Violent Extremism and Mental Disorders

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Question
What are the links between those who turn to violent extremism and mental disorders?

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1. Overview

This rapid review synthesises findings on the link between violent extremism and mental disorders. Violent extremism is defined as ‘violence committed by an individual and/or group in support of a specific political or religious ideology, and this term is often used interchangeably with terrorism’ (Simi, Sporer, & Bubolz, 2016, p. 537). It is important to note that recent research argues that mental illness does not determine who will engage in violent extremism; rather it culminates in greater risk of involvement. Although this report focuses on mental illness, there are a number of different drivers of violent extremism, which are often interconnected, and for this reason these are also briefly discussed. Studies that explore the pathway to radicalisation highlight that this process is incredibly complex and unique and there is no profile of an extremist, or warning indicators and this is important to remember when examining the link between mental illness and violent extremism (National Academies of Sciences, Engineering, and Medicine, 2017).

The research on mental disorders and violent extremism has progressed significantly in recent years, however, many scholars argue that it is still not robust enough. In earlier research linking mental illness and violent extremism data was not disaggregated amongst the different types of mental disorders and types of actors and although research is beginning to take this into account there is still an issue with data collection. The collection of data by the various law enforcement agencies encountering violent extremists is not robust enough and more work needs to be done on data collection in order to aid the understanding of the link between mental disorders and violent extremism. Due to the above reasons, there are many contradictions within the literature, as earlier work was too simplistic and thus too readily linked violent extremism to mental disorders. The understanding of the link between violent extremism and mental disorders is still developing and is currently overcoming the earlier less robust studies that unequivocally linked mental disorders to violent extremism and which is often taken up by the media and policy actors. Another issue in the literature linking mental disorders to violent extremism is, as argued by Horgan (2017), that researchers with a psychology background have been a very minor contributors to the research conducted.

Key findings are as follows:

- Higher exposure to trauma leads to a greater likelihood of developing Post Traumatic Stress Disorder (PTSD), which is associated with increased anger and hostility and greater urge for revenge versus reconciliation and thus increasing the likelihood of supporting violent extremism.
- Higher exposure to trauma, as well as weaker social bonds, makes an individual more likely to engage in violent extremism.
- A number of studies support that the number of risk factors (such as abuse, neglect, etc.) experienced during childhood, rather than any particular combination, are associated with childhood misconduct and potential later violence.
- Traumatic experiences during childhood can lead to an increased need for identity, which can be fulfilled by extremist causes.
- The research linking depression to violent extremism is fairly inconclusive, however there is an argument that joining violent extremist groups actually can prevent the rise of depression as it gives a sense of belonging.
Much of the research points to a strong link between mental disorders and lone-actor violent extremists rather than group actors. In a study of 119 lone-actors with 119 matched group actors it was found that the odds of a lone-actor terrorist having a mental illness 13.49 times higher than the odds of a group actor (Corner & Gill, 2015).

A study disaggregating the data on mental disorders and lone-actors found that three mental disorders have a substantially higher prevalence amongst lone-actors than the general population: schizophrenia (8.5%), autism spectrum disorder (3.3%), and delusional disorder (2.0%) (Corner, Gill & Mason, 2016).

However, it is argued that lone-actor motivation is embedded in an ideological cause, developed over time, alongside a number of other risk factors and that mental disorders are not the driving force.

In a study of Islamic State-influenced attacks, it was found that the occurrence of mental illness was comparable to the global average, however those that were inspired by the Islamic State rather than directed by them had a higher occurrence of mental disorders than the global average (Corner & Gill, 2017).

In a study of 140 radical Islamists from the Netherlands whom were suspected of joining or planning to join the fight in Syria the prevalence of schizophrenia was 2%, which is double that of the general population (Weenik, 2015).

Studies of Jihadi violent extremists argue that the majority of perpetrators are not psychologically abnormal and are often psychologically much healthier and far more stable than other violent criminals.

There are many criticisms of the research that has linked mental disorders to violent extremism, as it does not traditionally involve interviews with perpetrators to assess mental health, has not historically disaggregated the data across actors and mental disorders, and does not examine the temporal ordering of risk factors across those engaged in violent extremism.

