



Characteristics of autism spectrum disorder and susceptibility to radicalisation among young people: a qualitative study

Florian Walter , Sarah Leonard , Suhel Miah & Jenny Shaw

To cite this article: Florian Walter , Sarah Leonard , Suhel Miah & Jenny Shaw (2020): Characteristics of autism spectrum disorder and susceptibility to radicalisation among young people: a qualitative study, The Journal of Forensic Psychiatry & Psychology, DOI: [10.1080/14789949.2020.1854831](https://doi.org/10.1080/14789949.2020.1854831)

To link to this article: <https://doi.org/10.1080/14789949.2020.1854831>



Published online: 07 Dec 2020.



Submit your article to this journal [↗](#)



Article views: 2



View related articles [↗](#)



View Crossmark data [↗](#)



Characteristics of autism spectrum disorder and susceptibility to radicalisation among young people: a qualitative study

Florian Walter^{a,b}, Sarah Leonard^a, Suhel Miah^c and Jenny Shaw^{id}^a

^aCentre for Mental Health and Safety, University of Manchester, Manchester, UK; ^bGreater Manchester Mental Health NHS Foundation Trust, Manchester, UK; ^cNew Bridge Multi Academy Trust, Oldham, UK

ABSTRACT

Previous studies suggest an overrepresentation of autistic people among terrorist offenders, specifically lone-actors, as compared to the general population. At present, there is little literature which examines core autistic traits and how these may make individuals susceptible to adopting radical ideology. Such findings would support the identification of individuals who may require intervention, and help to minimise the risk of exploitation and criminalisation of individuals with autism. This study was commissioned by a specialist school for autistic children in England to provide guidance for staff on how to identify and manage autistic young people at risk of being radicalised. The study included 34 qualitative interviews with experts in the field. Participants included National Health Service staff, academics, educational staff and counter-terrorism officers, as well as young people with autism from the UK. This paper presents findings relating to the existing evidence; key autistic traits and environmental contexts that may contribute towards a susceptibility to radicalisation; the current safeguarding measures and referral system, and; appropriate interventions across the trajectory into radicalisation, specifically the role of early intervention. Findings will help support clinicians and criminal justice professionals when working with individuals who present with radical ideology and have an autism diagnosis.

ARTICLE HISTORY Received 29 June 2020; Accepted 18 November 2020

KEYWORDS Autism; radicalisation; terrorism

Introduction

There is an increased threat of terrorism in Britain, with extremists of all kinds undermining the values that are the foundation of British society, through the use of contradictory 'malevolent narratives' to justify acts of terrorism (Her Majesty's HM Government, 2015). The Government is committed to tracking and anticipating developments to this terrorist threat, focussing on tracking both the drivers of the threat, including ideology and radicalisation and

CONTACT Florian Walter  florian.walter@manchester.ac.uk

© 2020 Informa UK Limited, trading as Taylor & Francis Group

enablers of the threat including permissive environments and access to exploitable technology (HM Government, 2015).

The radicalisation of young people is an area of growing concern within the UK which has prompted recent investigation into safeguarding and radicalisation from The Department for Education (Chisholm & Coulter, 2017). The Prevent strategy is a community safeguarding programme for both children and adults aimed at preventing individuals becoming terrorists or supporting terrorist groups. The three specific strategic objectives of Prevent are to;

- (1) Enable those who are accessing radical ideology to disengage
- (2) Tackle the causes of radicalisation and to respond to the ideological challenges posed by terrorist groups
- (3) Identify those most vulnerable to radicalisation and offer support (Home Office, 2019)

Once further interventions have been deemed necessary, a person can be referred to Channel, a governmental multi-agency approach aimed to provide individualised support (HM Government, 2015). Channel assesses the risk of committing a terrorist offence based on three criteria: (1) engagement with a group, cause or ideology; (2) intent to cause harm; and (3) capability to cause harm. 'Relevant mental health issues' are specifically considered as a vulnerability factor for radicalisation in the engagement criteria, as there is evidence to suggest that prevalence of severe mental illness (such as Schizophrenia and Delusional Disorder) is higher in those who commit terrorist acts, as compared to the general population (Corner & Gill, 2015; Gruenewald et al., 2013). However, there is no specific reference to Autism Spectrum Disorder (ASD) in the criteria used by Channel, and to our knowledge, no publicly available training exists for professionals working with people with ASD who might be susceptible to radicalisation.

ASD is a 'lifelong developmental disability that affects how people perceive the world and interact with others.' (National Autistic Society, 2020). It is characterised by difficulties with social interactions, communicating with others and a range of repetitive and inflexible interests and behaviours (World Health Organization, 2019), but traits and their severity can vary significantly. Whereas ASD can result in only minor challenges, others experience a greater degree of impairment. Repetitive behaviours can take the form of intense preoccupations, or obsessions (Baron-Cohen & Wheelwright, 1999). It is estimated that around 75–90% of individuals with ASD develop a so-called 'special interest', a topic which interests the person to a degree, that others might consider obsessive, and they often acquire expert knowledge on the subject (Lam et al., 2008; Smith et al., 2009). These interests can include everyday topics such as trains or cars but may also include subjects surrounding guns and weaponry. Whilst these special interests may also be shared by

people without a formal diagnosis of ASD, it is the individual's enhanced perceptual capacity and intense 'hyper-focus' on the interest which makes this characteristic unique to ASD (Anthony et al., 2013).

