Oppositional Defiant Disorder; Literature Review

Devina Martinez, 110010765

PSYC 3220: Child Psychopathology

Dr. Phillip Ricciardi

University of Windsor

March 29, 2023

Oppositional Defiant Disorder; Literature Review

I. Introduction and Epidemiology

Description of Disorder

Oppositional Defiant Disorder (ODD) is a behavioural disorder that is frequently developed in childhood or adolescence. Within ODD, there is a persistent pattern of many behaviours such as an angry mood, irritability, frequent arguments, and vindictiveness (Mohammadi et al., 2020) with a common opposition to authority like teachers or parents (Ljungström et al., 2020). Although it is developmentally appropriate for children to have some of these behaviours in development, it is when the behaviours are overwhelming and repeated that it crosses over into ODD. Many children with ODD are immature in development areas such as cognitive, social, and emotional development (Ljungström et al., 2020). There are many different reports of prevalence rates for ODD, including between 3-6% (Nadi et al., 2021), 3.5% (Ballentine, 2019), 3.3% (Riley et al., 2016), and 10.2% (Halldorsdottir et al., 2023). Most of these studies report the prevalence between 3% and 10% and report that the individuals more likely to be diagnosed are boys in young childhood (Riley et al., 2016), as the prevalence decreases around age 12 for both boys and girls (Nadi et al., 2021).

Gender & Race Difference

There is no gender difference in symptoms in the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5), but most studies indicate a higher prevalence of ODD in boys. However, the way that girls and boys display symptoms is different, leading researchers to question if the diagnostic criteria are as useful for girls as it is for boys (Ljungström et al., 2020). For example, according to Ljungström et al. (2020), girls showed more problematic behaviours (e.g., constantly fighting) and annoyed others deliberately more often.

The reason for the difference in diagnosis between boys and girls is that boys may be more exposed to the risk factors than girls (Mohammadi et al., 2020). Another difference in diagnoses includes the pattern of black males being diagnosed with ODD at a greater rate than other groups like white males (Ballentine, 2019; Grimmett et al., 2016), yet in many studies, it has been shown that black children and white children realistically exhibit the same rate of the disorder and symptoms.

These differences in the diagnoses of black males with ODD have serious consequences that affect black children. Firstly, the diagnosis of ODD is related to negative long-term outcomes like mental health problems and involvement in the criminal justice system (Ballentine, 2019). Many people build a schema around black children engaging in disruptive and dangerous behaviour, that follows them into adulthood. Along with these issues, in the US, black males make up about 47% of suspensions and 44% of expulsions in the Southern states and were more likely to be rated as having greater symptoms of disruptive and defiant behaviour than their white peers (Grimmett et al., 2019). These statistics relate to ODD because these suspensions and expulsions can be used to create a diagnosis of ODD in black children. This is also problematic because of the lack of Black clinicians who diagnose disorders, leading to white mental health professionals using their racial lens to define social norms (Ballentine, 2019), and therefore could be unconsciously using their prejudices to diagnose ODD. Grimmett et al. (2016) suggest that mental health professionals should consider external and extrinsic factors that may contribute to behaviours and symptoms more deeply and look deeper into the culture and family dynamics of black children.

Risk Factors

The risk factors and predictors of ODD include environmental, genetic, biological, and societal, yet the latent factor has not been examined (Cavanagh et al., 2016). Within the genetic and biological factors, a genetic disposition to irritability and defiant behaviour in early childhood may be a factor (Waldman et al., 2018) as well as the finding from Ghosh et al. (2017) that reports that volume reductions in the left amygdala, insula, and frontal gyrus are associated with ODD. Low socioeconomic status, family conflict and high levels of stress, parental depression, low parent education (Mohammadi et al., 2020), parent communication (Nadi et al., 2021), history of parental psychiatric disorders, parent hostility, harsh parenting, and insecure attachment (Craig et al., 2020) are all risk factors associated with ODD. There are many associations between attachment to parents and ODD in adolescence according to Craig et al. (2020). Attachment anxiety and dysregulation were associated with ODD, and the explanation for this finding is that children who are securely attached to their parents and are more emotionally regulated can respond to situations appropriately (Craig 2016). There is no expected or consistent course of ODD, yet some researchers believe that anti-social personality disorder is an adult form of ODD (Riley et al., 2016). This argument was not repeated in the literature, however other comorbid disorders that may develop with time are discussed in the assessment and diagnosis section.