It is argued that no mental health disorder appears to be a predictor of terrorist involvement and is rather just one of the many risk factors that push and pull individuals towards terrorist engagement.
2. Post Traumatic Stress Disorder (PTSD)

It is important to remember that involvement in terrorism is a process and that there are many different pathways towards terrorism. Ellis et al. (2015) argue that setting events, personal factors, and social-political-organisational contexts influence the incremental decisions that shape the pathway towards terrorism. They particularly highlight early experiences and culture, on impacting on the individual's attitudes, perceptions, decisions, and behaviour. However, early traumatic experiences do not determine who will engage in violent extremism; rather they culminate in greater risk of initial involvement in violent extremism. Ellis et al. (2015) go on to argue that approximately one-third of those exposed to trauma go on to develop Post Traumatic Stress Disorder (PTSD) and that higher exposure to trauma leads to a greater likelihood of developing PTSD. PTSD is important, as it is associated with increased anger and hostility and greater urge for revenge versus reconciliation and thus increase the likelihood of supporting violent extremism. Whilst exposure to trauma can lead to a re-evaluation of the world and one's place therein, PTSD can shape a hostile and aggressive response. Figure 2 below provides another potential pathway towards violent extremism.

Figure 1: Empirical model of pathways associated with illegal or violent activism.

Source: (Ellis et al., 2015, p. 8)

Ellis et al. (2015) carried out a study in the US with 79 young Somali males between 18 and 25 years old in which they examined key setting events and personal factors associated with openness to legal non-violent or illegal and violent activism. The participants experienced a median of seven types of highly stressful events (out of 22). 33% reported no trauma, 41% reported experiencing either physical assault or serious injury, and 26% reported experiencing either physical assault or serious injury.

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1 The term "setting event" refers to something that influences the relationship between a situation and the likelihood that a behaviour will be shown.

2 The average age of participants was 21 years and the average length of time in the US was nine years.
both types of physical trauma. 16% of the participants demonstrated a considerable openness to illegal and violent activism and 76% demonstrated a considerable openness to legal non-violent activism (Ellis et al., 2015, p. 13). The study revealed a significant association between trauma and openness to illegal and violent activism with increased trauma associated with increased openness to illegal and violent activism and this was even higher with those who reported weaker social bonds to their communities and the wider society. It is suggested that trauma can destroy a person’s assumptions about themselves and the world around them, which in turn can lead to greater hostility and mistrust that facilitates openness to violent extremism. PTSD symptoms include a bleak vision of the future, which can lead to the idea of dying for a cause becoming more appealing and thus PTSD may be important in understanding what leads youths towards violent extremism. This makes increased efforts to identify and support mental health programmes to treat traumatised youth important, particularly in at risk communities where mental health services are missing. Moreover, programmes that strengthen communities and their place in society are important, as those with weaker social bonds are more likely to engage in violent extremism (Ellis et al., 2015).

Often linked to PTSD is childhood experiences and using 44 in-depth life-history interviews with former members of violent white supremacist groups, Simi et al. (2016) found substantial presence of childhood risk factors and adolescent conduct problems as precursors to participation in violent extremist groups. They argue that social–psychological processes that implicate emotion and cognition mediate the effects of risk factors on future engagement in antisocial behaviour and criminally-oriented - including violent extremist - groups. Of the subjects interviewed by Simi et al. (2016, p. 544), 84% reported experiencing one or more of the following adverse environmental conditions:

<table>
<thead>
<tr>
<th>Childhood physical abuse</th>
<th>43%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Childhood/adolescent sexual abuse</td>
<td>23%</td>
</tr>
<tr>
<td>Emotional and physical neglect</td>
<td>41%</td>
</tr>
<tr>
<td>Parental incarceration</td>
<td>27%</td>
</tr>
<tr>
<td>Parental abandonment</td>
<td>36%</td>
</tr>
<tr>
<td>Witnessed serious violence</td>
<td>64%</td>
</tr>
</tbody>
</table>

Additionally, over half of these experienced three or more of the above adverse environmental conditions, with cumulative influence of risk factors being seen as important in leading to future violent behaviour (Simi et al., 2016, p. 544). These elevated rates of childhood adversity far exceed the average population and are more comparable with youths in juvenile justice settings or in street gangs. The interviews further highlight the role of childhood risk factors as a series of
destabilising and adverse conditions that can lead to future violent conduct, and that these adversities are conditioning experiences that gradually increase the subject’s susceptibility to negative outcomes. It is suggested that the pathways to radicalisation begin with emotional vulnerabilities that are often brought on by traumatic experiences, often beginning in childhood, which can lead to the individual developing a need for identity that can be fulfilled by extremist causes. Witnessing domestic violence as a child creates trauma that can contribute to youth and adult violence (National Academies of Sciences, Engineering, and Medicine, 2017).

