

The Coventry Grid Interview (CGI): exploring autism and attachment difficulties

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Editorial comment

This paper builds on the earlier work of Heather Moran who developed what came to be called the Coventry Grid to try to differentiate the criteria for autism and attachment disorder (Moran, 2010). The authors work within a Child and Adolescent Mental Health Service, CF being a Principal Clinical Psychologist, SJ and RS being Consultant Psychiatrists and KM a Senior Occupational Therapist. In this paper, they have used the Coventry Grid and converted it into an interview format to allow clinicians to use this with parents and others during the assessment process. It is in its early stages and the authors would welcome comments from readers on the content and its usefulness in practice.

Some children have autism, some have attachment difficulties and some have both. By definition, the social and communication difficulties experienced by those with autism can create attachment problems. It is therefore difficult to ascertain whether an autistic child has an attachment disorder in addition to his or her autism or whether some of the difficulties encountered are a function of their autism. The Coventry Grid Interview (CGI) aims to help clinicians clarify this. They are keen to point out though that this has not been checked for reliability or validity and it should not be used in isolation, but form part of the whole diagnostic process.

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Note: The term ASD is used in this paper as the focus is on diagnostic criteria and ASD is the current diagnostic term (DSM5 APA, 2013). In other papers within the *GAP Journal*, the preference is to use autism, autism spectrum or Asperger syndrome, as not all autistic children, adults and their families consider themselves to be disordered.

Introduction

In order to support better differentiation between autism and attachment difficulties, the Coventry Grid was initially designed by a group of clinicians in Coventry CAMHS. This was discussed with the West Midlands Regional ASD group before being written up by Heather Moran in 2010 (Moran 2010) and revised in 2015 by Moran with a London/South of England group of speech therapists who work in youth justice. It was designed for those of broadly average/mild learning disability but not for children with severe learning disability. Attachment problems/difficulties are used in this paper, and by Moran in 2010, to refer to a broader group

of children than those with an attachment disorder. Rather, it refers to all kinds of attachment difficulties severe enough to affect the ability to develop mutually supportive relationships with family and friends.

It is hoped that this paper will carry on a key aim of the first paper, namely to stimulate discussion among clinicians and researchers about the need for tools which provide differential diagnosis between autism and attachment problems. It is also hoped that interested clinicians will continue the tradition of providing feedback on the CGI, clarifying whether the ideas

identified so far are relevant to them and whether they think there is a need to develop such work further. This paper seeks to refine and develop the tool based on our own extensive clinical experience working in the arena of ASD since the mid 1990s.

Attachment patterns describe the degree to which the child is able to use the caregiver as a secure base (Ainsworth et al, 1978; Bowlby, 1982). Whereas securely attached children seek proximity with the caregiver resulting in the reduction in distress, insecurely attached children deal with the distress with little reference to the parent or do not attain efficient relief of distress. For example, children may hurt themselves but go off to find a solitary space in which to calm down as opposed to seeking out physical comfort from a primary caregiver, actively avoiding being comforted by others (Ainsworth et al, 1978). However, children with ASD often present with aloof, disinhibited or detached attachment behaviours and insecure attachment styles are often seen in female autistic presentations clinically, with marked separation anxiety.

One of the insecure types is the insecure disorganised-disorientated pattern (Main and Solomon, 1986). Here the child displays fearful or contradictory behaviours such as freezing during proximity seeking or bizarre responses to being distressed. These are often played out in story-stem assessments which are a way of assessing child attachment presentations through play (Green et al, 2000). This pattern is also associated with particularly impoverished psychosocial histories (Minnis et al 2009). Although none of the insecure categories is considered to be a clinical disorder, they are seen as a pattern of relationship functioning that confers later psychosocial risk.

