Autism spectrum disorder and criminal responsibility: historical perspectives, clinical challenges and broader considerations within the criminal justice system

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There has been relatively limited research focus on autism in the context of the criminal justice system. The relationship between autism spectrum disorder (ASD) and criminal responsibility is complex. Furthermore, the features inherent to ASD can have a significant bearing on a wide array of other issues in this context including police interviewing, fitness to be tried, culpability and the appropriateness of custodial disposal. This review explores the background to our understanding of ASD, patterns of offending behaviour and the nature of the relationship between this and characteristic ASD deficits. The clinical and legal challenges posed by ASD defendants in terms of identification, assessment and on a broader service level as they negotiate the criminal justice system are highlighted to illustrate the varied difficulties they may encounter and to draw attention to this field as a worthy area of research and training for the medical, legal and law enforcement professions.

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The limits of my language mean the limits of my world.

– Tractatus Logico-Philosophicus (1922), by Ludwig Wittgenstein (1889–1951).

Introduction

Our understanding of autism has evolved from humble beginnings. Clinical descriptions of childhood syndromes bearing a resemblance to our current understanding of autism date back almost 200 years (Haslam, 1809). Later accounts of a handful of clinicians in the 20th century gradually spawned the vast and fascinating research field of today. The disorder's understanding and acceptance within Western society at a broader level has also undergone radical transformation.

Autism spectrum disorder (ASD), as presently understood, refers to a group of pervasive developmental disorders characterised in varying degrees by impairments in social communication, social interaction and social imagination (American Psychiatric Association (APA), 2013). Its prevalence in Western countries is accepted as close to one per hundred

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(Brugha *et al.* 2009). It usually manifests from early childhood when a array of deficits are gradually unmasked. Typically, this occurs as a child begins to explore its environment or its socialisation demands increase. For those with less severe features, deficits can be subtle and may remain undetected until later in life. Those with Asperger syndrome (AS) lack the clinically significant language acquisition or speech delay deficits of others with ASD. They may still demonstrate more nuanced communication deficits however. AS now falls under the rubric of ASD in DSM-5 (APA, 2013) and in this review what was previously conceptualised as AS may be referred to as a higher-functioning sub-type of ASD (hfASD) depending on the underlying material referenced.

Evolution of our understanding

The Austrian paediatrician Asperger (1944) is widely known for the syndrome that bears his name; however, his contribution is overshadowed by the far more systematic endeavours of others. Kanner (1943) and Rutter (1968) were integral in defining and validating, respectively, the features of the autism syndrome. Before Kolvin's (1971) comparative work, it was not clear whether early autism represented a form of childhood schizophrenia or a distinct developmental entity in its own right. The concept of an 'autistic

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spectrum' was borne from epidemiological research several years later (Wing & Gould, 1979). Wing (1981) affirmed Asperger's place in history when she defined the eponymous syndrome. More recently, Gillberg (2002) helped to synthesise the existing body of epidemiological, genetic and clinical knowledge to further clarify the features of AS.

ASD in the context of the criminal justice system

As a pervasive developmental disorder, it is not surprising that autism is associated with challenging behaviour. In his original paper, Asperger described antisocial behaviour in addition to the central features (Frith, 1991). There has been notably little research focus on autism in the context of the criminal justice system. Legal systems, by their very nature, typically do not have the capacity to react and respond to shifts in scientific knowledge with the same degree of dynamism as other systems in society. This can be brought to bear when people with ASD are charged with criminal acts and find themselves being processed by the criminal justice system.

Freckelton (2013) argues that the features inherent to ASD have a significant bearing on a wide array of issues in such a context. These include fitness to be tried, culpability, criminal responsibility and the appropriateness of custodial disposal. Freckelton & List (2009) contend that these deficits are especially relevant to the capacity to be interviewed and fitness to stand trial. Furthermore, they maintain that there exists a fundamental relationship between these defendants' inherent deficits and their criminal behaviour. This is usually placed in the context of deficits in social relatedness or rigidity in thought and behaviour (Barry-Walsh & Mullen, 2004). To examine whether defendants with ASD should be considered less responsible for criminal acts, we must explore their patterns of offending behaviour and the nature of the relationship between this and their deficits. The clinical and legal challenges they pose in terms of identification, assessment and on a broader service level as they negotiate the criminal justice system must also be borne in mind.

