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REVIEW

The Psychiatric Aspects of Terrorism: Prevention and Rehabilitation

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Preventing terrorism has thus far been in the domain of national security and law enforcement agencies. The expectation that psychiatry has a primary role to play in the rehabilitation of those involved in terrorism remains controversial, although the significance of certain mental disorders has been highlighted among lone-actor terrorists. This paper provides an overview of the motivating factors for radicalization to terrorism at both community and individual levels, as well as preventive and rehabilitative approaches to terrorism. We argue that psychiatry may have a role to play in these approaches with the goal of preventing violence in select cases.

Key words: *terrorism, radicalization, extremism, prevention, rehabilitation*

In Canada, section 83.01 of the *Criminal Code* defines terrorism as an act committed "in whole or in part for a political, religious or ideological purpose, objective or cause… with the intention of intimidating the public" (R.S.C. 1985). Despite decades of research, efforts to identify a universal psychological terrorist profile have been unsuccessful (Wright & Hankins 2016). This is hardly surprising given the heterogenous nature of terrorist groups around the globe. As a result, radicalization, a process by which an individual comes to adopt increasingly extreme political, social, or religious ideals, has attracted more attention in the academic literature (Woodhams, 2016; Wright & Hankins, 2016). In theory, while radicalization is not an ideology-specific phenomenon, it has been most thoroughly studied in the context of Islamic extremism, which provides the source material for this paper. Understanding radicalization is essential to defining both preventive and rehabilitative approaches to terrorism, with the goal of reducing political violence.

Radicalization to Terrorism

The process of radicalization is influenced by individual and community factors (Woodhams, 2016). This acknowledges that an individual's path to terrorism is unique, while some common contributing factors are identifiable. A crucial stage in the radicalization process is when the individual comes to believe that vigilante justice and violence are justified (Woodhams, 2016). At this point, the individual may join a terrorist group that seeks perceived justice through organized violence or engage in acts of lone-actor terrorism. Many studies propose push and pull factors to explain how individuals become radicalized (Striegher, 2013). Examples of push factors include poverty, social or political marginalization, human-rights violations, corruption, and youth frustration (Striegher, 2013). Push influences exist before radicalization and tend to be socio-economic, geopolitical, and historical variables that make the individual feel victimized, marginalized, or filled with a sense of insignificance in life. By contrast, pull factors are attractions that draw a vulnerable individual toward terrorist groups (Striegher, 2013). Examples include a sense of belonging, access to resources and security, religious moralization, leadership, and the means to enact revenge. These attributes are common to many terrorist groups, regardless of their ideological commitment (see Table 1).

More recently, the importance of social networks in the radicalization process has been clarified (Woodhams, 2016). Young people seem particularly vulnerable to online extremist messaging (Neumann, 2013; Pedersen et al., 2018). A parallel trend in mental health is that rising rates of adolescent depression and social isolation have been

Table 1
Push and Pull Factors Contributing to Radicalization (Striegher, 2013)

Push Factors (Increase vulnerability to radicalization)	**Pull Factors** (Draw individuals to a terrorist group)
Low socio-economic status	Resources
Cultural marginalization	Sense of belonging
Political grievance	Moralization of violence
Youth frustration, isolation, or both	Charismatic leader

linked with spending large amounts of time online (Gross, 2004). Some studies have linked social media use to negative mental health outcomes, including suicide, loneliness, and social anxiety (Berryman et al., 2018). In support of this radicalization pathway, a Norwegian study found that a radical interpretation of Islam may be linked with a high level of political activity on social media among young Muslim men (Pedersen et al., 2018).

A clear radicalization pathway has proven difficult to pin down. In their systematic review of the literature on pathways to radicalization among Muslims living in Western societies, McGilloway and colleagues (2015) identified numerous factors that contribute to radicalization. The authors grouped these factors into predisposing, precipitating, and perpetuating factors, ranging from personality traits, personal experiences, media influences, specific grievances, discontinuity between Islamic and national identity, and many more. The review examined 17 papers that provided empirical data on radicalization. While some vulnerabilities to radicalization could be identified, that systematic review ultimately concluded that no single cause or pathway exists to radicalization. The authors emphasized that a wide range of conditions interact to radicalize a person. The process is highly unique to the context and personal history of the individual. The authors point out that a common characteristic across studies was that terrorists were generally well-integrated into society, rebuking the often-repeated idea that terrorism is fundamentally a cultural integration problem. The authors conclude by calling for terrorism to be treated as a public health issue as opposed to a criminal justice matter, following the trajectory that domestic violence took in Western societies.