There has been an ongoing debate around any increased susceptibility to radicalisation in those with ASD but the current literature examining the link between ASD and radicalisation or the risk of committing terrorist offences is sparse and inconclusive. It has been suggested that among those individuals, who have a diagnosis of ASD and have committed a terrorist offence or are at elevated risk, both aspects may be contextually linked due to their tendency to hyper-focus on their fascinations at the expense of other attachments and life interests (Al-Attar, 2016). This tendency, alongside the absence of meaningful social connection and impairments in ability to critically analyse the philosophy and beliefs of radical groups, may collectively result in an individual with ASD being indoctrinated by terrorist ideology (Faccini & Allely, 2017). However, there is currently no empirical evidence that this group is significantly more susceptible to being radicalised or commit terrorist offences than others (Al-Attar, 2018) and the pure existence of 'special interests' does not appear to be the predominant factor among those people with ASD who do commit violent offences (Woodbury-Smith et al., 2010). In a case-control study by Woodbury-Smith et al. (2010) it was reported that offenders more often reported interests with 'violent' content than non-offenders, but the need for more research in this area was stressed. Other studies have examined the link between ASD and cyber criminality and cyber terrorism and came to the conclusion that there is no evidence to suggest an over-representation of individuals with ASD among perpetrators (Gill & Corner, 2013; Ledingham & Mills, 2015; Payne et al., 2019). The most comprehensive handbook on radicalisation and mental illness (Al-Attar, 2019) states that there is no evidence to suggest a causal link between mental illness and terrorism, but rather lists a range of traits which might add to an individual's vulnerability. Specifically, Al-Attar mentions restricted interests, rich and vivid fantasies, difficulties in socialising and communicating, a need for routine, differences in information processing and sensory sensitivity as potential features of ASD which might affect to the risk of radicalisation (Al-Attar, 2019).

Despite the lack of evidence linking ASD to radicalisation or terrorism, the debate surrounding the prevalence of ASD among so-called 'lone-actor terrorists' is ongoing. Whilst there is no consistent definition of lone-actor terrorism, most definitions refer to people working alone with a lack of direction from a wider terrorist group, where there is an absence of clear command and control from networked terrorist plots (Barnes, 2012). It was suggested that lone-actors often present with 'social problems' to varying degrees (Spaaij, 2012; Bakker & De Graa 2010) which can result in social isolation or isolationist attitudes (Corner & Gill, 2015; Spaaij, 2012). There is some evidence to suggest that ASD is over-represented in lone actors (Corner

& Gill, 2015; Corner et al., 2016). Corner and Gill (2015) reported lone-actor terrorists' odds of having a mental illness to be over 13 times higher than the odds for group actors. However, often studies investigating this link have relied on case reports rather than routinely collected and official data. Direct access to individuals who have been radicalised or committed terrorist offences is often not possible. Researchers utilising case reports or other data might, in the absence of the use of standardised test or clinical interviews, be unaware of existing ASD diagnoses or falsely assume the presence of such diagnoses based on the limited information available to them (Corner et al., 2016). Inconsistencies between studies and definitions including the aggregation of conditions into 'mental illnesses' limit the conclusions which can be drawn from previous research to date (Corner et al., 2016).

In the absence of reliable data, it is impossible to draw conclusions, and suggesting a potential link between ASD and the susceptibility to radicalisation or terrorism would be inappropriate, risking further stigmatisation of individuals with ASD. In the United Kingdom, data on diagnoses of those referred and accepted into prevent and channel is not available for research purposes. This information would allow the examination of characteristics and circumstances of referrals and would add valuable insights into which groups are especially susceptible to radicalisation. However, utilising information on referrals and acceptances bears the risk of stigmatising this group based on potentially inaccurate representations in the data caused by the fact that people with mental illnesses are commonly perceived as more 'dangerous' individuals (Walter et al., 2019) and are more often in contact with health and criminal justice services (Ghiasi et al., 2020) resulting in higher referrals rates for these people.

Clinicians and police officers are often involved when an individual is believed to be in the process of being radicalised or has already adopted radical ideologies with the risk of committing a terrorist offence. However, in the absence of reliable evidence and data relating to ASD and the susceptibility to radicalisation, there is currently little publicly available guidance for professionals working with individuals with ASD on specific traits and characteristics and how these affect an individual's susceptibility. Although the RAN H&SC Handbook Extremism, Radicalisation & Mental Health (Al-Attar, 2019) is the most comprehensive guidance available for professionals and covers an array of different facets and vulnerabilities, it does not seek to present a risk assessment or quantitative evaluation of traits and their links to radicalisation. No studies have explored the training needs in relation to people with ASD in front line staff in the clinical and education sector as well as police officers.

This study therefore aims to address this knowledge gap, by;

- (1) Describing the characteristics and external circumstances contributing to young autistic persons' susceptibility to radicalisation
- (2) Presenting training needs of clinicians and police officers
- (3) Providing recommendations for future practice.

These findings can aid providing more specific training for clinicians and police staff to allow them to make more informed decisions, avoid unnecessary and inappropriate referrals into Prevent and ensure the public is being kept safe without victimising autistic individuals.

Methods

Design

A qualitative investigation utilising semi-structured one-to-one and group-based interviews

Ethics

The study received ethical approval from the University of Manchester Research Ethics Committee (ref 2019–5552-9436) and Health Research Authority approval for NHS professionals (ref 260,820).

Sample

Between May 2019 and December 2019, 34 people were recruited for interviews (Appendix 1). The sample included both professionals ($n = 22$) and young people with autism ($n = 12$)

All professionals had worked with young people with autism, and many had experience of working with individuals who had been approached by radicals or had been identified as vulnerable to radicalisation. Professionals included clinicians ($n = 5$), academics ($n = 2$), police officers ($n = 4$), local authority ($n = 4$) and third sector professionals ($n = 3$). Education professionals included two from mainstream education, and one who was part of a specialist education team based in a mainstream setting. Clinicians included two psychiatrists, two psychologists, and a senior nurse, all of whom work with young people who had been radicalised. Local authority professionals were also specialists in the Prevent safeguarding strategy. Third sector professionals were those from organisations specialising in services and training related to those with ASD. Both academics were based in the field of crimes perpetrated by autistic individuals. The four police officers were based in counter-terrorism.

All young people had an autism diagnosis, were age 14–19 and were all students from two schools for pupils with special educational needs and/or ASD: a 300 place secondary specialist school across two sites, developed specifically to meet the needs of pupils and students from age of 11 up to 19 years, and a 140 place provision for students aged 4 to 19 years. Both schools belong to a group of schools providing individualised education for students of all age-groups. The majority of young participants were male ($n = 9$) and one had a Black, Asian and Minority Ethnic background. None of the young people had been radicalised or was ever convicted of committing a terrorist crime.

