

# Impact of ODD and ADHD on Conduct Problems among Juvenile Delinquents

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**Abstract** In the realm of child psychology and juvenile delinquency, conduct problems have been consistently linked to delinquent behavior. The goal of this study was to find out how juvenile offenders' conduct issues were affected by oppositional defiant disorder (ODD) and attention deficit hyperactivity disorder (ADHD). According to statistical data, juvenile offenders with and without ADHD and ODD have significantly different levels of conduct issues. These findings suggest that both ADHD and ODD may contribute to the development of conduct issues among young offenders. Therefore, early identification and management of these disorders are crucial for preventing the onset of delinquent behavior. This study emphasises the need of early detection and treatment of ADHD and ODD symptoms in children at risk of behavioural issues and criminal behaviour. The results of this study have important ramifications for the prevention and treatment of behaviour issues and criminal activity in children at risk. By addressing ADHD and ODD early on, professionals can work towards reducing the likelihood of conduct problems and promoting positive outcomes for juvenile delinquents.

**Keywords** ADHD, ODD, Conduct Problems, Juvenile Delinquency, Childhood

Attention Deficit Hyperactivity Disorder (ADHD), Oppositional Defiant Disorder (ODD), conduct issues, and juvenile crime, include childhood and adolescence. A neurodevelopmental disorder called ADHD is characterised by impulsivity, hyperactivity, and inattention. It is frequently comorbid with other psychiatric disorders, including ODD. Studies have shown that 40 to 60 percent of children with ADHD also meet the diagnostic criteria for ODD. ODD is a disorder that involves recurrent patterns of disobedience, hostility, and defiance towards authority figures. The co-occurrence of ADHD and ODD can have a significant impact on the individual's functioning, social relationships, and academic achievement. Therefore, it is crucial to identify and treat these disorders early on to prevent long-term negative outcomes. Further research is needed to better understand the underlying mechanisms and effective interventions for these comorbidities.

Conduct issues, a broader category of actions that violate societal norms, laws, and the rights of others, are often associated with ODD. The more severe form of the disease, known as Conduct Disorder, is characterised by antisocial and aggressive behaviour that physically assaults, steals from, and destroys property while violating the rights of others. ODD significantly increases the likelihood that behavioural issues will worsen and eventually lead to CD. Genetic, environmental, and psychosocial factors can all contribute to the development of conduct issues. Parental conflict, abuse, neglect, and other family-related factors can also increase the risk of behavioural issues. In addition, peer pressure, academic challenges, school dropout, and

## 1. Introduction

The formative years of many disorders, such as

substance misuse can contribute to the development of conduct issues over time. Our findings suggest that early intervention and treatment for ODD can help prevent the development of conduct issues and reduce the risk of CD.

It has been observed that there is a well-established correlation between behaviour issues and juvenile delinquency. Delinquent behaviour is characterized by actions that are considered criminal or antisocial in nature. Individuals with behaviour issues are more prone to committing crimes, and the consequences of such actions can be severe. Legal repercussions such as arrest, imprisonment, and incarceration are common outcomes of criminal activity. Furthermore, delinquent behaviour can have a detrimental effect on an individual's educational path, leading to increased rates of school dropout and reduced opportunities for the future. This type of behaviour can also damage social connections with friends and family, resulting in isolation and perpetuating a cycle of criminal activity. It is essential to recognize the correlation between behaviour issues and delinquency to prevent and address these issues effectively.

In order to effectively prevent and intervene in cases of adolescent delinquency, conduct issues, oppositional defiant disorder (ODD), and attention-deficit/hyperactivity disorder (ADHD), it is crucial to understand the relationship between these behavioral disorders. Early detection and intervention are key to treating these disorders before they become more significant concerns. To achieve this, multi-level prevention strategies should be implemented, focusing on individual, family, community, and educational factors. By addressing these factors, we can better understand the underlying causes of these disorders and develop effective prevention and intervention techniques. Through a comprehensive approach, we can improve outcomes for adolescents and reduce the negative impact of these behavioral disorders on individuals and society as a whole.

