

Autism and attachment disorders – how do we tell the difference?

ARTICLE

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SUMMARY

Clinicians assessing children with autism are sometimes faced with a dilemma, especially if there is a definite or suspected history of abuse or neglect: is this autism or attachment disorder? This is important because the attachment disorders (reactive attachment disorder and disinhibited social engagement disorder) are thought to be caused by abuse or neglect, whereas autism is not. We discuss the Coventry Grid, a clinical tool aiming to aid differentiation between autism and attachment disorders. We examine the small body of empirical studies focusing on this differential diagnosis and find that the Coventry Grid can be regarded as an evidence-based tool. We also discuss preliminary findings regarding a relatively unstructured observational method involving two assessors who engage the child in jokes and playful social dilemmas, which might help clinicians elicit the information required to complete the Coventry Grid.

LEARNING OBJECTIVES

After reading this article you will be able to:

- understand the key similarities and differences between autism and attachment disorders (i.e. reactive attachment disorder and disinhibited social engagement disorder)
- understand that children who have been maltreated are at higher risk of also having neurodevelopmental disorders such as autism, so will require a thorough and holistic assessment
- understand how the Coventry Grid, together with a socially dynamic observational method, can help in differentiating between autism and attachment disorders.

KEYWORDS

Autism spectrum disorder; attachment disorders; abuse and neglect; differential diagnosis; clinical assessment.

psychiatric problems associated with abuse and neglect, and for many years the Centre's clinical research team, in which two of us work (C.D. and H.Mi.), has been aware of this dilemma. The team has conducted a series of studies to examine the problem (Bennett 2009; Sadiq 2012; Davidson 2015) and it has also become aware of work on the part of other clinical (Moran 2010, 2021) and research groups (Mayes 2017) to address it.

In this article, we describe the nature of the clinical dilemma and some issues of terminology, and give a brief summary of relevant literature on autism and attachment disorders. We then present the Coventry Grid, an innovative clinical tool developed by H.Mo. that aims to aid clinicians in discriminating between autism and attachment disorders. This tool was developed from clinical impressions rather than from empirical research, so we interrogate the clinical usefulness of the Coventry Grid with respect to the small number of empirical studies on this topic. We also introduce the 'Live Assessment', an observational technique developed by the Scottish Centre for Autism which we are examining empirically in an ongoing study. We suspect that the Live Assessment – or other relatively unstructured observational tools containing social stressors – might be a useful way of eliciting the crucial information that would allow a clinician to complete the Coventry Grid and make a confident differential diagnosis between autism and attachment disorder.

An overview of autism and attachment disorders

The clinical dilemma in brief

The diagnosis of autism is one of the most standardised in psychiatry: international clinical guidelines recommend which types of professional should take part in autism assessments (National Institute for Health and Care Excellence 2011; Hyman 2020), and many autism diagnostic teams use standardised assessments that were initially developed for research, such as the Autism Diagnostic Observation Schedule (ADOS) and the Autism Diagnostic Interview-Revised (Fitzgerald 2017; Lefort-Besnard 2020). Despite this diagnostic rigour, certain groups of children continue to present diagnostic dilemmas,

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The focus of this article is a clinical dilemma, namely how clinicians might tell the difference between autism (thought to be highly heritable; Waye 2018) and attachment disorders (thought to occur only in the context of abuse and neglect; Guyon-Harris 2019). The child mental health team (<https://www.gla.ac.uk/acecentre/>) focuses on the

one of which is children who have experienced – or are suspected of having experienced – abuse or neglect. This raises a common clinical dilemma: ‘autism or attachment disorder’?

Relationship stress is normal in a clinic setting – don’t over-interpret

Clinicians commonly use the term ‘attachment difficulties’ to express concerns about the relationship between young children and parents. Yet few adequately validated measures of middle childhood attachment are usable in clinical practice (Jewell 2019), so use of the term ‘attachment difficulties’ is usually based on unstandardised observations of the parent–child relationship made during visits to the clinic (Turner 2019).

