



Support for children and young people with Attention Deficit Hyperactivity Disorder (ADHD) in educational settings



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Audience

Parents/carers and practitioners supporting children and young people with attention deficit hyperactivity disorder (ADHD) in education settings.

Overview

This guide provides an overview of the extent to which interventions delivered in educational settings are effective in realising positive outcomes for children and young people with ADHD. It was written by Bazian Ltd. The views expressed in this guide are those of the authors and not necessarily those of the Welsh Government.

Action required

This document may be of interest to practitioners and parents/carers when planning provision to support children and young people with ADHD.

Further information

Enquiries about this document should be directed to: Additional Learning Needs Branch Support for Learners Division The Education Directorate Welsh Government Cathavs Park Cardiff **CF10 3NO**

e-mail: additionallearningneedsbranch@gov.wales





Additional copies

This document can be accessed from the Welsh Government's website at gov.wales/aln

Related documents

A Rapid Evidence Assessment of the effectiveness of educational interventions to support children and young people with Attention Deficit Hyperactivity Disorder (Welsh Government, 2018)

Mae'r ddogfen yma hefyd ar gael yn Gymraeg. This document is also available in Welsh.



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Purpose and aim of the guide

This guide provides evidence about which approaches can be effective in supporting children and young people with attention deficit hyperactivity disorder (ADHD) whilst in education. The guide can be used by:

- parents;
- teachers, classroom-based support staff, early years workers and further education lecturers;
- special educational needs coordinators (SENCOs)/additional learning needs co-ordinators (ALNCos);
- headteachers, principals and senior leaders in education settings;
- local authority education services including specialist services such as educational psychologists;
- social workers:
- health professionals;
- third sector organisations; and
- advocacy services, dispute resolution services and the Special Educational Needs Tribunal for Wales.

Practitioners do not have to use the approaches set out in this guide. The guide does not set out what approaches must or must not be provided for children and young people with ADHD.

Rather, the purpose of the guide is to raise awareness of ways of supporting children and young people which are known to work and the outcomes which can be expected from them, based on research findings.

The research tells us what the average effect of these approaches is likely to be if they are used to support a number of learners, but can't tell us how well they will work for an individual learner.

Practitioners can use this evidence along with their own experience and knowledge when making decisions about approaches to support children and young people with ADHD.

The aim of the guide is to support practitioners when planning and delivering timely and effective support for children and young people with ADHD.

Not all approaches outlined in the guide may be suitable for all children and young people with ADHD. Approaches are likely to need to be tailored to each learner based on their needs and to the specific educational setting.

Educators may find it useful to monitor how well their selected support packages are working for their learners, so they know whether they are having the desired effects or need to be altered.

Background

This guide is based on an assessment of research studies which have considered the effectiveness of approaches to support children and young people with ADHD¹.

The assessment summarised the findings of the most reliable research studies on this topic published between 2000 and 2017. It looked at approaches which had been studied in any setting where children and young people receive education, such as preschools, schools, and further education institutions.

A relatively small number of very good quality studies were identified. The assessment included seven reviews which summarised the findings of available research. The methods of two of these reviews were rated as very good quality, four as good quality, and one as low quality.

The reviews included between five and 100 studies. A lot of the studies which the reviews included had some weaknesses. For example, not all studies included a control group to find out what happened if children and young people did not receive the support being tested.

The assessment also included an additional four recent studies which had not been included in the reviews. These studies were picked because they used strong methods which made it easy to identify what impact the support packages were having. For example, all of these studies included a control group. One of the studies was rated as very good quality and the other three as good quality.

Many of the studies included relatively few children or young people. This means what they found may not be representative of what would happen in the wider population of children or young people with ADHD. In addition, small studies might miss important changes in learners' outcomes.

As new studies are carried out in the future, they will tell us more about the impact of approaches to support young people with ADHD. This may mean what is thought to be effective could change over time and new approaches are likely to be developed.

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¹ The full rapid evidence assessment is available from https://gov.wales/statistics-and-research/assessmeny-effectiveness-educational-interventions-support-children-attention-deficit-hyperactivity-disorder/?lang=en

What is ADHD?

ADHD is a condition where the affected child or young person has levels of inattention, hyperactivity and/or impulsivity that are abnormally high for their age, and impact on their day-to-day life. The child or young person may not have all three of these aspects of ADHD and how severe each aspect is will vary between individuals. Not all children and young people with ADHD will have been diagnosed as having ADHD and not all children and young people with poor attention will have ADHD.

