POLICY ESSAY

LONER ATTACKS AND DOMESTIC EXTREMISM

Disaggregating Terrorist Offenders: Implications for Research and Practice

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ar-right—inspired violence in the United States is on the rise (Perliger, 2013), and there is a growing realization within policy circles of the increasing threat from so-called "lone wolf" terrorists of different ideological hues (Simon, 2013). A more in-depth understanding of individual offenders and their behaviors (both antecedent and offense-commission) is therefore of great importance not only to the academic literature but also for practitioners tasked with countering the problem. The need for such research is also driven by the fact that a preponderance of studies have focused on violent Islamist organizations for more than a decade. Given the nature of the threat presented by al-Qaeda, this is understandable, but a side effect is that our understanding of the nature of far-right—inspired homicide lags behind our understanding of the behaviors associated with analogous movements.

Recognizing these features of the existing literature and the current security environment, Gruenewald, Chermak, and Freilich (2013, this issue) provide an empirical assessment of the behavioral underpinnings of far-right—inspired homicide offenders and compare group-based offenders with lone offenders. Gruenewald et al. (2013) test 23 hypotheses, each of which is derived from a careful examination of the existing literature. Using inferential statistics, they find several significant differences between lone and group offenders. For example, the bivariate analysis suggests that compared with group offenders, far-right lone offenders are statistically more likely to be unmarried, have experience of the military, live alone, use firearms, select government targets, kill more people, and die in the commission of their offense. The multivariate analysis also suggests that age and mental illness also significantly distinguish lone offenders from group offenders (e.g., lone offenders are typically older and more likely to have a history of mental illness).

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For the remainder of this essay, we consider the salient issues in the available relevant literature in relation to Gruenewald et al.'s (2013) study by identifying and discussing specific and actionable next policy and research steps, as well as this study's potential impact on the current state of knowledge.

Research Implications and Considerations

Reviews of the terrorism research literature have regularly highlighted the paucity of original data that inform analyses (Schmid and Jongman, 1988; Silke, 2001, 2004). In the most recent review of the literature, Silke (2013: 34) noted: "[O]ne feels that a great deal more needs to be done before research is consistently building on past work rather than rehashing old data." Although the use of inferential statistical methods is certainly on the rise with relation to terrorism research, these studies typically tend to be based on terrorist events rather than on the individual offenders. This is largely because of the data available from the Global Terrorism Database. More recently however, there have been a handful of large-N studies of terrorist group membership that primarily use descriptive statistics (Gill and Horgan, in press; Horgan and Morrison, 2011; Magouirk, Atran, and Sageman, 2008; Reinares, 2004; Sageman, 2004). Gruenewald et al.'s (2013) article is a major next step in the study of the individual terrorist. Their development of the U.S. Extremist Crime Database (ECDB) provides a solid empirical basis from which inferential statistical approaches to the study of extremists and most importantly extremist behavior can be conducted.

Gruenewald et al.'s (2013) study highlights significant behavioral and personal differences between far-right-inspired lone and group offenders. Although some of these differences were expected based on their survey of research on lone-actor terrorism, they neglected to mention that a few studies of different crimes have found broadly similar results. For example, Alarid, Buron, and Hochstetler's (2009) study of robberies showed that group offenders were more likely to be younger, unmarried, and less educated. In terms of target selection, there was little difference between the difficulty levels of robberies chosen by group and solo offenders, which runs counter to much theorizing concerning "strength in numbers," and offending (see Felson, Baumer, and Messner, 2000, for example). Using vastly different samples, studies comparing lone and group rapists have found that the former tended to be significantly older (Bijleveld and Hendriks, 2003; Hauffe and Porter, 2009; Ullman, 1999; Wright and West, 1981), significantly more likely to be married and have children, significantly less likely to have a history of substance abuse (Hauffe and Porter, 2009), significantly more likely to have previous convictions and problematic personality structures (Bijleveld and Hendriks, 2003), and significantly more likely to be employed (Ullman, 1999). Hickle and Roe-Sepowitz's (2010) study of female juvenile arsonists found solo offenders more often came from unstable homes; more often experienced school difficulties, behavioral problems, and negative emotions; and expressed suicidal thoughts more regularly (the latter finding is particularly relevant to Gruenewald et al.'s study when we consider their finding that lone offenders were more likely to die in the commission of their offense).

Block's (1985, 1986) study of Chicago-based homicides illustrated that group offenders were significantly younger than lone offenders. Cheatwood and Block's (1990) study on homicides in Baltimore also found a disproportionate number of juvenile offenders engaging in homicides as members of groups rather than as individuals. In the most comprehensive of such analyses, Clark (1995) analyzed data across nine U.S. cities. Again, group offenders were significantly younger. Similar to Hauffe and Porter's (2009) results (discussed previously), lone offenders were less likely to have a history of substance abuse than group offenders. Unlike research on robberies, group homicide offenders were more likely to have previous criminal convictions (Clark, 1995). Aggregating a large number of crimes, Van Mastrigt and Farrington (2011) analyzed U.K. police data; group offenders were significantly younger than lone offenders and tended to have more criminal convictions. This finding is common when the offender sample is aggregated across crime types (Erickson, 1971; Hindelang, 1976; Reiss and Farrington, 1991). Collectively, these studies should raise future questions about what factors drive these differences across crime types. For example, answers may lie in individual decision making, gatekeeper selection effects, and group dynamics and influences. The collective findings also suggest that some factors may be crime specific (e.g., previous convictions), whereas others may be crime general (e.g., age and mental illness). These studies also highlight, from a policy and practitioner perspective, whether desistance and disengagement from crime is a different process for solo and group offenders.