The need for an instrument to clarify the presence of ASD and/or attachment difficulties

It is assumed that autistic conditions and attachment difficulties are two real and different phenomena. However, it is acknowledged that they are in part social constructions and distinguishing between the two and the interpretations made are down to the individual clinicians (bias). The dualistic assumptions within diagnostic heuristics can be

counter productive with an either/or rather than a both/and approach. Such reductionism can lead to clinicians negating either the ASD or the attachment issues when there is co-morbidity. Families can be disadvantaged in a number of ways for having a purist lens applied and an ASD diagnosis not given because of concurrent attachment disruption history. Having a more robust way of understanding the attachment contributions to a clinical picture will hopefully provide more confidence in establishing co-morbidity and also informing a clinical decision. Such decisions should always trump reliance on diagnostic instruments, which should only inform, as opposed to over-ride, clinical judgement.

Findings from the Romanian orphan studies

The Romanian orphan studies indicate the overlap with attachment disorder and autism. These children showed attachment difficulties and some appeared to have autism, termed 'quasi-autism' as it was not typical (Rutter et al 2001). Such autistic characteristics were not found in a similarly studied sample of typical children in the UK adopted in the first six months of life. The Romanian adoptees were somewhat different from many children with typical autism in the improvements they showed between the ages of 4 and 6 years and the extent of their social approach (Rutter et al 1999).

Studies have shown that school age adopted children referred with indiscriminate friendliness have very complex and sometimes disabling neuropsychiatric problems. Kocovska and colleagues (2012) recruited 34 adopted children, referred with symptoms of indiscriminate friendliness and a history of severe maltreatment in their early childhood. The overwhelming majority of the adopted/indiscriminately friendly group had a range of psychiatric diagnoses, including Attention Deficit Hyperactivity Disorder (ADHD), Post-Traumatic Stress Disorder (PTSD) and Reactive Attachment Disorder (RAD) and one third exhibited a disorganised pattern of attachment. Of the group, 70 per cent appeared to have possible or likely ASD but this may have been apparent rather than real. Perhaps an instrument such as the CGI could help clarify the differences between attachment and autism and help clinicians to decide whether a child has one or both disorders or neither.

Sensory processing, autism and attachment difficulties

The authors of this paper wanted to extend and develop the original Coventry Grid to include sensory processing questions. It is recognised that sensory issues are present in both typically autistic and attachment or post institutional deprivation populations and in children with many other conditions. For example, Beckett et al (2002) found patterns of rocking, self injury, unusual sensory interests, and eating problems in children who were adopted from institutional care. Of the institutionalised children 47 per cent rocked at the time of UK entry and 24 per cent engaged in self injurious behaviour. By the age of 6 years, the percentages had decreased to 18 per cent and 13 per cent, respectively. At the time of arrival, 11 per cent of the children displayed unusual sensory interests and at 6 years, 13 per cent of the children did so. At the age of 6 years 15 per cent of the children experienced difficulties with chewing and swallowing solid food. The primary factor affecting the prevalence and persistence of the behaviours appeared to be the length of time the children had spent in institutional care.

Purpose of the Coventry Grid Interview

The CGI does not seek to be a standalone diagnostic assessment tool of either autistic or attachment difficulties but rather to supplement the understanding of very complex children where there may be neurodevelopmental and environmental factors at play. As Keenan et al (2016) conclude, clinicians need help to tease out the complex interplay of children's biologically based social and emotional interactive deficits, children's subjective experience of attachment relationships, and caregivers' experience and responses within this challenging clinical picture. There is an ever increasing demand for bespoke interventions to reduce later psychiatric morbidity and hence a more efficient use of public finances.

Implications for intervention

There are treatment and psychoeducation implications from the differentiation between attachment difficulties and those on the autism spectrum. Attachment based interventions include parent-child attachment attunement work (eg using video feedback programmes

delivered in the parental home by a trained health or social care worker with experience of working with children and young people, highlighting parental sensitivity, responsiveness and communication (NICE guideline [NG26] Children's Attachment, November 2015). Trauma related issues are common with attachment disorders and require trauma based interventions. Autism specific educational interventions aim to explicitly develop communication and language and social understanding – eg Early Bird parent training for parents (National Autistic Society), Social Stories (Gray, 2015), Circle of Friends (Newton and Wilson, 2010), and social skills groups – and to enhance their theory of mind.