ASD and offending behaviour: towards understanding prevalence

The relationship between ASD and offending behaviour remains an area of need in terms of research. This is a function of its relatively new status as a diagnostic entity. Of note, there is a distinct paucity of information regarding female offenders with ASD. The literature on offending behaviour in ASD is largely based on case reports and case series. As such, it is difficult to

extrapolate from these. To illustrate the lack of clarity, patients with ASD were seen to be over-represented in all three of UK's high-secure units (Hare *et al.* 1999) relative to the general population. However, lower prevalence rates have been observed in Scotland (Myers, 2004). Interestingly, in terms of conviction rates, Danish data (Mouridsen *et al.* 2008) report similar rates for ASD and non-ASD populations in the community. Other studies from the United Kingdom with community samples have shown people with ASD to be less likely to commit violent crime (Woodbury-Smith *et al.* 2006).

To reconcile this, King & Murphy (2014) compared multiple studies examining the prevalence of ASD within the criminal justice system and also those that studied the prevalence of offending in ASD populations. They highlighted that the use of varying methodologies, biased samples and lack of appropriate controls make it difficult to compare studies. They concluded that those with ASD do not seem to be disproportionately over-represented within the criminal justice system, though they commit a range of offences and have a number of predisposing factors. They identified no convincing evidence that the rates of certain kinds of crimes are disproportionately high among ASD offenders. In addition, the role of co-morbid psychiatric disorders remains unclear due to methodological barriers to meaningful comparison.

Considering that intellectual disability (ID) and ASD overlap, King & Murphy (2014) contend that the existing body of research on offending behaviour in ID is relevant and worthy of attention. The critical impact of social deprivation in terms of increasing offending rates holds true for ID populations (Dickson *et al.* 2005) and could also be argued for ASD. Those with ASD are similarly more likely to experience lower socioeconomic attainment and mental health difficulties: both key associations with antisocial behaviour.

ASD and offending behaviour: towards understanding the act

For each case of offending, the relationship between ASD and the act has the potential for complexity. The facts of the case, nature of the behaviour itself and the burden of impairment are crucial considerations. Typically, offending behaviour can be explained with reference to theory of mind, executive functioning or central cohesion deficits. Social naivety and overload of environmental stimuli are also common key overarching themes. Lerner *et al.* (2012) suggested impaired theory of mind, poor emotional regulation and problems with moral reasoning in those with ASD may raise the risk of an offence.

The capacity for empathy is regarded as protective against the victimisation of others (Farrington, 2007). In hfASD, empathic deficits have been implicated as factors in offending behaviour (Wing, 1981; Woodbury-Smith *et al.*, 2005). The interplay of emotional regulation difficulties, interpersonal anxiety and hypersensitivity, maladaptive cognitive coping skills and a sense of alienation from others are cited as prominent features of interpersonal violence in ASD (Murphy, 2010). In terms of re-offending, poor appreciation of the consequences of criminal behaviour and limited scope for the consideration of the impact of these actions on others further raises the risk in the context of transfer to less-secure therapeutic settings, or onward into the community (Wing, 1997; Hare *et al.* 1999).

How odd is his voice, how odd his manner of speaking and his way of moving. It is no surprise, therefore, that this boy also lacks understanding of other people's expressions and cannot react to them appropriately.

- Hans Asperger (1906-1980).

ASD and the criminal justice system: vulnerabilities at all stages

It is not unreasonable to suggest that some with ASD would be fascinated by the legal system and its machinations. However, ASD defendants are distinctly vulnerable as they progress through the criminal justice system. This is the case at all stages: from arrest and initial interview through to sentencing and disposal. From the dizzying inquisition of police and incarceration, through to expert witness testimony under vociferous challenge and the deft argumentation of legal counsel it becomes apparent that for someone with an ASD profile this world has the potential to rapidly prove an intensely stressful and bewildering place in which to find oneself. There is much for the professionals involved to take into consideration at each stage: provided, that is, the offender's ASD has been identified.

