

## DSM-5 Differential Diagnoses: Attention Deficit/Hyperactivity Disorder (ADHD)

Neurodevelopmental Conditions	
<b>Social (Pragmatic) Communication Disorder</b>	Primary deficits of ADHD may cause impairments in social communication and functional limitations of effective communication, social participation, or academic achievement.
<b>Autism Spectrum Disorder (ASD)</b>	<p>Abnormalities of attention (overly focused or easily distracted) are common in individuals with ASD, as is hyperactivity. A diagnosis of ADHD should be considered when attentional difficulties or hyperactivity exceeds that typically seen in individuals of comparable mental age.</p> <p>Individuals with ADHD and those with ASD exhibit inattention, social dysfunction, and difficult-to-manage behaviour. The social dysfunction and peer rejection seen in individuals with ADHD must be distinguished from the social disengagement, isolation, and indifference to facial and tonal communication cues seen in individuals with ASD. Children with ASD may display tantrums because of an inability to tolerate a change from their expected course of events. In contrast, children with ADHD may misbehave or have a tantrum during a major transition because of impulsivity or poor self-control.</p>
<b>Other Neurodevelopmental Conditions</b>	The increased motoric activity that may occur in ADHD must be distinguished from the repetitive motor behaviour that characterises stereotypic movement disorder and some cases of ASD. In stereotypic movement disorder, the motoric behaviour is generally fixed and repetitive (e.g., body rocking, self-biting), whereas the fidgetiness and restlessness in ADHD are typically generalised and not characterised by repetitive stereotypic movements. In Tourette’s disorder, frequently multiple tics can be mistaken for the generalised fidgetiness of ADHD. Prolonged observation may be needed to differentiate fidgetiness from bouts of multiple tics.
<b>Specific Learning Disorder</b>	<p>Children with specific learning disorder may appear inattentive because of frustration, lack of interest, or limited ability. However, inattention in individuals with a specific learning disorder who do not have ADHD is not impairing outside of academic work.</p> <p>Specific learning disorder is distinguished from the poor academic performance associated with ADHD, because in the latter condition the problems may not necessarily reflect specific difficulties in learning academic skills but rather may reflect difficulties in performing those skills. However, the co-occurrence of specific learning disorder and ADHD is more frequent than expected by chance. If criteria for both disorders are met, both diagnoses can be given.</p>
<b>Intellectual Disability (ID)</b>	Symptoms of ADHD are common among children placed in academic settings that are inappropriate to their intellectual ability. In such cases, the symptoms are not evident during non-academic tasks. A diagnosis of ADHD in intellectual disability requires that inattention or hyperactivity be excessive for mental age.
<b>Developmental Coordination Disorder</b>	Individuals with ADHD may fall, bump into objects, or knock things over. Careful observation across different contexts is required to ascertain if lack of motor competence is attributable to distractibility and impulsiveness rather than to developmental coordination disorder. If criteria for both ADHD and developmental coordination disorder are met, both diagnoses can be given.