Materials

Two topic guides were developed; one for professionals and one for young people. In the interviews with professionals, the following areas were discussed:

1 Staff role and experience

Participants were asked about their current role, years of experience and their experience working with people with ASD.

2 Experience of ASD radicalisation

We explored professionals' views on the existing literature, potential association between ASD and radicalisation, pathways into radicalisation, whether young people with ASD are more susceptible and how ASD might affect an individual's susceptibility. Participants were also asked about potential warning signs.

3 Recommendations

Participants were asked about recommendations for other professionals, parents and educational staff on how to identify individuals who might require further interventions. We explored behavioural changes indicating a potential radicalisation process as well as training needs for those working with young people with ASD.

4 Interventions

We discussed the availability and appropriateness of interventions for people with ASD. Participants were asked about their recommendations for future practice, the criminal justice system, rehabilitation as well as management of individuals receiving interventions.

The interviews with young people aimed to unpack lived experience by covering topics such as their experience with the online world and risks associated with it. The following topic areas were discussed:

1 Student identity and background

We asked participants to introduce themselves and talk about their life at school including their relationship with other pupils.

2 Online and real life

Pupils were asked about their online behaviour, their use of social media and other services and the way they communicate with others in contrast to communicating offline. We explored the advantages of the online world as well as any content the participants found worrying or disturbing. Parental awareness and control of the young person's online behaviour were also addressed.

3 Experience of radicalisation

We explored whether participants had accessed potentially radical materials or had been approached by radicals online. Participants were asked how they came across these materials or how they were approached by radicals, whether they were aware of the nature and intentions as well as reasons for their engagement. We also talked more generally about the dangers of online radicalisation and participants were asked if they had any advice for other young people on what they should look out for and how to stay safe.

4 Experience of support

We spoke with participants, who had accessed radical material or had been approached by radicals, whether they reported their experience and what kind of support they received. We also explored barriers and facilitators of reporting.

The semi-structured nature of the interviews insured that intended topics of interest were discussed yet allowed flexibility. The development of the interview topic guides was overseen by a virtual steering group which included criminal justice professionals, third sector organisations for marginalised groups and members of Autism@Manchester.

Autism@Manchester is a community of academics, clinicians, practitioners, autistic adults, parents of autistic children and family members who work together to achieve quality research with real meaning for people with autism. The guidance received from this group helped to develop appropriate

terminology to be used in interviews, alongside practical considerations for participant recruitment, interview conditions and the communication of study findings.

Procedure

Professionals were interviewed one-to-one in their place of work or over the telephone, with the permission of their senior colleagues. Healthcare professionals were recruited through a call to participate in an expert advisory group and through directly contacting key professionals in the field. Educational staff were contacted directly by the research team. Calls for participation included a participant information sheet and consent form and interested parties were contacted directly to arrange a mutually convenient time and location for the interviews to take place. The four police officers took part in a group interview. Prevent leads were asked to circulate the call for participation including the participant information sheet and consent form in their respective places of work. Interested police officers were contacted directly to arrange the interview. All interviews were audio recorded with the permission of participants.

All parents/guardians of young people with ASD were contacted by the school and provided with study information. Parents/guardians were asked to return consent forms if they were in favour of the researchers approaching the young person in their care. These young people were then also provided with age appropriate study information and asked if they would like to take part in an interview with the option of having a chaperon present. Interviews took place on school grounds and were audio-recorded with the permission of each young person. Three of the young people took part in a group interview, the rest of the young people were interviewed one-to-one. During the group interview, a member of the educational staff was present.

Analysis

Audio recordings were transcribed verbatim and any identifying information was removed. Each transcription was uploaded to NVivo version 12 for analysis. Thematic analysis was chosen as the most appropriate approach to analysing the data generated in this study. This is an accessible method for identifying and reporting key themes within qualitative data (Braun & Clarke, 2006) which can produce a rich and detailed understanding of phenomena (Green & Thorogood, 2013, p. 215). This approach to analysis is not theoretically bounded or tied to a particular epistemology. Each transcript was screened for patterns in the data which were coded and tagged. These codes were grouped together into themes and categories were formed which represent the final results of this study. This process continued until no new themes emerged and saturation was reached. We applied an

inductive approach in which the data determines the themes, rather than approaching the data with preconceived themes in mind (Braun & Clarke, 2006).

Findings

Four key themes were identified in the interview data pertaining to (1) the current evidence, (2) training needs of professionals, (3) key autistic traits and susceptibility to radicalisation and (3) social and cultural considerations.

Theme 1 – current evidence

Participants stressed that no assumptions should be made regarding the link between ASD and radicalisation in the absence of sophisticated research and reliable evidence. Many described how the national referral and acceptance data into the Prevent and Channel pathways is not accessible; therefore, the prevalence of any DSM-IV diagnosis among these referrals and acceptances is currently unknown. In the absence of this knowledge, there was collective agreement that it is irresponsible to promote the notion of an association between autism and radicalisation at present.

Well, when we focus in specifically on the subject of radicalisation I think for one thing we have to be very careful because evidence of young people or even adults being radicalised is quite sparse on the ground; there isn't a lot of evidential base for all of this.

(PID18 – Local authority)

Likewise, participants were conscious of media coverage of high-profile cases of radicalised individuals who have an ASD diagnosis, alongside sensational commentaries on the topic both within open media and academic sources. It was felt that this may have led to incorrect labelling of individuals with an ASD diagnosis as more vulnerable to radicalisation and committing terrorist acts, than the general population.

But it is this whole question of being dazzled by the high-profile cases and then we're drawn into saying, well is this typical, and that's potentially fraught with problems.