These concerns sometimes raise suspicions that the family environment might be less than ideal, or that abuse or neglect could be occurring. Yet, as any parent who has taken their child to the doctor will know, children who are distressed because of mental or physical illness – or simply due to being in a stressful clinic setting – often show unusual relationship-focused behaviour with their parents, such as clinginess or oppositional behaviour (McLaughlin 2010). These behaviours do not necessarily indicate anything about the quality of the day-to-day relationship: the degree of clinginess and/or oppositional behaviour is likely to vary depending on how ill the child is and how stressful the clinic setting (McMorran-Young 2021). We and others therefore recommend that the term ‘attachment difficulties’ should be avoided (Turner 2019).

What psychiatric disorders can abuse and neglect cause?

DSM-5 identifies two attachment disorders – reactive attachment disorder (RAD) and disinhibited social engagement disorder (DSED) – and these are the only two disorders in DSM-5 that are specifically attributed to abuse, neglect or other ‘extremes of insufficient care’ such as institutionalisation (American Psychiatric Association 2013).

Rutter has described attachment disorders as ‘characterised by relative failure to develop committed intimate social relationships’ (Rutter 2009). RAD is characterised by failure to seek and accept comfort, and associated dysregulation in emotions and social relationships. DSED is characterised by socially indiscriminate behaviours and failure to respect social boundaries (American Psychiatric Association 2013). Although RAD and DSED are thought to have different aetiologies (abuse in the case of RAD and neglect in the case of DSED), abuse and neglect commonly co-occur, and therefore RAD and DSED also commonly co-occur (Zeanah

2021). For this reason, we will discuss these disorders as RAD/DSED.

The other disorder that can arise from abuse and neglect is post-traumatic stress disorder (PTSD), characterised by intrusive re-experiencing of the trauma (e.g. flashbacks and nightmares) and avoidance of reminders of the trauma (Bryant 2019). However, PTSD is not a maltreatment-specific disorder because it can also arise from traumas that occur outside the interpersonal domain, such as car accidents or natural disasters. The work of Lewis et al reminds us that PTSD is not the most common disorder to be associated with trauma (whether interpersonal or not): more prevalent disorders, such as depression, conduct disorder and substance misuse, occur even more frequently than PTSD in young people who have experienced trauma (Lewis 2019).

Can autism be caused by abuse and neglect?

Autism, characterised by problems with social communication and repetitive and stereotyped behaviours (American Psychiatric Association 2013), is highly heritable (Waye 2018) and there is no evidence that it is caused by abuse and neglect (Mayes 2019). Even the ‘quasi-autism’ described in children who experienced extreme deprivation in Romanian orphanages appeared to be more indicative of DSED as the children grew older (Kreppner 2010).

Yet autism is often associated with parenting-related stress: a young child with autism might find certain noises, tastes or textures intolerable, resulting in a lack of cooperation with essential routine tasks such as brushing teeth (Khrautieu 2020). Another child with autism might become fixated on a repetitive and stereotyped interest, making it extremely difficult for the parents to get her to school on time (Shiri 2020). Despite these challenges, the overwhelming majority of parents of children with autism cope well, especially if they have family and professional support (Goedeke 2019), but stress in these parents is understandable (Shiri 2020). It is therefore crucial for clinicians to recognise that, just like children with other developmental disabilities, children with autism are at higher risk of experiencing abuse or neglect (McDonnell 2019). Yet, even though neurodevelopmental conditions such as autism increase the risk of abuse and neglect, the overwhelming majority of children with autism do not experience maltreatment – in fact, secure attachment between children with autism and their parents is very common and is a testament to parents’ capacity to adapt to their child’s social communication difficulties (Teague 2017). On the rare occasions that abuse and neglect do occur, they might exacerbate symptoms

in children with autism, but they are extremely unlikely to have caused it in the first place (Dinkler 2017; McDonnell 2019).

