## **Editorial: Is autism linked to criminality?**

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Press reports often link autism to criminality with attention grabbing headlines such as, "Recipe for a serial killer? Childhood abuse, autism and head injuries are more common in murderers" (taken from the UK's Daily Mail following research by Allely, Minnis, Thompson et al., 2014). Gary McKinnon, who was diagnosed with autism during the investigation into his alleged extensive damage to US defence system, was described as perpetrating "the biggest military hack of all time"; and the press widely emphasised that the gunman in the 2012 Sandy Hook Elementary School massacre in the US, Adam Lanza, reportedly had a diagnosis of autism.

Such portrayals are particularly disturbing given the power of the media and its influence on public perceptions. Media reports can directly shape the public's beliefs about an association between mental illness and violence (Philo, Secker, Platt, et al., 1994). In recent years, the public has been exposed to very rare allegations of serious criminal offences involving individuals who may have autism; it is not surprising that public beliefs are being unduly influenced into (wrongly) believing that autism causes criminal behaviour. In reality, neither research nor the entire accumulation of sensational media reports supports such beliefs.

The journal, *Autism*, enjoys a wide readership that extends far beyond academia. We set out here, for the benefit of the whole readership, to debunk the myth that autism causes criminal behaviour. We review the little research on this topic and describe how easily negative stereotypes can be reinforced by press reports.

King and Murphy (2014) conducted a thorough review of the research in this area. They found that on the whole, there is no evidence that people with autism are more likely to engage in criminal activity than people without autism. The studies they reviewed presented conflicting information, however. Some studies have found that people with autism are *less* likely to commit offences such as probation violations and property offences (Cheely, Carpenter, Letourneau et al., 2012; Kumagami & Matsuura, 2009) and another study reported that people with autism are no more likely to commit violent crime than the general population (Woodbury-Smith, Clare, Holland et al., 2006). On the other hand, *some* people with autism may be more likely than the general population to commit certain types of offences such as arson (Hare, Gould, Mills et al., 1999; Mouridsen, Rich, Isager et al., 2008), sex offences (Cheely et al., 2012; Kumagami & Matsuura, 2009) and assault and robbery (Cheely et al., 2012).

Research on autism and offending needs to be interpreted with caution, however. Most studies rely on information from small samples that do not represent the general

population. These studies also rarely include people without autism for comparison. This makes it inappropriate to attempt to generalise these studies to the autism population at large. For example, two studies found a disproportionately high prevalence of autism in high security hospitals (e.g., Hare, et al., 1999; Scragg & Shah, 1994), but this does not mean that the autism population as a whole includes a disproportionate percentage of people who present a danger to society.

There are also several case reports of people with autism engaging in criminal behaviour (e.g., Baron-Cohen, 1988; Mawson, Grounds & Tantam, 1985). However generalisations cannot be made on the basis of individual cases regardless of whether these reports originate in the research literature or in the press, not least because it is often the unusual characteristics in such cases (e.g., the bizarre and random acts of violence noted by Mawson et al., 1985) that initially draw attention for analysis.

Especially concerning is the potential for misinterpretation of press reports purportedly based on research. For example, a recent study asserted that "a significant proportion of mass or serial killers may have had neurodevelopmental disorders such as autism" (Allely, et al., 2014). As the authors clearly note, their study was filled with problems that make it difficult to interpret their results. They had almost no rigorous studies on which to base their review; they relied heavily on online resources (e.g., murderpedia.org), rather than peer-reviewed literature; and they drew their cases from very unusual settings (e.g., secure hospitals) that did not reflect the general population. Of particular importance, the majority of mass/serial killers with autism that were included within this review also had experienced other psychosocial risk factors for criminal behaviour, such as physical or sexual abuse. This led Allely and colleagues to conclude that it is a complex combination of neurodevelopmental and environmental factors that cause someone to commit an act of extreme violence, and not autism alone. Nonetheless the headline in the press, "Recipe for a serial killer? Childhood abuse, autism and head injuries are more common in murderers," seems highly likely to be interpreted, at least by the lay reader, as meaning that people with autism are more likely to become murderers, despite research findings to the contrary. In fact, Allely and colleagues reviewed only studies of those very rare cases involving mass murderers and serial killers as opposed to murderers more generally.

People with autism may be at less risk for offending than the general population, and more likely to be victims of crime (e.g., Beadle-Brown, Guest, Richardson, et al., 2014). Nevertheless, there may be a very small group of people with autism at increased risk of committing crimes. For these individuals, a very complex combination of internal and external risk factors is likely involved. Indeed, this is the case for any offender.

In sum, existing research on autism and criminality is patchy at best and the relevant issues for consideration are highly complex. Needless to say, more rigorous research is needed. Arguably of greater use, however, would be research that examines the complex factors that lead some individuals with autism to engage in criminal behaviour, rather than

studies of whether the very heterogeneous group of people who have autism are more likely to commit crimes than the general population.

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