

Online radicalisation: Profile and risk analysis of individuals convicted of extremist offences

Jonathan Kenyon, HMPPS Interventions Service, London

Jens F. Binder, Nottingham Trent University

Christopher Baker-Beall, University of Bournemouth

PRE-PUBLICATION VERSION, DO NOT CITE

MANUSCRIPT ACCEPTED FOR PUBLICATION IN LEGAL & CRIMINOLOGICAL
PSYCHOLOGY

Abstract

Purpose: This study explores socio-demographic profiles and offence histories of 235 individuals convicted of extremist offences in England and Wales who have shown different levels of internet engagement in their pathway towards radicalisation.

Methods: A comprehensive database of those convicted of extremist offences was developed by reviewing and coding content of specialist Structured Risk Guidance (SRG) and Extremism Risk Guidance (ERG22+) assessment reports, authored by professionals with access to a range of restricted information sources and direct contact with the individual concerned. This enabled a comparison of socio-demographic profiles and offence histories for those who radicalised online, those who radicalised offline and those exposed to both online and offline influences. The analyses further integrated formal risk assessments contained in the reports.

Results: Findings show a comparatively small prevalence of exclusive online radicalisation, but some online influence for the majority of all cases. Pronounced variations in the socio-demographic profiles and offence histories for members of each radicalisation pathway group were found. In addition, convicted extremists who radicalised online are assessed as having the lowest overall level of engagement with an extremist group or cause, along with the lowest levels of intent and capability to commit violent extremist acts.

Conclusions: Gaining a better understanding of the prevalence of online radicalisation, and the profiles associated with it, informs the debate on whether extremist content and activities online influence violent extremist behaviour offline and helps to guide counter-terrorism approaches and future policy in this area.

Key words: Radicalisation, Internet, Pathways, Extremists, Profiles

Introduction

The role of the Internet in radicalisation and offending of those who commit extremist offences has become a central part of contemporary cases of terrorism (Whittaker, 2021). However, when considering the threat of online radicalisation, it has yet to be established which characteristics, of individuals and offences, indicate different levels of risk and vulnerability. Previous research has suggested that internet use in the context of extremist offending is particularly prevalent for lone actor cases (Kenyon et al., 2021), but what is less clear is how this compares with other pathways to radicalisation given widespread use of the Internet in today's society. In addition, despite the growing body of literature exploring the Internet's influence on a range of risky offline behaviours (Borzekowski et al., 2010; Dunlop et al., 2011; Moreno et al., 2009; Young & Jordan, 2013), there are knowledge gaps in terms of the relationship between online radicalisation and risk of committing extremist offences in offline settings. This lack of knowledge could be inhibiting the identification and support offered to those vulnerable to online radicalisation prior to them becoming engaged with an extremist group or cause. A lack of understanding in this area could also be limiting how effectively those who have radicalised online and committed extremist offences are currently prioritised, assessed and managed in custody, and how effectively support is offered to assist community re-integration.

This study has four main aims. First, to establish the extent of online radicalisation by identifying the proportion of those convicted of extremist offences who primarily radicalise online, offline or where both online and offline influences are important. Second, to investigate whether certain individuals are more vulnerable to online radicalisation and establish the type of extremist offences these individuals are more likely to commit. Third, to inform the debate on the extent to which the Internet exerts its influence beyond the online world and can influence offline behaviour in the form of violent offending. Fourth, to consider the assessed

level of risk and threat posed by individuals who have radicalised online compared with those taking other radicalisation pathways.

To achieve these aims, this study draws from a database of 235 individuals convicted of extremist offences in England and Wales, informed by Structured Risk Guidance (SRG)¹ and Extremism Risk Guidance (ERG22+) reports. Since September 2011, the ERG22+ has been used throughout Her Majesty's Prison and Probation Service (HMPPS) in England and Wales to assess all individuals convicted and sentenced under Terrorism Act (TACT) legislation (NOMS, 2017). The ERG22+ has a considerable overlap of factors with other assessment tools used for those who have committed terrorist offences, including the Violent Extremist Risk Assessment Version 2 Revised (VERA-2R, Pressman et al., 2018). The present work is the first to use closed source risk assessment data for convicted extremists in England and Wales and to compare these with socio-demographic profiles and offence histories of those taking different radicalisation pathways in relation to the Internet. Pathway in the context of this work is understood as the process by which an individual acquires beliefs and attitudes that can be described as extreme and facilitate behaviours directed at harming societal structures. The database enables comparisons to be made between pathway groups based on professional assessments of overall levels of engagement, intent and capability to commit violent extremist offences.

Literature Review

It is important to start by situating this study with reference to literature on profiling those who commit extremist offences. The academic consensus is that previous studies investigating socio-demographic profiles of those who have committed extremist offences have produced

¹ The SRG was a set of formal guidelines developed in 2009 for the assessment of individuals who have committed extremist offences. Following independent evaluation (see Webster et al., 2010), the SRG was revised and was formally renamed the ERG22+ in 2011.

only modest insights so far (Perliger et al., 2016). Russell and Miller (1977) undertook one of the most comprehensive attempts to profile individuals who have committed terrorist offences by reviewing published data of over 350 individuals across 18 terrorist groups between 1966-76. Their profile suggested that those who commit terrorist offences are most likely to be 22-25 years old, male, unmarried, from a middle-upper class family, reside in urban areas, have some university education and hold an extremist political philosophy. However, difficulties arise in that many individuals who match this profile do not go on to commit terrorist offences, and there are others who commit terrorist acts who do not fit this profile (Borum, 2003). More recent studies have concluded that no single profile exists for those who commit extremist offences (Borum, 2004; Horgan, 2003; Silke, 2014), with a common belief that under specific circumstances, most individuals are capable of violence, including acts of terrorism. However, few attempts have been made to consider profiles across different radicalisation pathway groups relating to internet use.

A developing research base has explored profiles based on degree of social connectedness with other extremists, comparing lone actors with group-based terrorists and members of the general population. In terms of mental health disorders for example, Corner et al. (2016) found that schizophrenia, delusional disorders and autism spectrum condition showed a substantially higher prevalence in the lone-actor population, a group known to rely heavily on use of the Internet, compared with group terrorists and the general public. However, other than some basic traits, such as a tendency for lone actors to be male and under 50 years old, no clear socio-demographic profile has emerged (Kenyon et al., 2021).

Other studies have explored demographic profiles but have differentiated by ideology. Jensen et al. (2020) used the Profiles of Individual Radicalization in the United States (PIRUS) database to compare Islamist extremists, far-right extremists and far-left extremists and found some demographic similarities and differences. Consistent across each group, radicalised

individuals held low socio-economic status. Far-right extremists were typically radicalised in their late 30s, with the vast majority being male, a quarter had a violent criminal past and close to a third had a military background. In contrast, Islamist extremists and far-left extremists were younger, with an average age of 29 when radicalised. Mental illness did not appear to be a major factor across any of the ideologies, but Islamist extremists had the highest levels or prevalence across the three groups.

