

University of Southampton
Doctoral Programme in Educational Psychology

Title: The Co-morbidity of Autism Spectrum Condition and Oppositional Defiant Disorder. So What?

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Date submitted: May 2015

Abstract

There is considerable research attention given to psychiatric comorbidity in children and adolescents with a diagnosis of autism spectrum conditions (ASC). This essay aims to consider one such comorbid diagnosis, that of oppositional defiant disorder (ODD) and question its value as an explanation of the behaviour of children and young people on the autism spectrum. Much of the existing research exploring the comorbidity of ASC and ODD comes from a neuropsychological perspective and is focused on validity and accurate measures. The research supports the diagnostic validity of ODD, however this essay will take a different perspective and consider the usefulness of a comorbid diagnosis of ODD for a child or young person with ASC and those supporting them. This argument will be placed in the context of some of the recognised core cognitive differences that are associated with a diagnosis of ASC, as well as potential wider contributing factors. Potential implications for educational psychologists will be considered throughout.

The Co-morbidity of Autism Spectrum Condition and Oppositional Defiant Disorder. So What?

“There are times when I can’t do what I want to do, or what I have to do. It doesn’t mean I don’t want to do it.” (Higashida, 2013, p. 67)

Individuals experiencing difficulties with their ability to understand social behaviour, communicate with others and to think and behave flexibly may be diagnosed with an autism spectrum disorder (ASD)¹ (Diagnostic & Statistical Manual, 5th edition [DSM 5], American Psychiatric Association [APA], 2013). This is considered to be a pervasive developmental condition and UK prevalence studies suggest that 1% of the population have a diagnosis of ASD (Baron-Cohen et al, 2009; Pellicano, Dinsmore & Charman, 2013). A number of terms exist in the literature and public domain for ASD, this essay will use the term autism spectrum condition. Definitions of autism imply there is a distinct and homogenous group, however, despite a proposed set of core characteristics, every individual’s personal strengths and difficulties will vary considerably. Research suggests that autistic traits are on a continuum (Baron-Cohen et al, 2009), with a clinical diagnosis being considered when everyday functioning is impaired (DSM 5, APA, 2013). The term ASC is potentially less stigmatising, allowing for more consideration of the areas of strength alongside the differences in social understanding, communication and flexibility in regulation of thoughts and behaviour (Baron-Cohen et al, 2009).

Much research attention is given to psychiatric comorbidity in children and adolescents with a diagnosis of ASC (e.g. Moseley, Tonge, Brereton, Einfield, 2011;

¹ This essay will use both person-first (individual with ASC) and identity-first language (autistic person) to respect the opinions of all individuals on the spectrum. Many people on the autism spectrum prefer identity first language, as it recognises the pervasive nature of autism. For further discussion of this see Sinclair (1999).

Simonoff, Pickles, Charman, Chandler, Loucas & Baird, 2008). The term comorbidity refers to the presence of an additional diagnosis co-occurring with the primary diagnosis, in this instance ASC. Simonoff et al (2008) argued that it is important to identify comorbid psychiatric disorders in those diagnosed with ASC, as this may lead to a better understanding of an individual's needs and more targeted intervention. However this does mean that the diagnosis needs to be the start of the process, rather than the conclusion, and should be used to inform assessment and intervention for the individual.

This essay aims to consider one such comorbid diagnosis, that of oppositional defiant disorder (ODD). This is a clinical diagnosis in the DSM 5 applied to children and young adolescents with a 'frequent and persistent pattern of angry/irritable mood, argumentative/defiant behaviour, or vindictiveness' (APA, 2013, p. 463). The diagnostic criteria of ODD in the DSM 5 suggest that the frequency and intensity should be "outside a range that is normative for the individual's developmental level, gender and culture" (APA, 2013, p. 462). However it does not extend such consideration to an individual's wider context, such as their personal experiences and relationships, except to note that a history of hostile parenting may be a potential causal factor.