Challenges for psychiatrists

AS was not included in the DSM, for example, until its fourth edition was published in 1994 (APA, 1994). Its tenure there was short-lived, as it was to be later 'spectralised' into ASD with the publication of the DSM-5 in 2013 (APA, 2013). As such, many established forensic psychiatrists and psychologists might not have received formal training in the diagnosis of ASD. This is complicated further by the imprecise nosology of the diagnosis of itself. The two major international diagnostic classificatory systems in use, DSM-5 (APA, 2013)

and ICD-10 (World Health Organization, 1992), rely heavily on qualitative impairments in social reciprocity, communication and relationships to be identified by the clinician. This is in contrast to schizophrenia, for example, which has a more psychopathologically based diagnostic paradigm (Woodbury-Smith, 2014). Furthermore, ASD diagnoses are not informative in terms of an individual's specific deficits.

From police interview to courtroom

In a police interview, people with hfASD may present as intellectually sound and their use of language may mask other impairments. Others may find the process deeply distressing and this can manifest in ways that may ostensibly appear obstructive to police. North *et al.* (2008) studied individuals with ASD in an interrogative context and suggested that they may be more compliant, deferential and confrontation-averse than controls. This may factor in self-incrimination or the proferring of erronenous accounts of events to diffuse acute anxiety or fear.

It is known that increased false confession rates, impaired decision-making and a poor understanding of one's rights coupled with increased suggestibility render those with ID particularly vulnerable when charged with an offence (Clare & Gudjonsson, 1993, 1995; Perske, 2011). There is a strong risk of a judge and jury drawing adverse inferences from a defendant with ASD's demeanour, attitude and general comportment in court. They could - by virtue of their idiosyncrasies be perceived as aloof, disinterested or even imperious to jurors unfamiliar with the disorder. Judges and juries find expression of remorse highly relevant to sentencing (Haskins & Silva, 2006). Such factors could understandably prove detrimental to a criminal defence. The National Autistic Society (NAS, 2011) have published guidelines for criminal justice professionals to highlight issues in this realm.

Establishing fitness to be tried

A trial encompasses several strata of social and cognitive demands in conjunction with its inherent deep personal significance for the defendant. In terms of applying the conventional fitness to be tried criteria – R v Pritchard (1836) – Barry-Walsh & Mullen (2004) highlighted concerns about its suitability for ASD defendants. They describe the threshold as low and outline how such defendants could readily fulfil these criteria in a superficial manner that belies a limited understanding of this complex series of events. Similar reservations were put forward regarding establishing fitness in the US criminal justice system.

In the case of less serious charges, a decision of unfitness to be tried may not be attractive to an ASD defendant's legal representative owing to the consequences that follow (Freckelton & List, 2009). In Ireland, the criteria for detention in a designated centre on the basis of mental disorder in relation to fitness to be tried are as outlined in the Mental Health Act 2001 as opposed to the Criminal Law (Insanity) Act 2006. These criteria are narrower and exclude, 'any disease of the mind'. This has implications for ASD defendants, as they may not be adjudged to meet this despite their complex deficits.

Establishing criminal responsibility

Considering the broad range of disability within the ASD population, the issue of criminal responsibility in any individual case is likely to be highly complex and potentially contentious. In its determination, two components are required. First, that the person committed the act, that is, actus reus (Latin: 'guilty act') and second, that they had criminal intent, or intent to cause harm, that is, mens rea (Latin: 'guilty mind'). There is a limited body of research in this field; however, it has been increasingly held that the culpability of hfASD offenders is not equal to non-affected offenders (Freckelton & List, 2009). Naturally, this is on a spectrum and similarly, theory of mind factors are relevant with regard to degrees of culpability (Haskins & Silva, 2006).

The clinical complexity of ASD itself and potential for atypical presentations of co-morbid psychiatric conditions in defendants behoves the involvement of expert psychiatric and psychological input from an early stage. Difficulties in establishing mens rea in defendants with hfASD acutely exemplify this need. It is argued that the appreciation of the consequences of certain ASD offenders in terms of their actions has the potential to be so impaired as to deem them neither morally, nor legally responsible (Barry-Walsh & Mullen, 2004; Schwartz-Watts, 2005). ASD offenders often have a diminished ability to reflect upon the social significance of their actions or the impact on others. This inherent egocentricity impairs their capacity to appreciate the potential of harm or the likelihood of legal sanction. By this, they may wholly believe their actions to have been appropriate, defensible and entirely justified. Deficits in these respective domains can vary in severity and raise uncertainty around the formation of the requisite criminal intent at the time of an offence.