Other Conditions	
<b>Oppositional Defiant Disorder (ODD)</b>	<p>Individuals with ODD may resist work or school tasks that require self-application because they resist conforming to others' demands. Their behaviour is characterised by negativity, hostility, and defiance. These symptoms must be differentiated from aversion to school or mentally demanding tasks due to difficulty sustaining mental effort, forgetting instructions, and impulsivity in individuals with ADHD. Complicating the differential diagnosis is the fact that some individuals with ADHD may develop secondary oppositional attitudes toward such tasks and devalue their importance.</p> <p>ADHD is often comorbid with ODD. To make the additional diagnosis of ODD, it is important to determine that the individual's failure to conform to requests of others is not solely in situations that demand sustained effort and attention or demand that the individual sit still.</p>
<b>Intermittent Explosive Disorder</b>	<p>ADHD and intermittent explosive disorder share high levels of impulsive behaviour. However, individuals with intermittent explosive disorder show serious aggression toward others, which is not characteristic of ADHD, and they do not experience problems with sustaining attention as seen in ADHD. In addition, intermittent explosive disorder is rare in childhood. Intermittent explosive disorder may be diagnosed in the presence of ADHD.</p> <p>Individuals with ADHD are typically impulsive and, as a result, may also exhibit impulsive aggressive outbursts. The level of impulsive aggression in individuals with a history of such a condition has been reported as lower than that in comparable individuals whose symptoms also meet intermittent explosive disorder Criteria A through E. Accordingly, if Criteria A through E are also met, and the impulsive aggressive outbursts warrant independent clinical attention, a diagnosis of intermittent explosive disorder may be given.</p>
<b>Conduct Disorder</b>	<p>Although children with ADHD often exhibit hyperactive and impulsive behaviour that may be disruptive, this behaviour does not by itself violate societal norms or the rights of others and therefore does not usually meet criteria for conduct disorder. When criteria are met for both ADHD and conduct disorder, both diagnoses should be given.</p>
<b>Reactive Attachment Disorder</b>	<p>Children with reactive attachment disorder may show social disinhibition, but not the full ADHD symptom cluster, and display other features such as a lack of enduring relationships that are not characteristics of ADHD.</p>
<b>Anxiety Disorders</b>	<p>ADHD shares symptoms of inattention with anxiety disorders. Individuals with ADHD are inattentive because of their attraction to external stimuli, new activities, or preoccupation with enjoyable activities. This is distinguished from the inattention due to worry and rumination seen in anxiety disorders. Restlessness might be seen in anxiety disorders. However, in ADHD, the symptom is not associated with worry and rumination.</p>
<b>Depressive Disorders</b>	<p>Individuals with depressive disorders may present with inability to concentrate. However, poor concentration in mood disorders becomes prominent only during a depressive episode.</p>

<p>- <b>Major Depressive Disorder</b></p>	<p>Distractibility and low frustration tolerance can occur in both ADHD and major depressive episode; if the criteria are met for both, ADHD may be diagnosed in addition to mood disorder. However, the clinician must be cautious not to over-diagnose a major depressive episode in children with ADHD whose disturbance in mood is characterised by irritability rather than by sadness or loss of interest.</p>
<p><b>Bipolar disorders</b></p>	<p>Individuals with bipolar disorder may have increased activity, poor concentration, and increased impulsivity, but these features are episodic, occurring several days at a time. In bipolar disorder, increased impulsivity or inattention is accompanied by elevated mood, grandiosity, and other specific bipolar features. Children with ADHD may show significant changes in mood within the same day; such lability is distinct from a manic episode, which must last four or more days to be a clinical indicator of bipolar disorder, even in children. Bipolar disorder is rare in preadolescents, even when severe irritability and anger are prominent, whereas ADHD is common among children and adolescents who display excessive anger and irritability.</p>
<p>- <b>Bipolar I Disorder</b></p>	<p>ADHD may be misdiagnosed as bipolar I disorder, especially in adolescents and children. Many symptoms overlap with the symptoms of mania, such as rapid, speech, racing thoughts, distractibility, and less need for sleep. The “double counting” of symptoms toward both ADHD and bipolar disorder can be avoided if the clinician clarifies whether the symptom(s) represents a distinct episode.</p>
<p>- <b>Bipolar II Disorder</b></p>	<p>ADHD may be misdiagnosed as bipolar II disorder, especially in adolescents and children. Many symptoms of ADHD, such as rapid speech, racing thoughts, distractibility, and less need for sleep, overlap with the symptoms of hypomania. The double counting of symptoms toward both ADHD and bipolar II disorder can be avoided if the clinician clarifies whether the symptoms represent a distinct episode and if the noticeable increase over baseline required for the diagnosis of bipolar II disorder is present.</p>
<p><b>Disruptive Mood Dysregulation Disorder</b></p>	<p>Disruptive mood dysregulation disorder is characterised by pervasive irritability, and intolerance of frustration, but impulsiveness and disorganised attention are not essential features. However, most children and adolescents with the disorder have symptoms that also meet criteria for ADHD, which is diagnosed separately.</p> <p>Unlike children diagnosed with bipolar disorder or ODD, a child whose symptoms meet criteria for disruptive mood dysregulation disorder also can receive a comorbid diagnosis of ADHD, major depressive disorder, and/or anxiety disorder. However, children whose irritability is present only in the context of a major depressive episode or persistent depressive disorder (dysthymia) should receive one of those diagnoses rather than disruptive mood dysregulation disorder. Children with disruptive mood dysregulation disorder may have symptoms that also meet criteria for an anxiety disorder and can receive both diagnoses, but children whose irritability is manifest only in the context of exacerbation of an anxiety disorder should receive the relevant anxiety disorder diagnosis rather than disruptive mood dysregulation disorder.</p>
<p><b>Substance Use Disorders</b></p>	<p>Differentiating ADHD from substance use disorders may be problematic if the first presentation of ADHD symptoms follows the onset of abuse or frequent use. Clear evidence of ADHD before substance misuse from informants or previous records may be essential for differential diagnosis.</p>