Early intervention for attachment disorders is likely to reduce the risk of the later development of personality disorders. Combinations of autistic and attachment difficulties are very challenging and will require a joint approach addressing both, eg psychotherapy (Reid, Alvarez and Lee, 2001). Reduced or inconsistent interactions with early caregivers are associated with deficits in executive function and a decreased ability to self-regulate; and can lead to lifelong issues in physical and mental health, including an inability to form and maintain appropriate emotional attachments. These challenges are often compounded by problems with self-regulation, self-concept, and anxiety (Ashton, O'Brien-Langer and Silverstone 2016).

Issues in the diagnosis of ASD and attachment difficulties

In the ASD diagnostic process, clinicians are often confronted with dilemmas on how much weight to place on disruptions to attachment, such as parental mental illness and separation from caregivers. Some clinicians feel paralysed about proceeding to make a diagnosis of ASD in the presence of complex psychosocial caregiving histories and sometimes a hypothesis of attachment difficulties vs ASD is seen as mutually exclusive. The reality is more complex and often both presentations are seen with the familial neurodevelopmental disorder leading to difficult professional/parent attachments which can complicate the neutrality of the assessing team. For example, it is not unusual that a parent with ASD, perhaps not yet diagnosed, presents with high levels of anxiety. Their personal style might cause

anxiety and concern among the professional team and they might be viewed as unhelpful to the process and/or to have led to the problems displayed by their child. If these parents do have ASD themselves or mental health issues, this may have led to attachment difficulties in their child, but it is also true that the child might have ASD. Separating out these two possibilities can be difficult and confirmation of the diagnosis is unlikely to be achieved quickly, observations and assessments being needed over time. The CGI might help with this process.

Collectively, the authors are trained in ASD diagnostic tools (3Di, (Skuse et al, 2004), DISCO (Wing, et al 2002), ADI-R (Lord et al 1994) and ADOS 2 (Lord et al, 2012) and work in an NHS CAMHS Tier 3 service and the Child Development Team in Sussex. Accordingly, they have sought to adapt the Coventry Grid to make it user friendly during assessment, where time is limited. It is often the case that the attachment issues are considered in less detail after the standard ASD tools have been used. Furthermore, post diagnosis, a clear understanding of attachment issues is important to tailor individualised support programmes and target scarce social care, voluntary sector or parenting resources. For young people with ASD, the visual presentation of materials, interventions to enhance social understanding and consistent and calm routines are paramount. Often there is an emphasis on delivery through school. Family work can be delivered via parent groups. Interventions for attachment include theraplay (Jernberg and Booth, 2001), art therapy or Eye Movement Desensitization and Reprocessing EMDR (Shapiro 1994) if there has been trauma within the family. Parenting work may include identifying parental mental health issues and supporting parents. In practice a child may need a combination of these approaches.

Pathological Demand Avoidance, attachment difficulties and ASD

There are divergent opinions among colleagues, some of whom have been told that it is impossible to disentangle attachment difficulties from autistic conditions or to identify attachment issues within the ASD diagnostic presentation. There are of course other diagnoses and debates, which overlap with the whole diagnostic conundrum, which often surrounds complex

autistic presentations. Elizabeth Newson first recognised or named Pathological Demand Avoidance or PDA (Newson, Le Marechal, D, 2003) later renamed by others as Extreme Demand Avoidance (EDA) (O'Nions, Christie, Gould, 2014). There is still debate among clinicians as to whether PDA should exist as a separate diagnostic category. As yet it is not included as such in DSM-5 or ICD-10. Those clinicians who feel it does warrant a separate diagnostic category feel it fits within the autism spectrum whereas others question whether it is better placed as an attachment disorder.

