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The Clinical Threat Assessment of the Lone-Actor Terrorist

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KEYWORDS

Terrorism
 Risk assessment
 Mass murder
 Lone actor

KEY POINTS

- The TRAP-18 (Terrorist Radicalization Assessment Protocol) is a structured professional judgment instrument for the assessment of individuals who present a concern for loneactor terrorism.
- It consists of eight proximal warning behaviors and 10 distal characteristics.
- Previous research has demonstrated its interrater reliability and some concurrent and postdictive validity.
- TRAP-18 is retrospectively applied to the case of a US Army psychiatrist and jihadist, Malik Nidal Hasan, who committed a mass murder at Fort Hood, Texas, in November 2009.
- The strengths and limitations of TRAP-18 as a structured professional judgment instrument for mental health clinicians are discussed, and clinical risk management suggestions are made.

Although there are many definitions of terrorism, and ideologies that drive such acts of violence toward noncombatant civilians, they share two common characteristics. First, they are acts of targeted violence, intended and purposeful events that are virtually always the culmination of a pathway toward violence. Acts of terrorism are not impulsive, and typically not a reaction to an imminent threat, which define most violence among individuals. Second, not only is a target selected, but an audience, as noted by Bakunin, the nineteenth century anarchist, in his definition of terrorism as "propaganda of the deed." Recent attacks by jihadists against Westernized democracies, most notably in Paris, San Bernardino, Nice, Orlando and Brussels, have underscored the degree to which the audience is anyone who has access to television, the Internet, or social media.

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One of the counterterrorism responses has been to search for a means by which lone-actor terrorists can be identified in real time before they act by efficiently organizing accumulating data. Such approaches have encountered several problems: (1) the traditional finding in violence risk research that historical variables are the best predictors has less relevance to lone-actor terrorists³; (2) the lack of efforts to draw a distinction between affective (emotional, reactive, impulsive) violence and predatory (instrumental, intended) violence,⁴ the latter mode of violence being the domain of terrorists; (3) the lack of attention to proximal and dynamic factors as the best predictors of short-term violence risk, and distinguishing them from more long term, distal characteristics, although this seems to be changing; and (4) the conflation of prediction and prevention. From an epidemiologic perspective, prevention does not require individual prediction, as long as risk factors are known. The paradox is that if prevention is effective, whether primary or secondary, one will never know which individuals would have become symptomatic (or in this application, carried out an act of terrorism) if no intervention had been done.

We believe the young scientific discipline of threat assessment and threat management can alleviate some of these issues,⁵ and has a direct application to mental health professionals in their clinical work. First developed by the US Secret Service 20 years ago,^{6,7} threat assessment focuses on behavioral facts that may be dynamically changing in real time to determine which individuals pose a risk of targeted violence. It is distinctive in many ways from traditional violence risk assessment, which is a more static approach to determine general violence risk.⁸ Since its inception, threat assessment has been successfully used in several risk domains, including stalking, public figure approaches and attacks, workplace violence, school violence, university violence, and adolescent and adult mass murder.⁵ The threat assessment model is being used by local, state, and federal law enforcement agencies in various countries to address the risk of targeted violence, including terrorism.

One practical method may eventually provide a reasonable assessment of risk of individual terrorism, based on the recommended domains of Monahan^{3,9} and incorporating work on proximal warning behaviors for targeted violence^{10–12}: the Terrorist Radicalization Assessment Protocol (TRAP-18), an investigative template developed for operational purposes. This article explores the use of TRAP-18 as a structured professional judgment instrument for clinical use by mental health professionals.

TRAP-18 consists of two sets of variables: first, eight warning behaviors that were originally developed to identify patterns of proximal risk for intended or targeted violence, in contrast to the more common mode of violence, which is typically impulsive or reactive. ^{1,13} Second, 10 distal characteristics of the lone-actor terrorist were derived from studying the extant empirical and theoretic research on terrorism and Meloy's experience as a forensic psychologist ^{10,14} in directly and indirectly assessing foreign and domestic lone-actor terrorists over the past 20 years. ¹⁵ The proximal warning behaviors and distal characteristics are listed in **Box 1**.