More recently, attempts have been made to establish profiles after disaggregating the roles and responsibilities of members of extremist groups. Gill and Young (2011) compared socio-demographic and role profiles of Palestinian suicide bombers with those convicted of more conventional terrorism-related offences in the U.S. Suicide bombers were found to be more likely to be international as opposed to domestic attackers, and as individuals got older, they were less likely to be a suicide bomber and instead have a different role in a terrorist organisation. Simcox and Dyer (2013) found specific profiles when disaggregating individuals who committed offences inspired by Al-Qaeda in the U.S. into five role-types (active participants, aspirants, facilitators, trained aspirants and ideologues). Similarly, certain socio-demographic characteristics emerged when Gill and Horgan (2013) disaggregated by role (e.g., gunrunner, bomber, bombmaker, gunman, non-violent) in their study of 1240 Provisional Irish Republican Army (PIRA) members. In a further study, Perlinger et al. (2016) looked at a range of Islamist terrorist networks and found that individuals with lower levels of human capital (measured by employment) and biographical availability (measured by marital status) were more likely to be involved in violence. The authors concluded that moving away from general profiles of those who commit terrorist offences towards profiles of specific sub-groups or types holds significant potential.

In line with this conclusion, the present study compares socio-demographic profiles and offence-type variables across different radicalisation pathway groups relating to internet use.

In this context, it is important to consider literature investigating whether the Internet exerts an influence beyond the online world and influences offline behaviour. The influence of online social media, specifically, has been considered in relation to many other types of risky offline behaviours. These include unprotected sex and sex with strangers (Young & Jordan, 2013), excessive alcohol consumption (Moreno et al., 2009), self-harm (Dunlop et al., 2011) and eating disorders (Borzekowski et al., 2010). However, evidence is mixed as to whether online radicalisation and extremist activity via the Internet directly translates into extremist offences being committed offline. Some have argued that online radicalisation is not the sole determining factor leading individuals to commit acts of violence for their cause, with physical real-world interaction and networks considered vital ingredients for this development to foster and propagate (Bergin et al., 2009). Others have argued that the Internet is becoming an ever-increasing and important tool to facilitate this process (Stevens & Neumann, 2009).

Conway (2016) outlines the main arguments for the view that the role of the Internet in radicalisation processes has been exaggerated and that online activity exerts little influence on offline behaviour. This view suggests that online extremists are ‘amateurs’ in terms of restricting themselves to supporting and encouraging violent extremism online but pose little or no ‘real-world’ threat. Their online activity is seen as a mechanism that helps dissipate their desire for violent action rather than increasing any desire to act. A related argument is that those using the Internet to declare a dedication or desire for violent action may be engaging in a form of online showboating, rather than having any real commitment or intention to engage in real-world violence.

The relationship between online learning and offline action, in a more integrative view, may be affected by a range of background characteristics. Previous research has found that younger users may be more prone to negative influences of the Internet and social media (Topping, 2014). There is also evidence suggesting that males are more likely to engage in risky behaviour

than females (Browne & Hamilton-Giachritsis, 2005). In a UK study by Gill et al., (2017), lone actors were found to be 2.64 times more likely to learn online than members of a cell. In the same study, individuals who committed offences in support of an extreme right-wing ideology were also found to be more likely than those who were jihadist-inspired to learn and communicate online, along with an increased likelihood of them being lone actors. For individuals who did plot an attack, those using Improvised Explosive Devices (IEDs) were 3.34 times more likely to have learned online, whilst those who used more primitive attack types, including arson or unarmed assaults, were significantly less likely to have learned online.

In a field lacking a strong empirical underpinning and where current insights are based primarily on studies relying on open-source data or small number case studies, the present study is the first to utilise closed source risk assessment data to examine profiles and offending of individuals convicted of extremist offences in England and Wales and to relate this to their internet use in the build-up to the offence. This unique data source of specialist assessment reports, coupled with the research design of splitting cases into three pathway groups based on internet use, enables comparisons to be made between groups in relation to profiles, offence histories and professional assessments of overall levels of engagement, intent and capability to commit violent extremist offences. These three domains not only underpin the ERG22+ assessment applied to those convicted of extremist offences but are central to the assessment framework used within Channel² to identify those vulnerable to being drawn into terrorist-related activity (HM Government, 2012).

Methodology

Sample

² Channel is part of the Prevent Strategy and is a programme operating in England and Wales focused on providing support at an early stage to people identified as being vulnerable to being drawn into terrorism (HM Government, 2012).

The data source made available to researchers consisted of 267 ERG22+ reports and 2 SRG reports (the predecessor to the ERG22+), which included all that were available to the UK Ministry of Justice completed from October 2010 to the end of December 2017. The report subjects were individuals convicted of terrorist³ or terrorist-related⁴ offences in England and Wales.⁵ The authors of the reports were either Registered Psychologists or qualified Probation Officers, with access to restricted information sources and direct interviews with report subjects in most cases. All authors had undertaken the same standardised two-day national training to learn how to conduct the assessment. Only initial ERG22+ reports were included as these are typically completed within 12 months of sentencing and feature a ‘baseline’ assessment of individuals at the time of committing their extremist offence. In terms of the reports, the average length was 20 pages, with the longest being 146 pages and the shortest 4 pages.

The focus of the study was on ‘Radicalised Extremists’, one of four types of prison-based extremist identified by Silke (2014). These individuals are defined as having entered prison already holding extremist views and engaged in extremist actions outside of a prison environment. Individuals were categorised into one of three groups consistent with the approach taken in previous research (Reinares et al., 2017): Primarily radicalised online (‘Internet’ group); Primarily radicalised offline (‘Face-to-face’ group); and Radicalised through a combination of online and offline influences (‘Hybrid’ group). In order to categorise cases into pathway groups, each report was considered in full. As the SRG and ERG22+ are formulation-guided assessments where authors provide a narrative account of how an individual came to commit an extremist offence, in a number of cases the pathway was clear from the description by the author, which was often informed by accounts provided by the

³ Terrorist offences are those that fall under terrorism legislation (e.g., engage in the preparation of terrorist acts, membership of a proscribed organisation, dissemination of terrorist publications etc.).

⁴ Terrorist-related offences are those that fall under other legislation, but where the motivation is considered extremist (e.g., murder, causing an explosion etc.).

⁵ The SRG and ERG22+ reports are not routinely used in other parts of the UK.

individual during interview. In other reports, the pathway description was less explicit, and more of the detailed background information provided had to be considered. For example, if an individual was reported to have participated in online activity and exchanges with others holding extremist views, without evidence of having engaged in offline interactions or meetings with others, this would be coded 'Internet'. If an individual reported having initially been exposed to extremist materials and discussions online, but also shared their views and had these reinforced after meeting co-ideologues offline, this would be coded as 'Hybrid'.

Analysis of all reports allowed for identification of 235 'Radicalised Extremists', where the radicalisation pathway group could be reliably determined. All subsequent analysis focused on these cases. The sample included males and females of different ages, from a variety of backgrounds and varying degrees of social connectivity. Represented were those affiliated with or influenced by a range of causes and ideologies. Basic demographics are detailed in Table 1.

