**JADD ENCYCLOPAEDIA OF AUTISM**

**FIRST RESPONDERS AND AUTISM**

Although only about 1% of the population are autistic (Brugha et al., 2012) there is some evidence to suggest that people with disabilities, including autism, come into contact with the criminal justice system significantly more often than predominant neurotype[[1]](#footnote-1) (PNT) (non-autistic) individuals. Although autistic people are statistically less disposed to criminality (Mouridsen et al., 2007), they are seven times more likely to be arrested (Curry, Posluszny, and Kraska, 1993), sometimes unlawfully. The longer they remain in the criminal justice system, the greater the injustice and suffering inflicted upon them. There are also potential negative impacts on the police such as a greater risk of litigation, waste of resources, and negative public relations. There is a clear need for the police, and, in particular, officers initially on the scene of an incident (first responders), to have a sufficient understanding of autism, how it may present in an individual, and how best to handle incidents involving an autistic person.

So – what is autism? Richard Howlin (2003) calls it social dyslexia. In the same way that dyslexia involves difficulty understanding words, the term ‘social dyslexia’ captures the difficulty that all autistic individuals have, to a greater or lesser degree, in understanding social situations. As virtually all situations people find themselves in are social, it can be seen that not fully understanding social behaviour can give rise to problems – sometimes considerable ones – when interacting with other people including first responders.

Autism is highly complex for various reasons. Firstly, there is its heterogeneity and extreme diversity whereby one autistic individual is unable to live independently or to work whereas another highly intelligent individual is married and working as a university professor. Although the variation in presentation in autism is very wide, all autistic people will have difficulties in understanding PNT social behaviour. These difficulties were described as the ‘triad of impairments’ in social interaction, social communication, and social imagination (Wing, 1981). The triad affects all autistic individuals, just not to the same extent in each case. Social interaction and social communication were combined in the latest edition of the American Psychiatric Association’s Diagnostic and Statistical Manual (DSM-5) on the basis that they are inextricably linked (APA, 2013). Autism may also involve what are known as repetitive behaviours[[2]](#footnote-2) and special interests[[3]](#footnote-3). Many autistic individuals are either hyper- or hypo-sensitive to sensory stimuli, and, sometimes, both. Many individuals also experience debilitating anxiety. It is made even more complex by the tendency for some autistic individuals to have other conditions as well as autism (co-morbidities). These may include pathological anxiety, clinical depression, attention-deficit hyperactivity disorder, dyspraxia, epilepsy, and obsessive-compulsive disorder (psychiatric co-morbidities) (Abdallah et al., 2011; Kamio, Moriwaki, & Inokuchi, 2013), and allergies, gastrointestinal problems, migraines, and seizures (medical co-morbidities) (Bauman, 2010).

Yet another complexity in autism is the ever-changing diagnostic criteria. During the currency of the fourth edition of the Diagnostic and Statistical Manual (DSM-IV) one of the diagnoses given to persons with autism was Asperger’s Disorder, commonly known as Asperger’s syndrome (AS). This diagnosis was given to certain (intellectually) high functioning autistic individuals. However, the DSM-5 which combined all the DSM-IV diagnoses into a single diagnosis – Autism Spectrum Disorder (ASD) – and dispensed with AS. For many years to come, first responders will come across some or all of the following diagnoses: Asperger’s syndrome; atypical autism; autism spectrum disorder; ‘classical’ autism; and pervasive developmental disorder not otherwise specified. All first responders need to know is that these are all attempts by clinicians to diagnose autism so if they are informed that a person they are involved with has any one of these diagnoses they know that autism is involved and should bring their knowledge of autism to bear.

If an officer is advised by their despatcher that an individual is autistic, or the individual themselves discloses their autism, any interaction requires sensitive handling based on an understanding of autism. In the introduction to his field response tips for first responders encountering a person with autism, Debbaudt writes: ‘Law enforcement professionals may unexpectedly encounter or be asked to find a person with autism. Recognizing the behavior symptoms and knowing contact approaches can minimize situations of risk - risk or victimization of the person with autism, and risk to the officer’[[4]](#footnote-4). The role of police officers and other emergency service personnel in a first response situation is to avoid a situation where lack of knowledge of autism causes a situation to escalate beyond what would be expected because of a failure to understand autism. The training of all first responders in autism (and other neurodiverse conditions) is therefore essential.