The diagnostic label of ODD is often applied to children and young people with ASC, for example the prevalence of a diagnosis of ODD in a population-derived sample of one hundred and twelve children in the UK with a clinical diagnosis of ASC was found to be 28.1% (Simonoff et al, 2008). Another study which looked at patterns of psychiatric comorbidity in youths with ASC found that 73% of the sample of 217 participants, met criteria for a diagnosis of ODD (Joshi et al, 2010). In contrast the DSM 5 suggests the prevalence of ODD in the general population ranges from 1% to 11% (APA, 2013). Research indicates the core features of autism may be explained, to some extent, by differences in certain aspects of cognition (Rajendran & Mitchell, 2007). Consideration of these, alongside

potential environmental factors, raises questions about the usefulness of ODD as a diagnostic construct when applied to the behaviour of children and young people with ASC. This does not seem to have received much research attention, however it is a question that warrants further exploration. When thinking about an individual's behaviour in an educational context the objectives differ from those of a clinical assessment. Despite this, for the Educational Psychologists (EP) or teachers seeking further understanding of diagnoses such as ODD, the main sources of information are mental health discourses (Jones, 2003). Recognition of the contributing interacting factors is necessary in order to avoid misinterpretations of a child or young person's behaviour and to develop effective support strategies and intervention.

ODD is a controversial term, seen as potentially pathologising behaviour and ignoring the relational context of behaviours (BPS, 2011). This seems a particularly striking argument considering the severity of the disorder is determined by the number of settings in which symptoms are present. The wider concerns about ODD as a diagnosis are beyond the scope of this essay, however it aims to explore whether this diagnosis is useful when understood in the context of the core differences characteristic of ASC. Consideration of these factors will lead into thinking about the wider context that may influence the prevalence and perception of oppositional and defiant behaviours. Furthermore, it will question what a diagnosis of ODD can contribute to an autistic child, their family and the school when considering potential support strategies. Implications for Educational Psychologists (EP) and their role in developing understanding at both a service and research level will be discussed throughout.

Individual Factors

Some children and young people with ASC may exhibit behaviours that are perceived as oppositional or defiant, however the question is whether these should be considered as evidence of a disorder. The DSM 5 lists a number of symptoms of ODD, such as "often

deliberately annoys others” and “often actively defies or refuses to comply with requests from authority figures or with rules” (APA, p. 462). These are the specific behaviours one might observe, arguably however understandings of these changes when considered alongside some of the underlying cognitive, social and behaviour and communication differences characteristic of ASC (Wing, Gould & Gillberg, 2011).

There are numerous cognitive theories that seek to explain the core differences characteristic of ASC (Rajendran & Mitchell, 2007). These provide some insight into how an autistic child or young person may experience the world and challenge the view that they are behaving in a deliberately oppositional or defiant manner. One of the first, and most influential, cognitive hypotheses was that individuals with autism may have difficulties and delays in their development of theory of mind (Baron-Cohen, Leslie & Frith, 1985). Theory of mind refers to the ability to attribute beliefs and motives to others and to understand these may differ from your own. This raises the question of whether a child or young person with autism, who is potentially experiencing difficulties in understanding others’ perspectives and how their behaviour may be impacting on others, is intentionally trying to annoy their parent or teacher by behaving defiantly. It has been proposed that children with ASC who are struggling to understand the social world, are perhaps behaving in ways that are perceived as antisocial in order to elicit a clear emotional reaction in other people, as opposed to acting out of spite or malice (Frith, 1991 as cited in Jones, Happe, Gilbert, Burnett & Viding, 2010). The concept of theory of mind has received much research attention and it seems there is little doubt that autistic children and young people have difficulties attributing mental states, both to themselves and others (Tager-Flusberg, 2007). However, the universality of theory of mind is questioned and the concept cannot account for all the core characteristics of ASC, such as the non-social features, as well as associated strengths (Hill, 2004).

Weak central coherence has been posited as a cognitive explanation for some of the social and non-social features of autism (Frith, 1989). Central coherence refers to an information processing style which seeks to integrate information and look for contextual meaning and connections (Hill, 2004). A processing bias towards building coherent wholes may come at the expense of attention to details. It is suggested that individuals with ASC may have less of a capacity for this type of processing and weak central coherence may result in close attention to detail, at the expense of the contextual meaning. This difference in processing style may account for some of the core features of autism, including rigidity and perseveration and finding changes in routines difficult. It also explains the potential strengths in analysing and constructing systems (Baron-Cohen, 2009). This difference in cognitive style may mean that a child or young person with ASC who is perceived as angry or irritable is instead reacting to an environment or interaction that is unpredictable for them. One way of supporting a child or young person with ASC in educational settings may be to make the environment more predictable, for example through use of visual schedules, consistent routines and clear organisation of resources.