(P01 – Academic)

Those participants whose professional role is embedded in the Prevent pathway described how this is reflected in the cases they are assessing in their professional practice. There was consensus that whilst many referrals are indeed appropriate, there has been an increase in referrals of those with ASD who may be exhibiting concerning behaviour but do not necessarily

warrant formal referral. It was described how, within the UK, it is the duty of all safeguarding professionals to report concerns about radicalisation to the Prevent programme. The training received by professionals, such as those in the local authority, educators and general practitioners, provides a general overview of key behavioural and emotional characteristics which may be indicators of concern. However, this training does not cover in-depth how these characteristics should be considered within the context of the individual's usual presentation, for example, within the context of their ASD diagnosis.

As such, it was felt that referrers are perhaps not adequately trained in the range of ASD presentations and this may be leading to **'better safe than sorry'** (PID17 – Local Authority) safeguarding practices, and subsequent inappropriate referrals to the prevent pathway. Concern was raised that that this may lead to further stigmatisation of the ASD community.

[...] I'm always slightly cautious we don't marginalise or exclude these young people or adults further, really.

(P03 – Clinician)

Theme 2- training needs

Training deficit was raised by all professional participants. Whilst the individuals we interviewed had expertise and experience of working with those with ASD who present as radicalised, all interviewees described how their colleagues would benefit from enhanced training sessions aimed at understanding the range of ASD presentations, and how radicalisation may present in individuals with ASD. This was deemed to be particularly relevant for both educators and also parents of young persons with an ASD diagnosis, so that tailored support measures can be utilised, and appropriate referrals made where necessary.

This training needs was also highlighted as particularly relevant further down the prevent pathway, where appropriate referrals of individuals with ASD are made, yet criminal justice professionals do not necessarily have ASD knowledge nor the skills to deescalate the risk an individual may pose. The counter-terrorism officers interviewed in this study had recently taken part in a workshop delivered by an expert in ASD and reflected on how their approach has changed as a result. For example: being prepared for ASD specific ways of communicating during interview; modification of language and questioning during interview, and; providing a set of written guidelines for acceptable and unacceptable actions and behaviours, based on social and legal norms. Officers also reflected on how their professional approach in the past would have been improved if they were privy to this knowledge earlier in their career, and therefore that all officers should receive ASD specific training.

Theme 3- key autistic traits and susceptibility to radicalisation

In the absence of current evidence and available training, participants discussed their professional knowledge and experiences, including the key factors that parents and professionals should be aware of when considering susceptibility to radicalisation for an individual with ASD. Across the professional sample there was a collective agreement that it is not the presence of an ASD diagnosis that may make a young person susceptible to radicalisation, but that there are key characteristics among autistic persons affecting an individual's susceptibility. These 'traits' may not be unique to autistic people and may also present in those with no formal autism diagnosis.

There were many aspects of ASD discussed with professional and young people which were deemed to impact an individuals' susceptibility to radicalisation. These included, but are not limited to, those outlined in [Box 1](#).

Box 1. Internal factors affecting susceptibility to radicalisation.

- A need for structure and routine
- Issues with self-esteem or self-confidence
- Elevated levels of anxiety stress and fear
- Emotional dysregulation and the inability to recognise their own emotional states
- Sensory processing issues and cognitive impairments which affect memory or;
- Impaired cognitive developmental more generally, including delayed adult maturity
- Rigid thinking and tendency to hyper-focus on topics of interest
- Difficulties with abstract thinking, problem solving and information processing
- Difficulties with anticipating the consequences of behaviour
- Uncertainty when differentiating right from wrong
- Poor social interaction and ability to form meaningful relationships
- Difficulties when interpreting the actions and intentions of others

The traits deemed most pertinent to making someone potentially susceptible to radicalisation are discussed in more detail below.

Difficulties in understanding and interpreting interpersonal relationships were discussed across the sample as influencing a person's susceptibility to radicalisation, alongside difficulties in determining the appropriateness of others' actions. For example, judging which are acceptable and unacceptable behaviours for others and therefore their own behaviour. Autistic people also sometimes struggle to fully understand someone's intention, making it difficult to differentiate between positive social contacts and those who might pose a risk:

They're much more socially naive. It makes them far more vulnerable so often they really struggle with friendship groups [...] so, problems with inhibiting

behaviour, ability to anticipate consequences of behaviour, problems generating more socially appropriate behaviour and challenging contexts.

(P03 - Clinician)

Participants also discussed how inflexibility and '**rigidity of thinking**', can contribute to an individual's risk of being drawn into radical ideologies. Professionals discussed examples such as young people taking statements as facts and truth, irrespective of who makes these claims, due to not having the ability to critically reflect on this information. This may result in an individual not questioning radical ideas and extreme viewpoints, especially if the person/group expressing these views are considered an authority on the topic, are an individual they may trust, or simply because they are very convincing.

The **need for structure** was also discussed across professional participants as being a characteristic which may make an individual susceptible to radicalisation, particularly towards organisations which have military structure, where the culture involves strict rules and hierarchies, such as right-wing organisations.

Definitely for younger ones, and especially I find for the right-wingers as well, they seem to be, like, people are just drawn to that kind of military, that marching, the routine, the uniforms, kind of love all of that, so it's a real profile. [...] I think it's the order and the routine.

(P07 – Police officer)

Participants described how radical groups may also align with individuals' '**special interests**'. These are topics on which an individual with autism may have a strong interest, to the degree that others may describe the interest as 'obsessive' or 'hyper-focussed'.

There were many conflicting opinions across the professional sample about the role of special interests and how to manage specific interests which might lead a young person to accessing radical content. It was clear from educators, clinicians and officers that it can often be challenging for professionals to differentiate between a radical ideology and a special interest for those with autism. Many participants highlighted the danger of assuming that interests are ideologically driven and may lead to criminality, and expressed concern that this may lead to incorrectly labelling an individual, and further stigmatising those with autism.

So you have to be very, very careful before you start pointing the finger and creating the labels and saying that someone is more interested in say extreme far right or extreme far left or international terrorism or anything there, or nationalist issues – you have to be very careful about that. It might be that they have a different sort of interest.