Dimensions of ODD

Within the literature on ODD, many researchers have created dimensions of ODD and disruptive behaviour. Ljungström et al. (2020) report that the four core dimensions were temper loss, aggression, noncompliance, and low concern for others, but then report in their study that mothers of children rated children in three dimensions: disobedience; inflexibility; and rebelliousness. Cavanagh et al. (2016) on the other hand, report that the dimensions of ODD are

affective and behavioural, while also acknowledging that other models propose different dimensions such as irritable, headstrong, and hurtful. These dimensions are used to help identify the core behavioural issues of ODD that help clinicians direct treatment. In the previously mentioned study by Cavanagh et al. (2016), the researchers believed that emotional dysregulation lines up statistically with ODD, so ODD should be conceptualized as a disorder of emotion regulation rather than as a behaviour disorder. With all these dimensions and factors considered; the DSM-5 has outlined the diagnostic criteria to be used to diagnose this disorder.

II. Assessment and Diagnosis

DSM-5 Criteria

The DSM-5 Criteria A consists of three main aspects of the disorder a pattern of angry/irritable mood, defiant and argumentative behaviour, or vindictiveness lasting six months and four symptoms need to be shown from these categories (Riley et al., 2016). Symptoms include losing temper, being touchy often, being easily annoyed, being angry and resentful often, arguing with authority figures/adults, defying requests from authority/adults, deliberately annoying others, blaming others for their mistakes, and being spiteful or vindictive within six months (Riley et al., 2016). In addition, the DSM-5 implemented a note that for children under 5, the behaviour should occur at least once a week (Ghosh et al., 2017), and explains that other factors, like intensity, should be considered. Criteria B involves the effect of distress it gives the individual or others in their social context or the negative impact it has on important areas of functioning. Lastly, criteria C states that the behaviours should not occur during another disorder, including bipolar, depressive, substance abuse, or psychotic (Riley et al., 2016). There are also specifiers for severity, where the "mild" specifiers explain that the behaviours only happen in one

setting, "moderate" means that the symptoms are present in at least two settings, and "severe" means that the symptoms are present in three or more settings (Riley et al., 2016).

Diagnostic Tools

According to the literature, no single tool is used to diagnose ODD, and most of the screening tools for ODD are used to diagnose comorbid disorders like Attention-Deficit/Hyperactivity Disorder (ADHD). The diagnostic tools for ODD include the Child Behaviour Checklist; the Conners 3; Swanson, Nolan and Pelham Teacher and Parent Rating Scale; and the Vanderbilt ADHD Diagnostic Parent Rating Scale (Riley et al., 2016). The Conners 3, Swanson, Nolan and Pelham Teacher and Parent Rating Scale, and Vanderbilt ADHD Diagnostic Parent Rating Scale are used to screen ADHD but have additional assessments, questions, and scales to assess for ODD and other comorbid disorders (Riley et al., 2016). Teachers, parents, and any other adult close to the child are also a part of the diagnosis process to help determine the correct diagnosis for the child. As stated before, the tools used to diagnose ODD are used to diagnose many other disorders, including ADHD, conduct disorder, depression, and anxiety (Riley et al., 2016) which were all found to be comorbid disorders according to multiple studies and research.

Comorbid Disorders

There are many comorbid disorders of ODD, with many researchers agreeing on ADHD, depression, anxiety, and conduct disorder as the main four (Ghosh et al., 2017; see also Déry et al., 2016; Herzoff & Tackett, 2015; Ljungström et al., 2020; Mohammadi et al., 2020; Riley et al., 2016; Waldman et al., 2018). Within these comorbidities, literature has surfaced about the gender differences in the comorbid disorders. In the study conducted by Déry et al. (2020) that studied the relationship between the categories of ODD and anxiety and depression, the