Legal insanity defences

The M'Naghten rules underpin the legal defence of insanity in the majority of Anglo-American jurisdictions (Allely, 2015a). The interplay between

non-diagnostic and the aforementioned central deficits in ASD has the potential to fulfil the M'Naghten rules to support a legal insanity defence. As such, a special plea of not guilty by reason of insanity (NGRI) should be considered in cases of violent behaviour among individuals with ASD.

Non-diagnostic deficits and legal defences

Non-diagnostic deficits in ASD have potential causal links to violent behaviour also (Lerner *et al.* 2012), these include emotional regulation, moral reasoning and theory of mind. Emotional regulation refers to the ability to inhibit and control the expression of intense emotions and it is increasingly seen as a prominent non-diagnostic construct in ASD (Laurent & Rubin, 2004). Difficulties in this domain can lead to aggression and violence in non-ASD adults. Lerner *et al.* (2012) propose that emotional regulation deficits may potentiate violence in hfASD offenders with impaired theory of mind. Aggression may result from unregulated physiological arousal in the context of poor emotional regulation capacity (Laurent & Rubin, 2004).

In terms of the exercise of volitional controls, ASD deficits in impulse inhibition can result in the failure to fully consider the outcomes and impact of specific actions (Blair, 2001; Haskins & Silva, 2006). Similarly, difficulties appreciating the subjective experiences of others, that is, a lack of intersubjective resonance or empathy can diminish the experience of remorse (Gillberg, 1992). These factors can potentially undermine the capacity to form the requisite intent to harm with reference to criminal responsibility and the ability to know the nature and quality of one's actions.

Individuals with ASD may have idiosyncratic moral reasoning styles. The interaction of this with impaired theory of mind in the context of an emotionally charged scenario – often relating to a conflict or uncertainty – has the potential to impair the capacity of individuals with ASD from refraining from violent behaviour (Lerner *et al.* 2012). Furthermore, an unorthodox moral reasoning style or one that is poorly communicated by the defendant can introduce systematic bias towards guilt in the courtroom (Narvaez, 1999).

Defence of diminished responsibility

In the United Kingdom and Ireland, the legal defence of diminished responsibility is only available for the charge of murder. It is a partial negating defence in both instances. In Ireland, such a verdict in the context of ASD would result in a custodial disposal and the reduced conviction of manslaughter. This is in contrast to the United Kingdom where although the same exculpatory conviction would apply, English law

affords the presiding judge the discretion to impose a hospital order under section 37 of the Mental Health Act 1983. This would mean, in practice, that someone with ASD convicted of manslaughter on the grounds of diminished responsibility would be ensured treatment rather than custody should the judge see appropriate. This illustrates a shortcoming within the Criminal Law (Insanity) Act 2006 in Ireland with relation to addressing the issue of mental disorder and diminished responsibility. It highlights the attendant limitations in direct access to appropriate specialist care in Ireland for ASD defendants not pursuing a plea of NGRI for the charge of murder.

Landmark judgements

For a review of three important recent decisions with regard to the determination of criminal responsibility and sentencing in the context of an AS diagnosis, see Freckelton & List (2009): Sultan v The Queen (UK), Parish v DPP (Australia), R v Kagan (Nova Scotia). The Sultan case related to the successful appeal of rape and indecent assault charges in light of new evidence regarding a diagnosis of AS in the defendant. Parish v DPP illustrated how the symptoms of AS can impair the formation of the requisite criminal intent. R v Kagan highlights sentencing considerations in AS. In 2012, following a protracted extradition attempt by the United States, the Scottish systems administrator Gary McKinnon - charged in 2002 with cyber crimes relating to a number of high-profile US military sites - ultimately had his extradition blocked by the United Kingdom on humanitarian grounds: his interim diagnosis of AS and the associated risk of suicide if extradited were central to this appeal [McKinnon v Secretary of State for the Home Department (UK)].