In individuals with ADHD, signs of the condition usually start before the age of seven, continue through adolescence, and can carry on into young adulthood.

Individuals with ADHD are often affected by other conditions such as conduct disorder, anxiety, depression and learning difficulties.

Children and young people with ADHD typically find it difficult to focus and pay attention in educational settings and may display problem behaviours in class. This can result in poor academic performance and attendance, a need for special education provision, in some cases exclusion from school, and making it less likely for them to go on to further education^{2,3}.

If a child with ADHD in a class displays problem behaviours, this can also disrupt their classmates' learning and interaction. Teachers may find it difficult to cope without appropriate knowledge and strategies to deal with learners with ADHD, and this can make teaching these learners more stressful than teaching learners who don't have the condition⁴.

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² Gaastra, G. F. et al. 2016. <u>The effects of classroom interventions on off-task and disruptive classroom behavior in children with symptoms of attention-deficit/hyperactivity disorder: A meta-analytic review.</u> PLoS ONE, 11, e0148841.

³ Loe, I. M. & Feldman, H. M. 2007. Academic and educational outcomes of children with

Loe, I. M. & Feldman, H. M. 2007. Academic and educational outcomes of children with ADHD. Journal of Pediatric Psychology, 32, 643-654.
 Richardson, M. et al. 2015. Non-pharmacological interventions for attention-

^{*}Richardson, M. et al. 2015. <u>Non-pharmacological interventions for attention-deficit/hyperactivity disorder (ADHD) delivered in school settings: Systematic reviews of quantitative and qualitative research</u>. Health Technology Assessment, 19, 1-470.

Support for children and young people with ADHD

Many distinct approaches have been used to help support children and young people with ADHD. Often, approaches are combined to give a wider package of support.

The approaches aim to reduce any unwanted behaviours (such as being disruptive in class) and increase the desired behaviours (such as following instructions and staying focused on one task at a time).

Teachers or teaching assistants may be able to deliver some of the approaches without any special training (for example, making changes to classroom seating, using a system of rewards and/or consequences to change behaviour and providing help with study skills).

Some approaches may need to be delivered directly by specially qualified professionals (for example, emotional skills coaching or music therapy), or by teachers or other educators who have had specific training in these approaches.

Using some approaches would need special equipment, so may not be possible in all settings. For example, the biofeedback approach needs equipment to monitor body functions such as brain waves (see below for more details of this and other approaches).

The descriptions below give a brief overview of the main types of approaches which were used in the reliable research studies identified in the assessment. Some examples of support packages based on selected approaches are also given to illustrate how they might be applied in practice. These examples are not intended to be endorsements for specific approaches or packages, or recommendations about what type of support is most effective.

Types of approaches to support children and young people with ADHD

Consequence-based approaches

Consequence-based approaches are also called contingency management approaches.

They involve encouraging the learner's desired behaviours by consistently rewarding them and/or using negative consequences (such as removal of specific privileges) to discourage their unwanted behaviours. Behavioural goal(s) are set with the learner and rewards and/or consequences used depending on the learner's progress towards their goals.

This approach can be combined with a daily report card, which records the learner's behaviour, for them to take home to share with their parent or carer and to document their progress towards their goals. This approach was a common part of the support packages identified in the research studies assessed. Studies have suggested that teachers view using daily report cards positively.

This approach may be better suited to younger than older learners. For example, this approach may not be well suited for those in further education settings.

Self-management and skills coaching

Self-management and skills coaching approaches aim to teach the learner skills in areas where they have difficulties. This can include skills to help them manage their own behaviour, thoughts and emotions (called self-management or self-regulation).

Cognitive-behavioural self-regulation coaching

Cognitive—behavioural self-regulation coaching involves working with the learner to develop methods for them to monitor and assess their own behaviour on an ongoing basis and to make positive changes as a result. It includes problem solving, such as identifying factors that lead to problem behaviour and solutions to overcome them, and training the learner to be able to talk themselves through how to achieve the desired behaviour (called "self-instruction"). An example of a support package based on this approach is described below.

The Stop, Think, Do programme

The Stop Think Do programme was originally developed in Australia and takes a cognitive-behavioural self-regulation approach⁵. Whilst originally developed as a way to improve children and young people's social skills, it has also been used in educational settings for behaviour management and to improve motivation for learning, including for children and young people with ADHD.