There are two distinctive aspects to TRAP-18, however, which are worth noting. First, TRAP focuses on patterns of behaviors, rather than discrete variables. We think this is a more productive clinical approach that guards against a myopic, and perhaps misleading focus on one risk variable. Second, the two components of TRAP (proximal warning behaviors and distal characteristics) allow the mental health professional to make a determination as to whether the case should be actively managed (the presence of one or more warning behaviors) or just continue to be monitored (a cluster of only distal characteristics). This distinction utilizes the work of Monahan and Steadman¹⁶ who drew from the weather forecasting research concerning

Assessment of the Lone-Actor Terrorist

Box 1

TRAP-18 (Terrorist Radicalization Assessment Protocol) indicators

Proximal Warning Behaviors

Pathway

Fixation

Identification

Novel aggression

Energy burst

Leakage

Direct threat

Last resort

Distal Characteristics

Personal grievance and moral outrage

Framed by an ideology

Failure to affiliate with an extremist group

Dependence on the virtual community

Thwarting of occupational goals

Failure of sexual-pair bonding

Changes in thinking and emotion

History of mental disorder

Creativity and innovation

History of criminal violence

Watching and Warning and applied this distinction to violence risk assessment. Although there is a strong theoretic underpinning for TRAP-18, ^{12,15} ongoing empirical testing is needed to demonstrate its reliability and validity. The current status of such studies is as follows:

- Criterion validity of the warning behaviors: This has been demonstrated in several samples of targeted violence cases, including nonterrorist attackers of German public figures, ^{17,18} spousal homicide perpetrators, US Presidential and political attackers and assassins, school attackers and school threateners, ¹⁹ European individual terrorists, ²⁰ and individual case studies. ^{21,22}
- Postdictive validity of the warning behaviors: This has only been demonstrated in one study,²³ wherein a comparison of school shooters and other students of concern found significant differences with large effect sizes between the two samples for pathway, fixation, identification, novel aggression, and last resort. The students of concern who ultimately had no intent to act violently had virtually none of these five warning behaviors.
- Criterion validity of TRAP-18: This has been demonstrated in two studies, a sample of 22 European individual terrorists, ²⁰ and a sample of 111 European and North American lone-actor terrorists. ²⁴ There is one interrater reliability study²⁵ for TRAP that indicates an overall mean kappa coefficient of 0.895, with a range of 0.691 to 1.0.

- Generalizability of TRAP-18: This has been demonstrated in Meloy and Gill²⁴ in
 the equivalence across most indicators when comparing samples of jihadists,
 right wing extremists, and single issue terrorists. There was also equivalence
 with the exception of one indicator (previous violent criminal behavior) when
 comparing lone-actor terrorists and autonomous cells in Europe.²⁰
- Postdictive validity of TRAP: There is some support for this in the identification of four indicators on the instrument that discriminated between thwarted and successful lone-actor terrorists; effect sizes were small to medium.²⁴

We demonstrate the clinical usefulness of TRAP-18 as a structured professional judgment instrument by applying it to the case of Nidal Malik Hasan, a US Army psychiatrist and jihadist who committed a mass murder at Fort Hood, Texas, in November 2009. We define each indicator of TRAP-18, followed by the behaviors of Dr Hasan, which illustrate the indicator. Although serious clinical and operational mistakes were made in this case, we acknowledge that we are now privy to evidence in the public domain that was not available to those involved in the case at the time; and it is easy, because of the ubiquity of hindsight bias, to believe that such an act was clearly predictable, when it was not. Given the extremely low base rate for ideologically motivated killing (there have been about 150 murders by all terrorists in the United States since 9/11²⁶ in contrast to 22 handgun murders *per day* in the United States because of other motivations) such events are not predictable, but we think they are preventable.

