Oppositional defiant disorder and conduct disorder

This essay provides a critical analysis of Oppositional Defiant Disorder (ODD) and Conduct Disorder (CD), providing justification for whether they should be considered distinct disorders in the next iteration of the Diagnostic and Statistical Manual, DSM-V. Firstly, the current DSM-IV definitions of these disorders will be outlined. Changes to these definitions throughout different DSM iterations will be discussed, along with the evidence base for these changes. The key questions raised for the fifth iteration of the DSM will be explored, concluding with recommendations for further research.

Introduction – DSM-IV Diagnostic Criteria

ODD and CD are two of three subgroups in the DSM-IV criteria for ‘ Attention Deficit and Disruptive Behaviour Disorders,’ the third subtype being Attention Deficit Hyperactivity Disorder (ADHD) (APA, 2000). According to the DSM-IV, ODD consists of “ a pattern of negativistic, hostile, and defiant behaviour lasting at least six months” and during which four or more of eight behaviours are present, these being that the person often: loses their temper; argues with adults; refuses to comply with adults’ requests or rules; deliberately annoys people; blames others; easily annoyed by others; angry and resentful; spiteful and vindictive. These are only considered diagnostic if they occur more than is ‘ typical’ of children of the same age and level of development, and if clinically significant impairments are present in social, academic, or occupational functioning. ODD is not diagnosed if CD is diagnosed since ODD is purported to increase risk of later developing CD.

The DSM-IV criteria for CD cites the disorders as being “ a repetitive and persistent pattern of behaviours in which the basic rights of others or major age-appropriate social norms or rules are violated” (APA, 2000). These

behaviours are manifested by the presence of three or more of four groups of criteria in the past 12-months, with at least one present in the past 6-months: aggression to people and animals; destruction of property; deceitfulness or theft; serious violations of rules. These behaviours are then categorised according to four subgroups: aggressive conduct that causes or threatens physical harm to other people or animals; non-aggressive conduct that causes property loss or damage; deceitfulness or theft; and, serious violations of rules. There are two types of CD outlined in the DSM-IV, distinguished according to the onset of symptoms. Child-Onset CD is defined by the onset of one criterion characteristic of CD before the age of 10-years old, whilst Adolescent-Onset CD is defined by the absence of characteristics of CD prior to 10-years old. Both Child-Onset and Adolescent-Onset CD can be diagnosed as mild (i. e. there are few signs of CD and little harm caused to others), moderate (i. e. there are multiple signs of CD that cause harm to others), or severe (i. e. there are many signs of CD that cause considerable harm to others).

The History of ODD and CD Diagnostic Criteria

The criteria for diagnosing ODD and CD have both undergone extensive changes over various iterations of the DSM (Pardini, Frick, & Moffitt, 2010), since first being introduced in the DSM-III (APA, 1980).

The original diagnostic criteria for ODD, which was referred to as ‘ oppositional disorder’ in the DSM-III, required that individuals exhibited two (as opposed to the current threshold of four) of five symptoms over the past 6-months, including violations of minor roles, temper tantrums, argumentativeness, provocative behaviour, and stubbornness (APA, 1980).

The addition of ODD to the DSM-III received a huge amount of criticism for pathologising ‘ normal’ behaviours of childhood (Rutter and Shaffer, 1980). It could not, however, be merged with CD since research suggested the two disorders had distinct outcomes, with ODD causing only minor disruptions and impairments compared to the more severe impairments of CD (Rey et al., 1988). This was addressed in the DSM-III-R by the addition of more ODD symptoms, including spitefulness, vindictiveness, anger, and resentfulness (Spitzer et al., 1990). Attempts were also made to distinguish symptoms of ODD from normative childhood behaviours, for example, symptoms had to occur more frequently than is ‘ typical’ of a child of a given age or level of development in order to meet the diagnostic threshold (APA, 1987). No guidelines were provided on the criteria for ‘ typical’ behaviour, rendering this effort flawed and at risk of clinician bias.