The importance of Gruenewald et al.'s (2013) study lies not only in its use of inferential statistical methods and in its delineation between far-right-inspired lone and group offenders, but also the findings have important implications for issues long debated within the literature, particularly issues concerning mental illness and terrorist involvement, as well as issues concerned with group processes.

In the 1970s, the first wave of studies on the individual terrorist offered psychopathological interpretations that perceived terrorist behavior to be essentially deviant. An underlying assumption in this research strand is that compulsion to join the militant organization, or the vulnerability to recruitment, is inherent in those who become engaged in militancy. Motivation to participate is therefore situated within the individual in isolation. To this end, researchers have postulated deviant characteristics of the terrorist. For Victoroff (2005), this field was "largely characterized by theoretical speculation based on subjective interpretation of anecdotal observations" (p. 3). In the 1980s, psychoanalytic approaches (with a particular emphasis on the concept of narcissism) largely replaced psychopathological explanations. These findings are reasonably similar to the preceding assumptions of the terrorist personality being essentially abnormal but perceive this abnormality as determined by unconscious drives and urges originating from childhood rather than inherent personality flaws.

Over the past 15 years or so, a growing awareness of the need to understand the group process has come to fruition. This has largely been aided by empirical studies that have

engaged in first-hand interviews and by the incorporation of theory from social psychology. This stream of research has been successful at downplaying the role of personality and mental health issues with regard to terrorist involvement to the extent that one noted academic, who in the past championed psychoanalytical interpretations of terrorist motivation, argued that "a clear consensus exists that it is not individual psychology, but group, organizational and social psychology, that provides the greatest analytical power in understanding this complex phenomenon" (Post, 2005: 7). Although the studies of the 1970s and 1980s were correctly debunked on methodological grounds, Gruenewald et al.'s (2013) findings suggest that the existing consensus that mental illness never plays a role in terrorism and that terrorist behavior can be purely explained by group processes is likely to be a fallacy.

With regard to group processes, Gruenewald et al.'s (2013) study supports recent work that has started to reexamine the role of group processes in terrorism. For example, the debate has been widened by Taylor (2010: 121), who argued that "group-focused causal accounts fail to offer sufficient explanations of the behaviors identified" in his case studies, whereas Gill (2012) attempted to refine the nature of role-specific qualities and group-based behavior. Although many studies of the individual terrorist are fixated with understanding motive and/or radicalization (this is also true for media accounts if we examine the coverage regarding the recent Boston Marathon bombings), Gruenewald et al. instead focus on behavior. Their findings that lone offenders are significantly more likely to have experience of the military and live alone also importantly provide insight into capability. Group membership provides individuals not only the operational capabilities necessary to perform a terrorist attack but also the mechanism for moral disengagement (Gill, 2012). Research literature from military psychology has suggested that many factors inhibit individuals from engaging in fatal violence against others. For example, Marshall concluded that "the average and healthy individual ... has such an inner and usually unrealized resistance towards killing a fellow man that he will not of his own volition take life if it is possible to turn away from that responsibility ... at the vital point" (cited in Grossman, 1995: 29). Absent a group setting, terrorist violence may be difficult to commit for practical and psychological reasons. In the absence of a group, an individual may need other factors to (a) provide security, (b) help overinhibitions against committing violence, (c) help develop the necessary practical skills, and (d) finance an operation. Here, variables found to be significant in the current study such as living alone at the time of the attack and military training provide the capabilities to turn motivation into action for lone offenders. This is also true for hypotheses that were unsupported, such as lone offenders being more likely to be unemployed. Without a group to help an individual plan, prepare, and carry out a successful attack, the lone offender must have a steady source of income. This observation is highlighted in the case of Anders Breivik in Norway, who financed his operations through several legal and illegal activities in the years before his attack and avoided delaying his attack further because he was having liquidity issues and feared he could not (a) keep renting the farm where he built his improvised explosive device and (b) rent a car for the operation itself.

With regard to mental illness and terrorism, Gruenewald et al.'s (2013) finding that more than 40% of lone offenders had previously been diagnosed with mental illness is one of the most statistically significant findings from the multivariate analysis. Despite its importance, this finding receives minimal attention in the concluding remarks and policy implications. This may be born out of discrepancies across the literature concerning mental illness and terrorism, leading to the current existing false dichotomy that an act of targeted violence was either the actions of a terrorist or the actions of someone who was mentally ill. Gruenewald et al. do suggest important methods for identifying diagnoses, but we hold the opinion that future research should use mental illness as a central unit of analysis. In doing so, it would provide a better understanding of the complexity of mental illness with relation to terrorist behavior and provide the possibility to examine how the other variables would affect and be affected by the offender suffering from mental illness. In other words, the mental illness variable is likely to stem from several other variables accounted for in the ECDB database and impact many other variables also. For example, research by Elisha, Castle, and Hocking (2006) illustrated that social isolation is highly prevalent among those diagnosed with a mental illness. Of their 3,800 observations of individuals diagnosed with a psychotic illness, 58% were also characterized as being socially withdrawn. Butterworth and Rodgers (2008) demonstrated that couples with at least one spouse diagnosed with a mental illness suffer higher rates of marital disruption than non-mentally-ill couples.