CASE SYNOPSIS

Nidal Malik Hasan was born in Virginia on September 8, 1970. His parents had emigrated from Palestine, and he grew up in a moderate Muslim household. Hasan enlisted in the US Army after high school, despite his parents' misgivings. In 1997, he entered the Uniformed Services Medical School; Hasan's parents died young and in short succession during his first few years of medical school.²⁷ The 9/11 terrorist attacks occurred 2 years before Hasan earned his medical degree. Hasan then went on to complete his psychiatric residency at Walter Reed Army Medical Center, along with a Masters of Public Health and a fellowship at the Uniformed Services University of Health Sciences, the military's chief medical institution; both sites are located near the nation's capital in Bethesda, Maryland. After receiving a promotion to Major in May 2009, Hasan was transferred to Fort Hood in Texas. He arrived in July 2009 with the understanding that deployment was imminent. The official notification came in October for a November deployment to Afghanistan.²⁸

Hasan, age 39, attacked the Fort Hood Readiness Processing Center on November 5, 2009, the day his unit was to report there for predeployment medical evaluations. He left his apartment at 6:00 AM to attend morning services at a local mosque before returning to his apartment and giving away several belongings. Hasan walked into the processing center at about 1:34 in the afternoon. He wore earplugs and pretended to be talking on a cell phone. He told a female civilian at the front desk there was an emergency and the Officer in Charge needed her. The desk had a barrier. Once she left, he yelled "Allah Akbar" and started firing one of his two pistols. He killed 13 and wounded 32 people. Police officers arrived on the scene about 10 minutes later. Officers apprehended Hasan after wounding him (Full Report of Sanity Board, US v MAJ Nidal M Hasan, 13 January 2011. Joshi K, personal communication, July, 2016).²⁹

TERRORIST RADICALIZATION ASSESSMENT PROTOCOL-18 INDICATORS Proximal Warning Behaviors

Pathway

Pathway warning behavior is research, planning, or preparation for an attack, or implementation of an attack.^{30,31}

Hasan reportedly spent several days considering the sort of firearm he wanted, inquiring about high-tech weapons at a local weapons retailer, Guns Galore. On August 1, 2009, he bought an FN Five-Seven semiautomatic handgun. Hasan recorded a video of the store manager giving him in-depth usage and care instructions for his new purchase, and he returned nearly every week after to stockpile ammunition. Hasan completed a concealed handgun course on October 10, 2009, and purchased a firing range membership so he could practice there each week. Rather than work on his marksmanship on base, Hasan chose to drive 35 miles to Stan's Outdoor Shooting Range. On the day of the attack, the major wore his fatigues to the processing center, and he filled his cargo pockets with 20 magazines, containing 20 bullets each; he lined the ammunition with paper towels to avoid rattling and attracting suspicion. Lastly, Hasan thought to wear earplugs in preparation for the noise of his attack.

Fixation

Fixation warning behavior indicates an increasingly pathologic preoccupation with a person or a cause, accompanied by a deterioration in social and occupational life.³³

During his residency, Hasan had become more and more outspoken about his opposition to the military's involvement in Iraq and Afghanistan, proselytizing to classmates, claiming that his religion took precedence over his sworn duties as a serviceman, and even defending suicide bombers. He began fiery arguments about Islam at mosques and alienated himself from more moderate worshipers, friends, and family. Hasan went so far as to express his radical beliefs in class assignments, giving three extraneous, extremist PowerPoint presentations to his superiors and colleagues. 34 Although Hasan graduated from the Virginia Polytechnic Institute and State University with honors and a resume sufficient for acceptance into medical school, his performance as a psychiatric resident and fellow grew markedly worse as his radical beliefs solidified.²⁹ Both the residency and fellowship programs ranked Hasan in the bottom guarter of his class, and his colleagues regarded him as a slacker and religious zealot. It should be noted that Hasan was accepted into the fellowship program as a placeholder, not for his achievements, for the Army feared losing the fellowship placement when no one else applied. Based on interviews of Hasan's classmates and supervisors, the US Senate³⁴ reported, "He was placed on probation and remediation and often failed to meet basic job expectations such as showing up for work and being available when he was the physician on call." The same report also concluded that Hasan was a "...barely competent psychiatrist whose radicalization toward violent Islamist extremism alarmed his colleagues and his superiors."34

