

Literature Summary – Autism and Suicidality

What do we currently know about autism and suicidality?

This review of the literature summarises the findings of existing academic research into autism and suicidality.

Prevalence:

- For autistic individuals, estimates of the prevalence of suicide ideation range between 19.7 % and 66% and estimates for the prevalence of suicide attempts range between 1.8% and 36% (Cassidy, 2020).
- A recent review of 372 coroner reports across 2 counties found that 41.4% of individuals who died by suicide were autistic or possibly autistic, thus highlighting the risk of individuals who have not yet been diagnosed (Cassidy et al., 2022).
- In one research study, more than 40% of individuals who have attempted suicide score higher than the clinical cut off for autism diagnosis on the Autism Spectrum Quotient measure (Richards et al., 2019).

Populations at greater risk:

- Parental depressive symptoms are correlated with increased suicidality for autistic adolescents and young adults (Vasa et al., 2020).
- Individuals who have received a late diagnosis of autism are at higher risk of suicidality (Cassidy et al., 2014). Individuals are particularly vulnerable to suicidality in the few years immediately following their diagnosis, highlighting the need for post-diagnosis support (Hirvikoski et al. 2018).
- Transgender and gender non-conforming autistic individuals are at greater risk of suicidality than cisgender autistic individuals (Strang et al., 2021).
- Autistic men and autistic women are equally likely to die by suicide, which is different to the general population, where men are significantly more likely to die by suicide (Newell et al., 2023).
- Unlike in the general population, IQ is not a protective factor against suicidality for autistic individuals. In fact, individuals with the largest gap between IQ and adaptive functioning (namely those who are highly cognitively able but lack adaptive functioning capacity) are at greatest risk of experiencing mental health crises and suicidality (Kraper et al., 2017).
- Substance abuse has also been shown to increase the risk of suicidality in autistic individuals (Segers & Rawana, 2014).

- There is conflicting evidence as to whether anti-depressants in autistic adolescents and young adults are correlated with suicidality (Mayes et al., 2013; Storch et al., 2013).

Risk Factors:

- Cognitive inflexibility associated with autism may lead individuals to believe that suicide is the only way out, or the only solution (Cassidy et al, 2020; South et al., 2020).
- Camouflaging (hiding one's autistic traits to fit in) has been linked to suicidality (Cassidy et al., 2018) as it can increase challenges with asking for help in addition to increasing the likeliness of an individual experiencing thwarted belongingness (Cassidy et al, 2020). Thwarted belongingness, a sense of isolation and alienation from others, has been identified as one of two central constructs in the Interpersonal Theory of Suicide (ITS; Chu et al., 2017). Although this theory was designed with neuro-typical people in mind, it has some aspects which apply to the experiences of autistic individuals. Autistic individuals have been suggested to have higher experiences of thwarted belonging and the other central construct of the ITS (perceived burden) than non-autistic individuals (Pelton et al., 2020)
- The following have been identified as increasing the risk of an autistic individual dying by suicide: previous suicide attempts; living alone and/or recent change to living situation; poor engagement with services; recent unemployment; relationship breakdowns and exposure to other people's suicidal behaviour. (Cassidy et al., 2022). In Cassidy et al.'s (2022) study, autistic individuals who died by suicide had an average of 6 risk markers.
- Autistic individuals are more likely to have experienced factors associated with vulnerability to suicidality such as unemployment (Office for National Statistics, 2021), homelessness (Churchard et al., 2018) and domestic abuse (Griffiths et al., 2019).
- Non-suicidal self-injury (NSSI) is associated with an increase in suicidality regardless of an individual's perception of their self-injury, perhaps because NSSI increases an individual's pain threshold and decreases danger perception (Moseley et al., 2020).
- Difficulties with attention switching (becoming 'fixated' on a particular thought or thought pattern) are associated with increased suicidality (Paquette-Smith et al., 2014).
- Suicidal and depressive thoughts may present differently in autistic individuals due to alexithymia, which refers to difficulties identifying and describing emotions (Berthoz et al., 2013). It is thought that approximately half of autistic individuals experience alexithymia (Berthoz & Hill, 2005). Alexithymia has been suggested as a greater risk factor for suicidality than depression and a particular priority for autism- focused research (Hintikka et al., 2004; De-la-Iglesia & Olivar, 2015). Costa et al (2020) have found that the interaction between autism and alexithymia predicts suicidality over and above antidepressant dosage, other autistic traits, and depressive symptoms.