Prison experiences

Research into the experiences of those with ASD while in prison is sparse. The extant literature – although limited by poor methodology and small sample sizes (Robertson & McGillivray, 2015) – suggests that they are more vulnerable to bullying, social isolation, victimisation and exploitation (Allely, 2015a). A recent review (Allely, 2015b) identified only four studies examining this issue: all involved case studies and small samples. Interpersonal difficulties with prison staff and fellow inmates and distress relating to the stressful environment were prominent themes identified. This has the clear potential to render imprisonment more burdensome for those with ASD. Furthermore, ASD is associated with reduced levels of empathy from prison staff (Glaser & Deane, 1999).

The custodial environment and regime itself also presents numerous difficulties for ASD offenders: these include sensory issues and lack of appropriately skilled support staff to name but a few. In the absence of a moral, or legal acceptance of wrongdoing in ASD, the meaningful role of a custodial disposal as an effective deterrent is questionable.

In 2016, Her Majesty's Young Offender Institute (HMYOI) Feltham became the world's first autismaccredited prison or YOI. It is one of the largest YOIs in Europe and recently became the first in the United Kingdom to be awarded Autism Accreditation from the NAS: the UK's leading charity for people affected by autism. The scheme provides an autism-specific quality assurance programme for organisations throughout the United Kingdom and internationally (NAS, 2017). In this instance, HMYOI Feltham sought to improve autism practice across every area of prison life, such as admission, staff training, behaviour management and the physical environment, with the long-term goal of tackling issues often faced by prisoners with ASD and ultimately lowering recidivism rates. Feltham's achievement triggered ministerial support for NAS accreditation across the UK's prison estate. This represented the first such collaboration between the NAS and a prison and a significant step forward in terms of the criminal justice system formally acknowledging and responding to the needs of those with ASD.

Justice is conscience, not a personal conscience but the conscience of the whole of humanity. Those who clearly recognize the voice of their own conscience usually recognize also the voice of justice.

> – Letter to Three Students (1967), by Aleksandr Solzhenitsyn (1918–2008).

Conclusion

The history and evolution of our understanding of autism has been convoluted. Naturally, the prevailing scientific thinking at each stage of discovery was not without ripples into societal and cultural beliefs. Sociopolitical changes in tandem with advances in research have sculpted our concepts of autism and informed us how best to educate and treat (Wolff, 2004). From the time of their arrest, defendants with ASD face a varied and demanding array of challenges. Each individual presents a unique constellation of deficits that can impair fitness to be tried and criminal responsibility among other forensic considerations. As such, the relationship between their deficits and offending behaviour needs to be elucidated on a case-by-case basis. This is necessary in order to determine whether they should be held less responsible for criminal acts.

This should only occur in the context of careful psychiatric assessment and expert guidance such that a jury can make an informed decision.

Offenders with ASD represent a relatively small, yet atypical group. There is little evidence to suggest they are more likely to offend; however, certain factors may increase their risk of offending. The challenges discussed exemplify a clear and broader need for the increased recognition of ASD amongst policing organisations, the legal profession, the judiciary and indeed legislators. An increased need for appropriate educational resources, specialised care and supportive accommodation has been identified and increasingly advocated for in recent years by dedicated carers' groups. Institutional autism-specific accreditation warrants exploration and investment as appropriate not only in our prison system but beyond into policing and probation services.

Improving access and increased funding for advocacy services appropriately staffed and skilled to meet the needs of those with ASD could potentially help alleviate the distress of defendants and the apprehension and confusion often experienced by those lacking such training or experience. Furthermore, early detection and appropriate intervention and support in the community may help to lower the risk of reoffending. As such, increased funding for general mental health services and committed investment to bridge the gulf between our national ID and forensic mental health services is needed.

In 2013, the Autism Bill 2012 was proposed in Ireland in recognition of the need for a coherent and national framework for addressing the specific needs of adults with ASD. It is similar in scope to legislation enacted in Northern Ireland [Autism (NI) Act 2011] and England (Autism Act 2009). The bill outlines the need for comprehensive cross-departmental strategies to meet these complex needs and a duty to implement any such measures. Its enactment and implementation could potentially herald vast changes in terms of the aforementioned resource, service and training deficits. Unfortunately, momentum for the Autism Bill 2012 has reduced. Nevertheless, it remains clear that a firm commitment to a cohesive national strategy to develop existing autism services towards the goal of an appropriately resourced and funded network is critical if we are to improve how we care for those with ASD that come into contact with the criminal justice system.

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Conflicts of Interest

None.