<b>Personality Disorders</b>	In adolescents and adults, it may be difficult to distinguish ADHD from borderline, narcissistic, and other personality disorders. All these disorders tend to share the features of disorganisation, social intrusiveness, emotional dysregulation, and cognitive dysregulation. However, ADHD is not characterised by fear of abandonment, self-injury, extreme ambivalence, or other features of personality disorder. It may take extended clinical observation, informant interview, or detailed history to distinguish impulsive, socially intrusive, or inappropriate behaviour from narcissistic, aggressive, or domineering behaviour to make this differential diagnosis.
<b>Psychotic Disorder</b>	ADHD is not diagnosed if the symptoms of inattention and hyperactivity occur exclusively during the course of a psychotic disorder.
<b>Medication Induced Symptoms of ADHD</b>	Symptoms of inattention, hyperactivity, or impulsivity attributable to the use of medication (e.g., bronchodilators, isoniazid, neuroleptics [resulting in akathisia], thyroid replacement medication) are diagnosed as other specified or unspecified other (or unknown) substance-related disorders.
<b>Neurocognitive Disorders</b>	<p>Early major neurocognitive disorder (dementia) and/or mild neurocognitive disorder are not known to be associated with ADHD but may present with similar clinical features. These conditions are distinguished from the ADHD by their late onset.</p> <p>A careful clarification of the individual's baseline status will help distinguish neurocognitive disorders from a specific learning disorder or other neurodevelopmental disorders.</p>
<b>Disinhibited Social Engagement Disorder</b>	Because of social impulsivity that sometimes accompanies ADHD, it is necessary to differentiate between the two disorders. Children with disinhibited social engagement disorder may be distinguished from those with ADHD because the former do not show difficulties with attention or hyperactivity.
<b>Narcolepsy</b>	In children and adolescents, sleepiness can cause behavioural problems, including aggressiveness and inattention, leading to a misdiagnosis of ADHD.
<b>Obstructive Sleep Apnea Hypopnea</b>	ADHD in children may include symptoms of inattention, academic impairment, hyperactivity, and internalising behaviours, all of which may also be symptoms of childhood obstructive sleep apnea hypopnea. The presence of other symptoms and signs of childhood obstructive sleep apnea (e.g., labored breathing or snoring during sleep and adenotonsillar hypertrophy) would suggest the presence of obstructive sleep apnea hypopnea. Obstructive sleep apnea hypopnea and ADHD may commonly co-occur, and there may be causal links between them; therefore, risk factors such as enlarged tonsils, obesity, or a family history of sleep apnea may help alert the clinician to their co-occurrence.

*Disclaimer: Unless otherwise specified, all language and terminology has been extracted directly from the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (APA, 2013).*