Preventive Strategies

Counterterrorism efforts have focused on several methods of deterrence. Preventing online radicalization is fraught with difficulties. Solutions that require social media companies to censor users has generated fierce political debate. Most prominent platforms (e.g., Facebook and Twitter) are U.S. based, therefore content that would qualify as extremist is often protected under the First Amendment of the United States Constitution (Neumann, 2013). Companies may de-platform (or refuse to promote) extremist content online; however, this method of prevention has been met with legal challenges in the United States (Neumann, 2013).

While there are many publications detailing the radicalization process, far fewer address prevention. This is partly due to the problem of defining prevention because, by definition, effective prevention produces no measurable outcome. It is also partly due to the lack of empirically driven preventive strategies. As such, interventions tend to be largely driven by expert opinion and evaluated based on societal outcomes, such as the number of terrorist attacks in a year, the number of victims affected, material damage by terrorism over time, or the number of arrests terrorism made (van Dongen, 2011). The U.S. Department of Defense acknowledges both the necessity and difficulty in defining and measuring effective prevention protocols (Perl, 2007). Too often, counterterrorism initiatives are implemented and never evaluated, as highlighted in multiple systematic reviews (Lum et al., 2006).

Prevention efforts have involved psychiatry to identify a psychological profile that might predict proneness to radicalization or terrorism. The work of Jerome Post (1984) is a prime example. He distinguished two major categories of terrorist groups in true psychodynamic fashion: the anarchic-ideologues who are committed to destroying the world built by their fathers, and nationalist secessionists committed to preserving the world of their fathers.

Outside the realm of psychodynamic theory, most efforts to involve psychiatry in the profiling of terrorists have been unsuccessful, not least because of the heterogenous nature of terrorist groups (Wright & Hankins 2016). Counterintuitively,

terrorists tend not to have psychopathy or sociopathy, nor do they suffer from emotional instability (Neumann, 2013; Wright & Hankins, 2016). On the contrary, most terrorists tend to have a clear, albeit distorted, rationale for violence, often stemming from perceived social, political, or religious injustice, which makes prevention difficult from a mental health perspective (i.e., not based in psychopathology; Nizami et al., 2014). This observation is truer of group actor terrorism than it is of lone-actor terrorism (Smith, 2018), a distinction that has become more relevant in recent years and is discussed in more detail in the Rehabilitation section of this paper. However, the psychological profiles of lone actors tend to overlap with individuals who are prone to violence generally (e.g., younger males, low socio-economic status, history of violence, social isolation, etc.; Smith, 2018). This type of risk assessment for violence is already part of a standard psychiatric practice.

Improving socio-economic factors and social supports tend to be a prevention strategy that is universally accepted. The parallel to social determinants of health have prompted some to ask what role medical professionals play in identifying youth at risk of radicalization. Some general practitioners have resisted this responsibility on the grounds that it damages the therapeutic relationship, contributes to marginalization of minority groups (e.g., refugees and migrants), and ought to be the role of law enforcement agencies (Neumann, 2013; Wright & Hankins, 2016). Balancing multiple imperatives has created slightly different emphasis in the approach to preventing terrorism between societies.

For its part, Canada has adapted its own counterterrorism strategy that emphasizes a community collaborative approach (Ahmad, 2017). This soft approach to preventing extremism is sometimes contrasted with more hardline approaches that involve expanding the powers of law enforcement to combat terrorism (Bjørgo, 2016). A large Canadian database called the GATE database examined all state counterterrorism interventions between 1985 and 2013, and evaluated these interventions by correlation to quarterly reports of terrorist attacks over time (Chenoweth et al., 2015). This dataset included many motivations toward violence, including radical environmentalist groups, al-Qaida inspired attacks, and right-wing extremist groups, among others. They found that the effectiveness of specific interventions varied widely according to the target terrorist group (e.g., left-wing extremists tended to respond to policy concessions better than right-wing groups). In general, however, state actions that were indiscriminately repressive were counterproductive, sometimes even increasing terrorist violence in the aftermath. This observation has tended to inform Canada's approach to preventing terrorism.

The United Kingdom's Preventing Violent Extremism (PVE) initiative emphasized the promotion and dissemination of counternarratives (Qurashi, 2018). A counternarrative is a moderate alternative interpretation of a religion, ideology, or political philosophy that discourages violence. A strong counternarrative attempts to unite a committed majority against violent outliers by appeal to common values (Bertram, 2015). The PVE initiative also included community engagement targeted at addressing push and pull factors that lead to radicalization and draw young people to terrorism in the first place (Qurashi, 2018).

In Continental Europe, there is less emphasis on challenging doctrine and more attention given to the integration of Muslim immigrants and refugees into society (Korn, 2016). Europe has tended to favour preventive measures that address the root causes of terrorism (e.g., socioeconomic factors and cultural integration).