Ethical Standards

The authors assert that all procedures contributing to this work comply with the ethical standards of the relevant national and institutional committee on human experimentation with the Helsinki Declaration of 1975, as revised in 2008.

References

- **Allely CS** (2015*a*). Autism spectrum disorders in the criminal justice system: police interviewing, the courtroom and the prison environment. *Recent Advances in Autism*, 1–13.
- Allely CS (2015b). Experiences of prison inmates with autism spectrum disorders and the knowledge and understanding of the spectrum amongst prison staff: a review. *Journal of Intellectual Disabilities and Offending Behaviour* **6**, 55–67.
- American Psychiatric Association (APA) (1994). Diagnostic and Statistical Manual of Mental Disorders (fourth edition) (DSM-IV). American Psychiatric Association: Washington, DC.
- American Psychiatric Association (APA) (2013). *Diagnostic* and Statistical Manual of Mental Disorders, 5th edn. American Psychiatric Association: Washington, DC.
- Asperger H (1944). Die autistischen psychopathen im kindesalter archiv fuer. Psychiatrie und Nervenkrankheiten 177, 76–137.
- Barry-Walsh JB, Mullen PE (2004). Forensic aspects of Asperger's syndrome. *Journal of Forensic Psychiatry & Psychology* **15**, 96–107.
- **Blair RJR** (2001). Neurocognitive models of aggression, the antisocial personality disorders, and psychopathy. *Journal of Neurology, Neurosurgery & Psychiatry* **71**, 727–731.
- Brugha T, McManus S, Meltzer H, Smith J, Scott FJ, Purdon S, Harris J, Bankart J (2009). Autism Spectrum Disorders in Adults Living in Households Throughout England: Report from the Adult Psychiatric Morbidity Survey 2007. The NHS Information Centre for Health and Social Care: Leeds.
- Clare ICH, Gudjonsson GH (1993). Interrogative suggestibility, confabulation, and acquiescence in people with mild learning disabilities (mental handicap): implications for reliability during police interrogations. *British Journal of Clinical Psychology* **32**, 295–301.
- Clare ICH, Gudjonsson GH (1995). The vulnerability of suspects with intellectual disabilities during police interviews: a review and experimental study of decisionmaking. Mental Handicap Research 8, 110–128.
- **Dickson K, Emerson E, Hatton C** (2005). Self-reported antisocial behaviour: prevalence and risk factors amongst adolescents with and without intellectual disability. *Journal of Intellectual Disability Research* **49**, 820–826.

- Farrington DP (2007). Childhood risk factors and risk-focused prevention. *The Oxford Handbook of Criminology* **4**, 602–640.
- Freckelton I (2013). Autism spectrum disorder: forensic issues and challenges for mental health professionals and courts. Journal of Applied Research in Intellectual Disabilities 26, 420–434.
- **Freckelton I, List D** (2009). Asperger's disorder, criminal responsibility and criminal culpability. *Psychiatry, Psychology and Law* **16**, 16–40.
- Frith U (1991). Asperger and his syndrome. Autism and Asperger Syndrome 14, 1–36.
- Gillberg C (1992). The Emanuel Miller Memorial Lecture 1991: autism and autistic-like conditions: subclasses among disorders of empathy. *Journal of Child Psychology and Psychiatry* 33, 813–842.
- Gillberg C (2002). A Guide to Asperger Syndrome. Cambridge University Press: Cambridge, United Kingdom.
- Glaser W, Deane K (1999). Normalisation in an abnormal world: a study of prisoners with an intellectual disability. *International Journal of Offender Therapy and Comparative Criminology* **43**, 338–356.
- Hare DJ, Gould J, Mills R, Wing L (1999). A Preliminary Study of Individuals with Autistic Spectrum Disorders in Three Special Hospitals in England. National Autistic Society: London.
- Haskins BG, Silva JA (2006). Asperger's disorder and criminal behavior: forensic-psychiatric considerations. *Journal of the American Academy of Psychiatry and the Law* 34, 374–384.
- Haslam J (1809). Cases of insane children. In Observation on Madness and Melancholy, pp. 185–206. Haydon: London.
- Kanner L (1943). Autistic disturbances of affective contact. The Nervous Child 2, 217–250.
- King C, Murphy GH (2014). A systematic review of people with autism spectrum disorder and the criminal justice system. *Journal of Autism and Developmental Disorders* 44, 2717–2733.
- Kolvin I (1971). Studies in the childhood psychoses: I. Diagnostic criteria and classification. The British Journal of Psychiatry 118, 381–384.
- **Laurent AC, Rubin E** (2004). Challenges in emotional regulation in Asperger syndrome and high-functioning autism. *Topics in Language Disorders* **24**, 286–297.
- Lerner MD, Haque OS, Northrup EC, Lawer L, Bursztajn HJ (2012). Emerging perspectives on adolescents and young adults with high-functioning autism spectrum disorders, violence, and criminal law. *Journal of the American Academy of Psychiatry and the Law* **40**, 177–190.
- McKinnon v Secretary of State for the Home Department (2009) EWHC 170.
- Mouridsen SE, Rich B, Isager T, Nedergaard NJ (2008). Pervasive developmental disorders and criminal behaviour: a case control study. *International Journal of Offender Therapy and Comparative Criminology* **52**, 196–205.
- Murphy D (2010). Understanding offenders with autismspectrum disorders: what can forensic services do? *Advances* in *Psychiatric Treatment* **16**, 44–46.