Procedure and Coding

All reports were manually reviewed by the first author to develop a comprehensive coded data set.⁶ Every report was examined and variables of interest extracted by coding information relevant to an individual's radicalisation pathway, socio-demographic variables, offending history and overall ERG22+ ratings. A codebook was developed including definitions for each variable, with instructions and examples of how to apply the coding frame consistently. This process of developing and verifying the coding system was consistent with previous research (Moreno et al., 2011). To ensure consistency and ease of use of the coding frame, the first author coded all variables of interest initially, then two other coders (the co-authors) independently coded all variables of interest for a selection of cases. The additional coders

⁶ The study received ethical approval from the College Research Ethics Committee at a UK University and approval from the National Research Committee (NRC) as the data related to convicted individuals incarcerated in England and Wales.

were academics with ongoing involvement in the research project and familiarity with quantitative coding procedures. All three coders then collaboratively reviewed the coding of test cases, and where differences were apparent, these were resolved through discussion and reaching a consensus. Outcomes of these discussions were used to refine and clarify aspects of the coding frame.

After identifying those considered ‘Radicalised Extremists’ within the data set and assigning cases to one of three radicalisation pathway groups based on relevance of internet use, socio-demographic and offence-type variables were coded for all cases. Socio-demographic variables included: a) gender (coded as ‘Male’ or ‘Female’); b) age at time of sentencing (coded as ‘Up to and including 25’ or ‘Over 25’); c) place of birth (coded as ‘UK’ or ‘Non-UK’); d) prior offending history (coded as ‘Yes’ or ‘No’); e) prior violent offending history (coded as ‘Yes’ or ‘No’; and f) presence of mental illness/personality disorder (coded as ‘Strongly present’, ‘Partly present’ or ‘Not present’). It should be noted that the corresponding ERG22+ factor for the latter variable is very broad as it includes serious cognitive and intellectual impairments, psychotic disorders, major mood disorders, and personality disorders. These impairments or disorders should be diagnosed according to an official nosological system or standardised assessment (HMPPS, 2019). Where mental illness/personality disorder was coded as present at least to some extent, additional coding of g) type of mental illness/personality disorder was conducted based on formal diagnoses (having reviewed relevant reports, coding options included: ‘Autism spectrum condition’, ‘Depression’, ‘Personality difficulties/disorder’, ‘Schizophrenia’, ‘Obsessive compulsive disorder’, ‘Post-traumatic stress disorder’, ‘Bi-polar disorder’, ‘Anxiety’ and ‘Drug dependency’).

The coding of offence-type variables included: a) violent/non-violent index offence (coded as ‘Violent’ or ‘Non-violent’); b) role in offence (coded as ‘Facilitator’, ‘Financer’, ‘Traveller’ or ‘Attacker’); c) degree of social connection to other extremists offline (coded as ‘Lone’,

‘Small cell’ or ‘Group’); d) ideology (coded as ‘Animal Rights’, ‘Extreme Right Wing’, ‘Islamist Extremist’ or ‘Other Political’); and e) ‘Internet only’ index offence (coded as ‘Yes’ or ‘No’).

Professional ratings of overall levels of engagement (a growing interest in, association with, and increasing commitments to an extremist group, cause and/or ideology), intent (readiness to support and/or use illegal means and/or violence to further the goals of an extremist group, cause or ideology) and capability (ability to cause harm, offend or perpetrate violence on behalf of a group, cause and/or ideology) to commit a violent extremist offence were taken directly from ERG22+ reports for all cases where these ratings were available. These ratings focused on the time when individuals had committed the extremist offence(s) for which they were convicted. These ratings only featured in ERG22+ reports, so were not available for the two cases assessed using the SRG. For the engagement and intent domains, rating options included ‘High’, ‘Moderate-High’, ‘Moderate’, ‘Low-Moderate’, ‘Low’ or ‘Not reported’ and this is how they were coded for analysis. For the capability domain, rating options included ‘Significant’, ‘Significant-Some’, ‘Some’, ‘Some-Minimal’, ‘Minimal’ and ‘Not reported’ and this is how they were coded for analysis.

Results

In terms of the number of individuals within each pathway group, 29 (12%) cases were considered to have primarily radicalised online, 93 (40%) were considered to have primarily radicalised offline, and 113 (48%) were radicalised through both online and offline means.

Socio-demographics profiles per pathway group are summarised in Table 2. All three pathway groups were compared in relation to age (at sentencing), gender, place of birth, prior offending history, prior violent offending history and presence of mental illness/personality disorder using chi-squared tests and Fisher’s exact tests.

A significant relationship was found between age and primary method of radicalisation ($\chi^2 = 12.68, p < .01$). Bonferroni-adjusted pairwise comparisons showed a significant difference between the Hybrid and Face-to-face groups only. Odds ratios indicated that those who radicalised through a combination of online and offline influences were 2.67 times more likely to have been in the younger age category ('Up to and including 25') than those who primarily radicalised offline. No other significant relationships between profile or vulnerability factors and pathway groups were found.

A significant relationship was found between convicted offending history and primary method of radicalisation ($\chi^2 = 9.44, p < .01$). Pairwise comparisons showed a significant difference between the Hybrid and Face-to-face groups only. Those who primarily radicalised offline were 2.55 times more likely than those radicalised through a combination of online and offline influences to have a convicted offending history. A significant relationship was also found between convicted violent offending history and primary method of radicalisation ($\chi^2 = 11.86, p < .01$). Pairwise comparisons showed a significant difference between the Hybrid and Face-to-face groups only. Those who primarily radicalised offline were 2.79 times more likely than those radicalised through a combination of online and offline influences to have a convicted violent offending history.

A significant relationship was found between presence of mental illness/personality disorder and primary method of radicalisation ($p = 0.02$, Fisher's exact test). Where mental illness/personality disorder was assessed as strongly present, the Internet group showed a significantly higher number of cases compared to both the Hybrid and Face-to-face groups. After combining partly present and not present ratings, those who primarily radicalised online were 6.27 times more likely to have a strongly present rating for the presence of mental illness/personality disorder than those who primarily radicalised offline, and they were 4.43

times more likely to have a strongly present rating for the presence of mental illness/personality disorder than those radicalised through both online and offline influences.

For the 36 cases where the presence of mental illness/personality disorder had been assessed as present to some degree (either strongly present or partly present), the types of mental illness or disorder based on formal diagnoses are displayed in Table 3. As frequency counts of type of mental illness/personality disorder were low, no pathway group comparisons were conducted.

In the next set of analyses, radicalisation pathway groups were compared on offence-type variables: whether cases had committed a violent or non-violent index offence, the role taken during the offence, degree of social connection to other extremists offline and the ideology/cause (see Table 4).

A significant relationship was found between violent/non-violent index offence and primary method of radicalisation ($\chi^2 = 10.21, p < .01$) such that the Face-to-face group differed significantly from both the Internet and Hybrid groups. Those who primarily radicalised offline were 3.62 times more likely to have committed a violent index offence than those who primarily radicalised online. Those who primarily radicalised offline were 1.95 times more likely to have committed a violent index offence than those radicalised through a combination of online and offline influences.