The original diagnostic criteria for CD, according to DSM-III, described a more severe form of deviant behaviour comprising significant violations of others rights and/or major social norms. Individuals who met the criteria for CD could not be diagnosed with ODD because it was believed that ODD would already be present in nearly all individuals with CD (APA, 1980). Four primary subtypes of CD were proposed on the basis of whether the individual demonstrated aggressive or non-aggressive conduct problems and whether they were ‘ socialised’ (i. e. can form lasting relationships) or ‘ unsocialised’ (i. e. cannot form lasting relationships). Efforts to simplify the diagnostic criteria for CD included replacing the four subtypes with the introduction of a single set of symptoms in the DSM-III-R, these being: acting physically cruel to people; destroying property; stealing; and truanting. Each symptom

needed to be present for at least 6-months for a diagnosis. Although the four subtypes of CD were removed, the diagnostic criteria were still complicated by the addition of two subgroups distinguished by whether their behaviours occurred primarily with peers or while alone.

The modifications made for the DSM-III-R were based on field studies that supported the validity of the newly proposed symptoms (Spitzer et al., 1990). This has caused much debate within psychology, since these field studies offered limited empirical data (Rey et al., 1988; Rutter and Shaffer, 1980), although the subtyping of CD was also based on evidence from one longitudinal study (Henn, Bardwell, and Jenkins, 1980). Nevertheless, the field trials comprised mainly males, few pre-school and adolescent children, and would have produced very different findings to clinical samples, raising limitations in terms of generalisability of findings. Thus, in preparation for the DSM-IV, existing data was used in attempts to clarify issues regarding the diagnosis of ODD and CD (Frick et al., 1993; Lahey, Loeber, Quay, Frick, & Grimm, 1992; Loeber, Green, Lahey, Christ, & Frick, 1992; Loeber, Keenan, Lahey, Green, & Thomas, 1993). These studies provided evidence supporting the DSM-III-R diagnostic criteria for ODD, but resulted in some further modifications for CD (Cohen, Kasen, Brook, & Stuening, 1991; Loeber et al., 1993).

Evidence to Inform the DSM-V

A new reiteration of the DSM is underway, raising an emphasis on any changes to be based on stronger empirical evidence than previous changes (Moffitt et al., 2008). In particular, stronger evidence is required for the clarification of the following issues (Kupfer & Regier, 2008):

Does the evidence support a distinction between:

ODD and CD?

Child-onset versus adolescent-onset CD?

Does the evidence support the premise that ODD increases risk of later developing CD?

Does the evidence support a requirement for female-specific diagnostic criteria for CD?

There have been efforts to address some of these issues in order to build an evidence base for the DSM-V, including studies with larger epidemiological and clinical samples, and diverse samples in terms of gender and ethnicity. This evidence is presented separately for each of the four questions posed above.

Does the evidence support a distinction between ODD and CD?

It has been argued that although empirical studies supported the distinction between features of disruptive behaviour disorders (ODD) and affective disorders (CD) in children, there was little empirical evidence supporting the reliability and validity of making a distinction between ODD and CD and the subtypes of CD (Achenbach, 1980). Furthermore, despite evidence from the DSM-III-R field trials supporting a distinction between the two disorders, the data also supported similarities, including that the disorders have similar etiological risk factors (Lahey et al., 1992; Loeber et al., 1993). Thus, the

debate continues as to whether ODD and CD are distinct or merely different severities of CD.

In 2000, Loeber, Burke, Lahey, Winters, & Zera reviewed empirical findings supporting a distinction between the symptoms of ODD and many of the symptoms of CD. More recently, Rowe, Costello, Angold, Copeland, & Maughan (2010) examined similarities between ODD and CD in young adult outcomes in a large longitudinal dataset comprising 8, 000 observations of 1, 420 individuals (56% male; ages 9-21 years) (Costello et al., 1996). When examining the characteristics of children with ODD, CD, and combined CD/ODD, many similarities in childhood and adolescents were found, however, key differences again support the distinct aspects of these disorders. For example, CD largely predicted behavioural outcomes, whereas ODD showed stronger predictive validity to emotional disorders in early adulthood

One difficulty confronted when considering whether ODD and CD are distinct disorders is that much of the epidemiological research has combined ODD and CD, limiting the evidence base on any differences between the two disorders. Further studies are needed to clarify the processes underlying links between ODD and CD, but the evidence thus far favours the utility of treating them as distinct disorders in the DSM-V.

Does the evidence support the distinction between child-onset versus adolescent-onset CD?