Children with autism and features of PDA have surface similarities with those with attachment difficulties. There is a lack of research to date linking attachment difficulties/disorder with PDA; however, we notice that these children often appear to find it hard to make trusting (securely attached) relationships. Further work is needed to disentangle this important area. Indeed, O'Nions et al (2016) reinforce this in their conclusion suggesting:

"It may also be of interest to examine attachment patterns and the processes by which these may come about in children with PDA."

The controversy around PDA/EDA relates in part to whether or not it falls on the autistic spectrum. Wing and Gould have incorporated it into the DISCO-11 as a subcategory of autism. Further work by O'Nions et al (2016) found PDA within the ASD population to be consistent with Newson's descriptions characterised by lack of co-operation, use of apparently manipulative behaviour, socially shocking behaviour, difficulties with other people, anxiety and sudden behavioural changes from loving to aggressive. Further ongoing work by Kaushik (RCPsych CAP Faculty Annual Conference 2015 proceedings) has recognised that there are also associations between PDA, ADHD, and conduct disorder, the latter two diagnoses of which can be linked to the environment, poor early caregiving and attachments (Kumsta et al, 2015).

With further work, it maybe that the CGI can help to clarify the defining criteria for ASD, PDA and attachment, but as yet this is not possible. With the increasing interest in PDA over recent years, it is possible that further

refinements in future may find attachment issues inform PDA presentations within the ASD diagnostic pathway and also help to inform more appropriate educational and therapeutic interventions.

Development of the Coventry Grid Interview

The clinicians in Coventry worked together, identifying the symptoms of autism and then thought about how these were different and similar to those symptoms presented in children with attachment problems and put these into a grid format (Moran 2010; 2015). The lead author of this paper (CF) had referred to the grid to help her thinking in complex cases but wanted to adapt it so that experienced clinicians would have a more accessible tool to use with parents in an assessment situation. The authors were also mindful that only a few sensory discriminatory behaviours were included within the original Coventry Grid and the DSM 5 (APA, 2013) now gives greater weight to sensory issues in ASD.

The primary author set about doing this by turning most of the elements in the grid into questions phrased in such a way as to elicit a 'yes' or 'no' response. The interviewer can ask supplementary questions to give richer detail when appropriate. However, by ticking the most appropriate box (YES or NO) after each item, it enables the interviewer to tally up the scores at the end and see how many responses pointed towards attachment and how many pointed towards ASD (see *Appendix 1* for the questions and scoring). In the early stages of this process, the authors were aware of how unhelpful it can be for families and children to have an either/or diagnosis. In complex cases very often there is co-morbidity but it remains helpful to try and understand the possible relative contributions of the neurodevelopmental and environmental factors. It is particularly important for informing clinical intervention. For example, a child who is identified as having mild ASD but significant attachment difficulties is likely to benefit from systemic and/or psychodynamic therapy (depending on the family circumstances) and attachment interventions at school more than a child with severe ASD and more mild attachment difficulties. The child with more severe ASD may benefit from modified Cognitive Behaviour Therapy (CBT) when there are accompanying mental health difficulties.

Colleagues showed a real interest in the first draft of the CGI and it was circulated to many clinicians in Sussex and feedback was requested, which proved largely positive. In some cases, in addition to the previously gathered history and data from assessment tools (eg ADI and ADOS), it helped clarify that the young person was presenting with attachment difficulties as well as autism. Feedback also included some suggestions for further development for the interview schedule, such as the addition of specific sensory processing questions. An Occupational Therapist fully trained in sensory attachment intervention, based on the work of Eadaoin Bhreathnach, a Consultant Occupational Therapist and attachment counsellor (Bhreathnach, 2008), was engaged to assist in the development of the sensory questions.

The authors found some of the original items were not as discriminatory as others and also some were difficult to turn into an interview format and so these were excluded; for example the item about eating disorders could apply to both ASD and attachment. In the authors' experience, there have been female ASD presentations with some superficial similarities with the attachment difficulties sub-group (eg using pretence and fantasy worlds). Interestingly, research has shown while children with ASD do show a range of normative attachment behaviours, they were less likely to use the caregiver as a secure base and as a co-regulating agent than their neurotypical peers (Keenan et al 2016).