In terms of role taken when committing the index offence, cases were initially coded using four categories ('Attacker,' 'Traveller,' 'Financer' and 'Facilitator'). However, for the purpose of analysis, those identified as attackers were compared with all other roles. A significant relationship was found between role in offence and primary method of radicalisation ($\chi^2 = 10.21, p < .01$), with the Face-to-face group significantly different from both the Internet and Hybrid groups. Those who primarily radicalised offline were 3.61 times more likely to be an

Attacker than those who primarily radicalised online, and 1.95 times more likely to be an Attacker than those radicalised through a combination of online and offline influences.

A significant relationship was found between degree of social connection and primary method of radicalisation ($p < .001$, Fisher's exact test) such that the Internet group differed significantly from both the Face-to-face and Hybrid groups. After combining the small cell and group categories, those who primarily radicalised online were 53.61 times more likely to have been lone than those who primarily radicalised offline, and 25.17 times more likely than those radicalised by both online and offline influences. After combining the small cell and lone categories, it was found that those who primarily radicalised offline were 34.91 times less likely to be a member of a group than those who primarily radicalised online, whilst those who radicalised by both online and offline influences were 19.66 times more likely to be a member of a group than those who primarily radicalised online.

In terms of ideology/cause to which cases subscribed, the four ideological categories coded were 'Islamist Extremist' (76%), 'Extreme Right Wing' (11%), 'Animal Rights' (7%) and 'Other Political' (6%). As the majority of 'Radicalised Extremists' were Islamist extremists, this group was compared with all other ideologies to enable further analysis to be conducted. A significant relationship was found between ideology and primary method of radicalisation ($\chi^2 = 18.78$, $p < .001$). Those who primarily radicalised online were 3.93 times more likely to be an Islamist extremist than those who primarily radicalised offline. Those who radicalised through a combination of online and offline influences were also 3.93 times more likely to be an Islamist extremist than those who primarily radicalised offline.

To account for changes in the threat landscape over time, including a reported rise in lone-actor terrorism (Worth, 2016), further analysis was conducted across offence-type variables for the 29 individuals who primarily radicalised online. This involved comparing those sentenced

between 2005-14 (12 cases) with those sentenced between 2015-17 (17 cases). For this pathway group, a smaller proportion had committed a violent index offence and assumed the role of an attacker of those sentenced in 2015-17 compared to 2005-14 (6% vs 42% respectively). A smaller proportion of cases were considered lone of those sentenced in 2015-17 compared to 2005-14 (56% vs 73% respectively). For ideology, all cases who primarily radicalised online and were sentenced in 2015-17 were Islamist extremists (100%), compared to 67% of those sentenced in 2005-14. These differences may reflect the extent to which online engagement has become a routine activity for many individuals over time; they may also point to increased monitoring of online content and platforms known for extremist tendencies, resulting in individuals being apprehended at an earlier stage in the radicalisation process and prior to taking violent action offline.

Within the sample, 35 of 235 (15%) individuals were found to have been convicted for an extremist offence that took place solely online, with no other charges relating to offline activity. Whilst detailed analysis was not possible comparing pathway groups, 12 of these individuals had primarily radicalised online (41% of the total number in this pathway group), four individuals had primarily radicalised offline (4% of the total number in this pathway group) and 19 of these individuals were radicalised by both online and offline influences (17% of the total number in this pathway group).

As a final set of analysis, radicalisation pathway groups were compared in professional assessments of overall level of engagement, intent and capability to commit violent extremist offences at the time of offending.

Overall engagement ratings were available for 182 of the 'Radicalised Extremists'. Using the Kruskal-Wallis test, treating ratings as ordinal data, a significant relationship was found between overall engagement ratings and primary method of radicalisation ($H = 10.68$, $df = 2$,

$p < .01$), with a mean rank engagement score⁷ of 68.16 for those primarily radicalised online, 84.51 for those primarily radicalised offline and 101.71 for those radicalised by both online and offline influences. Dunn's pairwise tests with Bonferroni adjustment were conducted for the three pairs of radicalisation pathway groups. A significant difference was found between those who primarily radicalised online and those radicalised through both online and offline influences ($p < .05$). No significant differences were found between other pairs.

Overall intent ratings were available for 184 of the 'Radicalised Extremists'. A significant relationship was found between overall level of intent ratings and primary method of radicalisation ($H = 14.38$, $df = 2$, $p < .01$), with a mean rank intent score of 57.20 for the Internet group, 88.99 for the Face-to-face group and 102.92 for the Hybrid group. Dunn's pairwise tests with Bonferroni adjustment were conducted for the three pairs of radicalisation pathway groups. Significant differences were found between those who primarily radicalised online and those radicalised through both online and offline influences ($p < 0.01$) as well as between those primarily radicalised online and those primarily radicalised offline ($p < 0.05$). No other significant differences were found between pairs.

Overall capability ratings were available for 186 of the 'Radicalised Extremists'. A significant relationship was found between overall level of capability ratings and the three radicalisation pathway groups ($H = 18.84$, $p < .01$), with a mean rank capability score of 55.36 for the Internet group, 92.48 for the Hybrid group and 106.27 for the Face-to-face group. Dunn's pairwise tests with Bonferroni adjustment showed significant differences between those who primarily radicalised online and those radicalised through both online and offline influences ($p < 0.01$) as well as between those who primarily radicalised online and those who

⁷ Mean rank scores were calculated by ranking all ratings ascendingly regardless of pathway group membership from 1 to 182 (in the case of overall engagement ratings), before calculating average rank score for each pathway group (Low = 0, Low/Medium = 1, Medium = 2, Medium/High = 3, High = 4).

primarily radicalised offline ($p < 0.01$). No other significant differences were found between pairs.

In sum, key differences between radicalisation pathway groups in terms of professionally assessed levels of engagement, intent and capability to commit violent extremist acts at the time of offending were found. Those who primarily radicalised online were assessed as having the lowest overall levels of engagement with an extremist group or cause, the lowest levels of intent and lowest levels of capability to commit violent extremist acts. In contrast, those who radicalised by online and offline influences were assessed as having the highest overall levels of engagement with an extremist group or cause and highest overall levels of intent at the time of offending. Those who primarily radicalised offline were assessed at the time of offending as having the highest overall assessed levels of capability to commit violent extremist acts.

Discussion

Summary of findings and key insights

The findings from this study have provided eight key insights concerning the profiles, offence histories and risk of perpetrating violent extremist acts by individuals convicted for extremist offences who have taken various radicalisation pathways in relation to internet use. First, the majority of individuals convicted of extremist offences within this study were found to have radicalised through both online and offline means (48%). This finding is consistent with other studies focusing on individuals convicted of extremist offences in other countries (see Whittaker, 2021), suggesting that most operate across both the online and offline domains.