The complex relationship between neurodevelopmental disorders and maltreatment

What of children who have experienced maltreatment? In 2013, one of us coined the term ‘maltreatment-associated psychiatric problems’ to highlight two intriguing clinical observations: the first was that many people who have experienced maltreatment do not develop psychiatric disorders; the second was that, when people who have experienced maltreatment do develop psychiatric problems, these are often complex and overlapping (Minnis 2013). It is now well-known that neurodevelopmental disorders tend to overlap, cluster in families and are underpinned by common genetic factors (Jensen 2017). What this means in practice is that a child with autism is more likely than a child who does not have autism to also have attention-deficit hyperactivity disorder (ADHD), coordination problems and/or an intellectual disability. This was first described by Gillberg in a paper on what he termed ‘ESSENCE’ (early symptomatic syndromes eliciting neurodevelopmental clinical examinations) in child psychiatry (Gillberg 2010) and has since been acknowledged by many other experts in neurodevelopment (Thapar 2017). Yet the number and type of overlapping disorders seemed to be even greater for maltreated children (Minnis 2013).

We tested this impression in a large twin study. We examined symptoms of autism, ADHD, tic disorders and intellectual disabilities in several thousand Swedish 9-year old twins. Those children who had symptoms in three of these four domains were nearly ten times as likely to have experienced abuse or neglect. Surprisingly, the abuse and neglect did not cause this neurodevelopmental complexity. Instead, additional genetic factors were causing both the abuse and neglect and the neurodevelopmental complexity (Dinkler 2017). We do not know for

certain what these additional genetic factors are, but we suspect they might be heritable neurodevelopmental problems running in the family. This has turned our clinical thinking on its head: it may be that abuse and neglect are more likely to arise when an already struggling family, in which the parent(s) may also have neurodevelopmental problems, has a child whose complex neurodevelopmental symptoms make parenting challenging. There is some evidence for this already in ADHD (Stern 2018), autism spectrum disorder (ASD) and intellectual disability (McDonnell 2019). Even though RAD and DSED are the only disorders thought to be caused specifically by abuse and neglect (Guyon-Harris 2019), the causality of RAD and DSED also has a heritable component (Minnis 2007) and it is intriguing as to why some abused and neglected children develop RAD, some develop DSED and some develop neither RAD or DSED. We have speculated that RAD and DSED might arise in children with pre-existing neurodevelopmental disorders who also experience maltreatment – a hypothesis that has yet to be tested (Nelson 2020).

Box 1 summarises the key points of this section on autism and attachment disorders.

A clinical approach to discriminating between autism and attachment disorder

As we have discussed above, there are various reasons why the differential diagnosis between RAD and/or DSED and autism can be challenging:

- children’s relationship-focused behaviour can be atypical in the clinic simply owing to the stress of the clinic setting, and this can suggest the existence of attachment-related difficulties when there may be no such difficulties present
- autism and RAD/DSED have a fundamental common feature – difficulties with social relationships
- children who have psychiatric problems in the context of maltreatment often have complex

BOX 1 Key points on autism and attachment disorders

- Only two psychiatric diagnoses are believed to be specifically caused by abuse and neglect: reactive attachment disorder (RAD), characterised by failure to seek and accept comfort, and disinhibited social engagement disorder (DSED), characterised by socially indiscriminate behaviours.
- There is no evidence that autism can be caused by abuse and neglect. However, like children with other developmental disabilities, children with autism are at higher risk of being abused and neglected, although the overwhelming majority of children with autism do not experience maltreatment.
- Children who have been abused and neglected are at higher risk of also having neurodevelopmental conditions, including autism, that were not caused by the abuse and neglect. Conversely, although children with neurodevelopmental conditions, including autism, are at higher risk of abuse and neglect, child maltreatment is rare and the overwhelming majority of children with autism experience excellent family relationships despite their social communication difficulties.

overlapping problems; they are at higher risk having RAD/DSED and are also at higher risk of having neurodevelopmental disorders, so autism and RAD/DSED might co-occur.

