

**Abbot's Lea School**  
**Autism Research and Development**

# **AUTISM AND ADHD**

**FACTSHEET FOR FAMILIES**



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# Is it possible to have both Autism and Attention Deficit Hyperactivity Disorder?

The short answer is Yes - but only since 2013. Previously, the manual used by health professionals when diagnosing conditions such as Autism Spectrum Disorder (ASD) and ADHD, the Diagnostic and Statistical Manual for Mental Disorders (DSM) did not allow for a co-diagnosis of the two conditions. This changed in 2013 with the release of the 5th edition of the DSM, and it is now possible to have a diagnosis of co-occurring ASD+ADHD. For this reason, up to 2013, most research examined autism and ADHD separately. However, in recent years research on the co-occurrence of ASD+ADHD has increased and our understanding of the co-occurrence of autism and ADHD is gradually improving, though it is still limited.

For an individual to be dually diagnosed with autism and ADHD, they must meet the full diagnostic criteria for both conditions, including having clinically significant impairment in functioning which is uniquely contributed to by both conditions. **(1)** When autism and ADHD co-occur, it can be more difficult to diagnose than when each condition occurs in isolation. **(2,3)** It appears that the cooccurrence of autism and ADHD tends to complicate early diagnosis, as children with both autism and ADHD are typically diagnosed later than those with one condition only. **(4)** This research also found that autism in children who also have ADHD is typically identified at a later age, compared to those children with autism only. It is suggested that the symptoms of ADHD could distract parents, teachers and clinicians from considering autism as they attribute their concerns to ADHD. **(5)**



## How common is co-occurring ASD+ADHD?

Estimates of co-occurring ASD+ADHD vary widely. Generally, it is considered that the majority of individuals with autism also have ADHD symptoms. However, in some studies, the proportion of children with autism who also have clinical symptoms of ADHD is reported to be as low as 14% while other studies report it to be up to 85%.<sup>4,7</sup> Similarly, clinically elevated levels of autism symptoms have been noted in 18% to 67% of children with ADHD. **(1,8,9)**



## What causes autism and ADHD to co-occur in an individual?

Autism and ADHD are both highly heritable conditions. There is strong evidence of an overlap between autism and ADHD in regards to brain function and structure, and genes.(1,10) Several recent large scale genome-wide studies have suggested that autism and ADHD may share the same genetic susceptibility and between 50-70% of the contributing genetic factors in both conditions show overlap, which may explain the frequent co-occurrence of ASD+ADHD.(11)

In addition, multiple family studies have shown that family members of individuals with either autism or ADHD frequently display symptoms of the other condition(12). This supports the hypothesis that autism and ADHD originate from partly similar familial/genetic factors.(10) A large study conducted in 2016 found that the co-occurrence of autism and ADHD is unlikely to be explained by shared pre-and peri-natal risk factors such as material infections and diseases, suboptimal conditions at birth, parental age, smoking and stress.(13)

## What impact does co-occurring ASD+ADHD have on the everyday life of a person with the dual diagnosis?

All research indicates that individuals with co-occurring ASD+ADHD may face more challenges than those with one condition only.(12,14, 15) Currently, it is thought that when both conditions occur together, the presence of each condition amplifies the symptoms of the other condition, and this also increases the likelihood of additional conditions, such as disruptive behaviour.(6, 16, 17) Recent studies have shown that compared with individuals with autism only, those with co-occurring ASD+ADHD may have more difficulties in reading other people's emotions and feelings, and in holding, recalling and manipulating critical periods of information.(8,18) They can also show a higher number of inattentive and hyperactive/impulsive symptoms and more stereotypic and repetitive behaviours.(17,19)

In everyday life, this can result in increased issues in dealing with communication, socialisation, self-help, life skills and independence; and in emotional and behaviour problems such as anger, tantrums, argumentative and defiant behaviour. (19, 20, 21, 22) Some studies have found that sleep problems are more pronounced when autism and ADHD co-occur, compared to when one condition occurs, however, other studies have found there is no difference in sleep problems.(9) Research also suggests that individuals with co-occurring ASD+ADHD may be at increased risk of developing additional psychological conditions such as anxiety, depression, bipolar disorder, disruptive behaviour and tic disorders.(11, 22)



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