Validity of the CGI

The Coventry Grid appears to have a reasonably wide clinical acceptance and empirically appears to have face validity, being developed and used by Moran (2010, 2015). With regard to construct validity convergent and divergent validity have preliminarily been considered through comparison with ADI and ADOS scores, but this is only in a very limited number of cases and further research is needed to establish construct, convergent and divergent validity. Further research could also aim to establish predictive validity by reviewing and following up on young people 5 years after discharge to see whether the diagnosis given still 'fits'.

Reliability

Initial use of the measure in joint clinics yielding the same outcome, appears to suggest this is a reliable measure. Again further research is needed to establish reliability properly.

Limitations

The scoring of the interview does not provide cut off scores or definitive answers. The CGI merely aids the interviewer's thinking in her/his assessment and differential diagnosis in what are often complex presentations. This is a work in progress and further feedback to refine the questions would be welcome. The CGI does not address severe intellectual disability or any other co-morbidities and hence needs to be an adjunct to wider multi-professional diagnostic pathway and screening processes.

Concluding comments

The relationship between attachment patterns and autism is a complex one. The medical model encourages a search for categorical diagnostic labels for children. The Coventry Grid attempts to differentiate between broadly defined ASD and attachment behaviours. It is likely, however that some of the more complex children seen in CAMHS ASD clinics may have behaviours which are related both to a primary neurodevelopmental deficit and to a disordered or disrupted relationship with the primary caregiver.

Crittenden et al (1999; 2000) emphasise the dynamic process of adaptation of humans to their environment. Change in patterns of attachment should be expected as a function of both change in circumstance and also individual maturation. Neurotypical children use subtle social responses to regulate parental emotion (eg the use of coyness to down regulate aggression). Children who have social communication disorders and who are not neurotypical are less likely to be able to do this, so maladaptive patterns of attachment may be propagated. Equally, Rutter et al's (1999) seminal work on adopted Romanian children with quasi-autism following institutionalised care and emotional deprivation shows that if a child has the right kind and enough input (more than 30 hours, as recommended

in NICE guidelines for ASD in pre-schoolers), they usually make good progress compared to controls. A child with 'quasi autism' should be in the group which improves.

Rutter et al (1999) have established that there are improvements in social approach within stable adoptive homes and that there may be more change towards neurotypical and secure attachment behaviours than would be seen in ASD alone. One could speculate that the attachment issues should improve within a stable home more quickly than typical ASD presentations and that recalcitrant presentations may represent more severe comorbidity, which remains chronic, even with stable family life. The complexity of associated psychosocial instability and inconsistent or hostile or neglectful parenting may increase the likelihood of developing conduct disorder in later childhood and adolescence. Accordingly, the CGI may also flag up concerns about antisocial personality development.

The team thinks it important that clinicians with ASD diagnostic expertise but also clinical experience with attachment difficulties use the CGI at the end stages of an ASD assessment. A potential drawback of such an instrument is that it could lead to an unbalanced focus on attachment issues to the exclusion of an ASD diagnosis, in inexperienced hands. If there are additional attachment issues, a more systemic family therapy approach may be appropriate. The team would welcome further feedback from clinicians on the clinical usefulness of the tool or suggestions for discriminatory items. It is hoped that the CGI will provide a much needed lens through which teams can disentangle attachment issues from mixed ASD presentations and allow clinicians to think of both, as well as being more confident to discount ASD as an adjunct with the standardised instruments such as Autism Diagnostic Interview, Revised (ADI-R), Developmental, Dimensional and Diagnostic interview (3Di) and Diagnostic Interview for Social and Communication Disorders (DISCO). It is hoped that this empirically useful clinical tool can be further validated and improved in future studies.

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