

# The SAGE Encyclopedia of Abnormal and Clinical Psychology

**Conduct Disorder** 

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Conduct disorder (CD) is a broad and overarching term describing a condition in which a child or young person persistently engages in antisocial behavior that violates the rights of others, such as fighting, using a weapon, physical cruelty to people or animals, running away from home, and stealing with the use of force. CD has sometimes been defined separately from oppositional defiant disorder (ODD), which is a less serious variant typically seen in younger children and involving high levels of irritable mood, temper tantrums, and refusal to carry out instructions. CD and ODD are the most common mental health disorders in childhood and adolescence and the most common reasons for referral to child and adolescent mental health services in the Western world. There is high comorbidity with other childhood mental health problems, and long-term prognosis is poor. Children with CD at age 7 years are 10 times more likely to be engaged in criminality in adulthood and are at much higher risk for a range of negative outcomes including leaving school without gualifications, being unemployed, being a teenage parent, and misusing drugs. CD is also the most consistent childhood precursor of adult mental health problems, and the rate of continuity to antisocial personality disorder (ASPD) is high. The lifetime costs of CD are also very high, with estimates in the United States of up to \$2.3 million, and in the United Kingdom a child with CD at age 10 years costs 7 times more than one without CD by the time they are 28 years old. This entry provides an overview of CD, including its symptoms and classification, prevalence, risk factors, and treatment.

# **Symptoms and Classifications**

Both the *International Classification of Diseases, 10th Revision (ICD-10)*, and the *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5)*, require 3 of 15 symptoms to be present for a diagnosis to be made. The *DSM-5* requires three symptoms to have been present in the past 12 months, and both systems require one symptom to have been present in the previous 6 months. These symptoms are grouped into four classes.

# Symptoms

#### Aggression Toward People and Animals

In this class of symptoms, the person frequently initiates physical fights, has used a weapon that can cause serious harm to others, frequently bullies others, is cruel to others, is cruel to animals, commits a crime involving confrontation with the victim, or forces another person into sexual activity.

#### Destruction of Property

The person deliberately sets fires with the risk or intention of causing serious damage or deliberately destroys the property of others (without firesetting).

#### Deceitfulness or Theft

The person steals objects of nontrivial value without confronting the victim; breaks into someone else's house, building, or car; and often lies to obtain goods or favors or to avoid obligations.

#### Serious Violations of Rules

The person frequently plays truant from school (beginning before age 13 years), has stayed out at night despite parental prohibition (beginning before age 13 years), or has run away from home at least twice (this does not include doing so to avoid abuse).

Although the symptoms are the same, there are some differences between the two systems. First, although the *DSM-5* and *ICD-10* diagnostic criteria are similar, the *ICD-10* also has clinical guidelines, and these are broader descriptions of CD. Second, in the *DSM-5*, ODD is a separate disorder, whereas in the *ICD-10*, it is a subtype of CD. Third, the *DSM-5* requires that CD leads to a significant impairment in the individual, whereas the *ICD-10* only requires this for the ODD subtype.

# Specifiers

Both systems include specifiers for the severity of CD. In addition to the ODD subtype, the *ICD-10* also specifies three other subtypes: (1) where CD is limited to the family context; (2) socialized CD, where peer relationships are normal; and (3) unsocialized CD, where the individual is rejected by peers. Two additional specifiers are of particular note. First, the *DSM-5* distinguishes between CD that begins in childhood and CD that begins in adolescence. Second, the *DSM-5* introduced a new specifier—"with limited prosocial emotions"—to reflect the growing body of literature pointing to the presence of callous-unemotional (CU) traits in children and young people being predictive of more severe CD. Third, although not recognized in either of the classification schemes, temperamental characteristics may delineate different subgroups.