**Current knowledge**

Autistic people are in contact with the police, as victims, witnesses, and perpetrators. In this respect they are no different from people without autism. The differences could arise in various ways. Firstly, whilst contact with law enforcement can be a stressful thing for anyone, people with autism – who tend to experience greater levels of anxiety, and have lower levels of “global stability”[[5]](#footnote-5) than their non-autistic peers – are likely to find such contact especially stressful (Beardon, 2008; Chown, 2010; Debbaudt, 2001; North, Russell & Gudjonsson, 2008). Secondly, there is an ongoing debate as to whether or not persons with autism are less likely to commit crime than those without autism because of the general tendency in autism to comply with rules and/or are particularly prone to committing certain types of crime (e.g., stalking) because of social difficulties and less well-developed theory of mind[[6]](#footnote-6) than non-autistic people (King & Murphy, 2014).

There is no clear evidence to demonstrate whether autistic people are more or less likely to commit a crime. Ghaziuddin et al. (1991) reviewed the published literature on the possibility of links between Asperger syndrome (AS) and offending going right back to when autism was first identified in the 1940s. These authors concluded that there was no clear link between AS and violent crime, suggesting that people with AS were no more likely to commit violent crime than the non-autistic members of society. Although they were unable to determine whether or not autism is associated with an increased rate of violent offending in comparison to the general public, Långström et al. (2009 p. 1358) ‘(concluded) that violent offending in ASD is related to similar co-occurring psychopathology as previously found among violent individuals without ASD’. Mouridsen (2012) provided an update on the issues discussed in the Ghaziuddin et al. study. His conclusions were that:

Currently, there is still no body of evidence to suppose that people with ASD are more prone to commit offences than anyone else. However, a small number of serious crimes can be linked to the core features of ASD. Co-morbid psychiatric disorders are important risk factors for offending in people with ASD

(Mouridsen, 2012, p. 79).

Mouridsen is careful to clarify that there is no valid evidence regarding types of offending that may be associated with autism. Nevertheless, he discusses certain types of offending that the limited studies undertaken in this area *indicate* may be linked with autism. The serious crimes he referred to are arson, and sexual offending with and without violence. Despite his statement that some serious crimes can be linked to the core characteristics of autism, and an acknowledgement that no good whole population studies have been carried out so far, he has to conclude his review by repeating that ‘available findings still indicate that people with ASD are not more prone to committing offences than anyone else’ (ibid., p. 85).

Since Mouridsen’s review, Sevlever, Roth and Gillis (2013) have reported on sexual abuse and offending in autism. They have been unable to identify any evidence of a greater risk of sexual offending conduct in autistic individuals. They include a useful discussion of factors that may lead to an increased or reduced risk of sexual offending in autism, summarised in table 1. Some of these proposed factors could be of more general application.

***Factors that may increase the risk***

* Difficulty with social-emotional reciprocity / reduced levels of empathy[[7]](#footnote-7)
* Naiveté (interpersonal / exploitation by others)
* Sexual frustration and preoccupations / limited intimate relationships
* Co-morbid intellectual disability (in which case it may be the latter that increases the risk of offending)
* Individuals with autism may be more likely to offend against younger children because, given poor social skills, younger children may be easier to interact with than older children or adults
* Tendency to engage in private sexual behaviours in public places

***Factors that may decrease the risk***

* The greater supervision of some autistic individuals reducing opportunities to offend
* A limited ability to deceive others which may reduce precursor behaviours to sexual offending
* A tendency for autistic individuals, especially higher functioning individuals, to be rule-governed could inhibit such offending

(Extracted from Sevlever, Roth & Gillis, 2013, pp. 192 & 194-5)

Where there is a co-morbid psychiatric disorder in addition to autism one has to bear in mind that it may be the co-morbidity that is leading to the offending acts, not the autism per se. We know of no research suggesting that an autistic person with any particular co-morbid psychiatric disorder is any more likely to commit a crime than a non-autistic individual with the same psychiatric disorder. Based on their systematic review of the literature, King and Murphy (2014) reported that there was ‘little’ evidence to support the often-heard contention that people with autism are over-represented in relation to certain crime types. Allen et al. (2008, p. 748) expressed the view that ‘The apparent association with offending has been in part generated by sensationalised … media reports’. As there is tentative 'evidence' to demonstrate that of those who do commit a crime many do so without criminal intent, as a direct result of behaviour associated with autism, one could conclude that there may be a lower tendency to *knowingly* commit crimes in autism (Beardon, 2008).