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⁵ http://www.stopthinkdo.com/prog_core.php

Stage	What is involved?	Example
STOP	Using visual, sound or	Coloured tape or a sticker on a pencil or
	tactile signals to remind	watch strap, which when the child
	the child to pause what	notices it reminds them to stop. These
	they are doing and	cues can be changed occasionally to
	consider their behaviour	make sure the child continues to notice
	or concentration	them.
THINK	Teaching the child to use	Using phrases and thoughts such as:
	self-instruction/self-talk	"Concentrate"
	strategies to motivate	"Control myself"
	themselves to work	"What will happen if I keep doing this?"
	through how to control	"What could I try to help me
	their behaviour and	behave/concentrate in this situation?"
	concentration	
DO	Putting into action their	Actions could include:
	plan to change their	Stopping the undesired behaviour (e.g.
	behaviour or concentrate	wriggling, talking, fighting, daydreaming)
		Paying attention to the teacher
		Getting on with the work assignment
		Telling friends they will speak to them at
		break time
		At break time, physically moving away
		from people/places which are leading to
	(trouble.

Adapted from the Stop, Think, Do website⁶

Academic and study skills coaching

Academic and study skills coaching involves giving the learner training and practice in specific academic skills (for example, in reading and writing) and/or general study skills (for example, effective note taking, test taking, organisation and time management).

Social skills coaching

Social skills coaching involves giving the learner training and practice in how to interact successfully with other people (such as classmates).

Emotional skills coaching

Emotional skills coaching involves giving the learner training and practice in learning to recognise and control emotions. For example, this could be through relaxation coaching and/or learning ways to increase positive emotions.

Cognitive retraining

Cognitive retraining involves giving the learner training and practice in the use of thought (cognitive) processes relating to executive function - the high level thinking skills which are used to control and coordinate other thinking processes and behaviours. Cognitive retraining, also called cognitive training,

⁶ http://www.stopthinkdo.com/sa add.php

is often computer-based⁷ and sometimes takes the form of a computerised game.

Motivational beliefs coaching

Motivational beliefs coaching involves helping the learner to adopt beliefs that will assist them in motivating themselves to achieve the desired behaviour. An example of such a belief would be that success at school will come with hard work and effort.

Biofeedback

Biofeedback involves using a device to monitor a bodily function for example, heart rate or brain waves, and feeding this information back to the learner. The aim is to train them to control these functions and as a result improve self-control of their behaviour.

Adapting the learning environment

Adapting the learning environment involves making changes to the physical or social environment where learning takes place and/or the learning materials to help the learner to achieve the wanted behaviour, or make it more difficult for them to perform the unwanted behaviour. This could for example, include removing distractions, reading test questions aloud to the learner, having smaller teaching group sizes, using colour coding to help understanding and navigation of lesson notes. Examples of adaptations which could be made to support learners at primary and secondary school are provided below.

Examples of adaptations to the learning environment

The ADHD Foundation, a registered charity, provides various materials for schools on ADHD, including information about how to be an "ADHD Friendly School". They suggest some practical ways of adapting the learning environment to support children and young people with ADHD in the classroom^{9,10}.

In primary schools, examples include¹¹:

- having rules clearly displayed on the wall;
- allowing time outs during lessons to move, or do breathing or relaxation exercises to de-stress;
- having a quiet and accessible space in school e.g. a chill-out zone; and
- seating children with ADHD at the front of the class near the blackboard, away from windows or distracting visual displays.

⁷ Cortese S. et al.; European ADHD Guidelines Group (EAGG). <u>Cognitive training for attention-deficit/hyperactivity disorder: meta-analysis of clinical and neuropsychological outcomes from randomized controlled trials</u>. Journal of the American Academy of Child and Adolescent Psychiatry. 2015 Mar;54(3):164-74.

⁸ https://www.adhdfoundation.org.uk/information/schools/

https://www.adhdfoundation.org.uk/wp-content/uploads/2017/05/Classroom-Ideas.pdf
 https://www.adhdfoundation.org.uk/wp-content/uploads/2017/10/ADHD-Psychoeducation-Information-for-Parents-Schools-and-Clinicians.pdf

https://www.adhdfoundation.org.uk/wp-content/uploads/2017/05/Primary-School-Classroom-Strategies.pdf

In secondary schools, examples include¹²:

- allowing the learner to doodle, take notes, or make mind maps while listening in class;
- writing down homework in the learners' planners;
- not setting lengthy homework tasks; and
- using learning mentors or buddies.