# Age of Onset

The timing of onset of CD has been shown to delineate groups of individuals, such that those with early onset of CD (before age 10 years) appear to constitute a separate group with a more severe form of the disorder relative to those whose CD begins in adolescence. Individuals with early-onset CD are more likely to exhibit early hyperactivity and oppositional behavior, tend to come from families who use harsh and inconsistent parenting practices, and are at higher risk for lifetime criminality and life failure. They are at substantially greater risk of performing delinquent acts in adolescence and indulging in continued violence and offending into adulthood, and many develop ASPD, a disorder synonymous with psychopathic traits and violence. However, recent studies are beginning to challenge the view that the antisocial behavior that emerges in adolescence is likely to be limited to the teenage years as these studies have found that the adolescence-onset group continued to offend well into adulthood. At the same time, not all children with early-onset CD have a poor long-term prognosis. There appears to be a childhood-limited CD group, where the children recover from the disorder by the time they reach adolescence.

# With Limited Prosocial Emotions

This *DSM-5* specifier is used to designate individuals with CD who exhibit two of four characteristics across multiple domains: (1) lack of remorse or guilt, (2) lack of empathy, (3) lack of concern about their performance in important activities, or (4) shallow affect. These characteristics are very similar to CU traits, which appear to delineate a distinct group with low empathy and high fearlessness. These are children who are cruel to animals, have difficulty making friends, and engage in acts of premeditated violence. CU traits have higher genetic

heritability than CD and are associated with a different pattern of neurocognitive deficits. They are also strongly associated with the development of ASPD and psychopathy and are predictive of criminal offending in early adulthood. The presence of CU traits in children with CD has important treatment implications. Studies have shown that these children are more resistant to punishment and more difficult to treat. However, it is not the case that they cannot benefit from treatment, and a key target for intervention may be empathy and the quality of the parent-child relationship.

## Irritability

Dividing children with ODD into different groups on the basis of their temperamental characteristics has been shown to predict long-term outcomes. Children who are irritable are more likely to subsequently develop internalizing problems, whereas those who are headstrong are more likely to develop CD. This distinction also appears to predict the different responses to treatment, with irritable children more likely to benefit from parent management training than headstrong children.

# Prevalence

Estimates of prevalence vary, with most surveys estimating between 5% and 10% of children and adolescents with CD. Social class is associated with the likelihood of a child having CD, with rates 2 to 3 times higher in inner-city deprived areas and 5 times higher in the lowest socioeconomic status category. CD is much more common in boys, with male to female ratios between 3:1 and 7:1. A recent international meta-analysis of surveys (which combine and analyze the results of several surveys) estimated a worldwide prevalence rate of all disruptive behavioral disorders of 5.7% (ODD: 3.6%, CD: 2.1%). There appears to be a great deal of variability in rates between different countries, but this may reflect the different methods and samples used in the surveys rather than actual cross-cultural differences. Surveys in highincome countries indicate that disruptive behavior disorders doubled between the 1970s and the turn of the 21st century, whereas the rates of ADHD remained stable. This increase occurred in both boys and girls and across social class and was accompanied by later increases in pervasive adult psychosocial problems. However, the rates appear to have leveled off or declined since the late 1990s in high-income countries. This may not apply elsewhere, as the rates in Brazil, for example, have not shown a decline and may have continued to rise.

# Etiology

Research indicates that there are likely to be three distinct pathways to CD, each with its own cluster of risk factors, and these loosely map onto some of the subgroups described in detail earlier. First, individuals with early-onset CD appear to constitute a separate group with more severe CD. Second, children with CU traits appear to be an etiologically distinct group with low empathy and high fearlessness, and CD in the presence of CU traits has higher genetic heritability than in its absence. Third, a number of studies have begun to support a causal pathway associated with poor regulation of anger. These are children who misinterpret ambiguous social cues as threatening, which may lead them to respond in an aggressive and violent manner. There is often a history of harsh discipline in this group.

Despite there being somewhat different clusters of risk associated with these different pathways, it is important to note that for any individual with CD there are likely to be risk

factors from multiple domains. These different domains are outlined in the following subsections. Furthermore, risk factors do not appear to operate in a purely additive way, with a linear increase in the risk for CD per each additional risk factor. Instead, having a larger number of risk factors appears to confer a disproportionately higher risk.

## Family Risks

The relation between parent-child relationship quality and CD is one of the most widely reported in the literature. In particular, parenting styles characterized by low warmth and involvement, high hostility, inconsistent and harsh discipline, and poor supervision have been found to be associated with antisocial behavior. One model that has been used to explain this relationship is that of the coercive family process. In this reinforcement model, a parent responds to mild oppositional behavior by a child with a prohibition, to which the child responds by escalating his or behavior, and the mutual escalation continues until the parent backs off, thus negatively reinforcing the child's behavior. The parent's inconsistent behavior and developing CD.

