover the sequence of individual trajectories leading to terrorism. Case study research can form the basis for inductive theory building, which serves as an important complementary to the deductive reasoning that currently dominates lone wolf terrorism research.

Precedents for this type of case study research have already been set. In the footsteps of Stern, some studies focus in depth on a small number of cases as part of a qualitative or mixed methods research design.<sup>62</sup> To date, case studies of lone wolf terrorism have predominantly relied on secondary sources, reflecting terrorism research more broadly. As Post has famously argued, most terrorism researchers "have never laid eyes upon a terrorist, much less spoken with one."<sup>63</sup> Yet, open-source case study research nowadays has a wide range of data to draw on. In addition to data gleaned from terrorist memoirs, government reports, court documents, psychiatric evaluations, and media and popular culture sources, researchers can use the public statements, letters, written manifestos, blogs,

YouTube videos, and other social media messaging produced by lone wolf terrorists. The importance to lone wolves of communication with audiences via online platforms, ranging from websites to new social media, is well established.<sup>64</sup> Many (would-be) lone wolf terrorists are, or were, highly active online, leaving copious digital footprints for researchers to trace using virtual ethnography techniques.<sup>65</sup> Such “fieldwork at a distance” may be complemented with primary research involving interviews and mail correspondence with lone wolf terrorists and significant others, including counterterrorism officials, spouses, ex-lovers, siblings, employers, friends, and lawyers.

Interpretation and inference problems also manifest themselves in other ways. How we analyze, interpret, and present our data has significant consequences for the types of patterns we are likely to uncover and prioritize. Again, Becker’s article can serve as an illustration.<sup>66</sup> Becker sets out to identify patterns and trends in lone wolf target selection over time, some of which are discussed above. One of the key trends that Becker uncovers is that lone wolf terrorists mainly choose civilian targets, a finding Becker arrives at by breaking down the 84 lone wolf terrorist attacks in the United States between 1940 and 2012 into three target categories: civilian, government, and military. But in so doing, the *temporal* dimension of target selection is sidelined. As a consequence, while Becker’s overall finding is interesting and in line with recent international research,<sup>67</sup> it misses an important *change* in lone wolf terrorist target selection in the United States in the post-9/11 period, a change that particularly affects law enforcement and the military.

A total of 12 law enforcement officers were killed or wounded by lone wolf terrorists in the United States in the 60 years preceding 9/11.<sup>68</sup> This figure nearly doubled in the first 13 years following 9/11, when the number of law enforcement personnel killed or wounded by lone wolves rose to 23. All of these attacks were bracketed by the years 2009 through 2013—the years coinciding with the presidency of Barack Obama.<sup>69</sup> Lone wolf terrorist attacks against law enforcement before 9/11 were largely motivated by Black power, the Palestinian question, and abortion. Since 2009, the attacks on law enforcement have stemmed primarily from antigovernment and White supremacy anger over the election of the nation’s first African-American president. In a similar vein, not a single member of the U.S. military was targeted by lone wolf terrorists prior to 9/11. Since then, lone wolves have killed or wounded 47 members of the military. Other lone wolf terrorists have attacked military bases or have been arrested in thwarted attacks against military installations since 9/11. All of these attacks were bracketed by the years 2009 and 2011. In every case but one, the attack was carried out by an Al Qaeda sympathizer.<sup>70</sup>

## Conclusion

While lone wolf terrorism is a rapidly growing area of research focus, intellectually it is arguably still in its infancy. This article has built on recent contributions to the academic subfield of lone wolf terrorism research to identify and reflect on some key issues that are germane to the current state of play in this field of study. While research on lone wolf terrorism contains pockets that meet high scholarly standards, this article finds that, overall, it still suffers from considerable problems regarding quality and rigor, including definitional, conceptual, methodological, and inference issues. The growing academic literature on lone wolf terrorism will need to address these issues if it is to further advance intellectual and policy understandings of this crime. We are hopeful that the issues discussed in this article can serve as a basis for greater dialogue and collaboration between scholars, and, as such, contribute to the integration and consolidation of this academic subfield.

## Notes

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