

# Comorbidity of Obsessive-Compulsive Disorder in Youth Diagnosed With Oppositional Defiant Disorder



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Understanding the overlap of symptoms between oppositional defiant disorder (ODD) and obsessive-compulsive disorder (OCD) experienced by youth is pertinent for accurate diagnosis. A quantitative, retrospective, cross-sectional design format was used to assess the relationship between ODD and OCD in addition to evaluating the difference in ODD severity and symptoms based on OCD severity. Symptoms and severity ratings of ODD and OCD were collected from youth diagnosed with ODD ( $N = 179$ ). Fisher's exact test and a Wilcoxon signed-rank test were performed. There were significant relationships between frustration related to obsessions and compulsions and the ODD symptoms of annoyance and anger. Results suggested that OCD severity predicted an increase in scores for ODD severity and symptoms.

**Keywords:** oppositional defiant disorder, obsessive-compulsive disorder, overlap of symptoms, youth, severity

Children and adolescents who struggle with mental health disorders experience a decline in their quality of life related to psychological, physical, and social well-being (Celebre et al., 2021). The most common disorders diagnosed in childhood and adolescence are attention-deficit/hyperactivity disorder (ADHD), generalized anxiety disorder (GAD), major depressive disorder (MDD), obsessive-compulsive disorder (OCD) and other disruptive behavior disorders such as oppositional defiant disorder (ODD) and conduct disorder (CD; Ghandour et al., 2019; Perou et al., 2013). The array of disorders diagnosed in childhood and adolescence contributes to the probability of misdiagnosis or overdiagnosis (Merten et al., 2017). Moreover, approximately 7.4% of children between the ages of 3–17 are diagnosed with a behavioral problem (Centers for Disease Control and Prevention [CDC], 2021). According to the *Diagnostic and Statistical Manual of Mental Disorders* (5th ed.; DSM-5; American Psychiatric Association [APA], 2013), the prevalence of OCD in the United States is 1.2%, with the majority of cases being reported before the age of 14, while the prevalence of ODD has an average estimate of 3.3%. Behavioral problems as a result of mental health issues impact a child's antisocial behaviors (Justicia-Arráez et al., 2021), further influencing performance at home and school.

Previous studies have documented the overlap of ODD with other mental disorders. For example, Garcia et al. (2009) found that approximately 12% of 4- to 8-year-old children who were diagnosed with OCD also presented with comorbid ODD. Furthermore, Thériault et al. (2014) suggested that irritability, a symptom affiliated with ODD, has been reported by individuals diagnosed with obsessive-compulsive behavior or OCD. A systematic review conducted by Stahnke (2021) revealed that OCD is commonly misunderstood by the general population as well as misdiagnosed by

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mental health professionals and primary care physicians. On the other hand, Grimm et al. (2016) suggested that the diagnostic criterion of ODD is reflective of general child and adolescent behavior. This could result in the misdiagnosis or overdiagnosis of ODD. The interchangeable symptoms of OCD and ODD may suggest that children and adolescents are experiencing comorbidity or that they are misdiagnosed, resulting in the use of ineffective interventions and treatment for children and adolescents with OCD or ODD. The co-occurrence of ODD and OCD in youth may be attributed to the overlap of anger-related symptoms. Assessment of anger-related symptoms can provide further insight on the comorbidity of these disorders in addition to suggesting the potential for misdiagnosis.

## Literature Review

### Oppositional Defiant Disorder

According to Loeber et al. (2000), approximately 1%–16% of school-aged children and adolescents have been diagnosed with ODD. ODD is characterized by emotional disruptions such as anger and mood irritability in addition to behavioral issues, including argumentativeness and defiance (APA, 2013). One study suggested that ODD comprises three symptomatic components: headstrong (i.e., argumentative toward adults and defying their requests), irritable (i.e., temper dysregulation and resentment), and hurtful (i.e., aggression toward others; Stringaris & Goodman, 2009). ODD has demonstrated significant impairments related to emotional, social, educational, and vocational daily functioning (APA, 2013).

Pharmacological interventions that treat ODD include antipsychotics (Hood et al., 2015) and psychostimulants (Pringsheim et al., 2015). Additionally, children and adolescents diagnosed with ODD often receive therapeutic interventions such as cognitive behavioral therapy (CBT) and brief strategic family therapy (Ghosh et al., 2017). Accurate diagnosis of ODD is imperative for appropriate treatment interventions to be implemented.