There is a growing consensus for the requirement to distinguish CD according to when symptoms first emerge. This consensus has primarily

come from findings suggesting that the developmental pathways for ODD and CD might be dependent on age of onset (Moffitt, 2003; Frick, 2006). Children with adolescent-onset CD do not tend to show early emerging ODD symptoms, but instead show a range of both ODD and CD behaviours coinciding with the onset of puberty (Moffitt, 2003). Furthermore, disruptive behaviours in adolescent-onset CD appear to be influenced by peer pressure and thus adults diagnosed with adolescent-onset CD are less likely to show academic, occupational, social, or physical impairment in adulthood (Odgers et al., 2007). Children with childhood-onset CD, however, appear to be less influenced by social and environmental factors and more influenced by biological factors such as poor emotional regulation. Indeed, the evidence suggests that there does appear to be a strong genetic contribution to child-onset CD (Moffitt, 2006). Individuals with childhood-onset CD present with a number of dispositional and environmental risk factors early in life, which places them at higher risk of continuing on a course of antisocial and aggressive behaviour (Moffitt & Caspi, 2001; Frick, 2004). Thus, a distinction between child-onset and adolescent-onset CD does provide clinicians with predictive information that would facilitate treatment decision-making.

Frick and Moffitt (2010) support the need to distinguish child and adolescent onset CD, but recommended the DSM-V include the specifier “ With Significant Callous-Unemotional Traits.” In a systematic review of possibilities for changing the diagnostic criteria for CD in the DSM-V, among eleven possible changes identified and reviewed, the addition of callous-unemotional traits as a specifier received the strongest evidence (Moffitt et al. 2008). The extensive research base supporting this specifier has been

summarised in several recent comprehensive reviews (Frick & Dickens, 2006; Frick & White, 2008). However, given the extensive and continued modification of ODD and CD over the different iterations of the DSM, it could be argued that more work is needed to determine how best to incorporate this specifier into diagnostic criteria in a valid and useful way.

The evidence presented does, however, raise the question of whether the notion of adolescent-onset CD is pathologising typical adolescent behaviour, which was an earlier critique of ODD. Peer pressure and antisocial behaviours are characteristic of adolescence and are usually grown out of, hence the lower risk of impairment in adulthood among this population. Diagnosing children with a less severe version of CD, or indeed diagnosing them with ODD, could plausibly be diagnosing typical adolescent behaviours. Data supporting a transition from ODD to CD could merely be demonstrating differences in development processes, with some people successfully transitioning through the developmental pathway and others not.

Does the evidence support the premise that ODD increases risk of later developing CD?

Support for the notion that ODD often precedes a diagnosis of CD was based on the DSM-III-R field trials demonstrating that only 16% of children diagnosed with CD failed to meet criteria for ODD (Spitzer et al., 1990; Cohen, Kasen, Brook, & Stuening, 1991; Loeber et al., 1993). This was supported by further research, showing a developmental progression from ODD to CD (Loeber, Green, Keenan, & Lahey, 1995; APA, 2000). Children with ODD begin showing moral problems around the age of 3-4 years old, with disruptive behaviours increasing in severity over the course of

development (Lahey & Loeber, 1994). Lahey & Loeber (1997) show that as many as 80% of people with childhood-onset CD were previously diagnosed with ODD. More recently, Rowe et al. (2010) examined links between ODD and CD in young adults and found that adulthood could be significantly predicted by an earlier diagnosis of ODD in boys; the same was not found in girls. Transitions between ODD and CD were less common than expected, however, particularly during adolescence. In another recent study, Burke, Waldman, & Lahey (2010) present data from three studies of children and adolescents showing that some children with ODD do progress to childhood-onset CD.

Researchers have also shown that the type of ODD displayed by children might be predictive of the developmental course of the disorder. For example, a longitudinal study of British children and adolescents (n= 7, 912) suggested that the outcome of children with ODD across a 3-year period differed according to the dimension of ODD behaviour being displayed (Stingaris & Goodman, 2009). In particular, the findings suggested that symptoms of irritability were predictive of future emotional disorders such as anxiety and depression, whilst symptoms reflective of headstrong behaviours (i. e. argumentativeness and rule breaking) were predictive of future CD. In addition, symptoms of hurtful behaviours such as spitefulness and vindictiveness were shown to predict future aggressive CD symptoms. Thus, consideration of subtyping ODD is required for the DSM-V.