A number of cognitive theories have been proposed to explain the various characteristics of autism, however a fully integrated account does not exist (Rajendran & Mitchell, 2007). Considering the individual nature of the characteristics of autism it is important to consider the specific profile of a child or young person with autism and plan interventions and strategies accordingly. EPs can support individuals, parents and schools through development of their knowledge of approaches to assessment and intervention, with a clear focus on the needs of the individual, as opposed to diagnostic labels (Waite & Woods, 1999).

Consensus of the underlying cognitive principles has yet to be reached, there does however seem to be some recognised differences in how an individual on the autism

spectrum might understand social situations and experience the world around them (Pellicano et al, 2013). Burkhardt (2008) argued that interpersonal applications may be an area of difficulty for children and young people with ASC, even if they have acquired effective communication and social skills. Interpersonal applications involve responding to varying social situations. They require being able to read the social environment, choose a suitable social response from acquired social knowledge, perform it and evaluate the outcome. An autistic child may experience a large array of social situations on a daily basis and find it difficult to correctly read and respond to the demands of each. Behaviour that is viewed as oppositional in one context, may be an appropriate response in a different social situation.

Children and young people with ASC may have difficulties with aspects of social communication. This refers to both verbal and non-verbal expression, as well as understanding others (Wing, Gould & Gillberg, 2011). It seems reasonable to suggest that an outcome of this may be difficulties understanding the “requests from authority figures” (DSM 5, APA, 2013, p.462) and fulfilling the expectation to comply. This behaviour may well be perceived as an active defiance by the adult and interpreted as an oppositional behaviour. Even if the request is understood by the child or young person, it may be that the rationale is not clear and they do not understand why it is necessary. MacLeod, Lewis and Robertson (2013) raised the lack of understanding in research and literature about the personal experiences of those on the autism spectrum. A lack of understanding about the motivations and interpretations of those who may be experiencing the world rather differently means it is difficult to make judgements as to what is normative behaviour and what can be considered disordered. EPs often work directly with children and young people and are well placed to use both practical and academic experience to offer a valuable contribution to research focused on developing understandings of the experiences of those on the autism spectrum.

Gadow, DeVincent and Drabick (2008) conducted one of the first studies that explored the diagnostic validity of ODD as a behavioural syndrome in children with ASC. They assessed the clinical features of ODD, using a range of parent and teacher rating scales and information about treatment history. Their findings suggested that ODD was a distinguishable behavioural syndrome from ASC, in the sense that autistic children who met the diagnostic criteria for ODD had differing co-occurring psychiatric symptoms and environmental adversity, when compared to those autistic children who did not have a comorbid diagnosis. However, they recognised that antecedents and manifestations of oppositionality would likely differ between children with and without ASC.

Mandy, Roughan and Skuse (2014) have since looked at whether the DSM-5 model of ODD, which separates the symptoms of oppositionality into three dimensions, can be generalised to ASC. They found the relationships between the dimensions and their associations with external validators were similar in both autistic and non-autistic populations, suggesting that ODD was a valid comorbid diagnosis in ASC. However, their sample was comprised of individuals with fluent language in mainstream education, which seems unrepresentative of a large percentage of the autistic population.