### Obsessive-Compulsive Disorder

OCD includes the presence of intrusive and unwanted thoughts, urges, or images that are often recurrent (obsessions) and/or repeated behaviors or mental acts that are completed as a result of obsessions (compulsions; APA, 2013). Moreover, individuals with OCD may experience intolerance of uncertainty with an emphasis on controlling their thoughts to lessen said uncertainty. A study conducted by Mancebo et al. (2008) suggested that common obsessions include contamination, catastrophic thoughts, and aligning objects to be symmetrical in addition to compulsions related to checking, repeating routine activities, and ordering or rearranging objects. Genetic, environmental, and familial factors can contribute to the severity of OCD symptoms. D. A. Geller (2006) described the average age of onset of OCD symptoms occurring between the ages of 7.5 and 12.5 years. Although the symptoms of OCD are focused on obsessions and compulsions, researchers have demonstrated that individuals with OCD experience issues with anger. For instance, Painuly et al. (2011) found that half of the participants in their study ( $N = 21$ ) who were diagnosed with OCD reported anger attacks. Furthermore, individuals diagnosed with OCD ( $N = 48$ ) reported increased frequency of anger along with higher anger suppression scores (Cludius et al., 2021). A third study conducted by Radomsky et al. (2007) suggested that individuals diagnosed with OCD who experience checking compulsions indicated heightened trait anger or an increased rate of anger over time. A longitudinal study that assessed children and adolescents ( $N = 563$ ) demonstrated the developmental trajectories of ODD and obsessive-compulsive problems (OCP), which provided evidence that youth endorsed high scores of irritability and defiance in addition to increased scores of OCP (Ezpeleta et al., 2022). This study conceptualized OCP as a component of an OCD diagnosis. Hence, children may appear to have ODD when, in actuality, they may not be able to perform obsessions and compulsions, leading to irritability, defiance, and anger.

Pharmacological interventions for children and adolescents diagnosed with OCD include serotogenic medications (Nazeer et al., 2020) and selective serotonin reuptake inhibitors (Kotapati et al., 2019). Therapeutic interventions such as CBT and behavior therapy have demonstrated effectiveness in the treatment of OCD in children and adolescents (Avasthi et al., 2019). The differentiations in treatment approaches between OCD and ODD highlight the need for further research on the specific symptoms that lead to a diagnosis.

### Comorbidity of ODD and OCD

Researchers have demonstrated that OCD is a highly comorbid disorder; approximately 80% of adults with OCD meet criteria for other conditions and 36.6% of children under the age of 17 with behavioral problems present with OCD (Ghandour et al., 2019). Moreover, a recent study by Ezpeleta et al. (2022) noted that ODD and obsessive-compulsive problems affect approximately 9.4% of children that are between the ages of 6 and 13. An additional study reported that one in five individuals experience depressive symptoms with OCD (Ghandour et al., 2019). However, there is inconclusive information regarding the comorbidity of ODD in association with OCD. Assessment tools such as the Child Behavior Checklist (Achenbach, 1991) can screen for comorbidity, including OCD, and the Children's Yale-Brown Obsessive Compulsive Scale (Scahill et al., 1997) can evaluate the severity of obsessions and compulsions. But a thorough inventory that assesses for comorbidities in children and adolescents and considers OCD and ODD has yet to be developed. Coskun and colleagues (2012) suggested that comprehensive evaluation could screen for comorbidities with regard to OCD in children in addition to increasing understanding of severity and age of onset, as these components can vary according to coexisting disorders.

A study conducted by Storch et al. (2010) evaluated the comorbidity of disruptive behavior disorder, including adolescents diagnosed with ODD, OCD, and CD, and reported that comorbid disruptive behavior disorder is related to greater family accommodation, less symptom resistance to obsessions, and heightened OCD severity. Moreover, the *DSM-5* suggested that males are more often diagnosed in childhood with OCD and ODD compared to females (APA, 2013). Although these two conditions are represented in distinct categories in the latest edition of the *Diagnostic and Statistical Manual of Mental Disorders* (5th ed., text rev.; *DSM-5-TR*; APA, 2022), clinical data and previous literature have suggested overlap. For example, one study stated that temper outbursts, which are described as behaviors such as anger outbursts, temper tantrums, and resentment, were two to three times more common in youth with OCD compared to those without (Krebs et al., 2013). Moreover, another study found that 53% of children diagnosed with OCD exhibited explosive anger outbursts, which were caused by perfectionism, modification to routine, or rules enforced by parents (Storch et al., 2012). Additionally, researchers have reported greater validity in OCD-diagnosed patients who exhibit increased behavioral and cognitive impulsivity (Boisseau et al., 2012). This finding has been observed and anecdotally reported by parents and teachers of youth diagnosed with OCD when compulsions cannot be acted on (Krebs et al., 2013). The influence of ODD and OCD symptoms can have lasting effects on children and adolescents, thus emphasizing the importance of mental health professionals' accurate diagnoses and the appropriate treatment of these disorders.

The pattern of uncooperative and defiant behavior toward authority figures can pose challenges in diagnosis and assessment. Factors associated with the environment, such as externalizing behaviors secondary to trauma (Beltrán et al., 2021), psychiatric conditions that include symptoms related to aggression and defiance, and hyperactivity, can be difficult to discriminate (APA, 2013; Thériault et al., 2014). This is common in ODD-diagnosed children and adolescents who often do not comply with authority figures without reason, resulting in repetitive negative behavior patterns. Similarly, youth

diagnosed with OCD might respond defiantly to their obsessive thoughts when they cannot be acted upon (J. Geller, 2022). Further, children and adolescents may experience obsessive thoughts of which parents and guardians are not aware. Ezpeleta et al. (2022) reported the coexistence of the two disorders:

The stubbornness of the oppositional child who wants to do their will and the rituals of the obsessive child who needs to do things a certain way, the low anger threshold in oppositionism and the anger attacks of the obsessive child when prevented from doing their rituals, the argumentativeness in both cases to be able to do what they want annoying others for fun or because they need to participate in the ritual, and defying rules may make the two disorders coexist. (p. 1090)

Similarly, a case study developed by Ale and Krackow (2011) described a 6-year-old boy who struggled with ritualized behaviors and avoidance that would lead to anger and aggression. The case study provided an example in which the boy feared small, round objects, and when the boy observed other children at school wearing buttons, the boy expressed his anger through name calling and kicking a peer. The distress from viewing buttons was due to an obsession that led the boy to become fearful of choking (Ale & Krackow, 2011). These explanations of anger or frustration that are an outcome of the child's inability to engage in rituals emphasize the importance of considering the misdiagnosis and comorbidity of ODD.