(P18 – Local Authority)

Professionals described that safe engagement with topics can be achieved through mentoring processes. Rather than aiming to suppress the individual's interest in the topic, mentoring creates a more balanced view while limiting the risk of transitioning into radical materials. Participants described how this is a more favourable approach when working with those with autism as opposed to providing counter narratives to radical ideology. It was stressed that successful mentoring could be achieved by adopting an individualised approach in each case – however it was clear that professionals felt that, as described in Theme 2, there is a current clear training gap in how to achieve this.

Throughout the interviews participants described **key behavioural changes** (Appendix 2) which might indicate that an individual is developing a radical ideology or is being targeted by a radical individual/group – these changes were no different than those already described in the Prevent literature such as decreased social contacts. When applied to those with autism, participants stressed that many of these key behaviours may actually be typical of that persons behaviour not indicating a need for further interventions – and that it is therefore important to always assess these behaviours with the individual's autism in mind.

Theme 4 – social and cultural considerations

The previous theme highlighted individual characteristics which may make a young person with ASD susceptible to radicalisation and the importance of an individualised approach in the context of these characteristics. Theme 4 outlines the interviewees' experience of external factors which may exacerbate an individuals' susceptibility.

All participants discussed how the nature of the **online world** is attractive to young people, who may be uncomfortable with face-to-face interaction and are perhaps socially isolated, in the absence of a well-established social circle. However, participants also described how this can lead to young people unknowingly engaging with **predatory individuals**. Invitation and acceptance into an established group may well offer a socially isolated individual **a sense of belonging** and an environment where their specialist knowledge on a subject is admired and praised by others.

[...] well, groomers essentially pick up on people who are more vulnerable and so they could be potentially far more vulnerable in the sense that perhaps that kind of obsessionality that can sometimes be used. So, for instance, being fixated or really interested in one particular topic and they can jump, groomers might jump on that and use that as an advantage.

(P06 – Police officer)

In addition to being approached, individuals can also stray into independently **accessing radical material** online whilst researching a topic of interest. The anonymous nature of the online world can lead to a focus on misinformation and an individual with ASD may not be able to distinguish between topic facts and others' interpretation and opinions.

As with any young person, the social context in which an individual with ASD is placed may shape their susceptibility to being approached by radicals or accessing radical materials online. The importance of the family dynamic was discussed by all professionals in the sample, where both positive and negative experiences were shared. Participants described instances where parents did not **routinely monitor** their young persons' activities, leading to illegal activity taking place. Professionals also discussed instances in which parents *were* aware of their young person's online activities, but had **not recognised the seriousness** of their interest or intentions, or that it may be challenging for parents to differentiate between the characteristics and 'quirks' of ASD, and activity that is problematic. Professionals described how this can sometimes lead to a **lack of limit setting**. It was also suggested by some participants that there may be instances where parents might find it **difficult to challenge** their young person's activities

I think there's too much about, well, that's what they're like, you know, and yes, they are quirky and they are into odd things. And then it's tolerated and the questions aren't asked. (P10 - Clinician)

Some participants also described that in the rare instances that young people with ASD do engage in radical activity, they were from 'troubled' backgrounds, where **little emotional support** and instances of **neglect** were observed. At times this was coupled with the **passing of radical ideas within families** such as through; the collection of right-wing related artefacts, teaching of Islamist beliefs or, less obvious, perceived normality of prejudiced attitudes such as racism or homophobia. As described in Theme 3, in these situations, those with ASD may be susceptible to adopting these beliefs/attitudes. Professionals stressed the importance of clinicians, educational and local authority professionals being aware of such family environments, so that they can individually tailor the support and guidance offered to the young person and offer family support where appropriate.

The issue of **bullying, marginalisation** and the subsequent social isolation was a topic which featured heavily in all interviews. Professionals and young people described how those with ASD are highly vulnerable to being victimised and excluded by others. Professionals described how this **exclusion makes an individual more susceptible** to exploitation and subsequently developing radical beliefs

So, okay, everybody is horrible to me, I've been bullied all my life, and then, all of a sudden, somebody is nice to me and that feels really good. And I'm going to

be ... And all of a sudden, I'm getting really accepted here and this is nice and my self-esteem is getting a boost, and not once do I ask myself what's in it for these people?

(P02 - Clinician)

Professionals and young people also described how individuals who are excluded from social circles have behaved in extreme ways as a mean to actively **control the nature of the attention** and ridicule they receive. One young person told us how this is one way of gaining a sense of control in situations where a person would ordinarily have no control. It was also suggested by professionals and young people that constant exposure and feelings of helplessness can contribute to the **wish for revenge**, making individuals more vulnerable to adopt extreme ideologies.

I think, yeah, definitely, definitely that group, who somehow are not feeling seen and who feel they're unfairly treated for some reason. So there's a sense of injustice and grievance almost all of them, because I think all of them have got it. Everybody I've seen who's been like that, they've just felt unfairly treated by life.

(P10 - Clinician)

Participants stressed the importance of being aware of social dynamics among pupils, and specifically of instances of young people with ASD being bullied or marginalised, in order to address these issues at an early stage. This early intervention provides an opportunity to reduce the young persons' risks of being attracted to radical groups.

Discussion

To our knowledge, this study is the first investigation into the experiences of young people with ASD and professionals working with these individuals with regard to their susceptibility to radicalisation. Through interviewing 34 participants, we were able to identify key themes and insights into the evidence base pertaining to the association between ASD and susceptibility to radicalisation, the knowledge and training needs among those working with young people with ASD as well as characteristics which are deemed to affect one's susceptibility.

Currently, data on referrals into prevent aren't accessible for the public or for research purposes. It is therefore not possible to obtain reliable statistics of the prevalence of conditions such as ASD in this population. However, our findings indicate that it is reasonable to believe that the number of people with ASD among those referred into prevent may be inflated. As described in Theme 1 and 2, in times of uncertainty and in the absence of appropriate training, professionals tend to initiate referrals in order to comply with their safeguarding obligations. Therefore, an overrepresentation of this group in

prevent referrals may not be surprising. Rather than examining those referred into prevent, it seems more insightful to focus on those individuals referred *and* accepted into prevent and subsequently channel and deemed to be in need of receiving further interventions which go beyond early interventions provided on a community level. Analysing information about characteristics of those individuals, the contexts of their referrals as well as the type of intervention they receive can be a valuable data source when trying to investigate the link between ASD and radicalisation. Having knowledge of and understanding the different pathways into radicalisation and the circumstances surrounding this process can further aid early interventions when seen in the context of ASD specific characteristics.

