# 13 Myths About ADHD

ADHD Australia

## Myth #1: ADHD isn't a real medical condition

ADHD is a disorder listed in the DSM 5[1] and it has been recognized as a legitimate diagnosis by medical and psychological experts in Australia and across the world[2], including the Center for Disease Control and Prevention , the World Health Organisation[3] and the Royal Australasian College of Physicians[4].

Extensive research, including studies by Harvard Medical School[5], have shown a genetic component to ADHD that also makes it highly hereditary. ADHD has also presented as a visible biochemical imbalance in patients[6].

## Myth #2: ADHD is the result of bad parenting

Parenting makes a large impact on the wellbeing of any child, but it does not cause ADHD. A study by Michigan University found that while different parenting techniques did make a difference in either improving negative outcomes or exacerbating existing symptoms, ADHD is linked to a combination of genetic and environmental factors[7].

A 2017 Netherlands study also compared the brain scans of 17 participants with ADHD to those without, and found slower development in areas of the brain responsible for controlling impulse, attention and other cognitive functions[8]. These crucial differences make it clear that parenting style alone cannot 'cause' ADHD.

## Myth #3: Kids with ADHD just need to try harder to pay attention

The persistent misconception that people with ADHD are simply 'lazy' or 'not trying hard enough' is both damaging and incorrect. Conversely, people with ADHD are often trying harder than average to overcome both brain chemistry and neurotypical assumptions.

As with other psychiatric conditions, the brain chemistry of a person with ADHD makes tasks such as focusing for extended periods, prioritising tasks and basics of executive functioning much more difficult.

A 2010 Italian study has found that The dorsal anterior cingulate cortex, a part of the brain designed to orchestrate mental activity, works much harder but potentially less efficiently in children with attention deficit hyperactivity disorder (ADHD)[9].

## Myth #4: All kids with ADHD are hyperactive

Although the word 'Hyperactive' features in the ADHD acronym, hyperactivity is not a universal symptom among those diagnosed. There are three recognized 'types' of ADHD in the DSM-5: hyperactive-compulsive type, inattentive type, and combined type[10].

'Inattentive type' is characterised by more symptoms of inattention than those of impulsivity and hyperactivity[11].

The National Institute of Mental Health explains that most children have combination type ADHD, as the most common symptom in preschool-age children is hyperactivity. This means that children and especially girls with primarily inattentive symptoms are often missed by parents and professionals.

## Myth #5: Only boys have ADHD

Despite this stereotype, ADHD affects people of every age, gender, IQ, religious and socio-economic background. Boys are more commonly diagnosed at a younger age, but this does not mean that girls never get diagnosed.

According to research by many sources, including the American Psychiatric Association, ADHD has a male-to-female ratio of 3:1 in population based studies[12] and between 5:1 to 9:1 in clinical samples[13]. A common finding of this research suggests that girls are consistently underdiagnosed, a phenomenon caused by a combination of differing presentation of ADHD and differing expectations for behaviour between boys and girls, especially at a young age[14].

Boys with ADHD tend to show more external hyperactive symptoms while girls with ADHD tend to exhibit more internal inattentive symptoms[15]. For many young boys, external hyperactive behaviour manifests disruptively, which draws attention to the symptoms and is more likely to result in diagnosis and treatment.

As a result, less disruptive behavior in females with ADHD often contributes to underidentification and lack of treatment for girls with ADHD[16]. Studies by found that teachers more often refer more boys than girls for treatment for ADHD, even when showing equal levels of impairment[17].

## Myth #6: Girls with ADHD never experience hyperactivity

Although a lack of hyperactivity in female cases of Inattentive-type ADHD can prevent early diagnosis, hyperactivity is not purely the realm of boys and men. Often hyperactivity in women is interpreted as signs of emotional difficulties, disciplinary problems, and learning or attention difficulties, rather than symptoms of ADHD[18].

Hyperactive behavior in girls and women may also manifest in ways that are not recognised at 'typical' signs of ADHD, such as hyper-talkativeness, fidgeting, flight of thoughts, internal restlessness, and emotional reactivity[19].

On top of these issues, often when young girls display common symptoms of ADHD such as disruptive, hyperactive, impulsive, or disorganised behaviour, they are at risk of harsh social judgment because these violate the norms for feminine behavior[20].