## Study Purpose

We hypothesized that children and adolescents diagnosed with ODD would report increased OCD severity and higher ratings of symptoms related to anger, providing further insight into the overlap in symptoms of ODD and OCD. For the purpose of this study, comorbidity was defined as the presence of two or more diagnosed disorders (Basu et al., 2018). Moreover, we hypothesized that children and adolescents would endorse higher scores on symptoms related to anger and frustration because of the inability to perform obsessions and compulsions. The research questions were:

Research Question 1: What is the relationship between ODD and OCD for youth diagnosed with ODD?

Research Question 2: Is there a difference in ODD severity and symptoms between youth that scored lower on OCD severity compared to those that had high scores of OCD severity?

## Method

### Design

This study followed a quantitative, retrospective, cross-sectional design format that utilized a purposive sampling technique. Purposive convenience sampling allowed for intentional selection of participants who were accessible based on location. Children and adolescents diagnosed with ODD were selected for the study in order to evaluate comorbidity with OCD. This methodological approach allowed for further insight into the overlap in symptoms experienced by children and adolescents with ODD. To answer the first research question, Fisher's exact test was utilized, and to answer the second research question, a Wilcoxon signed-rank test was conducted.

## Participants

The participants in this study ( $N = 179$ ) included children and adolescents between the ages of 5 and 19 that had been referred by their parents or guardians to a mental health clinic located in the Southern region of the United States. Following the securing of IRB approval, participant documents containing diagnoses, symptoms, and severity from children and adolescents that reported to the clinic between 2017 and 2020 were retrospectively collected. Participants who were prescribed psychotropic medication or had received any other diagnosis were excluded from the study. All participants were clients at the clinic at the time of data collection. Participants gave assent through their parent or guardian's completion of an informed consent form, which indicated that diagnostic information would be used for research purposes, including future studies that would retrospectively collect participant information while keeping their identifying information confidential. Participants did not receive any reimbursement for participation in this study.

The sample used in this study included 179 children and adolescents (121 boys and 58 girls) between 5 and 19 years of age ( $M = 13.34$ ,  $SD = 3.56$ ) that were diagnosed with ODD. Of the sample, 14 participants (8%) were between the ages of 5 and 8, 63 participants (35%) were between the ages of 9 and 12, 55 participants (31%) were between the ages of 13 and 16, and 47 participants (26%) were between the ages of 17 and 19. The average age of the sample was 13.34 years ( $SD = 3.56$ ).

## Data Collection

### Measures

**CliniCom™ Psychiatric Assessment Software.** The CliniCom™ Psychiatric Assessment (hereafter referred to as CliniCom) is a validated and reliable web-based tool that uses algorithms based on mental health research and *DSM-5* criteria to identify multiple psychiatric conditions (Handal et al., 2018). CliniCom is a self-guided measure that collects information including individual and family history, social history, responses to mental health questions, self-assessment of severity of symptoms, quality of life, and current and previous mental health treatments. Participants complete CliniCom at their own pace on a computer at a location of their preference (e.g., home, school). CliniCom assesses for 81 disorders and utilizes items from the Children's Yale-Brown Obsessive Compulsive Scale (Scahill et al., 1997). CliniCom has undergone psychometric investigation, indicating 78% concordance in diagnosing the same disorder in test-retest analysis, including the Yale-Brown Obsessive Compulsive Scale (Y-BOCS; Goodman et al., 1989; Handal et al., 2018).

The data were retrospectively collected from participants' charts, which included a report from CliniCom. The participants completed CliniCom prior to their initial appointment with assistance from their parent or guardian. Participants received a suggested diagnosis from the assessment. Following the completion of the CliniCom assessment, semi-structured diagnostic interviews and parent questionnaires were conducted and completed. Diagnoses were verified and confirmed by a board-certified child and adolescent psychiatrist. CliniCom and the semi-structured diagnostic interviews utilized diagnostic criteria from the *DSM-5* (APA, 2013) to assess the onset, duration, frequency, and severity of mental disorders in addition to the level of impairment experienced by the client. Symptoms were conceptualized based on clinical severity, which ranges from 0–10, with 10 as the most severe presentation of the symptom and 4 or higher indicating moderate to severe symptoms. A score of 4 is the threshold to be considered positive for the symptom. The overall severity ratings for ODD and OCD are determined by the Clinical Global Impressions Scale (CGI-S). The CGI-S uses a range between 1 and 7 to indicate illness severity with 1 = *normal* to 7 = *extremely ill* (Busner & Targum, 2007).