Furthermore, Hasan was an avid reader of extremist materials online, although he particularly favored the radical cleric Anwar al-Awlaki. Awlaki, an American citizen, became a prolific al-Qaeda recruiter, propagandist, and strategist before he was killed in a 2011 US drone strike. Additionally, Hasan, who had never been in a romantic relationship, desperately wanted a marriage that could meet his strict fundamentalist requirements. However, no women were pious enough for him.²⁷

Identification

Identification warning behavior indicates a psychological desire to be a pseudocommando, 35,36 have a warrior mentality, 37 closely associate with weapons or other

military or law enforcement paraphernalia, identify with previous attackers or assassins, or identify oneself as an agent to advance a particular cause or belief system.²⁴

Hasan printed out business cards at some point during his time at Fort Hood (July to November 2009). These made no mention of his military experience, despite his officer status; instead, Hasan identified himself as a "Soldier of Allah" with the abbreviation "SOA" following his name (27; first author's files). Along similar lines, Hasan chose silhouette targets over bull's-eye targets during his frequent visits to the firing range. 32 Lastly, Hasan deeply admired other jihadists: Carlos Bledsoe and Awlaki. Just 6 weeks before Hasan's transfer to Fort Hood, Bledsoe attacked a military recruitment center in Little Rock, Arkansas, and Bledsoe's actions stirred Hasan. During his trial, Hasan stated that Bledsoe was "my brother and my friend" (as cited in Ref. 27).

Novel aggression

Novel aggression warning behavior is an act of violence that seems unrelated to any targeted violence pathway and is committed for the first time. ¹² It is typically done to test one's ability to actually be violent. There is no evidence of novel aggression in Hasan's case.

Energy burst

Energy burst warning behavior is an increase in the frequency or variety of any noted activities related to the target, even if the activities themselves are relatively innocuous, usually in the weeks, days, or hours before the attack. Social media activity may increase or decrease during this period of time.

On October 28 and 29, Hasan visited a local strip club, spending nearly 7 hours per night sitting alone by the stage and purchasing several private nude lap dances.²⁹ Two days before the November 5 massacre, Hasan visited the shooting range and fired more than 200 rounds. He then met with a friend for dinner on November 4th.²⁸ In the days and hours before he attacked his fellow soldiers, Hasan performed online searches for terms related to the Taliban and jihad.³⁸

Leakage

Leakage warning behavior is the communication to a third party of an intent to do harm to a target through an attack.³⁹

A fellow Fort Hood psychiatrist testified that Hasan told her a few weeks before the attack that the Army would pay if he were deployed.³⁸ Furthermore, Hasan endorsed the violent actions of Bledsoe, saying to his fellow Fort Hood officers, "This is what Muslims should do. They should stand up to the aggressor" (as cited in Ref.²⁷). Lastly, the major stopped by a convenience store for breakfast about 7 hours before his attack, and he told a customer, "There's going to be a big action on post around 1:30. Be prepared" (as cited in Ref.²⁹).

Last resort

Last resort warning behavior is evidence of a "violent action imperative" and/or "time imperative"⁴⁰; it is often a signal of desperation or distress. It is often the result of a triggering event, or one that is anticipated, that involves a loss in love or work.

On October 30, Hasan sent an e-mail to his brother, in which he discussed the following: a resolution to a debt; the power of attorney paperwork he had filled out for his brother; and instructions on handling his affairs should he die or be incapacitated, such as requesting that his brother donate one-third of his wealth to charities as soon as possible after his death. At 2:37 AM on November 5, Hasan called his neighbor; the neighbor did not pick up. He left a message 3 hours later: "Nice knowing you, friend. I'm moving on from here" (as cited in Ref. 29). Hasan attended 6 AM prayers

as he usually did, and he approached a worshipper and apologized for a past slight, before hugging another and explaining he would not be in attendance at the next day's services. On his way home, Hasan stopped in a convenience store, where he made the odd statement about events at the base later that day. In the early hours of daylight, Hasan gave another neighbor frozen broccoli and spinach, an air mattress, and a clothing steamer. He gave away copies of the Koran to other neighbors.²⁹ Hasan destroyed his birth certificate and medical school degree with a paper shredder before returning to the mosque for noon services; he then drove to the processing center in his combat fatigues.²⁷ It is important to note that those who witnessed these last resort warning behaviors interpreted them in a specific context: Hasan was about to be deployed to a combat zone.