Autistic individuals are well known to have what can be referred to as 'spiky profiles' in their abilities and skills set. Essentially what this means is that while a person may be extremely adept in one area, they may present as just as extremely poor in another. This can lead to all sorts of erroneous assumptions being made by others - either of ability above and beyond actual capability, or incorrectly inferring a skill set is below par when this may not be the case. Having an 'autism profile' that identifies how autism impacts on an individual on a day to day basis can be an invaluable tool to help understand experience from that autistic person's perspective. In relation to criminal activity it is essential to have this understanding - so called seeing through the 'autism lens' - otherwise it is highly likely that PNT judgements will be applied (unfairly). It is extremely common for people to make judgments based on behaviour, and it is equally common for those judgements to be based on years of ingrained PNT concepts; however, the application of those judgements onto an autistic person whose behaviour is led by a qualitatively differing cognitive process is likely to lead to false premises. A good autism profile must include a full sensory profile i.e., a thorough identification of how the sensory environment impacts on the individual.

Anxiety and poor stress management are common in children with autism. Anxiety levels may increase during adolescence, as young people face an increasingly complicated social environment and often become more aware of their difficulties interacting with others (White et al., 2009). Anxiety levels exhibited by adolescents with autism are significantly higher than those in the general population (Bellini, 2004). Anxiety remains a serious issue for many adults with autism. Gillott & Standen (2007) demonstrated that adults with autism were almost three times more anxious than their comparison group of adults with intellectual disabilities. They wrote that ‘stress was found to correlate with high anxiety levels for the autism group, particularly the ability to cope with *change, anticipation, sensory stimuli and unpleasant events*’ (ibid., 2007, p. 359, our italics). Whilst a first response situation, or other contact with the criminal justice system, is likely to be a stressful for time for most people, individuals with autism will often face higher levels of anxiety and stress than their non-autistic peers. Steps should be taken, as far as possible, to reduce anxiety and stress; this will be of benefit to first responders as well as to the autistic individuals they interact with. We have set out various steps that can be taken in a variety of situations to achieve this. However, the most important action an organisation can take is to train its officers, and those staff who come into contact with the public, to have an understanding of neurodiverse conditions.

The behaviour of an autistic individual at times of duress is highly likely to differ from that of a PNT individual. As already noted, if that behaviour is only understood within a PNT context, it is very probable that the behaviour will be misinterpreted. At times of increased anxiety the individual may well present behaviours that are necessary to avoid a 'meltdown'[[8]](#footnote-8). For example, an autistic individual may need to engage in repetitive body movements (stimming). Interrupting this may increase levels of anxiety exacerbating the situation. Some possible scenarios that could lead to incorrect initial perceptions include:

1. *Refusal to engage* - sometimes when under duress the autistic response is essentially to shut off from external stimuli as much as is possible. To the 'untrained eye' the person may appear to be refusing to respond, or excessively rude, or even having something physically wrong with them. In actual fact it may well be a simple coping mechanism that is of huge benefit to the individual, and allowing them the space to reduce their own anxiety is often the most appropriate course of action in this instance.
2. *Seemingly excessive reaction to proximity and/or touch* - at times of high anxiety sensory sensitivities may be greatly increased. This means that if someone is tactile sensitive, for example, then any touch (including very light touch) may be processed as intense pain. In some cases a 'natural' reaction to a perceived assault for some people would be to defend themselves. Even well-intentioned contact meant as reassurance might be perceived physically as painful; combined with a potential lack of understanding of intent, this might make a difficult situation for the autistic person much worse. Sometimes even being close to the autistic individual is enough for them to move from a state of anxiety to a state of panic.
3. *Already in a state of panic* - A single crewed officer received a call about a man with a knife. She followed the man in her car to allow backup to arrive but soon realised that she knew the man to be autistic and with intellectual learning difficulties and that he was not dangerous. A group of young men had approached him and sent him into a panic. The officer knew that firearms officers and dogs were on the way to the scene so she knew she had to act quickly and get the knife off him. She explained that other officers would soon arrive who did not know him like she did. The officer was able to get him to throw the knife away. She also agreed not to handcuff him, as she knew it would hurt him, and suggested that they sat in the back of the police car together. The situation had been ‘defused’.
4. *Eye contact issues* - Social practice assumes a good way of gaining attention is to insist on eye contact - as well as the assumption that eye contact reciprocity will lead to a greater sense of trust. Although some autistic people do not have difficulty looking other people in the eye, many do and this difficulty can be exacerbated at times of stress. A first responding police officer may easily misinterpret this as deliberate evasion, a guilty reaction, or disrespect. Of course, as with any other individual, an autistic person can deliberately evade, react guiltily or show disrespect but it is far more likely that not looking the officer in the eye is an aspect of their autism. First responders who attempt to gain eye contact may inadvertently either make the autistic individual feel as though they have to do so - thus increasing distress – or, if the individual refuses, may make incorrect assumptions about why they are not doing so, as sometimes lack of eye contact can be seen as an indicator of suspicious activity or guilt.
5. *Flight risk* - A person with autism may try and run away from a situation involving a first responder. Unless an officer has an understanding of autism they will assume that this is a guilty reaction. It could be a guilty reaction of course but the officer should not assume this as it may be an autistic reaction. The autistic person may have great difficulty with social interaction and experience high levels of anxiety. Their natural response may be to get away from a highly stressful situation without thought as to the impression this creates, nor to the potential consequences of their own actions.

Irrespective of the levels of anxiety, there are some aspects of autism that may lead to misinterpretation of behaviour by first responders that require due consideration. For example:

1. *Sensory processing* - Autistic individuals may only be able to process sensory information through one sensory channel at a time. This is known as single attention (Murray, Lesser & Lawson, 2005). They may be unable to process auditory information, for example, because they are focusing on visual information. In such cases a lack of ability to hear, and subsequently respond to, verbal requests may come across as defiance and/or non-compliance.
2. *Shutdown[[9]](#footnote-9)* - A former autistic member of the internal consultancy team of a major United Kingdom police force found herself in a situation where officers suspected a terrorist incident was in play. She was in the reception area of an office building. Police officers shouted to the people there to get out of the building. The autistic individual ‘froze’ and did not vacate the premises as instructed. This was misinterpreted by the officers and a difficult situation arose. The situation was resolved satisfactorily on this occasion.
3. *Lack of or 'odd' facial expression / non-verbal communication* - some autistic people demonstrate either no facial expression (i.e., the 'same' face irrespective of the situation) or a facial expression deemed at odds with the situation (e.g., smiling when in distress). The misinterpretation of facial expressions could put the autistic individual in a position of grave disadvantage; it is beneficial for first responders to conclude that facial expressions should not be taken as an indication of any emotional state or intent. Similarly, 'body language' and other non-verbal cues should not be interpreted as being automatically meaningful.

Autistic individuals tend to use and process language and non-verbal cues in different ways in comparison to their non-autistic peers. Issues include:

1. *Expressive versus receptive language* - for most people, expressive language skills are a reasonable indicator of receptive skills (comprehension). In other words there might be an assumption that an eloquent person will have equally good comprehension skills. This may not be the case with an autistic person who may display very good expressive language skills but have huge problems with understanding what is being said to them.
2. *Feeling obliged to respond* - Remaining with the poor comprehension theme, some individuals will have learnt (usually by being directly taught) that a rule in verbal exchanges is that they *must* respond if asked a question. This places the individual at a huge disadvantage if they feel obliged to respond despite not understanding the question. In an interview situation this clearly could create numerous problems for an autistic individual.
3. *Literal interpretation* - It is often the case that the autistic person has a very specific way of understanding language; they may assume that there is a direct correlation between the words being uttered and the meaning of them (sometimes referred to as literal interpretation). However, many people do not use language in this way, even if they might think they do. Language is often full of contradictions and ambiguities; in addition, accuracy of language use varies considerably from one person to the next. For example the following instructions might cause a huge problem to an autistic person: "Freeze! Don't move! Take your hands out your pockets and turn around slowly…" - for most people the *meaning* behind the words is clear. For an autistic person in a stressful situation it might appear that the person is quite literally totally contradicting himself and they will not know how to react to such a confusing set of commands.
4. *Processing language* - Processing time may be considerably longer for autistic individuals than for PNT individuals. This means that after each sentence, for example, an individual might need a few seconds to 'digest' what has been said in order to understand it. If this additional processing time is not allowed, either the person will fall further and further behind the communication - or they will simply miss chunks of it out in order to keep up.
5. *Multiple concepts or questions at one time* - Many autistic people can get confused when they are asked to deliberate over multiple concepts at the same time, or when more than one question is asked at the same time. It is good practice when communicating with an autistic person to ask questions that a clear and 'one dimensional' and to do so one at a time.
6. *Prosody* - this refers to the tone of voice, inflection, and stressors placed on words - which is often either misunderstood or not taken into account at all by an autistic person. In some cases the same sentence can have very different meanings dependent on the prosodic expression - in written language grammar along with italics provides the equivalent information. It is important for anyone communicating with an autistic person to take into account that their language (including prosody) needs to be as ambiguity-free as possible.

It might be the case that some autistic people do break the law, but they often do so as a direct result of the way in which autism impacts upon them, as opposed to having any criminal intent. This is clearly a contentious and problematic issue for consideration, but nonetheless, as argued by Beardon (2008) there is research to demonstrate that in some cases of criminal activity the cause of the action might be directly related to autism rather than intent. Having an understanding of what caused a person to behave in a criminal manner would enable better decisions as to the best course of action to take. For example, an autistic adult who is both socially naïve and desperate for a friendship group might be persuaded to hoard stolen goods in return for the promise of being included in a social group. A lack of understanding between cause and effect, consequences of actions, difficulty with understanding the intentions of others, naïve levels of trust, difficulty in reading social situations, accepting language at 'face value' without question - these are all common characteristics of being autistic, and all can play some part in increasing the risk of engaging in criminal activity without any intention of doing so.

**Future directions**

In this section we discuss the importance of disclosure of a diagnosis of autism (or any other neurodiverse[[10]](#footnote-10) condition); include tips for first responders in a ‘first contact’ situation (courtesy of the autism specialist, Dennis Debbaudt); tips for communicating with persons with autism (including in an interview situation); general comments on anxiety levels and also on sensory sensitivities in autism; including recommendations for future practice.

Police officers and other first responders come into contact with all types of neurodiversity, not just autism. Whilst clinicians often require hours to diagnose a neurodiverse condition, first responders may have very little time in which to 'size up' an individual with whom they are in contact. Even if all first responders received effective training in neurodiverse conditions they cannot be expected to identify any one of these conditions in a first response situation. This emphasises the importance of disclosure in such situations. It is appreciated that there are various reasons why an individual may not wish to disclose a diagnosis outside family and friends. However, we consider it important that police forces, other first response organisations, and those advocating for autism and other neurodiverse conditions do all they can to encourage disclosure in first response situations (even by those individuals who otherwise would not disclose) as first responders cannot reasonably be expected to react appropriately in every situation they may face in the absence of disclosure.

Major autism charities in the United Kingdom, like the National Autistic Society, have produced information cards that autistic people can carry and share with first responders. These cards explain that the person they are speaking to is autistic. They also highlight the potential of communication difficulties the autistic person may have during unfamiliar situations. Debbaudt (2002) has developed some guidelines to assist first responders when an individual is known to be autistic.

* Approach in a quiet, non-threatening manner.
* Turn sirens and flashing lights off.
* Talk calmly in a moderated voice.
* Do not interpret limited eye contact as deceit or disrespect.
* Avoid metaphorical questions that cause confusion when taken literally.
* Avoid body language that can cause confusion. Be alert to a person modelling your body language.
* Understand the need to repeat and rephrase questions.
* Understand that communications will take longer to establish.
* Use simple and direct instructions and allow for delayed responses to questions, directions and commands

(Debbaudlt, 2002).

We would add the following additional guidance to Debbaudt’s suggestions:

* Where possible avoid touch as even a light touch may cause pain where a person is hypersensitive. Touching may cause a ‘flight or fright’ reaction; don’t assume that means the person is guilty of an offence.
* The cold metal part of handcuffs may cause pain so avoid where possible.