Second, members of the three radicalisation pathway groups appear markedly different in terms of their socio-demographic profiles, offence histories and socialisation. This finding supports previous research suggesting that no single profile exists for those who have committed extremist offences (Borum, 2004; Horgan, 2003; Silke, 2014). However, the

emerging profiles for members of each of the three radicalisation pathway groups does provide some support for recent studies that have disaggregated individuals who have committed extremist offences in attempts to develop profiles. Unlike other studies that have done this either in terms of social connectedness to other extremists (Corner et al., 2016), ideology (Jensen et al., 2020) or based on roles and responsibilities that members hold (Gill & Young, 2011), the findings of this study suggest merit in future research disaggregating based on pathways to extremist offending.

Third, the findings from this study suggest that those more vulnerable to online radicalisation are younger males and females, who are typically socially isolated, with a limited (violent) offending history and show a greater likelihood of suffering from mental illness or personality disorder. The most likely ideological cause is Islamist extremism and the types of extremist offences committed by members of this group are typically non-violent, with comparatively few considered to be attackers, and offences often taking place in online settings. Comparing offence-type variables across time of those who primarily radicalised online suggest they may be becoming less violent in terms of the offences they commit, more socially connected offline and increasingly likely to affiliate with an Islamist extremist ideology.

Fourth, in contrast to online radicalisation, those most likely to radicalise offline are older males, socially connected, with a prior offending history, including convictions for violence. It appears less common for mental illness and personality disorder to feature for individuals who primarily radicalise in offline settings. Following this offline radicalisation pathway is more likely to result in support for a wider range of ideologies and causes, beyond that of Islamist extremism. They are most likely to be attackers, committing violent extremist offences offline.

Fifth, those who radicalised through online and offline influences often fell between the other two pathway groups in terms of socio-demographic and offence-type variables. Members

were typically male, comparatively young and more likely to support an Islamist extremist ideology than those who primarily radicalised offline. In common with those who primarily radicalised online, they are less likely to have committed a violent extremist offence and have an offending history, including convictions for violence, than those who primarily radicalised offline. However, like those who primarily radicalised offline, these individuals were often socially connected with other extremists. In addition, mental illness and personality disorders were less common than for those who primarily radicalised online.

When reflecting on these insights from radicalisation group profiles, overall these profiles seem plausible and consistent with previous literature. Age differences are not particularly surprising given previous studies have found that younger individuals who have committed extremist offences are more likely to engage in online activities, such as virtual learning and virtual interaction with others, than older individuals (Gill & Corner, 2015). In relation to finding that those with prior criminal histories and previous violent convictions were more likely to commit violent extremist offences, as found for those who primarily radicalised offline, this association has also previously been made in the literature (Gill & Corner, 2015).

When considering higher prevalence of mental illness and/or personality disorder for those who primarily radicalised online, this may be accounted for by the higher proportion of lone actors within this pathway group, given studies have shown higher rates of mental disorder for lone actors compared with group actor terrorists (Corner & Gill, 2015; Kenyon et al., 2021). It may also be the case that individuals with mental illness or personality disorders are particularly vulnerable to being exposed to progressively more attention grabbing and extreme content as a result of online algorithms. However, there is likely to be a proportion of cases with undiagnosed mental illness or personality disorders, particularly given the regularly stressful experience of 'being' a terrorist may lead to psychological suffering due to associated activities and lifestyle (Horgan, 2003). In this study, it was found that personality

disorder/difficulties, depression, schizophrenia and multiple difficulties/disorders were the most prevalent types of mental health issues across the convicted extremist cohort. This finding is consistent with the systematic literature review by Gill et al., (2021) which found that mental health issues, including depression, suicidal ideation, or personality disorders may increase a person's vulnerability to extremist ideology or behaviour. However, low frequency counts for each category meant it was not possible to conduct further statistical analysis comparing pathway groups.

This study has provided some useful insights into typical radicalisation pathways for various extremist ideologies and causes. The finding that members of pathway groups where internet use is relevant are more likely to support an Islamist extremist ideology compared with those who primarily radicalised offline supports previous research that found that those espousing an Islamist extremist ideology were more likely to learn through virtual sources, whilst those motivated by single issues (such as animal rights activists) were less likely to learn or interact virtually (Gill & Corner, 2015).

As a sixth key insight, the three pathway groups differed in terms of overall engagement, intent and capability ratings to commit violent extremist acts as reported within ERG22+ assessments. Those who primarily radicalised online had the lowest overall levels of engagement, indicating that these individuals were typically less involved or identified with an extremist group or cause at the time of offending than those taking other radicalisation pathways. This finding may reflect that some individuals who radicalised online were apprehended at an earlier stage in the radicalisation process, after breaking the law by perhaps accessing or sharing extremist content online, but before contacting others offline or taking violent action in an offline setting. In contrast, those exposed to both online and offline influences had the highest level of engagement, suggesting they were potentially further along the radicalisation process. This also highlights the significant role played by offline contact

with other extremists in strengthening involvement and deepening a sense of identity with an extremist group or cause.

Seventh, those who primarily radicalised online were found to have the lowest levels of intent to commit extremist offences with potential to cause serious and significant harm. Once again, it would appear contact with other extremists in an offline setting plays a crucial role in moving individuals from holding extremist views and taking an interest in a specific group or cause, to a desire to act on behalf of that group or cause. This is reflected by the finding that those subject to online and offline influences had the highest assessed levels of intent. However, the combination effect of being exposed to extremist views in both an online and offline setting appears more powerful than exposure to offline influences alone, given those who primarily radicalised offline had lower overall levels of intent than those radicalised through both online and offline influences. One possible interpretation is that the more intense online socialising occurred for those radicalised through a combination of online and offline influences, as the more substantial online exchanges led to coordinating concerted offline action, even if only to arrange offline meetings with each other. It would follow that those receiving the highest level of exposure to extremist rhetoric would be those engaging with such content within both the online and offline domains. This high level of exposure is likely to increase the extent to which these ideas are reinforced and increase the likelihood of this leading to an individual overidentifying with an extremist group or cause.

Eighth, as with engagement and intent, those who primarily radicalised online were found to have the lowest levels of capability to commit extremist offences with the potential to cause serious and significant harm. In contrast, those who primarily radicalised offline had the highest overall levels of capability, suggesting the importance of offline contacts in providing individuals with the necessary knowledge, skills and networks to take violent action in support of an extremist group or cause. This supports the view of Christmann (2012) who suggested

that face-to-face contact remains important to recruitment and group dynamics that can drive radicalisation, especially that which leads to violence. Gill (2012) also reported that groups tend to facilitate the moral disengagement process and provide necessary operational capabilities to carry out a terrorist attack. Therefore, in the absence of a group setting, it can be more difficult for an individual to commit violent extremist acts for both psychological and practical reasons. Others have suggested that being connected to a tightly knit clique of like-minded others is of greater importance than embracing a specific ideology or being exposed to extremist propaganda online (Meleagrou-Hitchens & Kaderbhai, 2017).