3. Depression

Using a cross-sectional survey of a representative sample (608) of Pakistani and Bangladeshi men and women from East London and Bradford, Bhui et al. (2016) argue that depressive symptoms are associated with a higher risk of sympathies for violent protest and terrorism (SVPT). However, independent of SVPT associations with depressive symptoms, some expressions of social connectedness (measured as life events and political engagement) are associated with a lower risk of SVPT. Thus, the prevention of depressive responses to adverse life events and poor political engagement may marginally reduce the risk of SVPT, but the research findings also suggest that promoting political engagement and social connectedness are more likely to have a larger impact. In another study based on a survey in the UK of 3679 men aged 18–34 years, Coid et al. (2016) argue that men with neutral or undecided extremist views were more likely to be depressed. For them anti-British extremist views may offer protection against depression, specifically among men of Pakistani origin, as it help prevents the case of a lack of personal identity and meaning that is connected to depression. However, they do hypothesise that for some men, the link between lack of identity and depression may be a precursor to active support for and consideration of involvement in terrorism, but this cannot be confirmed within their study.

4. Disaggregated Results: Link to Lone Actors

Corner, Gill & Mason (2016) argue that lone-actor violent extremists are more likely to have a mental disorder. Figure 2 demonstrates the rates of recognised mental disorders across five groups – lone-mass murderers (who kill four or more people in a 24-hour period absent of a motivating ideology), lone-actor terrorists, solo-actor terrorists (conducted act of terrorism by themselves but were directed and controlled by a larger terrorist organisation), lone-dyads (a group of two terrorists), and terrorist group members. What this demonstrates is that the more isolated the individual is in terms of the number of co-offenders and support networks, the more likely that individual will also have mental health problems.
Corner and Gill (2015) conduct a series of bivariate, multivariate, and multinomial statistical tests using a unique dataset of 119 lone-actor terrorists that were either convicted or died in the commission of their offense in the United States and Europe since 1990. They compare these 119 lone-actors with 119 matched group actors based on the principle of having 55 US actors and 64 non-US actors. They found that the rate of mental illness among the lone-actor sample was 31.9%, whilst the corresponding figure for the group-actor sample was 3.4% - making the odds of a lone-actor terrorist having a mental illness 13.49 times higher than the odds of a group actor having a mental illness. Additionally, some significant associations were found between mental illness and group participation, as lone-actors who were mentally ill were 18.07 times more likely to have a spouse or partner who was involved in a wider movement than those without a history of mental illness. Finally, those with a mental illness were more likely to have a proximate upcoming life change, more likely to have been a recent victim of prejudice, and experienced proximate and chronic stress. The most highly significant stressor was if the individual’s parents were divorced – it is possible to view divorce as a control variable and a proxy for social integration or lower levels of individual attachment and involvement (Corner & Gill, 2015).

Corner et al. (2016) argue of the importance of not taking mental disorders as homogenous and disaggregating the data on mental disorders and violent extremism across the various mental disorders to have a clearer understanding of the link. Figure 3 compares the rates of different mental disorders amongst lone-actor terrorists, group actors and the general population. Lone actors diagnoses included schizophrenia (8.5%), depression (7.2%), unspecified personality disorder (6.5%), bipolar disorder (3.9%), post-traumatic stress disorder (PTSD, 3.3%), autism spectrum disorder (3.3%), delusional disorder (2.0%), unspecified anxiety disorder (1.3%), traumatic brain injury (TBI, 1.3%), obsessive compulsive disorder (OCD, 1.3%), unspecified sleep disorder (0.7%), schizoaffective disorder (0.7%), psychotic disorder (0.7%), drug dependence (0.7%), and dissociative disorder (0.7%). Three disorders held a substantially higher prevalence amongst lone-actors than found within general populations – schizophrenia, delusional disorder, and autism spectrum disorders – whereas depression, anxiety, PTSD, and sleep disorders had higher rates amongst the general population. Schizophrenia has of 1 % in the general population, whilst 8.5 % amongst lone-actors and has a contentious link to violent behaviour, as does delusional disorders. Individuals with autism
spectrum disorders (ASD) are not generally linked to violent behaviour. However, social interaction deficits impair an individual’s ability to maintain functional relationships and individuals with ASD often foster intense online relationships, a trait noted in lone-actors with ASD. Thus, Corner et al. (2016) argue that lone-actor motivation is embedded in an ideological cause, developed over time, alongside a number of other risk factors not just mental disorder, and that the mental disorder is not the driving force.