Creative-based therapies

Creative-based therapies which use, for example, music 13 or play 14, in specific ways to change the learner's thoughts, emotions and behaviours. For example, music therapy activities might aim to help the learner to pay attention (to instructions and the music) and focus on the task in hand (such as playing an instrument at the appropriate time).

Structured physical activity

Structured physical activity involves a planned physical activity for learners, which aims to burn off energy, and improve physical fitness and health.

Providing information

Providing information to the learner and/or their teachers on ADHD and approaches to help manage the condition. For example, this could include information for learners about how to form positive relationships with their peers, or information for teachers to inform behavioural management approaches. This is likely to be part of a wider package of support.

An example of a support package for learners in further education

One small study of 33 college learners with ADHD assessed a package of support called dialectical behaviour therapy (DBT) group skills training^{15.} DBT is based on cognitive behavioural therapy and mindfulness¹⁶.

The specific package studied included aspects of several self-management and skills training approaches, including cognitive behavioural self-regulation, training in academic and study skills, emotional skills, motivational beliefs, and adapting the learning environment.

http://www.bamt.org/
http://playtherapy.org.uk/About-PTUK

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https://www.adhdfoundation.org.uk/wp-content/uploads/2017/05/Secondary-School-Classroom-Strategies.pdf

¹⁵ Fleming, A. P. et al. 2015. Pilot randomized controlled trial of dialectical behavior therapy group skills training for ADHD among college students. Journal of Attention Disorders, 19,

¹⁶ https://behavioraltech.org/

The package was delivered by child clinical psychology graduate students who had been specially trained in the approach and who were supervised by a licensed psychologist with experience in managing college learners with ADHD.

It included an initial 15 minute one-to-one session aimed at increasing the learner's motivation for taking part in the support, and then weekly one and a half hour group sessions for eight weeks.

The group sessions focused on:

- academic and study skills (e.g. using daily planners, prioritising, breaking up tasks into smaller chunks);
- how to structure their environment to help learning;
- using social support;
- managing their lifestyle (sleep, eating and exercise);
- regulating their emotions;
- how to generalise the skills they had learnt, and troubleshooting any problems; and
- reviewing the skills they learnt, and planning for periods of high demand, and how to maintain their skills.

The learners also had weekly 10 to 15 minute individual phone calls to help coach them to generalise their skills to their specific situation.

The package took place over one academic quarter, and the learners also had a group booster session at the start of the next academic quarter.

Learners who received DBT were more likely to have a significant reduction in their overall levels of inattention, hyperactivity and impulsivity than learners who were simply given self-help handouts. Learners who received DBT also reported better quality of life while the support package lasted. However, DBT did not improve the learners' academic performance.

What the research says about what works

Most of the studies carried out so far have looked at approaches to support children at primary school and this means the findings are most applicable to this age group. Few studies have looked at approaches to support children in preschool or young people in further education. The findings may apply to these age groups, but we can't be certain.

The studies which have been done have looked at numerous packages of support, which may combine a number of approaches, or apply the same approach in different ways. This means only a small number of studies looked at each specific approach or support package and it is, therefore, difficult to say conclusively which work and which don't or which are the "best" approaches or packages.

Overall, the studies which have been done suggest that providing support for children and young people with ADHD is beneficial for them. The effects on

classmates and teachers are less clear, as very few studies have looked at these potential impacts.

Some analyses have looked at the impact of packages based on the more commonly used approaches and suggested that they are beneficial, including:

- approaches using a consistent system of rewards and/or consequences to change behaviour;
- approaches that adapt the learning environment e.g. changing the physical environment, learning materials, or teaching methods (e.g. using peer tutoring, or computer aided methods), including using academic or study skills coaching; and
- approaches which train the learner in self-management/self-regulation skills.

Packages based on other approaches may also be beneficial but as yet there has been less study of their effects in educational settings.

One analysis of the best studies available found that which specific approaches were used did not change how effective the support package was¹⁷. This may mean that different packages of support have similar effects, but it may also be because there were not enough studies to be able to detect differences.

Other analyses of weaker studies have suggested that support packages based on using rewards and/or consequences may be more effective at changing behaviour, and ones based on adapting the learning environment (including academic skills coaching) may be more effective at improving academic outcomes. However, these findings are not conclusive.