**Assessment of ODD and OCD.** To determine the overlap of symptoms related to ODD and OCD for children and adolescents, the following symptoms were collected from the responses to the CliniCom items: easily annoyed, bothered, or upset by others (ODD Symptom 1), often angry or resentful (ODD Symptom 2), often spiteful or vindictive (ODD Symptom 3), and frustrated and/or angry with relation to obsessions and compulsions (OCD Symptom 1). Descriptions of symptoms can be viewed in Table 1. To respond to the ODD symptom items in the assessment, participants submitted a rating between 1 and 10. A rating of 10 represents the most severe presentation of the symptom and 4 or higher represents a moderate to severe presentation; a score of 4 is the threshold to be considered positive for the symptom. Responses to the OCD symptom item were dichotomous, wherein participants indicated “yes” or “no” if they were experiencing the symptom. OCD and ODD severity ratings for each participant were recorded.

**Table 1**

*Description of Symptoms Collected*

Disorder Term	Description from CliniCom™ Psychiatric Assessment
ODD Symptom 1	“Easily annoyed, bothered, or upset by others”
ODD Symptom 2	“Often angry and resentful”
ODD Symptom 3	“Often spiteful or vindictive”
OCD Symptom 1	“Frustrated and/or angry with relation to obsessions and compulsions”

**Data Analysis**

IBM SPSS 27 software was used for data analysis. Preliminary analysis included all clients in the sample. The Kolmogorov-Smirnov test of normality was conducted to determine the numerical distribution of variables. The test of normality showed that none of the variables were normally distributed,  $p < .05$ . Spearman correlation coefficients were calculated to determine significant associations between variables.

Fisher’s exact tests were conducted to determine non-random associations between variables. Phi was used to calculate the effect size for the Fisher’s exact test. A Wilcoxon signed-rank test was performed to analyze other variables in the sample through comparison of groups. The first group included participants who endorsed a score between 1–3 on the CGI-S for OCD severity ( $n = 47$ ). The second group was composed of participants who reported a score between 4–7 on the CGI-S for OCD severity ( $n = 132$ ). Correlation coefficients were calculated to determine the effect sizes for the Wilcoxon signed-rank test.

## Results

The mean score for the characteristics of ODD Symptom 1 was 7.79 ( $SD = 2.39$ ), ODD Symptom 2 was 6.09 ( $SD = 3.18$ ), and ODD Symptom 3 was 4.58 ( $SD = 3.49$ ). For OCD Symptom 1, 88% ( $n = 159$ ) of participants endorsed experiencing the symptom and 12% ( $n = 20$ ) did not endorse the symptom. The mean score for ODD severity was 6.05 ( $SD = 0.996$ ) and OCD severity was 4.61 ( $SD = 1.92$ ). Descriptive statistics and Spearman correlations are reported in Table 2.

**Table 2**

*Spearman Correlation Coefficients (p Values), Mean, and Standard Deviations of Variables*

Measure	M	SD	1	2	3	4	5	6
1. Age	13.34	3.56	-					
2. ODD Severity	6.05	0.996	-0.102	-				
3. OCD Severity	4.61	1.92	-0.004	.286**	-			
4. ODD Symptom 1	7.79	2.39	0.026	.246**	0.112	-		
5. ODD Symptom 2	6.09	3.18	0.025	.240**	0.172*	.645**	-	
6. ODD Symptom 3	4.58	3.49	0	.220**	0.152*	.522**	.715**	-

\* $p < .05$ . \*\* $p < .01$ .

Fisher's exact test was used to determine if there was a significant association between the OCD and ODD variables. There was no statistical significance between ODD Severity and OCD Symptom 1 (two-tailed,  $p = .196$ ) or between OCD Symptom 1 and ODD Symptom 3 (two-tailed,  $p = .015$ ). However, there was a strong positive relationship between OCD Symptom 1 and ODD Symptom 1 ( $\phi = .43$ ; two-tailed,  $p < .001$ ) as well as a strong positive significant association between OCD Symptom 1 and ODD Symptom 2 ( $\phi = .53$ ; two-tailed,  $p < .001$ ).

A Wilcoxon signed-rank test revealed a statistically significant difference between ODD Severity and OCD Severity ( $z = -8.803$ ,  $p < .001$ ) with a medium effect size ( $r = .60$ ). The median score increased from 5 to 6 when ODD Severity was considered with OCD Severity, suggesting that OCD Severity scores predicted a significant increase in ODD Severity scores. Analysis indicated a statistically significant difference between OCD Severity and ODD Symptom 1 ( $z = -9.834$ ,  $p < .001$ ) with a large effect size ( $r = .735$ ), suggesting that the median score of ODD Symptom 1 increased from 8 to 9 when OCD Severity was included. ODD Symptom 1 predicted a significant increase in OCD Severity scores. The results revealed a statistically significant difference between OCD Severity and ODD Symptom 2 ( $z = -5.114$ ,  $p < .001$ ) with a small effect size ( $r = .382$ ). The median score for ODD Symptom 2 increased from 5 to 7 when OCD Severity was included. Results did not reveal a statistically significant difference between OCD Severity and ODD Symptom 3 ( $z = -.266$ ,  $p = .790$ ). The median score remained the same ( $Mdn = 5$ ) when OCD Severity was considered with ODD Symptom 3. Results of the Wilcoxon signed-rank test are depicted in Table 3.