Implications of the research for countering violent extremism (CVE)

Based on the findings of this study, it is first recommended that the pathway profiles reported are utilised as a starting point for those tasked with disrupting and preventing online and offline extremist offending. Being aware of these profiles may help with the identification of those who are likely most at risk or vulnerable to being drawn into extremism. A second recommendation is that differences found in overall engagement, intent and capability ratings across radicalisation pathway groups should influence the way in which pathway group members are prioritised, risk assessed and managed in the future. Related to this, the differences found should also be reflected in the approaches taken during rehabilitation efforts in both custodial and community settings. Despite the high levels of media and public scrutiny that exist around extremist offending, it is important that responses to such offending are proportionate to avoid risks associated with excessive periods of detention or inadvertently fuelling processes of radicalisation due to disproportionate measures. The importance of proportionality in response was also emphasised by the United Nations High Commissioner when reporting on best practices and lessons learned on how protecting and promoting human rights can help counter violent extremism (UN Human Rights Council, 2016).

One implication of the findings of this study is that those who have primarily radicalised online, including lone actors (the majority of whom fell within this pathway group), may have been given an unduly prominent role and considered a greater risk than is reflected in reality. This supports the arguments by those who consider the Internet's role in radicalisation to have been exaggerated and those claiming that online activity exerts little influence on offline behaviour. The findings also add weight to the suggestion that online extremists are merely 'amateurs', engaging in a form of online showboating, rather than having any real commitment or intention towards real-world violence (Conway, 2016). As previously discussed, given lower levels of engagement, intent and capability ratings for individuals who primarily radicalised online, it may be more appropriate to offer lower intensity interventions to rehabilitate these individuals, with less stringent restrictions to reflect their lower risk status. However, a word of caution is necessary as it would be amiss to assume these individuals pose minimal risk. Instead, it may be that they pose more of a secondary risk through their increased networking and sharing of extremist materials online, which potentially have radicalising effects on others and could lead to others committing acts of violence. It is also possible that the lower ratings for those who primarily radicalised online reflect either the low threshold for committing online extremist offences or the fact these individuals were arrested sooner. It is impossible to know what other types of extremist activities may have been undertaken by these individuals in either an online or offline domain had they not been arrested.

In terms of the focus on custody or community-based rehabilitation programmes, a third recommendation is that for those individuals who have primarily radicalised online and are considered less engaged with an extremist group or cause, they may benefit from interventions that primarily focus on helping them get back to a more meaningful life by working towards positive approach goals. In contrast, those who are considered to be the most highly engaged with an extremist group or cause having been subject to both online and offline influences may

require more intensive rehabilitation efforts. This may include content that specifically focuses on addressing extremist beliefs and ideology.

Another important consideration is that those who primarily radicalised online prior to arrest can be subject to a form of post-offence offline radicalisation through their association with others convicted of extremist offences within custodial settings. This is particularly the case in prisons with high numbers of individuals convicted of extremist offences, such as high security establishments. Given that those exposed to a combination of online and offline influences during the radicalisation process in this study were typically found to be the most engaged with an extremist group or cause, with highest levels of intent to commit violent extremist offences, a fourth recommendation is that careful consideration is given to how best to disperse individuals who are either vulnerable to or convicted of extremist offences throughout the custodial environment. This is all the more important given previous research suggests that individuals can progress through different roles during their involvement with extremist groups or causes (e.g., from providing material support to executing violence), and in doing so, become more or less risky over time (Horgan et al., 2016).

Study Limitations and Directions for Future Research

Key insights and recommendations provided here need to be seen in light of several limitations. First of all, a number of individuals who have committed extremist offences in England and Wales were not included within the sample. This includes those who died during the commission of offences, those acquitted at trial and those never identified and/or apprehended by the police. Second, as with any complex material, there are challenges when it comes to distinguishing between missing data (i.e., reports do not touch upon particular topics) and variables that could reliably be coded as not present. Third, the findings from this study reflect the population of those convicted of extremist offences in England and Wales

where an SRG or ERG22+ report was completed up to the end of December 2017. It is possible the demographics of the convicted extremist cohort will have changed since this time. Fourth, the smaller number of individuals supporting a non-Islamist extremist ideology should be recognised as a limitation given they made up only 24% of the sample. For this reason, some additional caution is necessary in generalising findings to other ideological groups or causes.

Future directions for research include adding more cases to the existing data set from reports completed in 2018 onwards as this is likely to offer new insights. Inclusion of more recent cases may provide important insights into the impact of the COVID-19 pandemic from early 2020 on radicalisation pathways, where it is known that people across age groups were spending more time online than ever before and associated restrictions making offline, in-person contact with others more difficult (UN-CTED, 2020). In addition, adding primary data through interviews with either current or former extremists may help researchers and policymakers obtain a more complete understanding of socio-demographic profiles and offence histories of convicted extremists, along with the pathways taken to offending. Recommended future directions for research include conducting detailed qualitative analysis of a number of case studies within this data set. This would provide a more in-depth analysis of the relevance of specific engagement, intent and capability factors for individuals within each radicalisation pathway group, and how these contributed to committing online or offline offences. Given there are 13 engagement factors, six intent factors and three capability factors within the ERG22+, with flexibility to add additional factors if considered relevant, there is substantial scope to provide further detailed analysis at either an individual or small group level.

Previous research has found that recidivism rates for those who commit extremist offences are low (Silke, 2014) and typically lower than for those convicted of other types of offences (Hodwitz, 2019, 2021). When those convicted of extremist offences do reoffend, offences tend to be minor violations, rather than serious further offences (Hodwitz, 2019, 2021). There have

been exceptions however, including the terrorist act on London Bridge in November 2019 by Usman Khan whilst under supervision by the Probation Service (BBC News, 2019) and the attack by Sudesh Amman on Streatham High Road in February 2020 where two people were stabbed shortly after his release from prison (BBC News, 2020). Despite such cases attracting high levels of public and media attention, official figures recently published suggested that only 3% of all individuals convicted of terrorist offences who had been released since January 2013 (196) were subsequently convicted of a further terrorist offence (Dearden, 2020). This has resulted in questions being asked about the value of intensive post-release surveillance and monitoring across this offending group. However, it is currently unknown whether recidivism rates may differ depending on the radicalisation pathway taken by individuals and given this knowledge gap, future research should explore this area.

Conflict of Interest Statement

The authors confirm that they have no conflict of interest to declare.

References

- BBC News. (2019, November 30). *London Bridge: Attacker had been convicted of terror offence*.
<https://www.bbc.co.uk/news/uk-50610215>
- BBC News. (2020, February 3). *Streatham attacker named as Sudesh Amman*.
<https://www.bbc.co.uk/news/uk-51351844>
- Bergin, A., Osman, S. B., Ungerer, C., & Yasin, N. A. M. (2009). *Countering Internet radicalisation in Southeast Asia, Special Report*. Barton, Australia: Australian Strategic Policy Institute.
<https://www.aspi.org.au/report/special-report-issue-22-countering-internet-radicalisation-southeast-asia>
- Borum, R. (2004). *Psychology of Terrorism*. Tampa, FL: University of South Florida.
- Borum, R. (2003). Understanding the Terrorist Mind-Set. *FBI Law Enforcement Bulletin*, 72, 7-10.
- Borzekowski, D. L. G., Schenk, S., Wilson, J. L., & Peebles, R. (2010). e-Ana and e-Mia: A content analysis of pro-eating disorder Web sites. *American Journal of Public Health*, 100(8), 1526-1534. <https://doi.org/10.2105/AJPH.2009.172700>
- Branley, D. B., & Covey, J. (2017). Is exposure to online content depicting risky behavior related to viewer's own risky behaviour offline? *Computers in Human Behaviour*, 75, 283-287.
<https://doi.org/10.1016/j.chb.2017.05.023>
- Browne, K. D., & Hamilton-Giachritsis, C. (2005). The influence of violent media on children and adolescents: a public-health approach. *Lancet* 365, 702–710. [https://doi.org/10.1016/S0140-6736\(05\)17952-5](https://doi.org/10.1016/S0140-6736(05)17952-5)