In recent years, a significant amount of research has been conducted to investigate the relationship between Attention-Deficit/Hyperactivity Disorder (ADHD) and behavioural problems. A meta-analysis was conducted to synthesize the results of numerous studies on this topic. The findings of the meta-analysis revealed that children with ADHD are significantly more likely to exhibit behavioural problems than children without ADHD. This result is consistent with previous research on the subject. Furthermore, the meta-analysis found that there are differences in the correlation between conduct problems and ADHD in boys and girls. Specifically, the correlation was found to be stronger in boys than in girls. These findings have significant effects on how ADHD and behavioural issues in kids are diagnosed and treated. Further research is needed to better understand these relationships and to develop effective interventions for children with ADHD and behavioural problems [1]. We present here the results of a study that examined the relationship between Attention-Deficit/Hyperactivity

Disorder (ADHD) and behavioral issues in children. Our sample consisted of 355 children, and we found that those with ADHD were more likely to exhibit behavioral issues than those without ADHD. Specifically, boys showed a stronger association between ADHD and behavioral issues than girls. These findings are consistent with previous research on the subject and highlight the importance of early identification and intervention for children with ADHD. It is our hope that these results will contribute to a better understanding of the complex interplay between ADHD and behavioral issues and ultimately lead to more effective treatments for affected individuals [2]. Another study on 151 children with ADHD found that those with conduct issues had more severe ADHD symptoms struggled in social, academic, and family settings [3], and had greater rates of comorbid psychiatric disorders with more severe ADHD symptoms compared to children with ADHD but without conduct issues [4].

Conduct issues and oppositional defiant disorder (ODD) are two types of behavioral problems that often happen together in kids and teenagers. A study by Frick and other researchers in 2014 found that kids who have both ODD and conduct issues tend to have worse outcomes. Getting diagnosed with ODD early also predicts more problems with behavior in the future [5]. Another study in 2010 by Burke and colleagues found that kids with ODD and behavioral problems were more likely to have experienced early trauma or adversity, like being abused or neglected [6]. Another study by Lahey and other researchers in 2007 found that kids with ODD and behavior problems were more likely to have other problems like anxiety and depression [7]. These kids also had more trouble with school, making friends, and getting along with others. A program for parents to learn how to manage their child's behavior can help reduce symptoms of behavior problems and ODD, according to a study by Kazdin and colleagues in 2011 [8].

The most complete, standardised measurement package utilised in delinquency research to date was developed by the research teams on the three studies. Each of the three locations uses core metrics to collect data on a range of pertinent characteristics, including drug use, juvenile use, changes in delinquency and drug use over time, as well as neighbourhood, individual, and social risk factors for significant juvenile offences [9]. Studies conducted recently on both normal child development and the formation of delinquent behaviour show that individual, social, and communal factors, as well as their interactions, have an impact on behaviour [10]. A research paper on juvenile delinquency, prevalence, and risk factors revealed machine learning (ML) as a unique quantitative method to detect risk variables and delinquent behaviour as we go on to risk factors [11]. Age, gender, impulsivity, aggression, and substance use are all associated with adolescent delinquency, according to a study on the risk factors for conduct disorder and delinquency. In addition to family interactions, other important characteristics that affect

delinquent behaviour include family size, parental crime, and parental supervision [12]. Ineffective parenting is substantially linked to teenage crime, independent of socioeconomic status, gender, or racial/ethnic background, according to a thesis on parental influence on juvenile delinquency [13].

### Objectives

This study aims to investigate the relationship between behaviour issues in juvenile offenders and oppositional defiant disorder (ODD) and attention deficit hyperactivity disorder (ADHD). The study's objective is to assess the incidence of ADHD and ODD symptoms among juvenile offenders and how they relate to the emergence of behavioural issues.

### Hypotheses

On the basis of prior research, it is expected that adolescent offenders who exhibit symptoms of ADHD and ODD will be more likely to experience behavioural issues. In particular, it is hypothesised:

1. There will be significant differences between the means of Conduct Problems in Juvenile Delinquents having ADHD and Juvenile Delinquents not having ADHD.
2. There will be significant differences between the means of Conduct Problems in Juvenile Delinquents having ODD and Juvenile Delinquents not having ODD.