**Table 3***Wilcoxon Signed-Rank Test for OCD Severity*

Measure	Ranks	Mean Rank	Sum of Rank	Z	p
ODD Severity	Negative Ranks	47.64	667.00	-8.083	< 0.001
	Positive Ranks	64.94	7208.00		
ODD Symptom 1	Negative Ranks	61.72	987.50	-9.834	< 0.001
	Positive Ranks	88.51	13718.50		
ODD Symptom 2	Negative Ranks	76.86	3766.00	-5.114	< 0.001
	Positive Ranks	86.28	10095.00		
ODD Symptom 3	Negative Ranks	85.56	7700.50	-0.266	0.790
	Positive Ranks	88.56	7350.50		

**Discussion**

The objective of the present study was to identify and assess children and adolescents for overlap in symptoms and severity of ODD and OCD to determine potential comorbidity and suggest misdiagnosis. The aim of this study was to better understand the potential for children and adolescents to be misdiagnosed with ODD rather than OCD based on the premise that OCD-diagnosed children and adolescents experience symptoms that mimic ODD, such as anger and frustration, because of the inability to perform compulsions.

According to the results of this study, there was a significant relationship between OCD Symptom 1 and ODD Symptom 1. This finding suggested that youth diagnosed with ODD demonstrated significant associations with anger/frustration related to obsessions, compulsions, and annoyance. Additionally, the results suggested a significant relationship between OCD Symptom 1 (feels very frustrated and or angry with relation to obsession and compulsions) and ODD Symptom 2 (often angry and resentful). These results are similar to the prior research conducted by Ezpeleta et al. (2022), which revealed that children with OCP and ODD experienced heightened severity with relation to irritability and defiance, which may be due to the inability to act on a compulsion or perform a ritual. Moreover, researchers have conceptualized that the inability to complete compulsions may result in defiance or temper/anger outbursts (Ale & Krackow, 2011; Krebs et al., 2013; Painuly et al., 2011). Perhaps the children and adolescents in this study were diagnosed with ODD because of the endorsement of symptoms associated with frustration and anger; however, these symptoms might be a result of the inability to complete compulsions.

Findings from this study suggested that ODD Severity, ODD Symptom 1 (easily annoyed, bothered, or upset by others), and ODD Symptom 2 (often angry and resentful) increased when OCD Severity was considered. The heightened severity and symptoms of ODD when OCD Severity was included



in the analysis demonstrated the potential for comorbidity. These results are similar to the findings of Storch et al. (2010), who found that youth diagnosed with ODD and OCD ( $N = 192$ ) reported increased OCD severity. Moreover, in a similar study, Coskun et al. (2012) found that 48% ( $n = 12$ ) of children and adolescents who were diagnosed with OCD had comorbidity with ODD. Understanding the co-occurrence of these disorders is crucial because they have shown to be predictors of OCD in young adulthood (Bloch et al., 2009).

## Implications

Clinical assessment is imperative to accurately diagnose children and adolescents who exhibit anger and frustration. The results of this study are imperative to understanding the potential for misdiagnosis and comorbidity among OCD and ODD. It is also important to note the overdiagnosis of ODD, which could contribute to the lack of consideration of OCD and misdiagnosis of ODD in children and adolescents. According to Grimmitt et al. (2016), the *DSM-5* criteria for ODD appear to be too general, which may make it more of a convenient diagnosis rather than an accurate one. Moreover, Merten et al. (2017) noted that misdiagnosis and overdiagnosis of mental disorders for children and adolescents could be due to the methods implemented in evaluation, reports of symptoms by parents or guardians, and differences in perspectives of diagnostic criteria. Consequently, clients may receive a fast and inadequate evaluation for ODD without a thorough consideration of the possibility of coexisting conditions, such as OCD. Clinicians can utilize this information by thoroughly evaluating the underlying cause or origin of the anger or frustration experienced by children and adolescents in order to engage in accurate conceptualization and planning of treatment modalities. We suggest that clinicians ask their clients about their cognitive thought processes prior to experiencing anger to determine if unwanted, intrusive, or upsetting thoughts (i.e., obsessions) are occurring prior to experiencing anger. To accurately diagnose, clinicians should ask if the client is engaging in compulsions in various environments to which the repetitive behaviors can be freely acted on and if the client experiences anger and frustration in all environments. Likewise, if the client reports experiencing anger or frustration mostly in the presence of authority figures, clinicians will be better able to rule out OCD. Additionally, clinicians should consider the onset of these disorders because ODD symptoms typically appear in preschool and OCD has an average onset of 19.5 years (APA, 2013). The assessment of both mental disorders can assist in the development of preventative efforts to better support emotional regulation of youth in the school and home settings (Ezpeleta et al., 2022). Lastly, Ale and Krackow (2011) touched on the importance of clinicians providing behavioral training to parents or guardians of children diagnosed with OCD and ODD that focused on differentiating defiant behaviors and anxiety-related behaviors. The American Academy of Children and Adolescent Psychiatry (AACAP; 2023) hosts the Oppositional Defiant Disorder Resource Center and the Obsessive-Compulsive Disorder Resource Center. These resource centers include psychoeducation on mental disorders and information on medications and treatment options (AACAP, 2023). Moreover, parents or guardians can find information, prevention, and intervention through government agencies, including the U.S. Department of Health and Human Services (2023) and state departments of mental health. Lastly, parents or guardians can seek information from nonprofit organizations, including the National Federation of Families (2023), the International OCD Foundation (2023), and the Child Mind Institute (2023).