Differences between crisis presentation in autistic and non-autistic individuals:

- In Cassidy et al's (2022) study, only 32% of autistic individuals communicated their suicidal thoughts verbally to another person before making an attempt on their life.
- A study involving 462 parents of autistic youth found that the most commonly reported behavioural characteristics of older youth and young adults (11-25 year olds) experiencing suicidality were physical and verbal aggression (Vasa et al., 2020).
- Autistic individuals are more likely to select lethal methods for suicide attempts than the general population (Kato et al., 2013; Takara & Kondo, 2014).

Access to support:

- In Crane et al.'s (2019) study of 130 autistic young people, approximately 1/3 of participants confident that they would know who to contact in a mental health crisis. Furthermore, roughly the same proportion of participants were confident that they would receive appropriate support if they reached out. Similarly, 17.8% of participants described themselves as not at all confident that they would be able to recognise that they were experiencing mental health difficulties (for the purpose of this illustration: confidence was interpreted as moderately confident or higher).
- Autistic individuals often talk about falling between the gaps, as services for neurotypical people cannot meet needs, but services for autistic people are often targeted towards those with co-existing learning difficulties (Crane et al., 2019).
- There is a skills gap in many healthcare services. Research suggests that whilst GPs understand autism on a theoretical basis, they do not always understand how to support autistic individuals in practice (Unigwe et al., 2017). This is mirrored by the titular quotation of Camm-Crosbie et al's (2019) study: 'People like me don't get support'. Furthermore, participants speak about the lack of support, especially in geographical disparities.
- Autistic individuals are sometimes not identified as being in crisis, because they do not interpret the screening tools used by clinicians as intended (Cassidy et al., 2021). Lai et al. (2017) found that some common screening questions, such as 'Are you having thoughts of suicide right now?', may be misinterpreted by an autistic individual who will be more likely to answer literally (namely, consider only that exact second).
- The double-empathy problem (namely that autistic individuals struggle to empathise with non-autistic individuals, but that non-autistic individuals also struggle to empathise with autistic individuals) has been used to suggest that non-autistic individuals struggle to understand or interpret the behaviour of autistic individuals (Sheppard et al, 2016; Milton et al., 2022).
- Over 60% of autistic individuals report difficulties with engaging in telephone conversations (Cassidy, 2017). Furthermore, autistic individuals may require more

processing time and may struggle with open-ended questions, as they may feel overwhelmed.

- Schwartzman et al (2021) demonstrate that visual aids can be helpful when safety planning with autistic individuals.

Existing Interventions and Support:

- A revised version of the Mental Health Crisis Assessment Scale has been created by Kalb et al (2022) for use with autistic populations. The MHCAS-R has good internal consistency ($\alpha = .85$), which can be used to show all items are relevant to mental health crises for autistic individuals. Furthermore, the scale was well-reviewed by parents who completed the scale and the professionals who interpreted it. There was 88% agreement between the scale and clinician judgement, which is strong concurrent validity and demonstrates the utility of the scale.
- The Vulnerability Experiences Quotient (VEQ) was designed by Griffiths et al. (2019) and contains 60 items assessing an individual's vulnerability across 10 facets. The facets are:
 1. Education
 2. Employment
 3. Finances
 4. Interactions with social services
 5. Interactions with the criminal justice system
 6. Childhood victimisation
 7. Adulthood victimisation
 8. Domestic abuse
 9. Mental health
 10. Social support

The scale was validated for use with autistic individuals and has very good internal consistency ($\alpha = 0.89$)

- Cassidy et al (2020; 2021) have revised a suicidality assessment tool used with the general population. The feedback they received from autistic individuals on the non-revised tool included that response options were unclear; questions were too vague (e.g. one participant was unsure as to what constituted a suicidal thought in terms of intensity and duration). There were issues identified with questions that required participants to 'predict the future', e.g. 'How likely are you to die by suicide someday?'. This is linked to wider difficulties with future abstract thinking in autistic populations (Cassidy et al., 2018). The revised questionnaire scored highly for content validity (how clear each item is) and had acceptable internal consistency (>0.79). The revised questionnaire also has excellent temporal stability, meaning scores are consistent

across time (>0.9) and measurement sensitivity, with 88% agreement with expert opinion.

Wider Family Unit:

- Having an autistic sibling is correlated with a higher prevalence of childhood mental health diagnosis (Griffith et al., 2013; Lovell & Wetherell, 2016). Furthermore, Shtayermman & Fletcher (2022) surveyed 144 individuals with an autistic sibling and found that the siblings of autistic individuals were at greater risk of suicidality than the general population, and this risk was greater for siblings with a greater number of anxious traits.
- Furthermore, parents of autistic individuals have a greater prevalence of mental health difficulties (Zabotksy et al., 2012), suggesting that services should also provide parental support.

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