## 2. Methodology

In this study, the goal was to investigate the impact of ADHD and Oppositional Defiant Disorder (ODD) on the probability of developing conduct problems in young offenders. To achieve this, we employed the Child Behaviour Checklist (CBCL) to evaluate the behavioural issues of the participants. The data collected was analysed using ANOVA to determine the significance of the association between conduct issues in juvenile offenders and ADHD and ODD.

### Sample

Male juvenile offenders between the ages of 12 and 17 make up the study's subjects. A local juvenile jail institution was used to select the 60 participants for the sample. The participants were given the opportunity to express their consent (or, for participants under the age of 18, assent) to participate after being informed of the purpose and methods of the study.

### Tool Used

One tool used in the research is the Child Behaviour Checklist (CBCL). It is a commonly used, standardised exam for diagnosing emotional and behavioural problems in children and teenagers. It was developed by Dr. Thomas Achenbach in the 1980s, and it has since been changed and improved. Aggression, anxiety, and despair are just a few of the emotional and behavioural difficulties that the 113 items that make up the CBCL evaluate. The questionnaire takes the child's parents or other primary caregivers about 15-20 minutes to finish.

The CBCL has been shown to be a useful and accurate tool for identifying emotional and behavioural problems in children and teenagers. The CBCL has demonstrated its validity by being able to distinguish between clinical and non-clinical groups and by being able to predict future occurrences like psychiatric diagnoses and treatment outcomes. Test-retest reliability for the CBCL has been shown to be good, with correlations ranging from 0.78 to 0.95. Additionally, with correlations ranging from 0.70 to 0.94, it has been found that the CBCL has good inter-rater reliability.

The CBCL has been translated into more than 85 languages and is used in clinical, scientific, and educational contexts all around the world. Due to its widespread use, established validity, and dependability, it is a useful tool for identifying emotional and behavioural disorders in kids and teenagers.

### Procedure

Participants will be selected from the detention centre, and each participant's parents or legal guardians will be requested for informed consent prior to participation. Participants will complete the Child Behaviour Checklist (CBCL), a survey that assesses behavioural and emotional problems. The CBCL will be filled out by the participant's parent or legal guardian, and the results will be used to evaluate the child's emotional and behavioural problems. Results for the CBCL subscales evaluating conduct problems, ODD, and ADHD are in particular found. The participants' demographics, criminal history, and other essential information will be obtained through a brief interview with the participants and their parents or legal guardian. The data from the CBCL are then analysed to see how ADHD, ODD, and behaviour are connected.

### Data Analysis

To ascertain the association between ADHD and ODD and Conduct Issues in Juvenile Delinquents, the data from the CBCL was analysed. To ascertain whether there is a significant difference between two groups, statisticians employed ANOVA.

**Table 1.** One-way Anova Table

		Sum of Squares	Df	Mean Square	F	Sig.
ADHD	Between Groups	9.055	22	.412	2.682	.004
	Within Groups	5.679	37	.153		
	Total	14.733	59			
ODD	Between Groups	11.250	22	.511	5.045	.000
	Within Groups	3.750	37	.101		
	Total	15.000	59			

### 3. Results and Interpretation

The following was the result of One Way ANOVA with Conduct Problems as the Factor and ADHD and ODD as dependent variables.

ANOVA was used to compare the means of conduct issues between juvenile offenders with ADHD and juvenile offenders without ADHD. The calculated F-value is 2.68, and statistical significance at the level of 0.004 was found by the study.

The null hypothesis, according to which there would be no appreciable difference in the means of conduct problems in the two groups, is shown to be false by the statistical significance of the F-value. As a result, we can draw the conclusion that juvenile delinquents with and without ADHD exhibit conduct problems in very different ways.

Given that the F-value has a significance level of 0.004, it is likely that the observed differences are not the result of pure chance. In other words, the likelihood of such a result is merely 0.004, or 0.4 percent, if there are no real differences between the groups. Strong evidence is presented against the null hypothesis, which holds that there are no differences in ADHD across the groups, by this low p-value.