## Limitations and Future Research

This study has a few limitations. First, with relation to the CliniCom, only one symptom of OCD was collected. Future studies should consider collecting more information on OCD when evaluating for overlap in symptoms. Second, the study relied on self-report data completed by the participants and their guardians, although a semi-structured diagnostic interview was completed by a board-

certified psychiatrist to verify and confirm the diagnosis. Third, the sample size for the study was small, which limited the power of the data analysis, and comprised far more boys than girls, limiting the generalizability of the results. However, this gender compilation was expected as more males are diagnosed with ODD compared to females (APA, 2013; Ezpeleta et al., 2022).

Despite limitations, this study contributes further evidence of the overlap in symptoms between ODD and OCD in addition to highlighting the challenges of accurate diagnosis. The findings of this study demonstrated that further research must be conducted to understand how frustration or anger related to obsessions and compulsions may be misinterpreted as symptoms of ODD for children and adolescents.

## Conclusion

This study sought to assess the associations in symptoms and severity between ODD and OCD as reported by children and adolescents. Specifically, we examined anger and frustration with relation to obsessions and compulsions to further understand the overlap in these disorders. The premise of this study was that the inability to act on obsessions and compulsions may lead to increases in anger and frustration. The inconclusive information regarding the overlap in symptoms related to anger for youth experiencing symptoms of OCD demonstrates the need for further research. Identifying the source of defiance (i.e., anger, annoyance, resentment) should be considered in the development of comprehensive assessments. This will further impact accurate diagnosis and treatment planning. The associations between anger or frustration related to obsessions and compulsions with the ODD symptoms of annoyance and anger/resentfulness indicate the need for further assessment regarding comorbidity and additional consideration of misdiagnosis or overdiagnosis. Furthermore, the increases in ODD symptoms and severity when OCD severity was considered further suggest that clinicians should recognize the impact of one diagnosis on another. Accurate diagnosis of these disorders is pertinent to providing effective treatment, which will influence the daily functioning of youth diagnosed with these disorders.

### *Conflict of Interest and Funding Disclosure*

The authors reported no conflict of interest or funding contributions for the development of this manuscript.

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## References

- Achenbach, T. M. (1991). *Manual for the Child Behavior Checklist/4-18 and the 1991 profile*. Department of Psychiatry, University of Vermont.
- Ale, C. M., & Krackow, E. (2011). Concurrent treatment of early childhood OCD and ODD: A case illustration. *Clinical Case Studies, 10*(4), 312–323. <https://doi.org/10.1177/1534650111420283>
- American Academy of Child and Adolescent Psychiatry. (2023). *Resource centers*. [https://www.aacap.org/AACAP/Families\\_and\\_Youth/Resource\\_Centers/Home.aspx](https://www.aacap.org/AACAP/Families_and_Youth/Resource_Centers/Home.aspx)
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). <https://doi.org/10.1176/appi.books.9780890425596>
- American Psychiatric Association. (2022). *Diagnostic and statistical manual of mental disorders* (5th ed., text rev.). <https://doi.org/10.1176.appi.books.9780890425787>