Utilising existing data on those people with ASD who required intervention to address their susceptibility to committing a terrorist offence can address one of the most pertinent gaps in the existing literature – the lack of reliable evidence. The current literature examining the link between ASD and radicalisation is sparse, based on case reports, inconsistent and focusses mainly on the prevalence of people with ASD among lone-actor terrorists (Al-Attar, 2016; Corner & Gill, 2015, 2017; Corner et al., 2016). Participants in our study were in agreement that in order to make these inferences, high quality studies based on routinely collected data to obtain reliable prevalence estimates is crucial since without it, the strength of the association or even its existence cannot be determined. Furthermore, in order to develop more robust approaches to address individuals who are susceptible to committing terrorist offences, contextual information regarding the referral and personal circumstance as well as details of successful approaches currently used are needed.

Obtaining this knowledge and having a robust evidence base is crucial in order to create appropriate training aimed at providing professionals with the skills and confidence they need when working with young people with ASD who might be susceptible to radicalisation. We identified training needs at all stages of the prevent pathway, beginning from the identification of individuals and their referrals to the interventions provided to them. Training needs were identified throughout all professional and non-professional groups including clinicians, police officers, educational staff as well as parents and guardians.

Participants stressed that educational staff, parents as well as front line staff including police officers should be aware of ASD specific vulnerabilities and how these traits affect the individual's susceptibility to radicalisation. Professionals established a range of characteristics they deemed relevant in this regard, as outlined in Theme 3. The RAN handbook for practitioners (Al-Attar, 2019) has listed several of these characteristics and our participants have named many of the traits mentioned in the handbook such as the existence of special interests, communication difficulties and the online world, as well as the need for routine. However, our participants stressed

the importance of external factors such as family life and marginalisation (Theme 4), which underlines the complex nature of ASD and the susceptibility to radicalisation. We concur with Al-Attar in the fact that certain facets of ASD and changes in behaviour in themselves do not indicate a radicalisation process and cannot be seen as checklist or risk assessment. Rather they need to be seen in the context of the young person's usual character. In order to put their behaviour into context and identify relevant changes, professionals should be aware of typical and usual behaviours for that young person and developmental processes. Close collaboration and information sharing with parents is essential in order to limit inappropriate referrals. Likewise, an understanding of the nature, routes and magnitude of a young person's special interests, as described in Theme 3, is crucial in order to differentiate those from radical ideologies. Our results show that this differentiation is challenging for professionals and parents alike. A collaborative approach, similar to Multi-Agency Working (MAW) as discussed by Van der Velden and Krasenberg (2018), can assist decision-making and does not necessarily require structured meetings but can be of more informal nature to discuss certain behaviours and their relation to the susceptibility of radicalisation.

Being able to understand these interests can aid the mentoring process aimed at providing the young person with a more balanced view on their topic while allowing them to safely engage with it. This stands in contrast to more confrontational approaches with the aim to disengage the young person. During the interviews it emerged that participants were in agreement as to which approach is more effective in addressing radical ideologies. More confrontational approaches such as counter narratives aim to provide 'a positive alternative to extremist propaganda, or alternatively aims to deconstruct or delegitimise extremist narratives' (Silverman et al., 2016). However, it was stressed by some participants that these approaches are often ineffective when working with people with ASD due to their ASD specific characteristics such as rigid thinking. One-size-fits-all approaches seem to be inappropriate in the light of the array of traits specific to ASD and more individualised approaches like mentoring were deemed more suitable by addressing these traits and appreciating the uniqueness of this group. In order to utilise such approaches, a thorough and holistic understanding of the young person's interests and usual behaviours is essential. However, as outlined in Theme 4, in addition to internal factors other external circumstances need to be considered by professionals and parents. In order to provide individualised interventions, it is essential for professionals to have awareness of these external factors such as bullying and marginalisation. It should be stressed to front line workers that having an understanding of an individual's social environment including family dynamics can add valuable knowledge and can

be utilised to put behaviours into context. Supportive resources such as family members or peers should be identified. Family structures and dynamics, including the monitoring and control of internet usage and social contacts online can be as useful for professionals as knowledge regarding the social environment at school can be for parents. Therefore, collaboration and sharing of knowledge between professionals and parents should be encouraged. This is especially crucial in the light of an ever-increasing online presence of extremist groups in order to promote radical ideas and recruit new members (Conway et al., 2019; Von Behr et al., 2013), putting those already susceptible to radicalisation at an increased risk.

These factors underline the complexity when working with young people with ASD who might be susceptible to radicalisation. The need for comprehensive training as stated by participants, and recommended in the RAN publication on mental health disorders and extremism (Krasenberg & Wouterse, 2019), becomes apparent when seeing both internal and external factors in the context of ASD specific traits. Training for professionals should stress the importance of these factors, and awareness is key to providing the knowledge and confidence required to interact with people with ASD without stigmatising these individuals. Front line staff across professions should receive training to allow them to get the most complete picture of ASD specific vulnerabilities and how they can impact an individual's susceptibility to radicalisation. Similar complexity can be observed in the literature examining cyber criminality in the context of ASD. Like our findings in relation to radicalisation, certain autistic traits appear to affect a person's susceptibility to committing criminal offences irrespective of an ASD diagnosis (Payne et al., 2019). A diagnosis of ASD is even believed have a protective affect through increased support (Heeramun et al., 2017). Only with such an understanding can progress be made gain to make informed decisions on whether referrals and subsequent individualised interventions are warranted.