There was weak evidence to suggest that support packages delivered over a shorter period of time were more beneficial than ones delivered over a longer period of time, in terms of how well learners adjusted to their school environment. Shorter support packages weren't any different to longer ones in terms of their impact on learners' overall levels of inattention, hyperactivity and impulsivity.

The evidence doesn't tell us the optimal period over which support packages should be delivered. On average, the support packages which have been studied lasted for around four months, but some lasted for as long as three years.

Groups planning support packages can select from existing approaches, such as those outlined in this Guide, based on their knowledge and experience of their setting and learners. Some additional points to consider when planning support are highlighted below.

¹⁷ Richardson, M. et al. 2015. <u>Non-pharmacological interventions for attention-deficit/hyperactivity disorder (ADHD) delivered in school settings: Systematic reviews of quantitative and qualitative research</u>. Health Technology Assessment, 19, 1-470.

Other points to consider when designing and providing support packages

It is likely support packages will need to be tailored to suit the individual child or young person. Factors which need to be considered include the severity of ADHD, how these affect behaviour and learning, age and abilities.

The learner's knowledge and beliefs about ADHD, such as whether they believe they can control their behaviour or not, may also need to be taken into account and addressed as part of the support package.

Some approaches may be more suited to certain age groups than others. For example, play therapy may be more suited to younger children. All approaches are likely to need some tailoring to age and level of development.

To give support packages the best chance of working, they also need to take into account issues relating to:

- the learner's class;
- their educational institution; and
- the wider society.

Class factors include:

- how the affected learner fits into their class
- their teachers' knowledge and beliefs about ADHD and usual teaching methods
- the relationships between the learner, their peers, teachers and parents
- whether ADHD is stigmatised are there negative attitudes and views about learners with ADHD?
- whether learners with ADHD are marginalised are the opinions and contributions of learners with ADHD treated as unimportant? Are they left out of groups, activities and decisions?

School factors include:

- what resources are available (e.g. time, support, knowledge)
- what school policies are in place about issues such as behaviour
- whether there is collaboration between parents and teachers
- whether there is clarity between teachers and parents about their respective roles and responsibilities in supporting the learner with ADHD
- whether there is any stigmatisation or marginalisation of learners with ADHD in the school as a whole.

It is also important to design support packages in a way that avoids unintentionally creating or increasing negative opinions about, and treatment of, learners with ADHD. In addition to the support aimed at the affected learners and their teachers, it may be useful to provide education about ADHD to others enrolled in the educational institution and its staff.

Studies suggest some of the concerns of learners, teachers and parents include:

- knowing how structured and tailored the support packages ought to be;
- whether the packages might work for the specific skills and behaviours they target but not improve academic achievement; and
- whether skills and knowledge gained from the support packages would be maintained by the learners once the support was no longer available.

For educational institutions considering implementing support packages for learners with ADHD, it may be helpful to consider how these issues will be addressed.

Finally, ensuring good communication and coordination between the educational institution, teachers, parents and/or carers and professionals involved in the learner's care is likely to be important in ensuring that support packages are effective.

What improvements might be expected from using support packages for children and young people with ADHD?

Overall, research has shown support packages for children and young people with ADHD can lead to 18:

- a moderate reduction in inattention;
- a small reduction in hyperactivity and impulsivity;
- a small reduction in problem behaviours such as being disruptive, defiance, or fighting;
- a small improvement in how well teachers think the learner has adjusted to school;
- a small improvement in how well teachers think the learner has adjusted to school; and
- a small improvement in academic performance, as measured on standardised tests.

The support packages may also lead to a moderate improvement in how well the learners perform on curriculum-based tests. However, this is less certain.

The size of the improvements - small, moderate or large - is based on a standard way of measuring the average effect of support packages.

As a result it is important to bear in mind that:

- individual support packages may result in more or less of an effect than the average
- individual learners may also experience more or less of an effect than the average
- the size of the improvement small, medium, large does not tell us how important the improvements were to the learner themselves, their teachers or parents.

Often the improvements were seen by the teachers but not necessarily by parents. This may mean the support packages provided in school do not have a large impact on the learner's signs of ADHD (inattention, hyperactivity and impulsivity) or ADHD-related behaviours or problems outside of school.

Whether the improvements seen continue when the support is no longer provided is unclear. This is because most studies did not assess the students once the support stopped.