Using mental illness as a central variable with relation to the criminogenic factors may also be a promising approach. As Anderson (1997) explained, the symbiotic relationship between mental illness and criminal behavior is complex. Comorbidity of mental illness with other behaviors is well documented across the literature and includes substance abuse (Todd et al., 2004) and violent and criminal convictions (Anderson, 1997). It is also a common understanding in psychiatric practice (Diagnostic and Statistical Manual [DSM] and International Classification of Diseases [ICD]). Gruenewald et al.'s (2013) study found that 34% of lone offenders had substance abuse problems and that 61.7% had prior arrests. Taking into consideration the complexities that comorbidity brings, it may be necessary in the future to distinguish between lone offenders who were mentally ill and those who were not to determine and compare the rates of substance abuse and criminal convictions, as well as compare these with group actors.

Many different mental illnesses display impulsivity as a problem behavior (DSM and ICD), which affects many aspects of living and may affect the attack types of offenders, as well as the primary weapon usage. The current study found that 84.8% of lone offenders used a gun, compared with 40.2% of group offenders. This finding is highly significant, but if one takes into account the country that the data were taken from (the United States) and the gun control laws, it could be hypothesized that lone offenders were more likely to use a

gun because nearly half struggled with impulse control and guns are freely and immediately available.

It is also interesting to note the potential link between the highly significant finding that lone offenders were more likely to partake in a suicide mission compared with group offenders given the higher levels of mental illness found in lone actors. This finding is interesting because suicide risks are much higher in the mentally ill population, and if non–mentally-ill lone actors were investigated separately, this figure may decrease to a value approaching that of group-based offenders.

Finally in relation to mental illness, Gill, Horgan, and Deckert (in press), and many of the group versus solo offender studies cited previously, also found the average age of lone offenders to be older than that of group offenders. This finding may provide support for the idea that a different temporal trajectory into criminality is at play for lone- and group-based offenders. It may be necessary to consider and examine whether the increased age range is a result of the later onset of mental illness. For example, military service personnel are at high risk of developing posttraumatic stress disorder (PTSD) (Sundin et al., 2010), which again may in part explain the highly significant discrepancies between lone and group offenders

Future Policy Considerations

Gruenewald et al. (2013) identified three policy recommendations that should be tailored from preexisting policies to fit the problem of lone offenders. Importantly, Gruenewald et al. make the point that lone offender attacks are preventable, which runs counter to several current studies that have not had the benefit of the high-quality data sets or rigorous methodologies that Gruenewald et al. used (Barnes, 2012; Michael, 2012; Simon, 2013).

The first recommendation is to increase intelligence partnerships between law enforcement and other organizations such as military intelligence units and social service agencies. This suggestion stems from the finding that lone offenders were significantly more likely to have military experience and a history of mental illness. We suggest that this could go further. The policy implications of our suggestions regarding the future study of mental illness with relation to terrorism suggests using multiple agencies at numerous intervention stages (social services, policing agencies, the courts, military organizations, psychiatric hospitals, weapons providers, community programs, financial agencies, intelligence agencies, and the media), which could all cooperate to aid in prevention and reduction efforts. The second recommendation involves increasing technological surveillance, which spans a wide range of functions including monitoring websites and chat rooms, collecting intelligence, creating fake websites, building relationships with chat room moderators (and thereby increasing guardianship), and countering extremist narratives. These behaviors, if applied correctly, could also help prevent and disrupt online group-based offenders. The final recommendation is to sharpen threat assessment tools, which is similar to recommendations stemming from broadly similar studies of school shooters and politically motivated assassins (Fein and Vossekuil, 1999; Vossekuil et al., 2002).

The significant behavioral differences between lone and group offenders found using the ECDB data suggest the need for a tailored response to both subgroups. It also serves to raise further questions about whether these differences hold true for other ideological motivations. Gill, Horgan, and Deckert's (in press) study suggests that identifiable behavioral differences exist among al-Qaeda—inspired, extreme right-wing, and single-issue lone-actor terrorists. The ECDB data also focus solely on offenders who commit fatal attacks. It would be interesting to observe what patterns hold for those who committed attacks that caused no fatalities as well as those whose plots were interrupted preattack. Finally, as mentioned, the ECDB data focus on only U.S.-based offenders, which leads to the question of whether this group of offenders is more likely to use firearms because of the smaller opportunity costs involved.

In conclusion, hopefully the highly important results found in Gruenewald et al.'s (2013) study will lead to a greater comparative examination of these issues across ideological domains and geographic boundaries.

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