Directly communicated threat

Directly communicated threat warning behavior is the communication of a direct threat to the target or law enforcement beforehand.¹²

There is no evidence of a directly communicated threat. Hasan made a determined effort to avoid harming noncombatants, using a ruse to send a civilian receptionist in the opposite direction; he targeted soldiers set to deploy, because he believed they posed a threat to his Muslim brothers overseas. Although Hasan did state that the Army would pay if he were to be deployed, he made that statement to a fellow psychiatrist who was not going to be deployed and, therefore, would not endanger Muslims.²⁷ The psychiatrist was not part of Hasan's target in this situation, so this statement qualifies as leakage only.

Distal Characteristics

Personal grievance and moral outrage

Personal grievance and moral outrage join personal life experience and particular historical, religious, or political events. The personal grievance is often defined by a major loss in love or work, feelings of anger and humiliation, and the blaming of others. Moral outrage is typically a vicarious identification with a group that has suffered, even though the lone-actor terrorist has usually not experienced the same suffering, if any at all.

Hasan experienced some hostility from his fellow soldiers and complained sharply about the general mistreatment of Muslims in the military. In the context of a war sparked from the worst terrorist attack in American history, Hasan felt ostracized by other soldiers. Family members cited three examples of personal affronts: (1) someone had thrown a diaper in his car and told him to use it as a headdress; (2) another had drawn a camel on his car and written "Camel Jockey, Get Out!" underneath; and (3) 3 months before Hasan's attack, a neighbor and veteran scratched Hasan's vehicle with a key in response to his Islamic bumper sticker (personal grievance). Moreover, Hasan claimed in October 2009 that some of his patients had confessed to committing war crimes against Muslims. Hasan was also disgusted by a military he believed to be fighting a war against his religion, and he was even more incensed at the possibility of being involved in that effort once deployed, because his exploration of gaining conscientious objector status had yielded no way out (moral outrage). As war as a soldier of the context of

Framed by an ideology

Framed by an ideology is the presence of beliefs that justify the terrorist's intent to act. It can be a religious belief system, a political philosophy, a secular commitment, a one-issue conflict, or an idiosyncratic justification.^{8,42}

Hasan's mother asked him to explore his faith as her health was declining in 2001, and he became increasingly devout, praying five times a day and attending 4:00 AM

prayer services.²⁷ Around 2004, Hasan began investigating the possibility of leaving the military as a conscientious objector, because he believed a Muslim who killed other Muslims would surely be sent to hell. Two supervisors encouraged his endeavor to leave the Army.³⁴ Furthermore, Hasan idolized Anwar al-Awlaki and raptly consumed the extremist materials Awlaki shared online. In a series of e-mails to Awlaki, Hasan asked for advice on the issues of Muslims serving in the American military, whether soldiers who committed fratricide for the sake of Islam would be considered martyrs, the appropriateness of killing innocents in the greater service of Islam, the religious legitimacy of suicide bombings with the intention of saving comrades, and several similar topics.⁴¹

Moreover, Hasan gave three separate extremist PowerPoint presentations from the end of his residency to the end of his fellowship, 2007 to 2008. Supervisory officers, psychiatrists, and other medical professionals comprised the audiences of these presentations. In the first, Hasan discussed the moral ambiguity of Muslims serving in the American military and how this ambiguity led to "adverse events," or incidents of jihadist fratricide within the military. He drew only one conclusion at the end of his presentation: Muslims should be allowed to withdraw as conscientious objectors. The second presentation was so immediately offensive and radical that Hasan's peers objected loudly and the instructor ended the presentation after just 2 minutes; Hasan hypothesized that the US military was at war against Islam, justified suicide bombings, and defended Osama bin Laden. The third presentation connected fratricide and religious conflicts of Muslim soldiers again, but in a slightly more clinical manner: Hasan proposed surveying Muslims in the military about such conflicts. Finally, Hasan shouted "Allahu akbar!" (God is great!) before he shot more than 50 people.³⁴

Failure to affiliate with an extremist group

Failure to affiliate with an extremist group is defined by the lone-actor terrorist rejecting or being rejected by a radical or extremist group with which he or she initially wanted to affiliate.