When a person is arrested they are being deprived of their liberty and an officer needs to explain why, in the form of a police caution. The police caution can be complicated to understand so instead of asking a suspect if they understand which may produce a ‘yes’ or ‘no’ response, ask them to explain in their own words what they understood; this could help to identify vulnerable suspects. It is worth noting that in the UK the Police and Criminal Evidence Act, 1984 (PACE), states that a person should be treated as vulnerable when a custody officer has any doubt about their mental state. Easy read custody sheets that help bridge the gap between a custody officer and a suspect whilst they await an appropriate adult have been piloted in a UK force with positive outcomes for autistic people. Moreover, they take away the uncertainty of what will happen whilst they are in custody (Parsons & Sherwood, 2016).

Attwood (2008) suggests that a number of autistic people find that sensory sensitivity causes them more issues in daily life than the social aspects connected with autism. Hence, understanding what may cause these sensory distractions will help to create a less stressful environment for an interview to take place (Baron-Cohen, 2008). For example, the noise of a clock in an interview room may be distracting or cause pain for someone hypersensitive to noise so consider moving objects out of the interview room that will cause distractions. When there are sensitivities a holding cell or an interview room accompanied by an officer maybe more appropriate than placing a suspect with autism in a police cell alone. In their new guidance on autism friendly training for first responders[[11]](#footnote-11) – with a particular focus on medical first response – Linda Barboa and Jan Luck major on the sensory aspects of autism. Interestingly, these authors make no mention of theory of mind, executive (dys)functioning, and central coherence which are almost always referred to by writers on autism, let alone other theory such as single attention/monotropism. Whilst supporting a strong focus on the sensory issues, this should not be at the expense of relevant autism theory in our view.

Debbaudt (2002) highlights susceptibility in autistic people during interviews; in particular, when leading questions are asked. As a result of the susceptibility of some autistic people they may feel that do not need legal advice and confess to an offence that they did not commit. This is especially true if the questions were not responded to correctly due to misinterpretation. It is good practice to summarise from time to time during an interview to check understanding. If the person is quiet or confused consider asking them to write their responses down. Allow them extra time to process information. Additionally, direct support from another person, either a family member or an appropriate adult should be considered a reasonable adjustment. An autistic person may also agree to receiving a police caution for a crime they have not committed due to anxiety of going to court and being cross-examined. It is also paramount that the person understands that accepting a police caution results in a criminal record and will affect any criminal conviction checks in the future. It is also noteworthy that in the UK you can only appeal against your conviction, sentence or both at a magistrates’ court if you pleaded not guilty at your trial.[[12]](#footnote-12) Therefore, a custody officer’s risk assessment for an autistic person should include assigning an appropriate adult to ensure procedures are followed and understood by the detainee. An appropriate adult should be additional to legal representation and should be present during the interview (PACE, 1984). However, it is only when vulnerabilities are suspected or declared that such provision will be arranged emphasising the importance of disclosure when in police custody. Officers should consider taking statements from an autistic victim of a crime in surroundings familiar to them. Explain what being a witness entails and offer support if a case goes to trial.

We have explained that individuals with autism will often face higher levels of anxiety and stress than their non-autistic peers. Steps should be taken, as far as possible, to reduce their anxiety and stress; this will be of benefit to first responders as well as to the autistic individuals they interact with. We have set out various steps that can be taken in a variety of situations to achieve this. However, the most important action an organisation can take is to train its officers (and those staff who come into contact with the public) to have an understanding of neurodiverse conditions since knowledge enhances interaction.

Future operational first responder practice *must* involve adequate training of officers and staff if interactions between first responders and persons with autism are to improve. Hence we conclude this entry with some comments on existing autism understanding training and a set of recommendations. In the United Kingdom, there have been only two studies of autism training provision by first responders – the police service in both cases – by Artingstall (2007) and Chown (2010). However, we have just completed the analysis of responses from 34 of the 43 UK police forces to a questionnaire submitted as Freedom of Information Act requests in July 2016, including a question asking for details of autism awareness training. Our data shows that there is no consistency in training provision for autism across the police service in the UK. Only 16 of the 34 respondents provide, or had provided, some form of autism training. The training provided varies greatly and may only be a Powerpoint presentation on a force website, online learning, or a 90 minute in-person session. Only five forces had involved their local autism organisation in developing their training. Another force had provided four separate autism courses – each of a full day – in which they had trained almost 1,200 officers and staff although almost all this training had been undertaken four years ago or more. In the USA, even in a situation where training is mandated by the state legislature (New Jersey in this case), and the training is delivered on a ‘minimalist’ online basis, a ‘survey indicated that a significant percentage of emergency service personnel have not completed the state mandated training’ (Kelly & Hassett-Walker, 2015, p. 9).