The clinical decision about whether the child fulfils criteria for autism, for RAD/DSED or for both is a crucial one. Clinicians are aware that autism is highly heritable, whereas RAD and DSED are thought to arise only in the context of abuse and neglect (Guyon-Harris 2019). Making the correct diagnosis could therefore have child protection implications as well as implications for ways the child's environment might be adapted to support their development (Davidson 2015).

The Coventry Grid

To address these important clinical concerns, one of us (clinical psychologist H.Mo.) developed the Coventry Grid (Moran 2010, 2021) to aid clinicians with these challenging diagnostic dilemmas. The need for such a tool became obvious to the team at Coventry and Warwickshire Partnership Trust in the late 1990s, because they were worried about misdiagnosing children: missing autism in children who had been maltreated or, conversely, missing the opportunity to provide the right support to children who had RAD or DSED. They were also concerned that some children with autism, and no history of maltreatment, might be suspected as having RAD or DSED and that these suspicions might result in unjustified child protection proceedings. Even for children with a known history of maltreatment, there were still important therapeutic implications of getting the diagnosis right. For example, the team had a therapy group for girls aimed at the kinds of psychological difficulties that often co-occur with RAD/DSED, with an emphasis on managing their emotion regulation: the group specifically excluded girls with autism because of a perception that young people with autism required a different kind of therapeutic approach (Moran 2009). The team also ran a group for girls with autism that was more activity based, with an emphasis on development of social communication: participants seemed to benefit from structured activities to develop relationships between members of the group.

The Coventry Grid considers how children with autism compare with children who have RAD or DSED, in eight domains (listed in **Box 2**). The Coventry Grid was developed from clinical impressions rather than from empirical research and is not intended to be diagnostic assessment: its purpose is simply to point clinicians towards key areas to focus on in their clinical assessment and it can be used alongside whatever tools clinicians have at their disposal for exploring the Coventry Grid domains.

BOX 2 The eight domains of the Coventry Grid

- 1 Flexible thinking and behaviour
- 2 Play
- 3 Social interaction
- 4 Mind reading
- 5 Communication
- 6 Emotion regulation
- 7 Executive function
- 8 Sensory processing

(Moran 2021)

The research evidence for the Coventry Grid approach

We will now examine the research evidence that might support clinicians in making the critical diagnostic decision between autism and attachment disorder and examine whether it is possible to place the Coventry Grid in a research context. We (C.D. and H.Mi.) searched the databases PsycInfo and Google Scholar for articles from October 2011 to October 2021 containing the search terms 'reactive attachment disorder', 'disinhibited social engagement disorder' and/or 'attachment disorder' and 'autism' and/or 'autism spectrum disorder'. We found three papers describing empirical research on this topic – two from our own clinical research group at the ACE Centre, one from a US group – plus one case study (Kildahl 2019).

Social use of language

In our clinical research group, we have tried to tackle this problem in different ways. First (Sadiq 2012), we assessed 126 children with RAD and/or DSED, ASD or who were typically developing using measures usually used to examine symptoms of ASD: parent-reported Autism Diagnostic Interview-Revised (ADI-R) algorithms and the Children's Communication Checklist, which examines pragmatic language functioning. All children had normal IQ and, in the ASD group ($n=52$) and the typically developing group ($n=39$), no child had a history of abuse or neglect. In the RAD/DSED group, all 35 children had symptoms of DSED and all but two also had symptoms of RAD. We found that children in the RAD/DSED group had significant problems in their use of language in context, rapport and social relationships with a degree of severity equivalent to children in the ASD comparison group. Despite none of the RAD/DSED group having a diagnosis of ASD, more than 60% met ADI-R clinical criteria on the 'use of language and other social communication skills' subscale, 46%

on the ‘reciprocal social interaction’ subscale and 20% had significant repetitive and stereotyped behaviours. We were able to conclude, from this study, that both ASD and attachment disorders were likely to be manifest in problems with social relatedness and that, although the pattern of these problems differed between the two types of disorder, clinicians were likely to struggle with discrimination unless offered more detailed information about the nature of social interaction in these two diagnostic areas (Sadiq 2012).