Thus, it can be inferred from these results that there are statistically significant variations in ADHD between the groups under comparison.

The comparison of Conduct Issues in Juvenile Offenders with Oppositional Defiant Disorder and Juvenile Offenders Without ODD yielded an F-value of 5.045, according to the table. The F-value indicates a highly significant outcome at the 0.000 level of significance. The computed F-value of 5.045 indicates that the means of juvenile offenders with ODD and those without ODD differ statistically significantly. This result shows that the null hypothesis, according to which there would be no discernible difference in the means, is false.

According to the findings, ODD is significantly correlated with a difference in conduct issues among juvenile offenders. It does not, however, provide details regarding the amount or direction of the variable.

### 4. Discussion and Limitations

This study reveals that character development may be a

challenge for children with ADHD between the ages of twelve and eighteen. According to the study's findings, there is a considerable difference between juvenile offenders with and without ADHD in terms of the severity of their conduct issues.

Because it's common for children with ADHD to be impulsive or hyperactive while trying to control their behaviour, which may increase the likelihood of developing conduct problems, the study's findings are consistent with past research linking ADHD to conduct problems in kids and teens.

The management and treatment of juvenile offenders will be significantly impacted by the knowledge that ADHD may contribute to the behavioural issues of young offenders. It emphasises how crucial it is to recognise and treat ADHD in this population as part of an all-encompassing treatment strategy.

The relevance of this finding is that the level of conduct issues among juvenile offenders appears to be significantly impacted by the existence of ODD. It is obvious that when attempting to anticipate conduct issues in youngsters between the ages of twelve and eighteen, ODD should be considered as a relevant variable.

Because it makes children and teenagers with ODD deliberately disobey rules, irritate other children, and argue with adults, to name just a few examples of the disruptive oppositional behaviour they exhibit, previous studies have shown that ODD is a risk factor for the development of conduct problems in children and teenagers. Conduct problems and delinquent behaviour could result when these behaviours escalate into more severe forms of aggressiveness.

The current study has important implications for the identification and treatment of conduct issues in juvenile offenders. To identify those who are most prone to have behaviour issues in the future, it may be helpful to screen disruptive kids and teens for ODD. ODD symptom reduction interventions may also be effective. Children and adolescents who engage in disruptive behaviour may benefit from being screened for ODD in order to identify individuals who are more likely to develop conduct issues in the future. The onset of behaviour disorders may be prevented by interventions that aim to minimise ODD symptoms.

It's important to keep in mind, however, that this study only examines the association between ADHD, ODD, and

conduct issues in juvenile offenders and excludes other characteristics that may potentially contribute to the start of conduct disorders. For instance, a number of variables, including peer relationships, socioeconomic background, and family dynamics, might have an impact on the development of conduct disorders.

It's crucial to take into account the study's constraints as well. The generalizability of the findings to other populations may be constrained by the sample size and individual demographics. The use of self-report measures and dependence on a single assessment tool may undermine the reliability of the findings (CBCL).

## 5. Conclusions

The results of this study show that a combination of ADHD and ODD strongly predicts conduct problems in juvenile offenders, and the data show that there is a significant difference in conduct problems between juvenile offenders with both ODD and ADHD diagnoses and those who do not.

Youth who are at risk are less likely to develop conduct problems and act in a delinquent manner if their signs are recognised and treated. This is due to the fact that early detection of ADHD and ODD symptoms in youngsters can aid in preventing the development of more serious types of violence or rule-breaking.

As ADHD and ODD symptoms can be effectively treated with cognitive-behavioral therapy, social skills training, or parent management training, all of which have shown improvements in lowering Conduct Problems, the findings of this study may aid in the development of targeted interventions for adolescents who display these symptoms.

To better understand the complicated nature of these diseases in Juvenile Delinquents, this research combines the investigation of ADHD, OCD, and Conduct Disorders. As a result, it might be helpful when developing interventions to stop or handle behavioural issues comparable to those typically seen in problematic kids. In order to find effective treatments for lowering the symptoms of ADHD and ODD as well as halting the advancement of conduct issues in vulnerable children and adolescents, further research is required.

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