- Avasthi, A., Sharma, A., & Grover, S. (2019). Clinical practice guidelines for the management of obsessive-compulsive disorder in children and adolescents. *Indian Journal of Psychiatry*, *61*(2), 306–316. [https://doi.org/10.4103/psychiatry.IndianJPsychiatry\\_554\\_18](https://doi.org/10.4103/psychiatry.IndianJPsychiatry_554_18)
- Basu, D., Basu, A., & Ghosh, A. (2018). Assessment of clinical co-morbidities. *Indian Journal of Psychiatry*, *60*(4), 457–465. [https://doi.org/10.4103/psychiatry.IndianJPsychiatry\\_13\\_18](https://doi.org/10.4103/psychiatry.IndianJPsychiatry_13_18)
- Beltrán, S., Sit, L., & Ginsburg, K. R. (2021). A call to revise the diagnosis of oppositional defiant disorder—Diagnoses are for helping, not harming. *JAMA Psychiatry*, *78*(11), 1181–1182. <https://doi.org/10.1001/jamapsychiatry.2021.2127>
- Bloch, M. H., Craiglow, B. G., Landeros-Weisenberger, A., Dombrowski, P. A., Panza, K. E., Peterson, B. S., & Leckman, J. F. (2009). Predictors of early adult outcomes in pediatric-onset obsessive-compulsive disorder. *Pediatrics*, *124*(4), 1085–1093. <https://doi.org/10.1542/peds.2009-0015>
- Boisseau, C. L., Thompson-Brenner, H., Caldwell-Harris, C., Pratt, E., Farchione, T., & Barlow, D. H. (2012). Behavioral and cognitive impulsivity in obsessive-compulsive disorder and eating disorders. *Psychiatry Research*, *200*(2–3), 1062–1066. <https://doi.org/10.1016/j.psychres.2012.06.010>
- Busner, J., & Targum, S. D. (2007). The Clinical Global Impressions Scale: Applying a research tool in clinical practice. *Psychiatry*, *4*(7), 28–37. PMID: 20526405
- Celebre, A., Stewart, S. L., Theall, L., & Lapshina, N. (2021). An examination of correlates of quality of life in children and youth with mental health issues. *Frontiers in Psychiatry*, *12*. <https://doi.org/10.3389/fpsy.2021.709516>
- Centers for Disease Control and Prevention. (2023, March 8). *Children's mental health: Data and statistics*. <https://www.cdc.gov/childrensmentalhealth/data.html>
- Child Mind Institute. (2023, March). *Complete guide to OCD*. <https://www.childmind.org/guide/parents-guide-to-ocd/>
- Cludius, B., Mannsfeld, A. K., Schmidt, A. F., & Jelinek, L. (2021). Anger and aggressiveness in obsessive-compulsive disorder (OCD) and the mediating role of responsibility, non-acceptance of emotions, and social desirability. *European Archives of Psychiatry and Clinical Neuroscience*, *271*, 1179–1191. <https://doi.org/10.1007/s00406-020-01199-8>
- Coskun, M., Zoroglu, S., & Ozturk, M. (2012). Phenomenology, psychiatric comorbidity and family history in referred preschool children with obsessive-compulsive disorder. *Child and Adolescent Psychiatry and Mental Health*, *6*. <https://doi.org/10.1186/1753-2000-6-36>
- Ezpeleta, L., Penelo, E., Navarro, J. B., de la Osa, N., & Trepate, E. (2022). Irritability, defiant and obsessive-compulsive problems development from childhood to adolescence. *Journal of Youth and Adolescence*, *51*, 1089–1105. <https://doi.org/10.1007/s10964-021-01528-7>
- Garcia, A. M., Freeman, J. B., Himle, M. B., Berman, N. C., Ogata, A. K., Ng, J., Choate-Summers, M. L., & Leonard, H. (2009). Phenomenology of early childhood onset obsessive compulsive disorder. *Journal of Psychopathology and Behavioral Assessment*, *31*, 104–111. <https://doi.org/10.1007/s10862-008-9094-0>
- Geller, D. A. (2006). Obsessive-compulsive and spectrum disorders in children and adolescents. *Psychiatric Clinics of North America*, *29*(2), 353–370. <https://doi.org/10.1016/j.psc.2006.02.012>
- Geller, J. (2022, October). *What is obsessive-compulsive disorder?* American Psychiatric Association. <https://www.psychiatry.org/patients-families/obsessive-compulsive-disorder/what-is-obsessive-compulsive-disorder>
- Ghandour, R. M., Sherman, L. J., Vladutiu, C. J., Ali, M. M., Lynch, S. E., Bitsko, R. H., & Blumberg, S. J. (2019). Prevalence and treatment of depression, anxiety, and conduct problems in US children. *The Journal of Pediatrics*, *206*, 256–267. <https://doi.org/10.1016/j.jpeds.2018.09.021>
- Ghosh, A., Ray, A., & Basu, A. (2017). Oppositional defiant disorder: Current insight. *Psychology Research and Behavior Management*, *2017*(10), 353–367. <https://doi.org/10.2147/PRBM.S120582>
- Goodman, W. K., Price, L. H., Rasmussen, S. A., Mazure, C., Fleischmann, R. L., Hill, C. L., Heninger, G. R., & Charney, D. S. (1989). The Yale-Brown Obsessive Compulsive Scale. I. Development, use, and reliability. *Archives of General Psychiatry*, *46*(11), 1006–1011. <https://doi.org/10.1001/archpsyc.1989.01810110048007>
- 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>