Social relationships

The profile of social relationship problems in autism is well-known: some children with autism are socially aloof (avoiding social interaction) or passive (interacting socially when others initiate this), whereas others have a stronger motivation towards social interaction but initiate this awkwardly (‘active but odd’) (Scheeren 2020). We conducted a qualitative study (Bennett 2009), using interpretive phenomenological analysis, to investigate how children with the socially indiscriminate behaviours characteristic of DSED perceived social relationships. We found that these children felt rejection and insecurity in social interactions, so attempted to control interactions with strangers (e.g. by asking personal questions). Despite being aware of ‘stranger danger’, these children had such a strong motivation to receive kindness from others that they would almost immediately place trust in the stranger and begin perceiving them as a ‘friend’ (Bennett 2009).

We explored this further in a study involving 125 children (Davidson 2015) – 58 with ASD (and no history of abuse or neglect) and 67 with RAD and/or DSED. This time, we focused our assessment on symptoms of RAD and DSED, and all assessments of the ASD group were videotaped. Although the groups were matched in terms of IQ and demographics, the ASD group had a significantly larger verbal performance deficit in their cognitive functioning. Although comorbid psychiatric diagnoses were common in both groups, the RAD/DSED group had a greater number and range of comorbid diagnoses compared with the ASD group, and disruptive behavioural problems were particularly common in the RAD/DSED group. In previous research, we have found interviews with parents or carers to be the most robust aspect of a diagnosis of RAD or DSED when comparing with the general population (Minnis 2013). In contrast, when trying to discriminate between RAD/DSED and ASD in this study, we found observation to be the most useful part of a multi-informant assessment. On parent report alone, 22 (38%) of the children with ASD appeared to have DSED symptoms and 14 (24%) appeared

to have RAD symptoms, yet for 32 of these 36 children, a diagnosis of ASD and not RAD/DSED was obvious on review of videos (Davidson 2015): children with ASD were less likely to show interest in reciprocal interaction; conversation tended to be dominated by specialist interests; and conversational interactions tended to break down during unstructured parts of the assessment such as the juice break. Some children with ASD had unusual speech patterns, for example including accents incongruent with their geographical or family location or unusual emphasis on certain words or sounds (Davidson 2015). For 4 of the 36 children, the videos were still equivocal so were reviewed, masked to diagnosis, by an independent expert: for 3 of the 4, the diagnosis was clearly stated to be ASD and not RAD/DSED. For the fourth (a girl with ADHD as well as ASD) a review of the case notes confirmed a robust ASD diagnosis and no history of abuse or neglect (Davidson 2015).

Differentiation and co-occurrence

Although the emotionally withdrawn symptoms of RAD seemed, in this study, to be hard to discriminate from the emotional withdrawal found in ASD, we suspect that the revised DSM-5 criteria might be helpful here. DSM-5 criteria place more emphasis, for a RAD diagnosis, on failure to seek or accept comfort. The research paradigm we used in the Davidson et al study did not place the kind of stress on the children that would have necessitated them seeking comfort, but other studies have shown that children with ASD do seek and accept comfort from parents in stressful situations, albeit sometimes in unusual ways (Rozga 2018; Martin 2020).