Like much of the existing research these studies both had a clinical focus. They lend support to the diagnostic validity of ODD, however arguably this does not provide evidence for the usefulness of a comorbid diagnosis of ODD for a child or young person with ASC or those supporting them. The language used to describe behaviour that is perceived as a challenge can shape beliefs about the 'problem', as well as perceptions about what can be done and whose responsibility it is (Jones, 2003). Labelling a child or young person with ODD can lead to a focus on deficits, a view of the child as the problem, rather than the interactions taking place within certain contexts (Roffey, 2007). EPs have an important role to play in utilising their psychological skills, knowledge and understanding for the benefit of

children and young people. EPs can develop the understanding of those working with children and young people with ASC, building their knowledge of the psychological principles underlying interventions and strategies. This has the potential to better equip practitioners to modify their approach in response to changing need and circumstance. EP's focus on collaborative practice and use of psychological frameworks in their work lends itself to an understanding of interactionist and social constructionist principles (Fallon, Woods & Rooney, 2010). Understanding of the wider context and contributing factors to the prevalence of oppositional behaviour will likely result in better outcomes for the individual.

Wider Context

Much of the extant research and literature considering the comorbidity of ASC and ODD comes from a neuropsychological perspective and is focused on identifying accurate measures and differences in neural structure (MacLeod, 2010). This is in stark contrast to an educational perspective, which aims to develop understanding of the behaviour in context to inform support strategies and intervention. Both ASD and ODD are included as diagnoses in the DSM 5 (APA, 2013), however ASC is potentially a more helpful construct when considering how best to support and encourage success in educational settings for those on the autism spectrum. Lauchlan and Boyle (2007) suggested that labels may be useful if they inform specific interventions and support for learning. ASC is a term that acknowledges some core differences and characteristics which can guide those working with child and young people with a diagnosis, however it is crucial to remember there are comprehensive individual differences and strategies need to be individualised based on information about personal strengths and areas of need.

MacLeod (2010) noted that the diagnostic criteria of ODD is mainly based on judgements of behaviour, relying heavily on behaviour rating scales as diagnostic tools.

Previous research, exploring the diagnostic validity of ODD in children and young people with autism, found that the reported presence and prevalence of some ODD symptoms were informant specific, with differences between parent and teacher responses (Gadow et al, 2008). This highlights the subjective nature of interpreting other's behaviour. The medical approach, supported through diagnoses such as ODD, assume there is a norm of behaviour and any deviation from this is the result of pathology or disease and requires treatment (Purdie, Hattie and Carrol, 2002).

Children and young people with autism may experience an increased likelihood of having ODD applied as an explanation of their behaviour (Simonoff et al, 2008). They are more likely to have difficulties communicating verbally and cognitive differences may make it more challenging for them to describe their mental experiences in a way those working with them can understand (Leyfer et al, 2006). EPs working with autistic children and young people who are exhibiting oppositional and defiant behaviour need to ensure they are listening to the child or young person in question. To better inform positive outcomes it is important to seek understanding of the individual's personal experiences and contributing factors, as well as developing meaningful methods of gathering pupil voice.

Matthys & Lochman (2008) noted that conduct problems, such as ODD, are substantially influenced by the social context around the child. One could argue that the diagnostic construct of ODD, as an explanation for seemingly oppositional behaviour, fails to account for this context. Humphrey and Symes (2013) explored secondary teacher attitudes towards inclusive education for pupils with ASC. A positive teacher-pupil relationship has important benefits for children and young people's social and academic success. Many teachers report feeling that they lack training and effective strategies to integrate autistic children and young people into the classroom, particularly in relation to managing differences in social and emotional understanding (Emam & Farrell, 2009). This can lead to tensions in

the teacher-pupil relationship, as teachers feel frustrated and lacking in self-efficacy. In turn this can impact negatively on the child or young person's likelihood of receiving social acceptance from peers. Humphrey & Symes (2010) suggest that the associated difficulties with social interactions can lead to children and young people with ASC being more likely to experience negative social outcomes, such as bullying, not receiving social support and being rejected by peers. Teachers struggling to manage the behaviour of a child or young person with ASC may be inclined to seek the additional label of ODD, as this has the potential to remove blame (MacLeod, 2010). A protective factor would be appropriate training and support for teachers. Teacher training for those working with pupils with ASC can increase awareness of ASC and an evaluation of teacher training programmes found that there was a significant improvement in the classroom behaviour of pupils with ASC (Humphrey & Symes, 2013). EPs are well placed to work with schools and to promote a whole-school, systemic understanding of autism spectrum and effective strategies for inclusion.