In an attempt to avoid social and interpersonal backlash, many girls with ADHD spend excessive amounts of energy trying to mask their difficulties, which in turn go unrecognized by others[21].

## Myth #7: ADHD is caused by too much TV / too much gaming / too much sugar

As stated, ADHD is a neurological condition that can be diagnosed medically from a very young age. The actions of a child with ADHD can exacerbate or reduce symptoms, but it cannot cause or 'cure' the issue itself.

Studies from Harvard University show that there's no definitive proof that diet has an impact on, or can even cause, ADHD symptoms[22]. The crux of the problem is a lack of concentration, and this is not due to a lack of effort. While behavioural interventions may assist in reducing symptoms, these are often not enough to counteract biological changes.

Conversely, activities such as video games can in fact often be outlets for a child or adult with ADHD to hyperfixate on an area of interest, which can provide relaxation and relief, with proper moderation[23].

## Myth #8: Kids with ADHD will outgrow the condition

Contrary to the view of ADHD as affecting children and adolescents only, studies suggest that 30–60% of affected individuals continue to show significant symptoms of the disorder into adulthood[24]. Like many conditions, an individual's relationship with ADHD, as well as their presentation may evolve across their lifespan, with different challenges presenting themselves at different stages in life[25].

## Myth #9: Making & sustaining friendships is easy for someone with ADHD

Many studies have found that children with ADHD experience more peer interaction problems and are at a higher risk of peer rejection and victimisation than their neurotypical peers[26]. The results of such studies invariably indicate that children with ADHD have fewer friends than non-disordered comparison groups[27]. Further, it is estimated that between 50 and 80% of primary school children with ADHD can be considered peer-rejected, compared to 10–15% of typically developing boys and girls[28].

These peer problems can manifest from many different ADHD symptoms, and across gendered lines. Hyperactivity and impulsiveness are often associated with negative behaviours such as oppositionality, non-compliance and defiance, which are likely to limit the opportunity for social learning, especially among young boys[29].

Often for young girls with ADHD, the inattentiveness often associated with ADHD may lead to lost opportunities for social learning[30]. This can lead to a drop in self-esteem and social skills for both young boys and girls with ADHD, which can persist into adult life.

For women with ADHD especially, symptoms that are seen to deviate from gender-norms can limit opportunities for social learning, leading to delayed development of social skills and a consequent decrease in the quality of their peer interactions.

Of course, this does not mean that all friendships for people with ADHD are difficult or impossible. In fact, a 2010 study by the Clinical Child and Family Psychology Review emphasises the potential for stable, high-quality friendships to buffer the negative outcomes of ADHD[31].

## Myth #10: Medication is the only way to treat ADHD

Medication has been proven to help someone manage the symptoms of ADHD[32].

However, both testimonials and clinical studies have shown the best treatment for ADHD is a combination of medication and behavioral therapy, differing for each individual. Cognitive behavioral interventions have proven popular in the treatment of adult ADHD, especially for people who cannot or will not use medications, along with the many medication-treated patients who continue to show residual difficulties[33]. Some examples of behavioral treatments include cognitive behavioral interventions, clinical behavior therapy, and direct contingency management.

## Myth #11: ADHD is overdiagnosed and overtreated

Based on the review of prevalence studies and research on the diagnostic process, there does not appear to be sufficient justification for the conclusion that ADHD is systematically overdiagnosed[34]. On the contrary, many people, especially women and older adults, are considered to be underdiagnosed and undertreated[35].

In order for a diagnosis of ADHD to be considered, the person must exhibit a large number of symptoms, demonstrate significant problems with daily life in several major life areas (work, school, or friends), and have had the symptoms for a minimum of six months. To complicate the diagnostic process, many of the symptoms look like extreme forms of normal behavior, or could represent comorbidities of ADHD and other conditions.

## Myth #12:There is no relationship between ADHD and depression

The rates of comorbidity with ADHD and other psychological conditions is very high.

As many as 75% of children with ADHD are likely to have at least one other psychiatric disorder[36]. Researchers at the University of Chicago in 2010 found that 18 percent of children diagnosed early with ADHD suffered from depression as adolescents, about 10 times the rate among those without ADHD[37]. From a treatment perspective, difficulties will often arise in differentiating the symptoms of ADHD and depression and identifying if one is an outcome of the other[38]. For example, someone may have difficulty completing tasks as a result of poor executive function (a symptom of ADHD), which leads to low self-esteem and a sense of worthlessness (symptoms of depression). The relationship between ADHD and depression will differ for every individual.