researchers found an association between vindictive behaviour symptoms and depression for girls. In addition, there is a correlation between the category of irritable symptoms in ODD and high depression and anxiety scores in the future (Déry et al., 2020). Craig et al. (2020) also reported these findings, along with Ghosh et al. (2017) and Herzoff & Tackett (2015). When specifically discussing the high rate of comorbidity between ODD and ADHD, Ghosh et al. (2017) add that two models can be used to understand why the comorbidity is so high; the correlated risk-factor model, which suggests that the disorders share similar risk factors; and the developmental precursor model, which suggests that the symptoms of ADHD can lead to ODD. In addition, children with ODD are more likely to develop the following disorders in their teenage years and adulthood: Disruptive Mood Dysregulation Disorder; Intellectual disability; language disorder; and social phobia (Riley et al., 2016).

Other comorbid disorders like substance abuse and bipolar disorder are debated in ODD literature. Riley et al. (2016) and Cavanagh et al. (2016) agree that substance abuse is a future comorbidity with ODD, especially in "headstrong" individuals. However, Waldman et al. (2018) write that substance abuse is not comorbid with ODD but that there is an influence on the rates of substance abuse when a child has defiant behaviour and a genetic influence. For bipolar disorder, Cavanagh et al. (2016), Riley et al. (2016), and Grimmett et al. (2016) were the only literature found that named bipolar as a comorbid disorder, while Waldman et al. (2018) disagreed. There are many comorbid disorders to ODD, making researchers question the approach to diagnosis. Ljungström et al. (2020) suggest that when looking for and diagnosing ODD, a top-down and bottom-up approach should be used to cover all the aspects of this disorder. The DSM-5 uses a top-down approach and is sometimes seen as too blunt, while researchers argue that a bottom-up approach allows multi-dimensional thinking. In the study by Ljungström et al. (2020), mothers

used top-down and bottom-up to help with identifying symptoms and reported their child's behaviour using both approaches to researchers. Ljungström et al. (2020) concluded that the top-down approach to ODD criteria helped to identify oppositional behaviour from conduct issues, and a bottom-up approach captured more range of problematic behaviours.

III. Evidence-Based Treatments

Treatment for ODD revolves around three main parts: parent/family intervention and training, psychosocial therapy, and medication. Inefficient parenting styles can have negative consequences (Nadi et al., 2021). Psychologists can help children if they educate parents on managing and understanding their child's behaviour. Parent management therapy and behavioural parenting interventions are the first lines of therapy for younger children (Riley et al., 2016), and this training is used to influence parent-child interactions (Nadi et al., 2021). Parent management therapy is also used to help parents manage behaviour that is disruptive by decreasing positive reinforcement of unwanted behaviours and to help parents recognize and understand appropriate consequences and punishments (Riley et al., 2016). Group parenting intervention using Cognitive-Behaviour Therapy (CBT) is also effective for improving child conduct problems, and parenting skills, and is cost-effective (Riley et al., 2016).

Multisystemic therapy can be used to improve family communication and parenting skills, and it has a positive effect on children older than eight years, as reported by Pringsheim et al. (2015). Family therapy can be used to help modify family interactions. Attachment-based interventions, like Attachment-Based family therapy, can lead to more parental sensitivity and attachment security by giving adolescents chances to handle difficult emotions and helping parents recognize their child's behaviour (Craig et al., 2020). Family-centered therapy is only one type of therapy used in treating ODD with many more child-centered approaches that come into

play in adolescence. Individual therapy is more prominent in adolescence, but parent involvement creates better outcomes (Riley et al., 2016). Child-based psychotherapy focuses on problem-solving skills. Individual CBT is effective for children, especially in reducing anger episodes (Pringsheim et al., 2015). On top of this, other vocational training programs and academic preparation programs are used to help children improve social competence for their future in school and careers (Riley et al., 2016).