Few studies looked at the effect of the support packages on the classmates of those with ADHD. Those studies which did found mixed results – some

¹⁸ Richardson, M. et al. 2015. <u>Non-pharmacological interventions for attention-deficit/hyperactivity disorder (ADHD) delivered in school settings: Systematic reviews of quantitative and qualitative research. Health Technology Assessment, 19, 1-470.</u>

showed an impact, while others did not¹⁹. This means we can't be certain what impact support packages will have on outcomes for classmates.

Because what works and how well it works are not certain, it is important to monitor the impact of the support packages on the outcomes that they aim to improve (for example, behaviour or academic performance) in the educational settings where they are being used.

What the research says about what doesn't work

The research suggests that just providing primary school teachers with written information about ways to support children with ADHD is not likely to have an impact on the learners²⁰. This may be because this approach does not result in high levels of engagement from teachers.

Also, routinely testing all primary school learners to see whether they have ADHD doesn't seem to be helpful.

Some evidence suggested that support packages, which include coaching in social skills, might not improve how well teachers feel learners with ADHD adjust to the school environment. However, this evidence was not very strong.

National Collaborating Centre For Mental Health 2009. <u>Attention Deficit Hyperactivity Disorder: Diagnosis and Management of ADHD in Children, Young People and Adults.</u> Leicester (UK): The British Psychological Society & The Royal College of Psychiatrists.

Gaastra, G. F. et al. 2016. <u>The effects of classroom interventions on off-task and disruptive classroom behavior in children with symptoms of attention-deficit/hyperactivity disorder: A meta-analytic review.</u> PLoS ONE, 11, e0148841.
 National Collaborating Centre For Mental Health 2009. <u>Attention Deficit Hyperactivity</u>

Key points

There is evidence that a range of support packages for children and young people with ADHD appear to offer benefits for these learners.

These benefits include small to moderate reductions in the signs of ADHD (inattention, hyperactivity, and impulsivity) and small improvements in problem behaviour and performance on standardised tests.

Whether there are benefits for classmates and teachers is less clear, as very few studies have looked at this.

Many types of packages of support have been studied, often using different approaches, or applying them in different ways. The research has not yet shown which specific packages work best.

Some approaches which appear to offer benefits include:

- consequence-based approaches using consistent rewards and/or consequences to reinforce desired behaviours;
- approaches that adapt the learning environment, such as changing the physical environment, learning materials, or teaching methods (for example, using peer tutoring or computer aided methods), or train the learner in academic or study skills
- self-regulation approaches coaching the young person to monitor and control their own behaviour, emotions or thoughts.

When putting together packages of support, it is important to consider what would be best suited to the learner's needs, within the context of their class and school.

Evaluating the impact of the support packages implemented will help educators to see if they are working and whether they need to be adapted.

Definitions

Key word	Definition
Conduct disorder	A condition where the child or young person regularly behaves antisocially over a prolonged period of time. The affected individual can find it difficult to control their temper and may argue with, disobey and lie to others.
Executive function	The high level thinking skills which are used to control and coordinate other thinking processes and behaviours. Executive function is important for planning, focusing attention, remembering instructions, and dealing with multiple tasks at once. It allows filtering out of distractions, prioritising tasks, setting and achieving goals, and controlling impulses.
Hyperactivity	Being fidgety, restless and unable to sit still (for example frequently running or climbing), talking non-stop, being noisy, having difficulty doing quiet activities.
Impulsivity	Doing things (such as speaking) without thinking about the consequences, interrupting others, being unable to wait or take turns.
Inattention	The inability to concentrate for very long or complete a task, being disorganised, losing things frequently, being easily distracted and forgetful, and not able to listen when others are talking.
Learner	In this document the term learner is used to refer to any child or young person up to the age of 25 years enrolled in an educational setting.
Marginalised	Treated as unimportant and left out of groups, activities and decisions.
Stigma	Negative attitudes and views about a particular type of person (for example, those with ADHD).

Based on information from Harvard University and the National Institute for Health and Care Excellence (NICE)^{21,22}

https://developingchild.harvard.edu/science/key-concepts/executive-function/ (All links last accessed November 2017)

NICE information for the public for their guidelines on ADHD https://www.nice.org.uk/guidance/cg72/ifp/chapter/About-this-information and conduct disorders https://www.nice.org.uk/guidance/cg158/ifp/chapter/Antisocial-behaviour-andconduct-disorders