The following recommendations are made regarding future first responder autism awareness training (Chown, 2010; Debbaudt, 2002; Kelly & Hassett-Walker, 2015):

1. Whilst online training may have its place, in-person training is arguably far superior, especially where autistic individuals are involved in the delivery.
2. Individuals with experience of first response situations in a professional capacity *and* of autism bring a personal bond and validity to autism training. Officers and staff in first responder organisations with an immediate family relationship with a person with autism represent a potential training resource for their organisations.
3. Studies suggest that lengthier and more diverse approaches to training are often desired, and covering all neurodiverse conditions rather than ‘just’ autism.
4. Training should also be conducted jointly between the police, fire, and ambulance services, including discussion groups and role play scenarios, so that each service can contribute their own perspective and learn from the others.

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1. One of the authors of this paper on autism and first responders introduced the term “predominant neurotype” – which simply focuses on autistic people being in a minority – as an alternative to “neurotypical”. [↑](#footnote-ref-1)
2. Unless there is a co-morbid obsessive-compulsive disorder (OCD), repetitive behaviours in autism are of benefit to an autistic individual – by introducing some stability and/or being comforting – whereas in OCD these behaviours are detrimental to the individual’s mental health. [↑](#footnote-ref-2)
3. An individual with autism often has fewer interests, but engages with their interests more intensely, than is generally the case for PNT individuals. Such interests are known as “special interests”. [↑](#footnote-ref-3)
4. http://www.autismriskmanagement.com/autism-articles [↑](#footnote-ref-4)
5. Whilst non-autistic people generally have high levels of global stability, which enable them to cope with the 'ups and downs' of life reasonably easily, those with autism have low levels of global stability because it is difficult for them to cope day-to-day in a non-autistic world. So issues that a non-autistic person will - generally speaking - cope with relatively easily, may create great anxiety and stress for an autistic individual. [↑](#footnote-ref-5)
6. Theory of mind is a reference to an individual’s ability to attribute mental states to themselves and to others (Frith and Happé, 1999). It has been described as the means by which people make sense of other people’s behaviour by attributing beliefs, desires, and feelings that motivate actions. [↑](#footnote-ref-6)
7. It is noteworthy that typically developing individuals who sexually offend against others also demonstrate a lack of empathy for their victims. [↑](#footnote-ref-7)
8. Many autistic people experience meltdowns. The public often finds it hard to tell autism meltdowns and temper tantrums apart, but they are different things. A meltdown is ‘[an intense response to overwhelming situations’](http://researchautism.net/publications/6508/meltdowns,-surveillance-and-managing-emotions;-going-out-with-children-with-autism). It happens when someone becomes completely overwhelmed by their current situation and temporarily loses behavioural control (National Autistic Society). [↑](#footnote-ref-8)
9. A shutdown is caused by the same factors that cause a meltdown but instead of losing behavioural control the individual stops reacting to the situation as a means of avoiding it. [↑](#footnote-ref-9)
10. Neurodiversity is a concept where neurological differences are regarded as a natural human variation. These differences include Asperger syndrome, attention deficit hyperactivity disorder, autism, dyscalculia, dyslexia, dyspraxia, and Tourette syndrome. [↑](#footnote-ref-10)
11. Although the Barboa and Luck guidance is generally excellent, sensory sensitivity may make wrapping a person in a blanket inappropriate in some instances, and attempting to move a person in the midst of a meltdown is not advisable; they can be moved to a quiet area after the meltdown has subsided. [↑](#footnote-ref-11)
12. https://www.gov.uk/appeal-against-sentence-conviction/magistrates-court-verdict [↑](#footnote-ref-12)