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Social relationship difficulties in autism and reactive attachment disorder: Improving diagnostic validity through structured assessment

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ABSTRACT

Background: Autism Spectrum Disorder (ASD) versus Reactive Attachment Disorder (RAD) is a common diagnostic challenge for clinicians due to overlapping difficulties with social relationships. RAD is associated with neglect or maltreatment whereas ASD is not: accurate differential diagnosis is therefore critical. Very little research has investigated the relationship between the two, and it is unknown if standardised measures are able to discriminate between ASD and RAD. The current study aimed to address these issues.
Methods: Fifty eight children with ASD, and no history of maltreatment, were group matched on age with 67 children with RAD. Group profiles on multi-informant measures of RAD were investigated and group differences explored. Discriminant function analysis determined assessment features that best discriminated between the two groups.
Results: Although, according to parent report, children with ASD presented with significantly fewer indiscriminate friendliness behaviours compared to the RAD group ($p < 0.001$), 36 children with ASD appeared to meet core RAD criteria. However, structured observation clearly demonstrated that features were indicative of ASD and not RAD for all but 1 of these 36 children.
Conclusions: Children with RAD and children with ASD may demonstrate similar social relationship difficulties but there appears to be a difference in the social quality of the interactions between the groups. In most cases it was possible to differentiate between children with ASD and children with RAD via structured observation. Nevertheless, for a small proportion of children with ASD, particularly those whose difficulties may be more subtle, our current standardised measures, including structured observation, may not be effective in differentiating RAD from ASD.

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1. Introduction

The idea to investigate potentially overlapping symptoms of children with Autism Spectrum Disorder (ASD) and children with Reactive Attachment Disorder (RAD) occurred to us because we have been struck by the intensity of clinical interest in this field. While we have observed that a clinical 'divide' has, at times, been present i.e. recognition of ASD symptoms without consideration of RAD and vice versa, we have also noted growing clinical interest in differentiating these disorders, with clinicians on both 'sides' wishing to advance their knowledge in order to make an informed holistic assessment to provide the most appropriate treatment. This seems to be best evidenced by the attendance of large numbers of Child and Adolescent Mental Health (CAMHS) professionals and educational colleagues (150+) at 2 recent national conferences, both with a focus on ASD and RAD.

ASD is a neurodevelopmental disorder defined by impaired social communication, fixated interests and repetitive behaviours (Diagnostic Statistical Manual, 5th Ed, 2013). The core deficit may be one of social imagination or social instinct i.e. ability to understand one's own role and pre-empt other's responses in social situations (Wing, Gould, & Gillberg, 2011). Children with ASD have limited social reciprocation and may have impaired skills in empathy, perspective taking and following social rules and limited awareness of personal boundaries. The aetiology of ASD is complex. ASD can run in families and in many cases there is a strong genetic component (Delorme et al., 2013). However, environmental factors also play a role. There is increased risk of ASD in children born pre-term, particularly where there is a very low birth weight (Limperopoulos, 2009). Some teratogens increase the risk of development of ASD. For example, foetal exposure to valproic acid; a common epileptic drug, also used in the treatment of bipolar disorder and schizophrenia (Moore et al., 2000; Rasalam et al., 2005; Williams et al., 2001) and in cases of alcohol exposure and Foetal Alcohol Syndrome (Aronson, Hagberg, & Gillberg, 1997; Landgren, Svensson, Strömland, & Grönlund, 2010; Harris, MacKay, & Osborn, 1995). In addition, co-occurring ASD has been found with other neurological conditions neurological conditions (Ryland, Hysing, Posserud, Gillberg, & Lundervold, 2012), including Cerebral Palsy (Bjorgaas, Elgen, Ryland, & Hysing, 2014; Kirby et al., 2011).

Other groups of children may also present with similar or overlapping core features of social relationship problems but may not necessarily have ASD. Children with Reactive Attachment Disorder (RAD), a disorder associated with early life abuse and neglect, are a particularly important example. RAD has two sub-types: (a) inhibited RAD characterised by hyper-vigilance and emotional withdrawal and (b) disinhibited RAD characterised by indiscriminate friendliness, lack of social boundaries and difficulties negotiating social relationships (DSM-IV TR[1]). The DSM-5 separates these sub-types into two separate disorders. These are Disinhibited Social Engagement Disorder (D-SED), formerly Disinhibited RAD, and Reactive Attachment Disorder, formerly Inhibited RAD (DSM-5). D-SED is primarily characterised by indiscriminate friendliness towards strangers and Reactive Attachment Disorder is characterised by minimal social/emotional responsiveness and fearful behaviour. For consistency with previous literature and because, in our samples, the great majority of children have symptoms of both inhibited and disinhibited RAD, we use the term "RAD" from now on to refer to D-SED, RAD or mixed disorder. Other symptoms of RAD may include lack of social reciprocity, empathy and poor awareness of social cues (Rutter et al., 1999; Pears, Bruce, Fisher, & Kim, 2009; Mukaddes, Bilge, Alyanak, & Kora, 2000), which are also definitive features of ASD.

Children with RAD may also have difficulties with the use of social language, or "pragmatic language." Pragmatic language difficulties are a feature previously believed to be characteristic of ASD. In one study children with RAD ($n = 35$) performed even more poorly than a group with ASD and "normal IQ" ($n = 52$) when using language in social context, in social relationships or establishing rapport. However, in contrast, the ASD group showed more stereotyped behaviours (Sadiq et al., 2012).

In our clinical experience, concerns about differential diagnosis are particularly likely in cases where the child's developmental history is unclear or symptoms are subtle. However, the question of differential diagnosis may arise for paediatricians and all health professionals in CAMHS teams as well as Looked After and Accommodated Children's teams (LAAC) because in both RAD and ASD, additional problems such as aggression, anxiety, hyperactivity, behavioural problems or social relationships difficulties may be more likely to result in a referral to CAMHS than symptoms of the core disorder itself (Byrne, 2003; Kantzer, Fernell, Gillberg, & Miniscalco, 2013).

Although there is very little intervention research on RAD (O'Connor & Zeanah, 2003), compared to ASD, early work suggests that treatment and management may also differ. One study (on a small sample) has suggested that children with RAD may respond better to a psycho-educational approach compared to children with ASD (Mukaddes, Kaynak, Kinali, Besikci, & Issever, 2004) and there is now pilot research suggesting that children with RAD may respond better to interventions focusing on reciprocal dyadic interactions between child and caregiver than children with ASD (Becker-Weidman, 2006). However, the major clinical concern relating to differential diagnosis may arise as RAD is a disorder associated with severe childhood maltreatment or neglect (AACAP, 2005). Both psychiatric classification systems (ICD 10 and DSM-IV/DSM-5) state that the diagnosis of RAD should *only* be made if there is history of serious early childhood maltreatment or neglect. Giving the diagnosis of RAD therefore implies that maltreatment has occurred and, if the child is

[1] Although we have continued to use DSM-IV terminology, the core features of these disorders remain similar; despite the new terminology. D-SED is still primarily characterised by indiscriminate friendliness towards strangers and Reactive Attachment Disorder is characterised by minimal social/emotional responsiveness and fearful behaviour. See Appendix 1 for further information.