- Handal, N., LePage, J., Dayley, P., Baldwin, B., Roeser, A., Kay, J., Theobald, H. A., Nellamattathil, M., Drotar, S., Weir, C., Tindell, N., & Tice, K. (2018). Validation, reliability, and specificity of Clinicom™ psychiatric assessment software. *Psychiatry Research, 265*, 334–340. <https://doi.org/10.1016/j.psychres.2018.05.029>
- Hood, B. S., Elrod, M. G., & DeWine, D. B. (2015). Treatment of childhood oppositional defiant disorder. *Current Treatment Options in Pediatrics, 1*, 155–167. <https://doi.org/10.1007/s40746-015-0015-7>
- International OCD Foundation. (2023). *For parents and families*. <https://kids.iocdf.org/for-parents/>
- Justicia-Arráez, A., Pichardo, M. C., Romero-López, M., & Alba, G. (2021). Can we manage behavioral problems through the development of children's social-emotional regulated behavior? Longitudinal study of a preschool program. *International Journal of Environmental Research Public Health, 18*(16), 8447. <https://doi.org/10.3390/ijerph18168447>
- Kotapati, V. P., Khan, A. M., Dar, S., Begum, G., Bachu, R., Adnan, M., Zubair, A., & Ahmed, R. A. (2019). The effectiveness of selective serotonin reuptake inhibitors for treatment of obsessive-compulsive disorder in adolescents and children: A systematic review and meta-analysis. *Frontiers in Psychiatry, 10*(523). <https://doi.org/10.3389/fpsy.2019.00523>
- Krebs, G., Bolhuis, K., Heyman, I., Mataix-Cols, D., Turner, C., & Stringaris, A. (2013). Temper outbursts in pediatric obsessive-compulsive disorder and their association with depressed mood and treatment outcome. *Journal of Child Psychology and Psychiatry, 54*(3), 313–322. <https://doi.org/10.1111/j.1469-7610.2012.02605.x>
- Loeber, R., Burke, J. D., Lahey, B. B., Winters, A., & Zera, M. (2000). Oppositional defiant and conduct disorder: A review of the past 10 years, part I. *Journal of the American Academy of Child and Adolescent Psychiatry, 39*(12), 1468–1484. <https://doi.org/10.1097/00004583-200012000-00007>
- Mancebo, M. C., Garcia, A. M., Pinto, A., Freeman, J. B., Przeworski, A., Stout, R., Kane, J. S., Eisen, J. L., & Rasmussen, S. A. (2008). Juvenile-onset OCD: Clinical features in children, adolescents and adults. *Acta Psychiatrica Scandinavica, 118*(2), 149–159. <https://doi.org/10.1111/j.1600-0447.2008.01224.x>
- Merten, E. C., Cwik, J. C., Margraf, J., & Schneider, S. (2017). Overdiagnosis of mental disorders in children and adolescents (in developed countries). *Child and Adolescent Psychiatry and Mental Health, 11*(5). <https://doi.org/10.1186/s13034-016-0140-5>
- National Federation of Families. (2023). *Oppositional defiant disorder resources*. <https://www.Ffcmh.org/esources-odd>
- Nazeer, A., Latif, F., Mondal, A., Azeem, M. W., & Greydanus, D. E. (2020). Obsessive-compulsive disorder in children and adolescents: Epidemiology, diagnosis and management. *Translational Pediatrics, 9*(1), S76–S93. <https://doi.org/10.21037/tp.2019.10.02>
- Painuly, N. P., Grover, S., Mattoo, S. K., & Gupta, N. (2011). Anger attacks in obsessive compulsive disorder. *Industrial Psychiatry Journal, 20*(2), 115–119. <https://doi.org/10.4103/0972-6748.102501>
- Perou, R., Bitsko, R. H., Blumberg, S. J., Pastor, P., Ghandour, R. M., Gfroerer, J. C., Hedden, S. L., Crosby, A. E., Visser, S. N., Schieve, L. A., Parks, S. E., Hall, J. E., Brody, D., Simile, C. M., Thompson, W. W., Baio, J., Avenevoli, S., Kogan, M. D., & Huang, L. N. (2013). Mental health surveillance among children – United States, 2005–2011. *Morbidity and Mortality Weekly Report Supplements, 62*(02), 1–35. PMID: 23677130
- 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 1: Psychostimulants, alpha-2 agonists, and atomoxetine. *The Canadian Journal of Psychiatry, 60*(2), 42–51. <https://doi.org/10.1177/070674371506000202>
- Radomsky, A. S., Ashbaugh, A. R., & Gelfand, L. A. (2007). Relationships between anger, symptoms, and cognitive factors in OCD checkers. *Behaviour Research and Therapy, 45*(11), 2712–2725. <https://doi.org/10.1016/j.brat.2007.07.009>
- Scahill, L., Riddle, M. A., McSwiggin-Hardin, M., Ort, S. I., King, R. A., Goodman, W. K., Cicchetti, D., & Leckman, J. F. (1997). Children's Yale-Brown Obsessive Compulsive Scale: Reliability and validity. *Journal of the American Academy of Child and Adolescent Psychiatry, 36*(6), 844–852. <https://doi.org/10.1097/00004583-199706000-00023>

- Stahnke, B. (2021). A systematic review of misdiagnosis in those with obsessive-compulsive disorder. *Journal of Affective Disorders Reports, 6*, 1–7. <https://doi.org/10.1016/j.jadr.2021.100231>
- Storch, E. A., Jones, A. M., Lack, C. W., Ale, C. M., Sulkowski, M. L., Lewin, A. B., De Nadai, A. S., & Murphy, T. K. (2012). Rage attacks in pediatric obsessive-compulsive disorder: Phenomenology and clinical correlates. *Journal of the American Academy of Child and Adolescent Psychiatry, 51*(6), 582–592. <https://doi.org/10.1016/j.jaac.2012.02.016>
- Storch, E. A., Lewin, A. B., Geffken, G. R., Morgan, J. R., & Murphy, T. K. (2010). The role of comorbid disruptive behavior in the clinical expression of pediatric obsessive-compulsive disorder. *Behaviour Research and Therapy, 48*(12), 1204–1210. <https://doi.org/10.1016/j.brat.2010.09.004>
- Stringaris, A., & Goodman, R. (2009). Longitudinal outcome of youth oppositionality: Irritable, headstrong, and hurtful behaviors have distinctive predictions. *Journal of the American Academy of Child and Adolescent Psychiatry, 48*(4), 404–412. <https://doi.org/10.1097/CHI.0b013e3181984f30>
- Thériault, M.-C. G., Lespérance, P., Achim, A., Tellier, G., Diab, S., Rouleau, G. A., Chouinard, S., & Richer, F. (2014). ODD irritability is associated with obsessive-compulsive behavior and not ADHD in chronic tic disorders. *Psychiatry Research, 220*(1–2), 447–452. <https://doi.org/10.1016/j.psychres.2014.07.039>
- U.S. Department of Health and Human Services. (2023). *Youth mental health*. <https://www.hhs.gov/surgeon-general/priorities/youth-mental-health/index.html>