Some fascinating research has come from a US group running a clinic specialising in autism and other neurodevelopmental disorders that used assessment tools including a semi-structured interview with parents, cognitive testing and observations of each child (Mayes 2017). Over 15 years, 20 children were referred with diagnoses of RAD and/or DSED and, unsurprisingly because of the ASD focus of the clinic, a high proportion also had autism. This study offered a golden opportunity to examine which symptoms indicate RAD/DSED and which suggest ASD. There were certain symptoms that, in this sample, only occurred in those with autism (even if the child also had RAD/DSED): these were ‘restricted and obsessive interests, repetitive stereotyped play (e.g. lining up objects), stereotypies (e.g. hand flapping and spinning), craving movement (e.g. excessive running, jumping, and swinging), distress with crowds, fascination with repetitive movements (e.g. fans), picky eater (limited food preferences and/or

hypersensitivity to food texture), normal motor and delayed speech milestones, and unusual fears (e.g. elevators, tornadoes, and small spaces)' (Mayes 2017). Atypical or repetitive vocalisations or speech, stereotypies and unusual fears were also much more common in those with autism (Mayes 2017). This study also demonstrated clearly that RAD/DSED and autism can co-occur – a finding that we have frequently seen mirrored in our clinical work. This makes sense in the light of our behavioural genetic work showing that children who have experienced abuse or neglect are more likely to have complex neurodevelopmental problems (Dinkler 2017): if a child has RAD or DSED it should not be a surprise if that child also has neurodevelopmental problems such as ASD, ADHD or an intellectual disability.

Once clinicians accept that co-occurring problems are common in children who have experienced abuse or neglect, and that the nature of social communication difficulties differs between RAD/DSED and ASD, many will have no difficulty deciding when a child has ASD or RAD/DSED. However, as our research has highlighted, very occasionally, clinical decision-making can remain challenging in this area.

The Live Assessment

Since the Davidson et al paper, we have been piloting a method that seems to work well for particularly complex autism assessments, such as when RAD and/or DSED is suspected and where the social behaviour is difficult to discriminate. This is a procedure called Live Assessment, used by the Scottish Centre for Autism, a team that conducts second opinions where other clinicians have found an autism assessment challenging. In Live Assessment, there is a relatively unstructured structured period of observation that includes two assessors who create 'social dilemmas' through informal conversation and play/games. This is currently being written up for publication with case examples. We have conducted the Live Assessment with ten children originally referred with a diagnosis of ASD and ten originally referred with RAD/DSED (in a study approved by the West of Scotland NHS Ethical Committee). Two children from the DSED-referred group were eventually given a diagnosis of both DSED and ASD and a third was given a diagnosis of ASD not DSED. The Live Assessment was helpful in making these decisions and our (previously unpublished) preliminary findings suggest that it might be helpful in revealing the social relationship differences between RAD/DSED and ASD. These social relationship differences include:

- children with DSED appear to be better able to engage in humour compared with children of the same age with ASD
- the play of children with DSED is often more creative and spontaneously shared
- children with ASD are generally more object focused compared with their peers with DSED
- some children with ASD show signs of stress when coping with the additional social interaction and demand of the two-assessor dynamic.

We suspect that the Live Assessment (or similar relatively unstructured assessments involving social stressors) might support clinicians to elicit the elements of the Coventry Grid, and that this will help them make the differential diagnosis between autism and RAD/DSED – especially in those cases that are still challenging even after thorough assessment. The clinical experience of the Coventry team is that traditional assessment tools for autism can be too structured to reveal the differences between children with autism and children with RAD or DSED. The ADOS, for example, was developed for children with autism who had significant impairments (Lord 2001) and may be less appropriate for those with more subtle or complex difficulties. A relatively unstructured assessment allows time for ordinary social interaction to develop, which eventually will reveal the differences between these groups: children with autism will likely become more and more stressed in the socially demanding situation and begin to reveal behaviours typical of autism; conversely, children with RAD/DSED will often feel more and more comfortable as time goes on, allowing abnormalities such as socially indiscriminate behaviour, or failure to seek comfort, to become more obvious. More research will be needed to further examine this.

Co-occurring autism and RAD/DSED

We have found no empirical research on the clinical presentation of children with both autism and RAD/DSED, and this will be another important avenue for future studies. However, Fig. 1 shows that features of both autism and RAD/DSED can be evidenced through considering each of the eight domains of the Coventry Grid. The implication of this is that if clinicians consider the eight domains of the Coventry Grid with an open mind as to the potential for dual diagnosis, they should be able to decide whether or not both autism and RAD/DSED are present. This process might also help the clinician decide which other members of the multidisciplinary team (e.g. speech and language therapist, clinical psychologist, occupational therapist) should become involved if further assessment is required.