Our findings concur with conclusions by Al-Attar (2019), stating that a list of facets and characteristics of ASD cannot act as predictors for future terrorist offending. The combination of ASD and other co-morbidities can add complexity to the construct of susceptibility and give rise to the need for individualised approaches (Al-Attar, 2019). Existing co-morbidities should therefore always be considered when working with young people with ASD. Informed decisions have the potential to reduce inappropriate and unnecessary referrals and as result reduce the risk of victimising these individuals. It would be advantageous for intervention providers to shift their focus more towards individualised approaches in order to account for the complexity of ASD and to provide support more tailored to the individual rather than utilising one-size-fits-all strategies unsuitable for people with ASD.

Strength and limitations

Our study has added valuable knowledge to the evidence base surrounding radicalisation and ASD. We were advised by Autism@Manchester who approved the study, shaped the recruitment design and advised on the interview strategy, ensuring a robust and appropriate interview process. We interviewed not only a broad range of professionals but also included the voices of young people with ASD. Speaking to the young people about their experiences added an additional level of insights to the study, allowing us to put findings from professionals into the context of lived experiences. The professionals we included came from a variety of backgrounds and included not only academics and clinicians but also members of the police and local authorities. Each group added their unique expertise to the study and allowed us to explore ASD specific factors and their impact on the susceptibility to radicalisation from different angles. Our recruitment strategy for professionals ensured that we included participants who were experts in their respective fields.

All professionals interviewed for this study were experts in their field and many had substantial experience in working with people with ASD who had been radicalised or were vulnerable to radicalisation. Although not all had directly worked with radicalised individuals or those who had committed terrorism-related offences, all participants had received counter-terrorism training and were knowledgeable in this area. Our sample of young persons was limited since we interviewed young persons with ASD from a specialist school. Therefore, their experiences of bullying and marginalisation might have been different from individuals in mainstream schools. Young persons self-selected to take part in the study and it might be possible that those who are involved in criminal activity or those who had extreme ideological interests either themselves or through other family members did decide not to take part because of this (Farnworth et al., 1996). We selected a representative sample of, to our knowledge, non-criminalised young people with ASD, therefore their views might differ from those of individuals who have been radicalised or are in the process of being de-radicalised. After careful consideration and consulting with members of Autism@Manchester, we decided not to interview young people who had been radicalised in order not to add to an individual's vulnerabilities. Our study therefore lacks insights from individuals who had such experiences, which is a potential focus for future research. Adolescence represents a highly complex time for all young persons, and we acknowledge that this time may impact one's vulnerability to radicalisation and that adolescence may create vulnerabilities which differ from those of autistic adults. While the topic of developmental stages was not addressed by participants, future research should consider findings in the light of typical and non-typical development.

Disclosure statement

No potential conflict of interest was reported by the authors.

Funding

This work was funded by New Bridge Multi Academy Trust.

ORCID

Jenny Shaw  <http://orcid.org/0000-0003-2569-7687>

References

- Al-Attar, Z. (2016). Autism & terrorism links – Baseless headlines or clinical reality? *XI Autism-Europe International Congress, Autism-Europe & National Autistic Society*. Edinburgh
- Al-Attar, Z. (2018). Interviewing Terrorism Suspects and Offenders with an Autism Spectrum Disorder. *International Journal of Forensic Mental Health*, 17(4), 321–337. <https://doi.org/10.1080/14999013.2018.1519614>
- Al-Attar, Z. (2019). *RAN H&SC handbook extremism, radicalisation & mental health: Handbook for practitioners*. https://ec.europa.eu/home-affairs/sites/homeaffairs/files/what-we-do/networks/radicalisation_awareness_network/about-ran-ran-h-and-sc/docs/ran_h-sc_handbook-for-practitioners_extremism-radicalisation-mental-health_112019_en.pdf
- Anthony, L., Kenworthy, L., Yerys, B., Jankowski, K., James, J., Harms, M., Martin, A., & Wallace, G. L. (2013). Interests in high-functioning autism are more intense, interfering, and idiosyncratic than those in neurotypicals development. *Development and Psychopathology*, 25(3), 643–652. <https://doi.org/10.1017/S0954579413000072>
- Bakker, E., & de Graaf, B. (2010). Lone Wolves: How to Prevent This Phenomenon?. *Terrorism And Counter-Terrorism Studies*. xxx <https://doi.org/10.19165/2010.2.01> doi:10.19165/2010.1.02
- Barnes, B. (2012). Confronting the one-man wolf pack: Adapting law enforcement and prosecution responses to the threat of lone wolf terrorism. *Boston University Law Review*, 92, 1613–1662. <https://www.bu.edu/law/journals-archive/bulr/volume92n4/documents/BARNES.pdf>
- Baron-Cohen, S., & Wheelwright, S. (1999). 'Obsessions' in children with autism or Asperger syndrome. *British Journal of Psychiatry*, 175(5), 484–490. <https://doi.org/10.1192/bjp.175.5.484> doi:10.1192/bjp.175.5.484
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), pp.77–101. <https://doi.org/10.1191/1478088706qp0630a>
- Conway, M., Scrivens, R. & Macnair, L. (2019). *Right-Wing Extremists' Persistent Online Presence: History and Contemporary Trends*. The International Centre for Counter-Terrorism – the Hague, 10, 1–24. <https://doi.org/10.19165/2019.3.12>
- Corner, E., & Gill, P. (2015). A false dichotomy? Mental illness and lone-actor terrorism. *Law and Human Behaviour*, 39(1), 23–34. <https://doi.org/10.1037/lhb0000102>