Within all literature studied, medication is not recommended for the sole treatment of ODD, yet all literature confirms that medication could be used to treat comorbid disorders and that in turn may lessen the symptoms of ODD (Riley et al., 2016; see also Ghosh et al., 2017; Pringsheim et al., 2015;). When medications are used for treatment, behavioural interventions should accompany them (Riley et al., 2016). Riley et al. (2016) name some examples of medication that can be taken, including stimulants (when comorbid with ADHD), mood stabilizers, and atypical antipsychotics (for aggressive behaviour). The gold standard of treatment is what follows: psychosocial approaches to therapy that help children problem solve and better understand their own emotions and behaviours (Ghosh et al., 2017); a parent-management therapy to help with understanding behaviour, and help parents learn techniques based on operant conditioning at task analysis; and pharmacotherapy if needed to treat comorbid disorders (Nadi et al., 2021).

IV. Future Research and Conclusion

Many areas were identified in the literature for future studies that have to do with topics such as the core deficits of ODD, treatment and medication, emerging symptoms of ODD, and the long-term implications of an ODD diagnosis. Firstly, in the study by Cavanagh et al. (2016), they concluded that ODD should be conceptualized as a problem of emotional dysregulation

(ED) rather than a disruptive behaviour disorder. The argument presented in the study presents that because ODD's core deficit is ED, more research in this area is warranted to decide if ODD and disruptive mood dysregulation disorder (DMDD) can be seen as occurring on the same continuum (Cavanagh et al., 2016). In addition, Cavanagh et al. (2016) believe that an ODD-ED scale should be created, and Ghosh et al. (2017) support this idea, stating that ODD grouped with impulse-control disorders may need to be altered to group the disorder with DMDD. Within treatment, Pringsheim et al. (2015) suggest that future research include trials that compare medications in their ability to manage disruptive and aggressive behaviours, along with more research comparisons between medication and psychosocial therapies. To add to the topic of treatment, Halldorsdottir et al. (2023) state that studying the use of augmented treatment, including treatment targeting underlying processes such as executive functioning, may be necessary for some children with ODD, especially those rating high in conduct problems. Craig et al. (2020) argue that it is unclear if ODD symptoms emerge in childhood and persist throughout adolescence or if this disorder can emerge in adolescence; longitudinal research from childhood into youth and adulthood is needed. Mohammadi et al. (2020) similarly recognized that ODD symptoms have increased with age and that this needs to be studied in the future. Lastly, more research should target the implications of an ODD diagnosis long-term, including the relationship between the diagnosis, discipline practices at school, and crime among marginalized groups (Grimmett et al., 2016).

In closing, ODD is reported in the literature as more of an emotional dysregulation issue than a problem with disruptive behaviour. The prevalence of ODD varies across studies, but the percentage rates most often lie between 3% and 10%. Boys are diagnosed with ODD more often than girls, yet no explanation is given. Another key point is that black males are

disproportionately diagnosed with ODD, although ODD symptoms are equal in appearance to white and black children (Grimmett et al., 2016). The dimensions of ODD are argued in the literature, but most researchers agree with the three dimensions of ODD using the DSM-5 criteria; anger/irritability, argumentative/defiant, and vindictiveness (Riley et al., 2016). The literature agrees that ADHD, depression, anxiety, and conduct disorder are the most common comorbid disorders, and girls are more likely to experience internalizing comorbid disorders while boys are more likely to experience externalizing comorbid disorders (Déry et al., 2020). A large amount of literature explaining ODD treatment regards parent management therapy and psychosocial therapy for the child are the two main parts of treatment, using medication only to treat comorbid disorders. To end, Riley et al. (2016) state that ODD may be prevented with programs such as parenting skills training, social skills training, conflict resolution, and anger management in preschool to adolescent-aged children that can help reduce the risk of ODD for high-risk youth.

References

Ballentine, K. L. (2019). Understanding racial differences in diagnosing odd versus ADHD using critical race theory. *Families in Society: The Journal of Contemporary Social Services*, *100*(3), 282–292. https://doi.org/10.1177/1044389419842765

Cavanagh, M., Quinn, D., Duncan, D., Graham, T., & Balbuena, L. (2016). Oppositional defiant disorder is better conceptualized as a disorder of emotional regulation. *Journal of Attention Disorders*, *21*(5), 381–389. https://doi.org/10.1177/1087054713520221