## Myth #13: ADHD only has negatives associated with it

Despite the difficulties associated with ADHD, there are many advantages that people with ADHD have utilised to improve their lives and the lives of others.

The cognitive dynamism that characterises ADHD has been linked to creativity and the ability to 'think outside the box' in many studies[39]. An international qualitative study on the abilities associated with ADHD revealed a number of reported strengths, such as energy and drive functions, which suggested to make it easier to engage in physical exercises (e.g. swimming, football) and to achieve personal goals and face general demands and challenges in life (e.g. study before exams, meet deadline dates for work-related tasks).

Also, directing attention (hyperfocus) was mentioned as a strength, providing that the activity or topic was of interest to the individual[40].



ADHD Australia

## References


1. Barkley, R. (2016). Opinion: A Response to the CDC Press Conference on Behavioral Parent Training and Treating ADHD in Young Children. The ADHD Report, 24(4), pp.11-11,16.
2. Centers for Disease Control and Prevention. (2020). Symptoms and Diagnosis of ADHD | CDC, https://www.cdc.gov/ncbddd/adhd/diagnosis.html
3. Catalá-López, F, et al. (2017). The pharmacological and non-pharmacological treatment of attention deficit hyperactivity disorder in children and adolescents: A systematic review with network meta-analyses of randomised trials. PLoS One. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5507500/
4. Australia - Updated draft Australian Guidelines on Attention Deficit Hyperactivity Disorder (ADHD) published. (2010). International Journal of Health Care Quality Assurance, 23(3). https://www.racp.edu.au/docs/default-source/advocacy-library/pa-australian-guidelines-on-adhd-draft. pdf
5. Pnl.bwh.harvard.edu. (2020). Attention Deficit Hyperactivity Disorder | Psychiatry Neuroimaging Laboratory. http://pnl.bwh.harvard.edu/education/what-is/attention-deficit-hyperactivity-disorder/
6. Caylak, E. (2020). Biochemical and genetic analyses of childhood attention deficit/hyperactivity disorder. - PubMed - NCBI. Ncbi.nlm.nih.gov. https://www.ncbi.nlm.nih.gov/pubmed/22825876
7. Ellis, B. (2010). Parenting Practices and Attention-Deficit/Hyperactivity Disorder: New Findings Suggest Partial Specificity of Effects. J Am Acad Child Adolescent Psychiatry. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2827638/
8. Hoogman, D. et al, (2017). Subcortical brain volume differences in participants with attention deficit hyperactivity disorder in children and adults: a cross-sectional mega-analysis, The Lancet. https://www.thelancet.com/journals/lanpsy/article/PIIS2215-0366(17)30049-4/fulltext
9. Curatolo, P. et al, (2010). The neurobiological basis of ADHD. Italian Journal of Pediatrics. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3016271/
10. Epstein, J. et al, (2014). Changes in the Definition of ADHD in DSM-5: Subtle but Important. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3955126/
11. Nimh.nih.gov. (2020). NIMH » Attention-Deficit/Hyperactivity Disorder. https://www.nimh.nih.gov/health/topics/attention-deficit-hyperactivity-disorder-adhd/index.shtml
12. Gaub, M. & Carlson, C.L. (1997). Gender differences in ADHD: A meta-analysis of analysis and critical review. Journal of the American Academy of Child and Adolescent Psychiatry, 36, 1036-1045. Journal of Attention Disorders, 2(3), pp.197-197. https://www.ncbi.nlm.nih.gov/pubmed/9256583/
13. Sandberg, S. (2002). Hyperactivity and Attention Disorders of Childhood: Second Edition. Cambridge Child and Adolescent Psychiatry. http://repository.umpwr.ac.id:8080/bitstream/handle/123456789/431/Hyperactivity%20and%20Attentio n%20Disorders%20of%20Childhood.pdf?sequence=1&isAllowed=y
14. Skogli, E, et al. (2013). ADHD in girls and boys – gender differences in co-existing symptoms and executive function measures. BMC Psychiatry. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3827008/
15. Rucklidge, J. (2010). Gender Differences in Attention-Deficit/Hyperactivity Disorder. Psychiatric Clinics of North America, 33(2), pp.357-373. https://www.ncbi.nlm.nih.gov/pubmed/20385342
16. Skogli, E, et al. (2013). ADHD in girls and boys – gender differences in co-existing symptoms and executive function measures. BMC Psychiatry. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3827008/
17. Sciutto, M., Nolfi, C. and Bluhm, C. (2004). Effects of Child Gender and Symptom Type on Referrals for ADHD by Elementary School Teachers. Journal of Emotional and Behavioral Disorders, 12(4), pp.247-253. http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.973.2615&rep=rep1&type=pdf