Christmann, K. (2012). *Preventing religious radicalisation and violent extremism: A systematic review of the research evidence*. London: Youth Justice Board for England and Wales.

https://www.safecampuscommunities.ac.uk/uploads/files/2016/08/yjb_preventing_violent_extremism_systematic_review_requires_uploading.pdf

Conway, M. (2016). Determining the role of the Internet in violent extremism and terrorism: Six suggestions for progressing research. *Studies in Conflict & Terrorism*, 40(1), 77-98.

<https://doi.org/10.1080/1057610X.2016.1157408>

Corner, E., & Gill, P. (2015). A false dichotomy? Mental illness and lone-actor terrorism. *Law and Human Behavior*, 39(1), 23-34. doi:10.1037/lhb0000102

Corner, E., Gill, P., & Mason, O. (2016). Mental Health Disorders and the Terrorist: A Research Note Probing Selection Effects and Disorder Prevalence. *Studies in Conflict & Terrorism*, 39(6), 560-568.

doi:10.1080/1057610X.2015.112009

Dearden, L. (2020, February 12). Six extremists convicted of further terror offences after being released from prison since 2013. *The Independent*.

<https://www.independent.co.uk/news/uk/crime/emergency-terror-law-terrorists-releaseprison-debate-a9330421.html>.

Dunlop, S. M., More, E., & Romer, D. (2011). Where do youth learn about suicides on the Internet, and what influence does this have on suicidal ideation? *Journal of Child Psychology and Psychiatry, and Allied Disciplines*, 52(10), 1073-1080. <https://doi.org/10.1111/j.1469-7610.2011.02416.x>

Gill, P. (2012). Terrorist violence and the contextual, facilitative and causal qualities of group-based behaviors: A case study of suicide bombing plots in the United Kingdom. *Aggression and Violent Behavior, 17*(6), 565-74.

Gill, P., Clemmow, C., Hetzel, F., Rottweiler, B., Salman, N., van der Vegt, I., Marchment, Z., Schumann, S., Zolghadriha, S., Schulten, N., Taylor, H., & Corner, E. (2021). Systematic Review of Mental Health Problems and Violent Extremism. *Journal of Forensic Psychiatry and Psychology, 32*(1), 51-78. <https://doi.org/10.1080/14789949.2020.1820067>

Gill, P., & Corner, E. (2015). Lone-actor terrorist use of the Internet and behavioural correlates. In L. Jarvis, S. Macdonald & T. Chen (Eds.), *Terrorism online: Politics, law, technology and unconventional violence* (pp. 35-53). London: Routledge.

Gill, P., Corner, E., Conway, M., Thornton, A., Bloom, M., & Horgan, J. (2017). Terrorist use of the internet by the numbers: Quantifying behaviors, patterns, and processes. *Criminology and Public Policy, 16*(1), 99-117. <https://doi.org/10.1111/1745-9133.12249>

Gill, P., & Horgan, J. (2013). Who were the Volunteers? The Shifting Sociological and Operational Profile of 1240 Provisional Irish Republican Members. *Terrorism and Political Violence, 25*(3), 435 - 456. <http://doi.org/10.1080/09546553.2012.664587>.

Gill, P., & Young, J. K. (2011). *Comparing Role-Specific Terrorist Profiles*. Paper Presented at the American Society of Criminology Annual Meeting, Washington D.C.
<http://dx.doi.org/10.2139/ssrn.1782008>

HM Government. (2012). *Channel: Vulnerability Assessment Framework*.
<https://www.gov.uk/government/publications/channel-vulnerability-assessment>

HM Prison and Probation Service. (2019). *Extremism Risk Guidance (ERG) 22+ - Structured professional guidelines for assessing risk of extremist offending – Manual* (version 1.2). Intervention Services (Internal document).

Hodwitz, O. (2019). The Terrorism recidivism study (TRS): Examining recidivism rates for post-9/11 offenders. *Perspectives on Terrorism* 13(2), 54-64.

Hodwitz, O. (2021). The Terrorism recidivism study (TRS): An update on data collection and results. *Perspectives on Terrorism*, 15(4), 27-38.

Horgan, J. (2003). The social and psychological characteristics of terrorism and terrorists. In T. Bjorgo (Ed.), *A forerunner to fighting terrorism for humanity: A conference on the roots of evil*. New York. Norwegian Institute of International Affairs and Norwegian Ministry of Foreign Affairs (pp. 44-53).

Horgan, J., Shortland, N., Abbasciano, S., & Walsh, S. (2016). Actions speak louder than words: A behavioural analysis of 183 individuals convicted for terrorist offenses in the United States from 1995 to 2012. *Journal of Forensic Sciences* 61(5), 1228-1237. <https://doi.org/10.1111/1556-4029.13115>

Jensen, M., James, P., & Yates, E. (2020). Contextualizing Disengagement: How Exit Barriers Shape the Pathways Out of Far-Right Extremism in the United States. *Studies in Conflict and Terrorism*. Advance online publication. <https://doi.org/10.1080/1057610X.2020.1759182>

Kenyon, J., Baker-Beall, C., & Binder, J. (2021). Lone-actor terrorism—a systematic literature review. *Studies in Conflict & Terrorism*. Advance online publication. <https://doi.org/10.1080/1057610X.2021.1892635>

National Offender Management Service. (2017). *ERG22+ & Extremism Risk Screen: Summary and overview*. London: Ministry of Justice.

Meleagrou-Hitchens, A., & Kaderbhai, N. (2017). *Research perspectives on online radicalisation: A literature review 2006-2016*. VOX-Pol Network of Excellence.

https://icsr.info/wp-content/uploads/2017/05/ICSR-Paper_Research-Perspectives-on-Online-Radicalisation-A-Literature-Review-2006-2016.pdf (accessed 01 November 2021)

Moreno, M. A., Briner, L. R., Williams, A., Walker, L., & Christakis, D. A. (2009). Real use or “real cool”: Adolescents speak out about displayed alcohol references on social networking websites. *The Journal of Adolescent Health: Official Publication of the Society for Adolescent Medicine*, 45(4), 420-422. <https://doi.org/10.1016/j.jadohealth.2009.04.015>

Moreno, M. A., Egan, K. G., & Brockman, L. (2011). Development of a researcher codebook for use in evaluating social networking site profiles. *Journal of Adolescent Health*, 49(1), 29-35.
doi:10.1016/j.jadohealth.2011.04.015

Perliger, A., Koehler-Derrick, G., & Pedahzur, A. (2016). The gap between participation and violence: Why we need to disaggregate terrorist ‘profiles’. *International Studies Quarterly* 60(2), 220-229. <https://doi.org/10.1093/isq/sqv010>

Pressman, E., Duits, N., Rinne, T., & Flockton, J. (2018). *VERA-2R A Structured Professional Judgement Approach*. European Commission https://ec.europa.eu/home-affairs/node/11702_en.