Although attachment security is thought to be a lifelong organizer of personality development, it is yet to be clearly established whether attachment difficulties have an independent causal role in the development of CD. However, some evidence for this causal relationship is emerging, with a recent meta-review showing that a disorganized attachment is associated with CD in younger children; and a recent article found that in adolescence insecure attachment predicted conduct problems, even after taking into account current parenting quality, suggesting that it may have at least a maintaining role.

#### Peer and Neighborhood Risks

Beyond the family, peers play an important role through two mechanisms, (1) peer rejection and (2) association with delinquent peers. Again, both of these are potentially modifiable. A particularly harmful aspect of the latter is membership of a gang.

The neighborhood a child lives in can also exacerbate delinquent tendencies, with low ties to the neighborhood, poor social control of behavior, and exposure to risky activities such as drug taking all contributing.

#### Individual Risks

Several studies have shown associations between temperament (which is a precursor of adult personality) and conduct problems, and that temperament also predicted ASPD and criminal offending into adulthood. Longitudinal studies show that persistence in antisocial behavior over periods of years is predicted by a low verbal intelligence quotient (IQ) in childhood, possibly due to disengagement from school and an inability to negotiate with peers verbally. Children who are prone to aggression also tend to focus on the threatening aspects of others' actions and interpret hostile intent in the neutral actions of others, and are more likely to select and to favor aggressive solutions to social challenges. Low self-control, as assessed through measures of executive functioning, has also been shown to be associated with CD.

There is now solid evidence from twin and adoption studies that conduct problems assessed both dimensionally and categorically are substantially heritable. The mechanism by which genes lead to CD is likely via their effect on brain development. CD has been found to be associated with lower amygdala volume, an area of the brain associated with processing socioemotional information, and the hypothalamic-pituitary-adrenal axis, part of the brain's stress response system, also appears to function abnormally in individuals with CD.

However, it is important to note that genetic risk will typically lead to adverse outcomes in interaction with circumstances in the child's environment. Adoption studies have reported an interaction between antisocial behavior in the biological parent and adverse conditions in the adoptive home that predicted the adopted child's antisocial outcome. A twin study also yielded evidence that family genetic liability and the experience of maltreatment interact to predict conduct problems. An emerging area of research demonstrating the complexity of gene-environment interactions is the study of epigenetics, which examines how environmental influences affect the expression of genes without changes in the nucleotide sequence. The research on the epigenetics of CD is in its infancy, but studies showing the role of epigenetic effects of maternal smoking during pregnancy on the development of CU traits in adolescence.

# Treatment

The most effective treatment of CD for children under the age of 12 years is parent management training programs, based primarily on social learning theory. These are typically delivered to groups of parents over 8 to 12 weeks. Their effectiveness with adolescent CD is less well established. Instead, systemic and multicomponent interventions are more likely to be used, and some of these have a reasonable evidence base. There is also some evidence for interventions based on anger management or social skills training approaches. However, these are often delivered in school settings, and more research needs to be conducted to demonstrate the effectiveness of these approaches in everyday settings. Incarceration, boot camps, and shock treatments, such as taking individuals to visit prisons, do not work and have been shown to be potentially harmful. There is also no compelling evidence for the use of medication when there is no comorbid hyperactivity.

See alsoAggression: Reactive and Proactive; Antisocial Personality Disorder; Attention-Deficit/Hyperactivity Disorder; Conduct Disorder: Biological Factors; Conduct Disorder: Cultural Factors; Conduct Disorder: Diagnosis; Conduct Disorder: Epidemiology; Conduct Disorder: Gender and Sex Differences; Conduct Disorder: Lifespan Perspectives; Conduct Disorder: Psychological Factors; Conduct Disorder: Risk for; Conduct Disorder: Social Factors; Conduct Disorder: Treatment; Hypothalamic-Pituitary-Adrenal Axis; Limit Setting; Oppositional Defiant Disorder; Parenting and Child Adjustment

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# **Further Readings**

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