18. Waite, R. (2010). Women With ADHD: It Is an Explanation, Not the Excuse Du Jour. Perspectives in Psychiatric Care, 46(3), pp.182-196. https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1744-6163.2010.00254.x.
19. Nussbaum, N. (2011). ADHD and Female Specific Concerns. Journal of Attention Disorders, 16(2), pp.87-100. https://journals.sagepub.com/doi/10.1177/1087054711416909
20. Holthe, M. and Langvik, E. (2017). The Strives, Struggles, and Successes of Women Diagnosed With ADHD as Adults. SAGE Open, 7(1), https://journals.sagepub.com/doi/full/10.1177/2158244017701799.
21. Quinn, P. (2005). Treating adolescent girls and women with ADHD: Gender-Specific issues. https://onlinelibrary.wiley.com/doi/abs/10.1002/jclp.20121
22. Publishing, H. (2009). Diet and attention deficit hyperactivity disorder - Harvard Health. Harvard Health. https://www.health.harvard.edu/newsletter_article/Diet-and-attention-deficit-hyperactivity-disorder
23. Weiss, M., Baer, S., Allan, B., Saran, K. and Schibuk, H. (2011). The screens culture: impact on ADHD. ADHD Attention Deficit and Hyperactivity Disorders, 3(4), pp.327-334. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3220824/.
24. Harpin, V. (2005). The effect of ADHD on the life of an individual, their family, and community from preschool to adult life. Archives of Disease in Childhood, 90(suppl_1), pp.i2-i7. https://adc.bmj.com/content/90/suppl_1/i2#xref-ref-4-1.
25. Cherkasova, M. (2013). Developmental Course of Attention Deficit Hyperactivity Disorder and its Predictors. Journal of the Canadian Academy of Child and Adolescent Psychiatry. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3565715/
26. Kok, F., Groen, Y., Fuermaier, A. and Tucha, O. (2016). Problematic Peer Functioning in Girls with ADHD: A Systematic Literature Review. PLOS ONE, 11(11), p.e0165119. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5117588/
27. Hoza, B. et al (2005). What Aspects of Peer Relationships Are Impaired in Children With Attention-Deficit/Hyperactivity Disorder?. Journal of Consulting and Clinical Psychology, 73 (3), pp.411-423. https://www.ncbi.nlm.nih.gov/pubmed/15982139/
28. Nixon, E. (2001). The Social Competence of Children with Attention Deficit Hyperactivity Disorder: A Review of the Literature. Child Psychology and Psychiatry Review, 6(4), pp.172-180.
29. Kok, F., Groen, Y., Fuermaier, A. and Tucha, O. (2016). Problematic Peer Functioning in Girls with ADHD: A Systematic Literature Review. PLOS ONE, 11(11), p.e0165119. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5117588/
30. Ibid.
31. Mikami, A. (2010). The Importance of Friendship for Youth with Attention-Deficit/Hyperactivity Disorder. Clinical Child and Family Psychology Review, 13(2), pp.181-198. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2921569/
32. Hechtman, L. (2008). Treatment of adults with attention-deficit/hyperactivity disorder. Neuropsychiatric Disease and Treatment, p.107. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2518387/
33. Antshel, K., et al (2011). Advances in understanding and treating ADHD. BMC Medicine, 9(1) https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3126733/
34. Sciutto, M. and Eisenberg, M. (2007). Evaluating the Evidence For and Against the Overdiagnosis of ADHD. Journal of Attention Disorders, 11(2), pp.106-113. https://www.ncbi.nlm.nih.gov/pubmed/17709814
35. Sciutto, M., Nolfi, C. and Bluhm, C. (2004). Effects of Child Gender and Symptom Type on Referrals for ADHD by Elementary School Teachers. Journal of Emotional and Behavioral Disorders, 12(4), pp.247-253. http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.973.2615&rep=rep1&type=pdf
36. Barkley RA. Attention-deficit hyperactivity disorder: A handbook for diagnosis and treatment. The Guilford Press; 2006
37. Uchicagomedicine.org. (2020). Children with ADHD at increased risk for depression and suicidal thoughts as adolescents - UChicago Medicine. https://www.uchicagomedicine.org/forefront/news/children-with-adhd-at-increased-risk-for-depression- and-suicidal-thoughts-as-adolescents
38. Binder, C. (2009). Adult ADHD and comorbid depression: A consensus-derived diagnostic algorithm for ADHD. Neuropsychiatric Disease and Treatment, p.137. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2695217/
39. Sedgwick, J. (2018). The positive aspects of attention deficit hyperactivity disorder: a qualitative investigation of successful adults with ADHD. ADHD Attention Deficit and Hyperactivity Disorders, 11(3), pp.241-253. (PDF) The positive aspects of attention deficit hyperactivity disorder: a qualitative investigation of successful adults with ADHD.
40. Mahdi, S. (2017). An international qualitative study of ability and disability in ADHD using the WHO-ICF framework. European Child & Adolescent Psychiatry, 26(10), pp.1219-1231. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5610225/