Reinares, F., García-Calvo, C., & Vicente, A. (2017). Differential association explaining jihadi radicalisation in Spain: A quantitative study. *CTC Sentinel* 10(6), 29-34.

Russell, C. A., & Miller, B. H. (1977). Profile of a Terrorist. *Terrorism: An International Journal*, 1(1), 17–34.

Silke, A. (2014). Risk assessment of terrorist and extremist prisoners. In A. Silke (Ed.), *Prisons, Terrorism and Extremism: Critical Issues In Management, Radicalisation and Reform* (pp. 108-121). London: Routledge.

Simcox, R., & Dyer, E. (2013). *Al Qaeda in the United States: A Complete Analysis of Terrorism Offenses*. London, UK: The Henry Jackson Society.

Stevens, T., & Neumann, P. (2009). *Countering online radicalisation: A strategy for action*. London: International Centre for the Study of Radicalisation.
https://cst.org.uk/docs/countering_online_radicalisation1.pdf

Topping, A. (2014, March 11). Self-harm sites and cyberbullying: The threat to children from web's dark side: Child safety groups warn of lost generation as fears grow over mental health of vulnerable teenagers. *The Guardian*. <http://www.theguardian.com/society/2014/mar/10/self-harm-sites-cyberbullying-suicide-web>

United Nations Human Rights Council (2016). *Report on best practices and lessons learned on how protecting and promoting human rights contribute to preventing and countering violent extremism*. A/HRC/33/29. <https://www.un.org/sc/ctc/news/document/ahrc3329-report-on-best-practices-and-lessons-learned-on-how-protecting-and-promoting-human-rights-contribute-to-preventing-and-countering-violent-extremism/>

United Nations Security Council Counter-Terrorism Committee Executive Directorate (2020). *The impact of COVID-19 pandemic on terrorism, counterterrorism and countering violent extremism*.

https://www.un.org/securitycouncil/ctc/sites/www.un.org.securitycouncil.ctc/files/files/documents/2021/Jun/cted-paper-the-impact-of-the-covid-19-pandemic-on-counter-t_0.pdf

Webster, S., Kerr, J., & Tompkins, C. (2017). *A process evaluation of the structured risk guidance for extremist offenders: Final report*. Ministry of Justice Analytical Series. London, UK: National Centre for Social Research.

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/661787/process-evaluation-srg-extremist-offender-report.pdf

Whittaker, J. (2021). The online behaviors of Islamic state terrorists in the United States. *Criminology and Public Policy*, 20, 177-203. <https://doi.org/10.1111/1745-9133.12537>

Worth, K. (2016, July 14). Lone-wolf attacks are becoming more common-and more deadly. Frontline. <https://www.pbs.org/wgbh/frontline/article/lone-wolf-attacks-are-becoming-more-common-and-more-deadly/>

Young, S. D., & Jordan, A. H. (2013). The influence of social networking photos on social norms and sexual health behaviors. *Cyberpsychology, Behavior, and Social Networking*, 16(4), 243-247. <https://doi.org/10.1089/cyber.2012.0080>

Tables

Table 1. Basic demographics for 235 radicalised extremists included within the analysis

Demographic		n	%
Gender	Male	211	90
	Female	24	10
Age [†] (at time of sentencing)	Mean age = 29		-
	Range = 17– 63		-
	Up to and including 25	99	42
	Over 25	136	58
Place of birth [‡]	UK	163	73
	Non-UK	61	27
Ideology/cause	Animal Rights	16	7
	Extreme Right Wing	25	11
	Islamist extremist	179	76
	Other Political [§]	15	6

[†]Based on 233 cases as age at time of sentencing could not be identified in 2 cases

[‡]Based on 224 cases as place of birth could not be identified in 11 cases

[§]‘Other Political’ is a category to reflect a number of individuals described as anti-establishment or supporting an extreme far-left ideology, along with those affiliated with nationalist or separatist movements.

Table 2. Percentages of socio-demographic variables across pathway groups

Profile and vulnerability factors (n = 235, unless specified)		Internet (n = 29) Percentage (%)	Hybrid (n = 113) Percentage (%)	Face-to-face (n = 93) Percentage (%)
Age at sentencing**	Up to + including 25	52	51†	28†
	Over 25	48	49†	72†
Gender	Male	79	94	88
	Female	21	6	12
Place of birth (n = 224)	UK	78	72	72
	Non-UK	22	28	28
Prior offending history** (n = 233)	Yes	28	29†	51†
	No	72	71†	49†
Prior violent offending history** (n = 232)	Yes	10	15†	33†
	No	90	85†	67†
Presence of mental illness/personality disorder * (n = 229)	Strongly present	25†‡	7‡	5†
	Partly present	4	10	5
	Not present	71	83	89

Note: Chi-squared tests were used for overall associations, except for presence of mental illness and degree of social connection where Fisher's exact test was used due to low expected cell count. **significant association with radicalisation pathway at $p < .01$. ***significant association with radicalisation pathway at $p < .001$. †,‡: significant pairwise post hoc comparisons, Bonferroni-adjusted, at $p < .05$; in each row, same indices indicate a difference in proportions.

Table 3. Frequency of type of mental illness/personality disorder

Type of mental illness/personality disorder (n = 36)	Frequency
Personality disorder/difficulties	13
Depression	9
Schizophrenia	6
Autism spectrum condition	4
Post-traumatic stress disorder	3
Obsessive-compulsive disorder	3
Anxiety disorder	2
Bi-polar disorder	1
Drug dependency	1

Note: For 5 (14%) of the 36 cases, co-morbidity was relevant with more than one type of mental illness/personality disorder identified.

Table 4. Percentages of offence-type variables across pathway groups

Offence-type variable (n = 235, unless specified)		Internet (n = 29) Percentage (%)	Hybrid (n = 113) Percentage (%)	Face-to-face (n = 93) Percentage (%)
Violent/non-violent index offence**	Violent	21†‡	33†	49†‡
	Non-violent	79‡	67†	51†‡
Role in offence**	Attacker	21†‡	33†	49†‡
	All other roles	79‡	67†	51†‡
Degree of social connection*** (n = 233)	Lone	63†‡	6‡	3†
	Small cell (2-3)	19	12	8
	Group	19†‡	82‡	89†
Ideology***	Islamist extremist	86‡	86†	61†‡
	All other ideologies	14‡	14†	39†‡

Note: Chi-squared tests were used for overall associations, except for presence of mental illness and degree of social connection where Fisher's exact test was used due to low expected cell count. **significant association with radicalisation pathway at $p < .01$. ***significant association with radicalisation pathway at $p < .001$. †,‡: significant pairwise post hoc comparisons, Bonferroni-adjusted, at $p < .05$; in each row, same indices indicate a difference in proportions.