Figure 3: Mental disorder prevalence across terrorist actors and the general population

Source: (Corner et al., 2016, p. 564)

5. Jihadi Actors

In examining 55 attacks (totalling 76 individuals) between May 1, 2014, and September 30, 2016, where media reports indicated they were possibly influenced in some way by the Islamic State, Corner and Gill (2017) found a history of psychological instability (with the threshold being actual mental health interventions) was noted in 21 (27.6%) of the individuals, which is comparable to the current worldwide average (25-27%). The authors did not find examples of psychological
instability in the individuals in the cases where the media reported on Islamic State-directed attacks. When Islamic State-directed attacks are taken out of the equation, the percentage of attackers with reported psychological instability increases to 34.4%. However, it is worth noting that the majority of the cases for this study have not reached trial and thus the information available is limited. Moreover, other studies by the same authors (not focusing solely on the Islamic State) have pointed to a correlation between mental health and violent extremism, particularly in the case of lone-actors. Corner and Gill (2017) argue that it is too early to come to a definitive answer regarding the role of mental health problems and various forms of Islamic State terrorism. However, at this stage, mental disorders appear more prevalent among those inspired by Islamic State than those directed by it. The available data is clouded by poor reporting practices and the tendency to treat all mental health disorders equally. Mental health problems are often used as an explanation for acts of terror by individuals by both the media and policy actors – particularly since the rise of lone actors connected to the Islamic State – as a range of studies demonstrate links. However, these studies examined specific groups and much of the nuance within them has been lost.

Weenik (2015) uses a sample containing personal details of 140 radical Islamists from the Netherlands whom the Dutch police suspect of having joined the fight in Syria, or are considered potential travellers. He then crosschecks these names with a number of databases to find evidence of problem behaviour and previous diagnosed mental disorders. 6% of the sample had diagnosed disorders, whilst an additional 20% displayed signs of undiagnosed mental health problems. Importantly, the prevalence of schizophrenia of 2% is higher than what would be expected in the general population, which is currently estimated at between 0.87% and 1%.

In a study of Jihadi terrorists, Silke (2008) argues that the vast majority of research has concluded that the perpetrators are not psychologically abnormal and that terrorists are often psychologically much healthier and far more stable than other violent criminals. This does not mean that people suffering from psychological disorders do not join terrorist groups, rather that they are an exception and when found they tend to be fringe members. The involvement in terrorism is usually the result of a gradual process over many years and the sense of personal identity and social networks are both extremely important factors. Most terrorists become radicalised as members of a small group of like-minded individuals and the relative isolation of the individuals from the surrounding society beforehand usually plays an important role in the early bonding of the group.

6. Criticisms of the Research

As highlighted by others within this report, Weine, Eisenman, Jackson, Kinsler, and Polutnik (2017) argue that mental illness or psychosocial problems are not the simple explanation for terrorism and other mass casualty attacks. Additionally, the state of the evidence is still undeveloped and there are no rigorous studies actually interviewing persons involved in radicalisation using standard measures to assess for mental health problems. Therefore, it is possible that mental illness is no more likely and no more causally linked to violent extremism than it is to any other types of violence, as there are studies show that individuals with psychotic experiences have an increased risk of violence perpetration. Nonetheless, the evidence that does exist does point to a link between mental illness and violent extremism. Many close to those who went on to commit acts of terror highlight that something felt wrong and that there was
behavioural change, however there was no one to report this to apart from law enforcement. For this reason Weine et al. (2017) argue that it is important that mental health professionals are given a role in combatting terrorism, as if this behaviour was reported to them they could help diagnose and prevent the behaviour from escalating.