There is no evidence to suggest that Hasan attempted to join a terrorist group or otherwise collaborated with one.

Dependence on the virtual community

Dependence on the virtual community is evidence of the lone-actor terrorist's use of the Internet through social media, chat rooms, e-mails, listservs, texting, tweeting, posting, searches, and so forth concerning his or her radical or extreme beliefs or the planning of tactical operations.

Hasan was active online; he was an ardent consumer of Awlaki's materials, frequenting Awlaki's Web site and subscribing to Awlaki's e-mail service. Hasan sent a total of 18 e-mails to Awlaki from December 2008 to June 2009, yet he received only two messages in reply. He also had Google Alerts for jihadist terms and subscriptions to the following Web sites: Islamicrelief.org, Islamistwatch.org, RadicalIslam.org, and the Middle East Forum.⁴¹

Thwarting of occupational goals

Thwarting of occupational goals is a major setback or failure in a planned academic and/or occupational life course. According to Hasan's cousin, Nader, combat deployment was Hasan's "worst nightmare" (as cited in Ref.²⁷). He admitted to a supervisor that he applied for the fellowship to delay deployment as long as possible, not out of a desire to contribute to his field of study. Furthermore, Hasan wanted to be discharged, but the Army had paid for his medical education, was actively recruiting Arab-Americans, and needed mental health professionals. When he realized achieving

conscientious objector status was not feasible, he resigned himself to completing his Army commitment.²⁸ When Hasan was transferred to Fort Hood, the Army's staging area for combat deployments at the end of his fellowship, he knew his greatest fear would soon come to fruition. Indeed, the official deployment orders came in October 2009; he was set to embark for Afghanistan at the end of November.³⁴

Changes in thinking and emotion

Changes in thinking and emotion is indicated when thoughts and their expression become more strident, simplistic, and absolute. Argument ceases, and preaching begins. Persuasion yields to imposition of one's beliefs on others. There is no critical analysis of theory or opinion, and the mantra, "don't think, just believe," is adopted. Emotions typically move from anger and argument, to contempt and disdain for others' beliefs, to disgust for the outgroup and a willingness to homicidally aggress against them. Violence is cloaked in self-righteousness and the pretense of superior belief. Humor is lost.

This distal characteristic was most apparent from 2001 to 2008. After the successive death of his parents in 1998 and 2001, Hasan became "steadily more pious" and "even more rigid" in his religious views, according to his cousin. Hasan isolated himself from family and friends with accusations of religious failures and engaged in heated arguments about Islam with fellow worshipers, debating the meaning of jihad and the significance of being a true Muslim. Hasan alarmed his peers and superiors inside and outside the classroom; several officers reported him to superiors, and two dubbed him "a ticking time bomb" (as cited in Ref. 34).

Failure of sexual-intimate pair bonding

Failure of sexual-intimate pair bonding is coded if the subject has historically failed to form a lasting sexually intimate relationship. The sexualization of violence is a secondary component. It refers to the finding of a sexual attitude or behavior in the subject that seems to substitute for the absence of a sexual pair bond, such as the sexualization of weapons, the anticipation of unlimited sexual gratification in the afterlife, the exclusive use of prostitutes and other unbonded sources of sexual gratification, or compulsive use of pornography: all of these behaviors may be rationalized by the ideology. For example, among jihadists, the adoption of Westernized sexual attitudes and behaviors may be acceptable because they help maintain operational secrecy and deceive the unbelievers.