Leyfer et al (2006) argued that recognising problematic behaviours as symptomatic of comorbid disorders can lead to more specific treatment. Many of the recognised interventions for ODD involve working with parents and training them in behavioural techniques, focused on increasing social appropriate behaviours and decreasing disruptive behaviours (Matthys & Lochman, 2010). Parent training is well established as an evidence-based treatment for children diagnosed with disruptive behaviour disorders (DBD), such as ODD (Bearss, Burrell, Stewart, Scahill, 2015). There is less clarity about the term parent training in relation to ASC, as there are often multiple targets of intervention, such as developing a child's communication and social skills. There is currently a lack of empirical evidence that interventions specifically targeted for ODD would support an autistic child or young person, as well as a lack of understanding as to whether cognitive differences would impact on the effectiveness of such 'treatments' (Mandy et al, 2014).

One wonders what the diagnostic label of ODD contributes to planning for intervention and support strategies in relation to an autistic child or young person. The use of a label for behaviours can result in generalisation of the individual's needs, ignoring strengths, as well as individual differences (Lauchlan & Boyle, 2007). Individualised programmes are more likely to be effective and support the individual to build on social skills. The development of social skills is a lifelong process, diagnosing a child or young person with ODD seems deterministic and is likely to result in lowered expectations for that individual.

Conclusion

ODD is a psychiatric diagnosis created for a clinical purpose, it proposes a list of behaviours as symptoms, such as angry/irritable mood and defiant behaviour, whilst giving little attention to the huge range of interacting contributory factors. Furthermore, the behaviours that are identified as symptoms of ODD are particularly influenced by relational and social contexts. As discussed in the introduction, ODD is one of the most common comorbid psychiatric disorders diagnosed in children and young people with ASC (Simonoff et al, 2008). Through an exploration of some of the hypothesised cognitive differences associated with ASC and consideration of wider factors, this essay aimed to challenge the usefulness of applying the diagnostic construct of ODD to the behaviour of children and young people on the autism spectrum.

Emotional and behavioural problems in children and young people with ASC are strongly associated with both parent and teacher stress, as well as negatively associated with adults' feelings of self-efficacy (Karst & Vaughan Van Hecke, 2012; Emam & Farrell, 2009). Challenging the usefulness of the diagnostic construct of ODD is not intended to deny the reality of parents' and teachers' experiences of behaviour they find difficult to manage. EPs

can work both proactively and reactively, offering training and support at a whole school level, whilst also developing understanding and building skills to empower staff and parents.

This essay does not propose that oppositional and defiant behaviours are part of the autism spectrum, but rather that some of the core social and communication differences associated with ASC may contribute to an increased likelihood of an individual on the autism spectrum responding in ways that are perceived as such. Furthermore, a lack of understanding of the experiences of autistic individuals (MacLeod et al, 2014) and a failure to account for the wider social context contributes to a construction of behaviours as disordered. Behaviours are bound up in a huge range of interacting contributory factors, therefore it is necessary to explore behaviours in context and consider a variety of approaches and strategies. Bastra and Frances (2012) highlighted the pressures on psychiatrists and mental health workers to overdiagnose and overtreat mental illness and the resulting diagnostic inflation. EPs must question the place of the medical model in educational settings. This is often deficit focused and places the problem within child, ignoring that expectations and perspectives of what is normal behaviour in the school context is not fixed (Macleod, 2010).

Much of the available research and literature exploring the comorbidity of ASC and ODD is from a neuropsychological and clinical perspective. EPs have a distinctive contribution to make to the research field, through their understanding of child development and educational settings. In the UK the majority of funding for autism research is focused on biology, brain and cognition, with the smallest proportion looking into societal issues (Pellicano et al, 2013). Pellicano et al (2013) carried out a large-scale online survey with members of the autism community. They found there was a consensus that research priorities should instead be in the areas of public services, improving the life chances of people with autism and considering how autistic people think and learn. EPs work closely with schools, children and families and are well placed to contribute to future research. A more robust

understanding of the experiences of young people whose behaviour gives adults cause for concern, and the protective and risk factors of the systems they find themselves within, are likely to better inform practitioners to develop appropriate interventions and support.

(Macleod, 2010).

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