- Corner, E., & Gill, P. (2017). Is there a nexus between terrorist involvement and mental health in the age of Islamic State? *CTC Sentinel*, 9(1), pp. 1–11. https://ctc.usma.edu/wp-content/uploads/2017/01/CTC-Sentinel_Vol9Iss1121.pdf
- 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 and Terrorism*, 39(6), pp. 560–568. <https://doi.org/10.1080/1057610X.2015.1120099>
- Chisholm, T., & Coulter, A. (2017). *Safeguarding and radicalisation: Research report*. Department for Education. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/635262/Safeguarding_and_Radicalisation..
- Faccini, L., & Allely, C. S. (2017). Rare instances of individuals with autism supporting or engaging in terrorism. *Journal of Intellectual Disabilities and Offending Behaviour*, 8(2), 70–82. <https://doi.org/10.1108/JIDOB-11-2016-0022>
- Farnworth, M., Bennett, K., & West, V. M. (1996). Mail vs. telephone surveys of criminal justice attitudes: A comparative analysis. *Journal of Quantitative Criminology*, 12(1), 113–133. <https://doi.org/10.1007/BF02354473>
- Ghiasi, N., Azhar, Y., & Singh, J. (2020). Psychiatric Illness And Criminality. In *StatPearls*. StatPearls Publishing. <https://www.ncbi.nlm.nih.gov/books/NBK537064/>
- Gill, P., & Corner, E. (2013). Disaggregating terrorist offenders: Implications for research and practice. *Criminology & Public Policy*, 12(1), pp.93–101. <https://doi.org/10.1111/1745-9133.12015>
- Green, J., & Thorogood, N. (2013). *Qualitative methods for health research* (Third edition.). SAGE Publications Ltd.
- Gruenewald, J., Chermak, S., & Freilich, J. D. (2013). Distinguishing “loner” attacks from other domestic extremist violence: A comparison of far-right homicide incident and offender characteristics. *Criminology & Public Policy*, 12(1), pp. 65–91. <https://doi.org/10.1111/1745-9133.12008>
- Heeramun, R., Magnusson, C., Gumpert, C. H., Granath, S., Lundberg, M., Dalman, C., & Rai, D. (2017). Autism and convictions for violent crimes: Population-Based cohort study in Sweden. *Journal of American of Child & Adolescent Psychiatry*, 56(6), 491–497. <https://doi.org/10.1016/j.jaac.2017.03.011>
- HM Government. (2015). *Counter-extremism strategy*. Counter-Extremism Directorate, Home Office.
- Home Office. (2019). *Independent review of prevent: Terms of reference*. Retrieved July 14, 2020, from. <https://www.gov.uk/government/publications/independent-review-of-prevent-terms-of-reference/independent-review-of-prevent-terms-of-reference>
- Krasenberg, J., & Wouterse, L. (2019). Understanding the mental health disorder pathway to violent extremism. *Radicalisation Awareness Network*, Turin, 13(March), 2019. https://ec.europa.eu/home-affairs/sites/homeaffairs/files/what-we-do/networks/radicalisation_awareness_network/about-ran/ran-h-and-sc/docs/ran_h-sc_understanding_the_mental_health_190313_25_en.pdf
- Lam, K., Bodfish, J., & Piven, J. (2008). Evidence for three subtypes of repetitive behaviour in autism that differ in familiarity and association with other symptoms. *Journal of Child Psychology and Psychiatry and Allied Disciplines*, 49(11), pp.1193–1200. <https://doi.org/10.1111/j.1469-7610.2008.01944.x>
- Ledingham, R., & Mills, R. (2015). A preliminary study of autism and cybercrime in the context of international law enforcement. *Advances in Autism*, 1(1), pp. 2–11. <https://doi.org/10.1108/AIA-05-2015-0003>

- National Autistic Society. (2020). *What is Autism?* Retrieved June 19, 2020, from <https://www.autism.org.uk/about/what-is/asd.aspx>
- Payne, K., Russell, A., Mills, R., Maras, K., Rai, D., & Brosnan, M. (2019). Is there a relationship between cyber-dependent crime, autistic-like traits and autism? *Journal of Autism and Developmental Disorders*, 49(10), pp. 4159–4169. <https://doi.org/10.1007/s10803-019-04119-5>
- Silverman, T., Stewart, C. J., Amanullah, Z., & Birdwell, J. (2016). *The impact of counter-narratives*. Retrieved May 31, 2020, from http://www.isdglobal.org/wp-content/uploads/2016/08/Impact-of-CounterNarratives_ONLINE_1.pdf
- Smith, C., Lang, C., Kryzak, L., Reichenberg, A., Hollander, E., & Silverman, J. (2009). Familial associations of intense preoccupations, an empirical factor of the restricted, repetitive behaviors and interests domain of autism. *Journal Of Child Psychology And Psychiatry*, 50(8), 982–990. <https://doi.org/10.1111/j.1469-7610.2009.02060.x>
- Spaaij, R. (2012). *Understanding lone wolf terrorism. Global patterns, motivations and prevention, springer briefs in criminology*. Springer. www.springer.com/gb/book/9789400729803
- Van der Velden, M., & Krasenberg, J. (2018, June 6-7). Embedding social and health care workers into institutional structures. Radicalisation awareness network. *Munich*.
- Von Behr, I., Reding, A., Edwards, C., & Gribbon, L. (2013). *Radicalisation in the digital era: The use of the Internet in 15 cases of terrorism and extremism*. Retrieved September 26, 2020, from https://www.rand.org/content/dam/rand/pubs/research_reports/RR400/RR453/RAND_RR453.pdf
- Walter, F., Carr, M. J., Mok, P. L. H., Antonsen, S., Pedersen, C. B., Appleby, L., Fazel, S., Shaw, J., & Webb, R. T. (2019). Multiple adverse outcomes following first discharge from inpatient psychiatric care: A national cohort study. *Lancet Psychiatry*, 6(7), 582–589. [https://doi.org/10.1016/S2215-0366\(19\)30180-4](https://doi.org/10.1016/S2215-0366(19)30180-4)
- Woodbury-Smith, M., Clare, I., Holland, A. J., Watson, P. C., Bambrick, M., Kearns, A., & Staufenberg, E. (2010). Circumscribed interests and 'offenders' with autism spectrum disorders: A case-control study. *The Journal of Forensic Psychiatry & Psychology*, 21(3), 366–377. <https://doi.org/10.1080/14789940903426877>
- World Health Organization. (2019). *International statistical classification of diseases* (11th ed.). <https://icd.who.int/>