Craig, S. G., Sierra Hernandez, C., Moretti, M. M., & Pepler, D. J. (2020). The mediational effect of affect dysregulation on the association between attachment to parents and oppositional defiant disorder symptoms in adolescents. *Child Psychiatry & Human Development*, *52*(5), 818–828. https://doi.org/10.1007/s10578-020-01059-5

Déry, M., Lapalme, M., Jagiellowicz, J., Poirier, M., Temcheff, C., & Toupin, J. (2016). Predicting depression and anxiety from oppositional defiant disorder symptoms in elementary school-age girls and boys with conduct problems. *Child Psychiatry & Human Development*, *48*(1), 53–62. https://doi.org/10.1007/s10578-016-0652-5

Ghosh, A., Ray, A., & Basu, A. (2017). Oppositional defiant disorder: Current insight. *Psychology Research and Behavior Management*, *Volume 10*, 353–367. https://doi.org/10.2147/prbm.s120582

Grimmett, M. A., Dunbar, A. S., Williams, T., Clark, C., Prioleau, B., & Miller, J. S. (2016). The process and implications of diagnosing oppositional defiant disorder in African American males. *The Professional Counselor*, *6*(2), 147–160. https://doi.org/10.15241/mg.6.2.147

Halldorsdottir, T., Fraire, M. G., Drabick, D. A., & Ollendick, T. H. (2023). Co-occurring conduct problems and anxiety: Implications for the functioning and treatment of youth with oppositional defiant disorder. *International Journal of Environmental Research and Public Health*, *20*(4), 3405. https://doi.org/10.3390/ijerph20043405

Herzhoff, K., & Tackett, J. L. (2015). Subfactors of oppositional defiant disorder: Converging evidence from structural and latent class analyses. *Journal of Child Psychology and Psychiatry*, *57*(1), 18–29. https://doi.org/10.1111/jcpp.12423

Ljungström, B.-M., Kenne Sarenmalm, E., & Axberg, U. (2020). Bottom-up and top-down approaches to understanding oppositional defiant disorder symptoms during early childhood: A mixed method study. *Child and Adolescent Psychiatry and Mental Health*, *14*(1). https://doi.org/10.1186/s13034-020-00339-1

Mohammadi, M. R., Salmanian, M., Hooshyari, Z., Shakiba, A., Alavi, S. S., Ahmadi, A., Khaleghi, A., Zarafshan, H., Mostafavi, S. A., Alaghmand, A., Molavi, P., Mahmoudi-Gharaei, J., Kamali, K., Ghanizadeh, A., Nazari, H., Sarraf, N., Ahmadipour, A., Derakhshanpour, F., Riahi, F., … Ahmadi, N. (2020). Lifetime prevalence, sociodemographic predictors, and comorbidities of oppositional defiant disorder: The National Epidemiology of Iranian Child and Adolescent Psychiatric Disorders (IRCAP). *Brazilian Journal of Psychiatry*, *42*(2), 162–167. https://doi.org/10.1590/1516-4446-2019-0416

Nadi, M. A., Fooladvand, M., Abedi, A., & Sajjadian, I. (2021). Parenting styles for children with oppositional defiant disorder: Scope review. *Journal of Education and Health Promotion*, *10*(1), 21. https://doi.org/10.4103/jehp.jehp_566_19

Pringsheim, T., Hirsch, L., Gardner, D., & Gorman, D. A. (2015). The pharmacological management of oppositional behaviour, conduct problems, and aggression in children and adolescents with attention-deficit hyperactivity disorder, oppositional defiant disorder, and conduct disorder: A systematic review and meta-analysis. part 2: Antipsychotics and traditional mood stabilizers. *The Canadian Journal of Psychiatry*, *60*(2), 52–61. https://doi.org/10.1177/070674371506000203

Riley, M., Ahmed, S., & Locke, A. (2016). Common Questions About Oppositional Defiant Disorder. *American Family Physician*, *93*(7), 586–591. https://www.aafp.org/pubs/afp/issues/2016/0401/p586.html

Waldman, I. D., Rowe, R., Boylan, K., & Burke, J. D. (2018). External validation of a BIFACTOR model of oppositional defiant disorder. *Molecular Psychiatry*, *26*(2), 682–693. https://doi.org/10.1038/s41380-018-0294-z