Hasan had never been in a romantic relationship, despite investing a great deal of time and money in finding a mate. He asked several imams to help him find a wife and even attended matchmaking events for single Muslims. But Hasan had high expectations of his future wife: a devout Muslim virgin of Middle Eastern heritage, who prayed five times per day and covered herself appropriately with a hijab. Even when seemingly suitable women expressed an interest in the doctor and officer, they did not meet Hasan's standards. One 2006 event boasted an attendance of 150 single Muslims, yet Hasan complained to the organizer that none of the women appealed to him.²⁹ He even requested help with romance from Awlaki in a 2008 e-mail.⁴¹ Incongruously, the fundamentalist major began to visit a local strip club in September 2009. He noticed Starz Strip Club after purchasing his handgun next door.⁴³ Although Hasan's romantic efforts failed terrestrially, he believed his devotion to Islam would be rewarded in the afterlife: in his 2007 residency presentation, Hasan spoke awkwardly about the existence of "a lot of virgins" awaiting the faithful in Paradise (as cited in Ref.²⁷).

Mental disorder

Mental disorder is coded if there is evidence of a major mental disorder by history or in the present. Whether or not ideology helps buffer the symptoms of mental disorder is a secondary, but important consideration. ¹⁵

Hasan did not have a diagnosable mental disorder (Full Report of Sanity Board, US v MAJ Nidal M Hasan, 13 January 2011. Joshi K, personal communication, July, 2016).²⁹

Greater creativity and innovation

Greater creativity and innovation is coded if there is evidence of tactical thinking "outside the box." ^{15,42} The planned terrorist act is creative (a major aspect has not been done before in contemporary times) and/or innovative (imitated by others).

Hasan's attack on a US Army base brought about major changes in all branches of the military and several law enforcement agencies, for America had not seen an attack like his before. According to the US Senate, ³⁴ "From September 11th until the Fort Hood attack occurred, the only attack on the homeland that resulted in deaths was perpetrated by a lone-actor Carlos Bledsoe" (p. 19). Representing al Qaeda, US-born Adam Gadahn encouraged others to emulate Hasan's heroic actions in a lengthy video recording of praise: "The Mujahid [one engaged in jihad] brother Nidal Hasan is a pioneer, a trailblazer and a role model who has opened a door, lit a path and shown the way forward for every Muslim who finds himself among the unbelievers and yearns to discharge his duty to Allah and play a part in the defense of Islam and Muslims." Even Awlaki, Hasan's idol, hailed his actions: "I am proud that there are people like Nidal Hasan among my students. ... I support what he did, and I call upon anyone who calls himself a Muslim, and serves in the US army, to follow in the footsteps of Nidal Hasan" (as cited in Ref.²⁷).

History of criminal violence

History of criminal violence is coded if there is evidence of instrumental criminal violence in the subject's past. Virtually all acts of terrorism are predatory (instrumental) violence. This characteristic indicates a capacity and a willingness to engage in predation for a variety of reasons, such as a history of armed robberies or planned assaults on others.

No history of criminal violence was found other than the mass murder.

DISCUSSION

Case studies are the idiographic data that put flesh on the bone of large-group nomothetic analyses. Although they typically do not contribute to the advancement of deductive conclusions in science, case studies provide clinicians with a more nuanced and individualized understanding of the application of particular methods to an actual patient. We have applied a structured professional judgment instrument, TRAP-18, to a known outcome case of mass murder, which was clearly ideologically motivated. The results point to a goodness-of-fit between the behaviors of Dr Hasan and the proximal and distal characteristics of the instrument.

What are the practical applications of these findings to a mental health clinician in either a public or private setting? First, it is imperative to note that TRAP-18 does not predict who will or will not commit an act of terrorism. The base rate for such events is extremely low, particularly in the United States, and any attempt at prediction would likely result in a false-positive finding and the potential for deprivation of liberties.