Does the evidence support a requirement for female-specific diagnostic criteria for CD?

One of the limitations of the research evidence thus far informing the diagnostic criteria for ODD and CD is a paucity of studies with girls. This raises the question of whether the diagnostic criteria have the same clinical utility in girls as boys and whether gender-specific diagnostic criteria and thresholds should be used (Keenan, Coyne, and Lahey, 2008). Indeed, the evidence remains unclear as to whether ODD is likely to act as a precursor in girls, as has been found with boys (Silverthorn & Frick, 1999). It has been suggested that many girls with adolescent-onset CD do not have a history of ODD (Silverthorn & Frick, 1999). In a recent study conducted by Rowe et al. (2010), data shows ODD to be a significant predictor of later CD in boys but not in girls, suggesting some important gender differences in developmental pathways.

Research by Fairchild, Stobbe, van Goozen, Calder, & Goodyer (2010) focused on girls with CD, examining whether there were deficits in explicit and implicit aspects of emotion function (n= 25). They found that, compared with a control group, girls with CD presented with impairments in recognition of emotions such as anger and disgust. The same impairment was found for recognition of sadness in those with high scores on psychopathic traits, but not those with lower scores on psychopathic traits. Girls also showed impaired fear conditioning compared to controls. These findings support results previously found in boys with CD, indicating gender similarities in terms of emotion function.

Research examining co-morbidities in ODD and CD have provided some insight into potential gender differences. For example, Pfiffner et al., (1999) found that in boys with comorbid ADHD, paternal externalising disorder was significantly correlated with comorbid CD and moderately correlated with comorbid ODD. In girls, mother and daughter antisocial behaviours have been found to be linked, with stronger in¬, uence coming from parental psychological distress than parenting behaviours (Kaplan and Liu, 1999). Since there is extensive evidence showing gender differences in temperament, further research on the gender-speci¬)c effects of temperament on the developmental pathway of ODD and CD are needed (Sanson and Prior, 1999).

In an effort to close the gap in the evidence base for boys and girls with CD, Keenan, Loeber, & Green (1999) conducted a review of the literature. They found that CD symptoms in girls are relatively stable. Precursors to CD in girls potentially include ODD and temperamental factors, but also may include certain negative cognitions. What distinguishes CD in girls is the high risk they have to develop comorbid conditions, especially internalising disorders. Risk factors for CD in girls do meet some consensus with those known for boys, but some factors appear to be more frequent in girls.

Conclusions

According to the DSM-V Task Force, the key priority for the next DSM revision is to improve the clinical utility of the manual (Michael, 2010). A strong evidence base to inform the DSM is essential as the manual provides an invaluable resource to clinicians involved in diagnosing and treating mental disorders. The manual also informs prognostic and treatment-related

decisions. Importantly, it provides a reference for differentiating pathology from normative behaviours. The evidence presented within this essay provides a strong rationale for distinguishing ODD from CD as distinct disorders with distinct influencing factors and severities. However, the further distinction between child-onset and adolescent-onset CD remains debateable, with the latter arguably pathologising normative adolescent behaviour. Furthermore, since there is extensive evidence showing that children of different genders possess differences in temperament, further research exploring the gender-speci¬)c effects of temperament on ODD and CD are needed.

Remaining limitations include a paucity of research on the cultural differences within these two distinct disorders and since evidence suggesting that temperament and gender play a role in both the development and trajectory of ODD and CD, the same is plausible for culture. In addition, since ODD and CD often co-occur with other mental disorders, this may pose some problems in finding accurate diagnostic criteria and clearly distinguishing the two conditions. Larger scale studies need to control for these co-occurring disorders, as well as to increase the applicability of evidence to the clinical environment. One of the key limitations within much of the research within this essay is its lack of generalisability to the setting in which a diagnosis traditionally takes place.

In conclusion, despite extensive efforts to provide a stronger evidence base for the DSM-V, many questions still remain. Whilst clearly distinguishing Oppositional Defiant Disorder from Conduct Disorder is supported by the

literature, evidence for the subtypes of CD and the need to produce gender-specific diagnostic criteria remains in its infancy.