ADHD Australia Limited ABN 73 602 346 047
is a registered charity.
PO Box 164, Westmead NSW 2145

www.adhdaustralia.org.au
ADHD in the Workplace – Practical Strategies 202007
factsheet - version 1.0





Compiled by Rachel Worsley and Isabelle Quigley from Neurodiversity Media (2020)


ADHD Australia

# ADHD

| MYTH | vs | FACT |
|---|---|---|
| ADHD isn't a real medical condition. |  | ADHD is listed in the DSM-5 and extensive research has shown a genetic component that makes it very hereditary. |
| ADHD is the result of bad parenting. |  | A study by Michigan University found that while different parenting did make an impact on symptoms, ADHD is linked to a combination of genetic and environmental factors. |
| Kids with ADHD just need to try harder. |  | As with other psychiatric conditions, the brain makeup and chemistry of a person with ADHD makes tasks like focusing, prioritising tasks and executive functioning much more difficult. |
| All kids with ADHD are hyperactive. |  | There are three recognized 'types' of ADHD in the DSM-5: hyperactive-compulsive type, inattentive type, and combined type. |
| Only boys have ADHD. |  | ADHD affects people of every age, gender, IQ, religious and socio-economic background. Less disruptive behavior in women with ADHD often leads to underidentification and lack of treatment. |
| Girls with ADHD never experience hyperactivity. |  | Hyperactive behavior in girls and women may manifest in ways that are not recognised as 'typical' signs of ADHD, such as hyper-talkativeness, fidgeting and emotional reactivity. |
| ADHD is caused by too much TV / too much gaming / too much sugar. |  | ADHD is a neurological condition. Studies from Harvard University show that there's no definitive proof that diet or activity has an impact on, or can even cause, ADHD symptoms. |
| Kids with ADHD will outgrow it. |  | Studies suggest that 30–60% of affected individuals continue to show significant symptoms of the disorder into adulthood. |
| Making & sustaining friendships is easy for someone with ADHD. |  | Many studies have found that children with ADHD experience more peer interaction problems and are at a higher risk of peer rejection and victimisation than their neurotypical peers. |
| Medication is the only way to treat ADHD. |  | Testimonials and clinical studies have shown the best treatment for ADHD is a combination of medication and therapy, differing for each individual. |
| ADHD is overdiagnosed and overtreated. |  | According to many studies, there is no sufficient evidence that ADHD is systematically overdiagnosed. Many people, especially women and adults, are considered to be underdiagnosed and undertreated. |
| There is no relationship between ADHD and depression. |  | Researchers have found that 18 percent of children with ADHD suffered from depression, 10 times the rate of those without ADHD. |
| ADHD only has negative aspects. |  | The cognitive dynamism of ADHD has been linked to creativity, energy, hyperfocus and drive. Celebrities with ADHD include Simone Biles, Jim Carrey and Richard Branson. |

ADHD Australia