TRAP-18, however, does allow the application of an organized set of indicators that are rationally derived from the lone-actor terrorism research conducted over the past 20 years, and seem to be reliable and have some validity. These indicators can help

the clinician determine whether the patient should be monitored for further concerning behavior, or whether the patient should be actively risk managed to divert him or her from a pathway toward ideologically motivated violence. The presence of one warning behavior suggests that the clinical case needs active management (the warning); the presence of only a cluster of distal characteristics suggests that the case needs active monitoring (the watching). ¹⁶

Active risk management could mandate the issuance of a Tarasoff warning, codified in various jurisdictions somewhat differently, but typically requiring the clinician to believe that the patient poses a substantial risk of violence toward an identifiable victim(s), and mandating the notification of the victim and law enforcement. Such decisions on the part of the clinician, however, should be done with the full awareness that federal agencies will be alerted when the term "terrorism" or "terrorist threat" is invoked, and further opportunities to clinically manage the case will probably dissolve. The seriousness of such an action, however, does not preclude its importance when a threat to national security is involved.

Active monitoring, however, calls for a more nuanced approach to a clinical case, including the following:

- Determine if there is a relationship between the patient's diagnosed mental disorder and his or her ideological framing and changes in thinking and emotion. This analysis should be conducted at the level of symptoms rather than diagnosis: is the patient drifting toward a more fundamentalist belief system to modulate his or her anxiety concerning the worsening of symptoms? Is there emerging an esoteric, if not bizarre, belief system that is helping him or her manage a decompensating mind? Is there a causal relationship between certain symptoms and the risk of violence that function as either motivators, disinhibitors, or facilitators?45 Jared Loughner, the Tucson assassin and mass murderer (but not a terrorist) who wounded Congresswoman Gabrielle Giffords and killed a federal judge in 2011, was diagnosed with schizophrenia, and as he decompensated he embraced nihilism as a philosophy, and the belief that there could be no government if words had no meaning. 12 Theodore Kaczynski, a serial bomber and lone-actor terrorist in the late twentieth century, was diagnosed with paranoid schizophrenia (S. Johnson, psychiatric evaluation, first author's files), and embraced the philosophy of the Luddites, a nineteenth century British textile labor group that raged against advancing technology.
- Therapeutically manage the case with whatever mental health interventions are clinically indicated and feasible. These may include medication adjustments, psychotherapeutic frequency and duration changes, and hospitalization.
- Use collateral contacts with the patient's permission to gather behavioral information concerning the patient's activities when not in treatment, a critical component of a reliable and valid clinical threat assessment using TRAP-18. Families and close friends may be hesitant to provide any information that suggests radicalization for fear of precipitous acts by law enforcement, and dependence on authority figures that have an ongoing relationship with the patient will likely be more informative. It is also imperative that the clinician be aware that family and kinship networks may be supporting the patient's radicalization.^{46,47}
- Monitor the patient's online behavior, especially social media activity, by perusing his or her publicly accessible accounts. There is no reasonable expectation of privacy when one posts to Instagram, Facebook, Twitter, and so forth, or any of the other myriad means of expressing oneself in virtual

reality. Clinical threat assessment recognizes that patients increasingly live in terrestrial and virtual reality, and often express their most intimate thoughts and feelings in the latter. Informing the patient of such active monitoring may diminish use of social media; however, it may provide a consensual avenue for more open communication between the mental health professional and the patient.

 Seek consultation with a mental health professional that is of the same racial, ethnic, or religious background of the patient so cultural behaviors are not grossly misinterpreted by the treating clinician.

SUMMARY

The violence of the lone-actor terrorist cannot be predicted; however, in many cases, it can be prevented. In this article we have studied the behaviors and mindset of a lone-actor terrorist, Malik Hasan (who happened to also be a mental health professional and a psychiatrist) through the lens of TRAP-18. Trained clinicians observed his behaviors for years, yet he continued on a pathway to targeted violence, culminating in the worst act of domestic terrorism in the United States since 9/11. Such acts are very low-frequency, but high-intensity events. They are understandable, and interdiction is possible. The fictional writer in the novel *Mao II*⁴⁸ ruefully noted, "Years ago I used to think it was possible for a novelist to alter the inner life of the culture. Now bomb-makers and gunmen have taken that territory. They make raids on human consciousness." Mental health clinicians are uniquely qualified and positioned to carefully observe such consciousness when it turns homicidally dark; they may therapeutically divert, and in some cases, operationally intervene with law enforcement to mitigate the risks of such mobilization for targeted violence.

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