Gill and Corner (2017) argue that that the work linking terrorism and mental disorders has historically been fairly poor and has lacked robustness. This research followed two reductionist paths – that mental disorders were linked to terrorism or that they were not linked at all. Moreover, research that followed on from this early research contained many misrepresentations of these findings and have built a false dichotomy around mental disorders and terrorist involvement. More recently, research has improved and is based on empiricism and an understanding that terrorist involvement is a complex process involving multiple push/pull factors. Recent research is beginning to get a better understanding of the links between the types of actors engaged in violent extremism and the various mental disorders, rather than a blanket view of both violent extremists and mental disorders being homogenous. However, Gill and Corner (2017) do argue that current research gives little understanding of the temporal ordering of risk factors (of which a mental disorder may be one of dozens) across terrorists. Radicalisation is not a homogenous process, yet there is a distinct lack of studies aiming to quantify the processes of radicalisation. As a result there is a lack of knowledge of what the real risk factors are and factors are simply a cause of a cause – for example a factor that may heighten vulnerabilities that in turn push the individual further down the extremist path and make them more likely to experience other risk factors. Based on the current research Gill and Corner (2017) opine that no mental health disorder appears to be a predictor of terrorist involvement and that for some terrorist mental health disorders may be just one of many ‘risk’ factors that pushed and pulled that individual into terrorist engagement.

Using data from the Profiles of Individual Radicalization in the United States (PIRUS) database – which is based on publicly available sources and contains background, demographic, group affiliation, and contextual information for 1,473 individuals who radicalised in the United States from 1948 to 2013 – Lafree, Jensen, James, and Safer-Lichtenstein (2018) argue that evidence of mental illness was consistently associated with engaging in extremist political violence. However, they go on to highlight that in their study it is difficult to point to the precise mechanism by which mental illness influences violent extremism – mental illness could make people more susceptible to ideological propaganda and/or coercion, or the exclusion faced by those diagnosed with mental illness could lead to them seeking acceptance through less prosocial means. For this reason future research needs to gather more precise data in order to better unpack the relationship between mental illness and violent extremism (Lafree et al., 2018).

7. Drivers of Violent Extremism

The pathway towards radicalisation is incredibly complex and involvement in violent extremism is a process that includes many different pathways. The studies examined for this report highlight that mental illness can influence the pathway towards terrorism, however they do not determine who will engage in violent extremism (Ellis et al., 2015). Therefore, it is important to examine other drivers of violent extremism, especially as it is suggested that more than one driver is usually necessary on the pathway towards extremism (Allan et al., 2015).
**Marginalisation:** Blocked participation creates grievances that can be harnessed to promote extremist violence, however they do not necessarily lead to violent extremism and are rather a factor. In conflicts involving violent extremism, marginalisation is often a factor in extremist groups being able to recruit in large numbers. It is suggested that the lack of civil liberties is the most reliable predictor of terrorism. This includes civil or political society turning to violence when faced with political failure or repression (Allan et al., 2015).

**Government Failure:** The failure of the government to deliver services gives extremist groups a pathway into the locality. Through delivering services they gain support and legitimacy at the cost of the government. At the same time, failure of the government to provide security and justice (or if they provide oppressive forms of security and justice) opens up a pathway for extremist groups, which they can then utilise to gain support and legitimacy. In situations of conflict and insecurity the population is more likely to accept extremist groups if they offer stability (Allan et al., 2015).

**Identity formation:** Identity-formation is important in radicalisation, as it can become ‘maladaptive’ and make some individuals more vulnerable to radicalisation. Radicalisation is also a social process and identity can play a key factor in individuals becoming involved in violent extremism and religion and ethnicity are strong elements of individual and group identity (Allan et al., 2015).

**Poverty:** Poverty and deprivation can play a role in pathways to violent extremism, particularly outside of the West and in areas involved in civil war. However, as poverty is often linked to other drivers it is important to examine the wider context. Additionally, extremist groups often recruit from the unemployed and underemployed groups, including the well-educated (Allan et al., 2015).

**Inequality:** Economic, social and political marginalisation of ethnic or religious groups enhances the risk of violent extremism. Additionally, the perceived victimisation of fellow members of the wider group can be used by violent extremist groups in order to gain supporters (Allan et al., 2015).
8. References


Key websites

- International Center for the Study of Violent Extremism (ICSVE)
- RUSI

Suggested citation


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