Coventry Grid domain	Is there research evidence?
1. Flexible thinking and behaviour	Problems with flexible thinking and behaviour can occur in RAD/DSED but less common than in autism (Sadiq 2012); (Davidson et al., 2015); (Mayes et al., 2017) These include "restricted and obsessive interests, repetitive stereotyped play (e.g. lining up objects), stereotypes (e.g. hand flapping and spinning)" (Mayes et al., 2017) Focus on special interests notable in autism (Sadiq et al., 2012)
2. Play	Autism – less able to cope with unstructured play or interaction than RAD/DSED (Davidson 2015), Live Assessment
3. Social interaction	"Use of language in context, rapport and social relationships – as severe as ASD" (Sadiq 2012)
4. Mind reading	RAD/DSED – more able to enter into a joke on Live Assessment
5. Communication	Unusual speech patterns, odd accents, odd emphasis on vowels, (Davidson 2015) Children with ASD more likely to make errors in speech sounds, (Sadiq 2012) Atypical or repetitive vocalisations or speech, (Mayes et al., 2017)
6. Emotion regulation	Stereotypes (e.g. hand flapping and spinning), craving movement (e.g. excessive running, jumping, and swinging), distress with crowds, fascination with repetitive movements (e.g. fans), (Mayes 2017)
7. Executive function	Greater verbal-performance deficit in autism, (Davidson 2015) Normal motor and delayed speech milestones, (Mayes 2017)
8. Sensory processing	Picky eater (limited food preferences and/or hypersensitivity to food texture) (Mayes 2017)
Additional from the research	More comorbid diagnoses in RAD/DSED – (Davidson 2015) Unusual fears (e.g. elevators, tornadoes, and small spaces) (Mayes 2017)

FIG 1 The eight domains of the Coventry Grid – these are simply areas for the clinician to consider using whatever assessment tools are available. ASD, autism spectrum disorder; RAD/DSED, reactive attachment disorder and/or reactive attachment disorder.

BOX 3 Key points on discriminating between ASD and RAD/DSED

- Discriminating between autism spectrum disorder (ASD) and reactive attachment disorder and/or reactive attachment disorder (RAD/DSED) is usually possible if observation is part of the assessment, and the Coventry Grid is an evidence-based tool that can help clinicians to make this differential diagnosis.
- When the differential diagnosis is particularly challenging, a relatively unstructured observation involving two assessors, and social stressors such as jokes and play, can be helpful in eliciting the eight domains of the Coventry Grid and can support these more difficult diagnoses.
- Children who have been abused and neglected are at higher risk of a range of neurodevelopmental and mental disorders, so a dual diagnosis of autism and RAD/DSED is possible. The Coventry Grid should help the clinician decide whether the diagnosis is autism, RAD/DSED or both.
- Children who have been abused and neglected are at higher risk than their non-maltreated peers of having a range of co-occurring neurodevelopmental and mental disorders, so the assessment should always be broad-based to find out whether other diagnoses are present.
- Symptoms of RAD or DSED should never be used in the absence of other evidence to conclude that abuse or neglect has occurred because, very occasionally, symptoms of RAD/DSED can appear to be present in the absence of abuse or neglect.