Initially, legislators in Sweden, Norway, and Denmark were eager to expand police powers to include communication surveillance and criminalizing preparatory terrorism under the mantle of proactive policing (Husabø, 2013). This approach mimicked the American *Patriot Act*, which empowered intelligence agencies to monitor the communications of ordinary citizens for signs of impending terrorist activity. Nordic countries have since transitioned to a more holistic approach to preventing terrorism (Bjørgo, 2016); a trend that is reflected globally in most developed countries struggling to balance privacy rights of individual citizens with national security interests.

Rehabilitation

In tandem with preventive strategies, efforts should also focus on rehabilitation. Most rehabilitation programs have been studied on those convicted of a terrorist act (Striegher, 2013). The goal of terrorist rehabilitation tends to be either disengagement or deradicalization (Bertram, 2015; Striegher, 2013). Disengagement is achieved when the individual leaves a terrorist organization and no longer intends to use violence to achieve ideological goals, despite maintaining their extremist beliefs. Deradicalization involves changing core beliefs and attitudes and is generally more robust at preventing recidivism in the long term (Striegher,

2013). Deradicalization has been the goal of Saudi Arabia's pioneering rehabilitation program for many years. The Saudi program emphasizes education on the process of indoctrination itself, and the tactics terrorist leaders use to train conformity and isolate followers from alternative worldviews (Lankford & Gillespie, 2011).

Another important tactic is rehumanizing the enemy by having individuals who have been incarcerated continuously interact with other inmates who are demonized by terrorist propaganda (e.g., Jews and Americans; Lankford & Gillespie, 2011). This exposure tactic resembles studies in psychology and sociology that find repeated exposure to outgroups can reduce prejudice overtime (Turner et al., 2007).

Deradicalization programs in Southeast Asia (e.g., Indonesia, Malaysia, Singapore, Thailand) have tended to use counternarratives to challenge the doctrine of extremism, with psychological counselling for those who have been incarcerated for terrorism (Aslam et al., 2016). Deradicalization programs exist to some degree in France, Belgium, Germany, the Netherlands, and the United Kingdom (Feddes, 2015). However, there are no studies comparing the relative effectiveness of these programs, nor is there an agreed-on standard to evaluate their effectiveness at achieving deradicalization.

In most places, rehabilitating those involved in terrorism fall under the purview of the criminal justice system. In academia, clinical approaches to rehabilitation have scarcely been explored. Perhaps this is because terrorism is relatively rare and terror subjects are hard to reach. Or perhaps it is because the link between mental disorder and terrorism is controversial (Stoddard et al., 2011).

Here, a distinction can be made between group and lone-actor terrorists (Corner et al., 2016; Smith, 2018). Terrorist groups tend not to recruit individuals with overt signs of mental illness due to the perceived security risk they pose (Wright & Hankins, 2016). However, more recent studies have demonstrated that mental disorder is more common in lone-actor terrorists than group actors (Corner et al, 2016). In particular, three mental disorders appear to be significantly more common among lone-actor terrorists compared to the general population: schizophrenia, delusional disorder, and autism spectrum disorder (Corner et al., 2016). As well, certain features of conduct disorder (e.g., childhood disobedience) and antisocial personality disorder may predict lone-actor terrorism (Dhumad et al., 2020). Such studies are correlational, and many factors that predispose mental illness also predispose terrorism (Smith, 2018). The link between mental disorder and terrorism remains controversial, unaided by misleading terms such as suicide bomber that is not motivated by nihilistic depression but rather an empowering ideological commitment (Nizami et al., 2014; Stoddard et al, 2011).

Perhaps, psychiatry might assist with assessment and treatment of underlying mental disorders and risk assessment in a collaborative framework involving law enforcement and other health and social care agencies. This may help prevent violence from occurring in select cases, but there is no standard of care or established guidelines to treat or modify the risk of extremist violence in hospitals. Even if psychiatry could lend itself to counterterrorism initiatives, some would be reluctant to do so, believing that other principles come into conflict, such as patient confidentiality, or even the Hippocratic Oath.

Conclusion

The clinical literature on preventing violent extremism and rehabilitating those involved in terrorism is limited. Although many governments would like to enlist the help of physicians in counterterrorism initiatives, many have pushed back, citing ethical commitments to patient care and confidentiality (Wright & Hankins, 2016). The link between mental disorder and terrorism remains controversial and more prominent among lone-actor terrorists than group actors. For certain individuals in certain cases, psychiatry may play a collaborative role in prevention and rehabilitation. To date, radicalization and terrorism have been addressed as a criminal justice matter rather than a mental health issue. While many concepts discussed in this paper (e.g., counternarratives, push and pull factors, disengagement, and deradicalization) were studied in the context of Islamic extremism, there is no clear reason why these concepts could not be generalized. In fact, concepts learned from studying Islamic terrorism in the United States are already being applied to political extremism (e.g., far-right and far-left wings) that seem to be on the rise (Chermak & Gruenewald, 2015).

Conflict of interest: none

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