- Myers F (2004). On the Borderline?: People with Learning Disabilities and/or Autistic Spectrum Disorders in Secure, Forensic and Other Specialist Settings. Scottish Executive Social Research: Edinburgh.
- Narvaez D (1999). Using discourse processing methods to study moral thinking. *Educational Psychology Review* 11, 377–393.
- National Autistic Society (NAS) (2011). Autism, a Guide for Criminal Justice Professionals. National Autistic Society: London.
- National Autistic Society (NAS) (2017). Autism Accreditation. (http://www.autism.org.uk/accreditation). Accessed 13 March 2017.
- North AS, Russell AJ, Gudjonsson GH (2008). Highfunctioning autism spectrum disorders: an investigation of psychological vulnerabilities during interrogative interview. The Journal of Forensic Psychiatry & Psychology 19, 323–334.
- Parish v DPP (2007) VSC 494.
- Perske R (2011). Perske's list: false confessions from 75 persons with intellectual disability. *Intellectual and Developmental Disabilities* 49, 365–373.
- R v Pritchard (1836) 7 C. & P. 303.
- R v Kagan (2004) 185 CCC (3d) 417.
- **Robertson CE, McGillivray JA** (2015). Autism behind bars: a review of the research literature and discussion of key issues. *The Journal of Forensic Psychiatry & Psychology* **26**, 719–736.
- Rutter M (1968). Concepts of autism: a review of research. Journal of Child Psychology and Psychiatry 9, 1–25.
- Schwartz-Watts DM (2005). Asperger's disorder and murder. Journal of the American Academy of Psychiatry and the Law 33, 390–393.
- Sultan v The Queen (2008) EWCA Crim 6.
- Wing L (1981). Asperger's syndrome: a clinical account. *Psychological Medicine* 11, 115–129.
- Wing L (1997). Asperger's syndrome: management requires diagnosis. *Journal of Forensic Psychiatry* 8, 253–257.
- Wing L, Gould J (1979). Severe impairments of social interaction and associated abnormalities in children: epidemiology and classification. *Journal of Autism and Developmental Disorders* **9**, 11–29.
- Wolff S (2004). The history of autism. European Child & Adolescent Psychiatry 13, 201–208.
- Woodbury-Smith M (2014). Changing diagnostic practices: autism spectrum disorder. Advances in Psychiatric Treatment 20, 23–26.
- Woodbury-Smith MR, Clare ICH, Holland AJ, Kearns A (2006). High-functioning autistic spectrum disorders, offending and other law-breaking: findings from a community sample. *The Journal of Forensic Psychiatry & Psychology* **17**, 108–120.
- Woodbury-Smith MR, Clare ICH, Holland AJ, Kearns A, Staufenberg E, Watson P (2005). A case-control study of offenders with high-functioning autistic spectrum disorders. *Journal of Forensic Psychiatry & Psychology* **16**, 747–763.
- World Health Organization (1992). The ICD-10 Classification of Mental and Behavioural Disorders: Clinical Descriptions and Diagnostic Guidelines. WHO: Geneva, Switzerland.