Concluding remarks

In Fig. 1, we have outlined how the empirical studies and our preliminary findings from our work on the Live Assessment support all eight domains of the Coventry Grid. The Coventry Grid therefore is an evidence-based tool that can support clinicians facing the challenging dilemma of ASD or RAD/DSED. A fairly unstructured observational assessment, involving two assessors, such as the Scottish Centre for Autism's Live Assessment, appears to be helpful in eliciting some of the information needed to complete the Coventry Grid and make this differential diagnosis. It must be born in mind, however, that children who have experienced abuse or neglect are at higher risk of having neurodevelopmental disorders (Dinkler 2017) so that

dual diagnoses of ASD and RAD/DSED are entirely possible, despite the advice to choose one or the other in ICD-11 (World Health Organization 2021) and DSM-5. Also, very occasionally, children who have never experienced maltreatment may appear to have symptoms of RAD/DSED even when multi-informant tools are used, including observation (Davidson 2015). This underscores an important point – that symptoms of RAD or DSED should never be used, without additional evidence, to conclude that abuse or neglect has occurred.

An adult version of the Coventry Grid has recently been developed to help clinicians in adult mental health discriminate between autism and symptoms associated with complex trauma (Cox 2019). Since neurodevelopmental conditions such as autism are

MCQ answers

1 c 2 b 3 b 4 d 5 b

lifelong conditions, this is a welcome innovation warranting future research.

Despite children exposed to maltreatment being at higher risk of having neurodevelopmental disorders (Dinkler 2017; Hoover 2020), clinicians may be more likely to overlook neurodevelopmental disorders in children who have experienced adversity, possibly because their problems are assumed to be 'social' (Minnis 2021). This is beginning to change, and new resources are emerging to support parents caring for children with both ASD and attachment disorders. We would particularly recommend Hunt & Rodwell's (2018) book, which explains both types of disorder and offers plenty of parenting tips that would be useful for any parent or carer of a child with both types of disorder.

Box 3 summarises key points on differentiation between ASD and RAD/DSED.

Data availability

Details of the literature search strategy and interpretation are available by contacting the lead author.

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Author contributions

C.D. conceived of the paper, wrote the first draft and approved the final draft. H.Mo. developed the Coventry Grid, contributed to the paper and approved the final draft. H.Mi. discussed the format of the first draft and produced the final draft.

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MCQs

Select the single best option for each question stem

1 The two psychiatric diagnoses in DSM-5 specifically associated with abuse and neglect are:

- a PTSD and depression
- b PTSD and anxiety
- c reactive attachment disorder (RAD) and disinhibited social engagement disorder (DSED)
- d RAD and complex PTSD
- e complex PTSD and generalised anxiety disorder.

2 As regards autism and attachment disorders:

- a both can be caused by abuse and neglect
- b autism is highly heritable, whereas attachment disorders are thought to be caused by abuse and neglect
- c autism and attachment disorders are both caused entirely by heritable factors
- d parents are responsible for most of the behaviour problems seen in autism and attachment disorders
- e abuse and neglect are necessary and sufficient for both disorders.

3 As regards autism and attachment disorders:

- a autism is characterised by problems with social behaviour, whereas attachment disorders are characterised by challenging behaviours and oppositionality
- b it is usually obvious whether autism or attachment disorder is present clinically, especially if an observation has been conducted, but occasionally diagnosis is more challenging
- c a diagnosis of an attachment disorder should initiate child protection proceedings whether or not autism is also present
- d a diagnosis of an attachment disorder should initiate child protection proceedings, but only if autism is not present
- e a diagnosis of autism in a child with a history of abuse and neglect should make clinicians revisit that history since the abuse and neglect may not have been truly present.

4 Autism and attachment disorders are:

- a most easy to differentiate using parent report
- b always tricky to differentiate, so the Coventry Grid must be used if this is the differential diagnosis
- c always tricky to differentiate, so an observational assessment involving two or more assessors is essential for making this differential diagnosis
- d more easily differentiated using observational methods, and the Coventry Grid can help with this
- e always likely to occur together.

5 As regards attachment disorders:

- a reactive attachment disorder (RAD) is characterised by severely oppositional and controlling behaviours
- b RAD is characterised by failure to seek and accept comfort
- c disinhibited social engagement disorder (DSED) is characterised by disinhibited behaviours such as removing clothes or shouting out in public
- d DSED rarely co-occurs with ADHD
- e RAD and DSED have only been described in infants and preschool children.