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BRIEFING PAPER

# Non-pharmacological interventions to support children who have difficulties with attention, activity and impulsivity

This guidance has been written for educational psychologists (EPs) who support children and young people (CYP) who have difficulties with attention, activity and impulsivity. These CYP may have a formal diagnosis of attention deficit hyperactivity disorder (ADHD), be awaiting an assessment, or experiencing difficulties in these areas.

The guidance, produced by the Division of Education and Child Psychology (DECP) will focus upon evidence-informed interventions and strategies that can be implemented by EPs and schools. The child's response to the intervention will provide valuable information for any future assessment. These interventions can be used prior to, alongside or instead of medication, in line with the National Institute for Health and Care Excellence (NICE) guidelines (2019), local pathways and research evidence about what children and families want (Town et al., 2016).

## BACKGROUND

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Attention deficit hyperactivity disorder (ADHD) is a diagnosis, typically given by psychiatrists or paediatricians, to children and young people (CYP) whose behaviour appears to be inappropriately impulsive, overactive and/or inattentive for their age, and which may present barriers to their learning and social functioning. Attention means being able to selectively detect information and reject or inhibit irrelevant or distracting information, sustaining this attention and/or being able to switch between tasks. Hyperactivity means being unable to sit still, being restless or fidgety. Impulsivity means speaking or doing things without waiting or thinking about the consequences.

NICE guidelines (2019) recommend that a diagnosis of ADHD or Hyperkinetic Disorder should be made by a highly qualified healthcare professional who has specialist training based on a full clinical and psychosocial assessment of the person including a discussion about behaviour and symptoms in the different domains and settings of the person's everyday life (e.g. home and school). In addition, a full developmental and psychiatric history, observer reports, and an assessment of the person's mental state should be undertaken. A diagnosis should not be made solely based on rating scales or observational data. The DECP also feel that a multidisciplinary assessment is good practice.

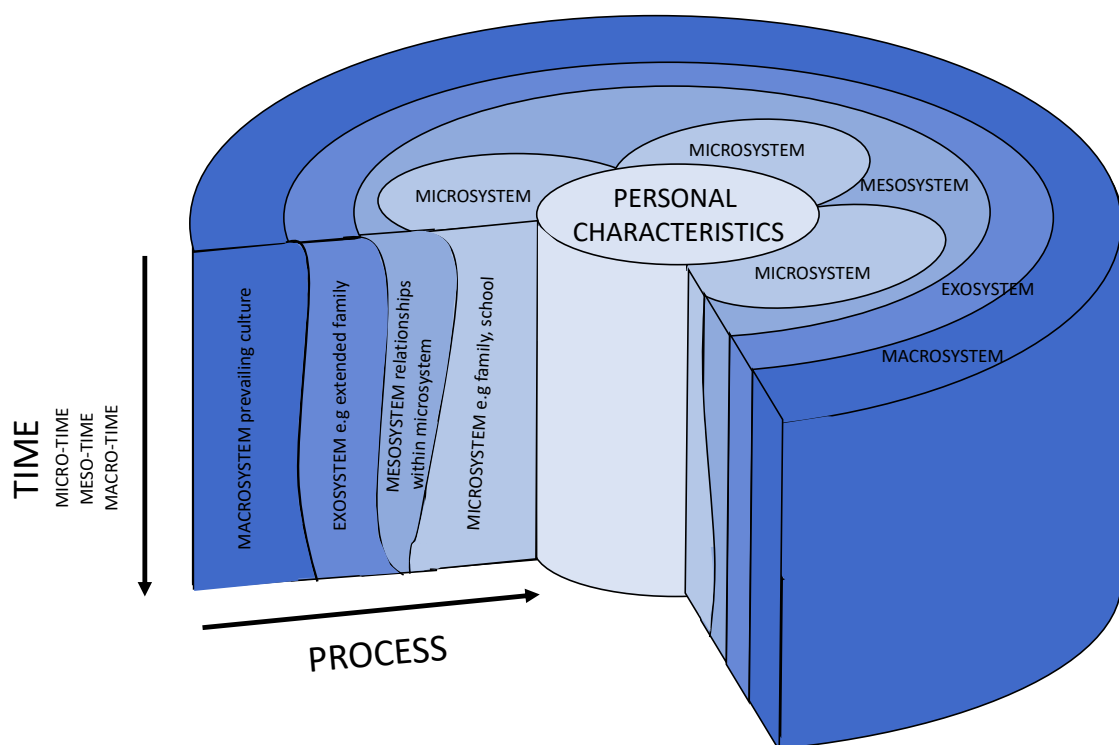
There are two distinct classification approaches that may be used in the diagnosis of children and young people who have difficulties regulating their attention, activity, and impulsivity. A diagnosis of ADHD can be given if they meet the criteria in the Diagnostic and Statistical Manual of Mental Disorders – 5th Edition (DSM-5) for ADHD and the use of the International Classification of Diseases – 11th Revision (ICD-11) may lead to a diagnosis of Hyperkinetic Disorder. Whilst there are many overlapping features of the two diagnostic categories (First et al., 2021) they generate quite distinct levels of diagnosis. With 1-2 per cent prevalence for ICD-11 Hyperkinetic Disorder and 3-9 per cent ADHD using DSM-5 (NICE, 2019) This is largely due to the extent of evidence required by the two classification systems.

In this paper we will refer to behaviours reflecting challenges with activity, attention, and impulsivity, but where a diagnostic term was used by other authors it has been adopted.

## IDENTIFYING NEEDS

The DECP and Division of Clinical Psychology (DCP) have long argued that it is vital to consider children’s behaviour in the context of their life experiences to decide if these patterns of behaviour might, in fact, be adaptive responses to difficult and unsafe contexts. For this reason, psychologists have been advocating for a paradigm shift away from psychiatric diagnoses in a medical model to an approach that is multifactorial, considering not only biological but also social, environmental and psychological factors (e.g. DCP, 2013). This is exemplified by Bronfenbrenner’s bioecological model, which includes consideration of the process-person-context-time (PPCT) (Bronfenbrenner & Morris, 2006), see Figure 1. This model captures the complexity of the interactive processes that take place across the many systems and social contexts in which the child develops over time. This approach indicates that links between social contexts and a child’s behaviour are complex and bi-directional and ensures that we adequately consider factors in the child’s immediate and wider environments as significant influences on their development.

Figure 1: Bronfenbrenner & Morris Bioecological Process-Person-Context-Time Model (2006). Figure based on diagram by Avramides (2020).



More recently the concept of neurodiversity has been used to highlight the idea that people experience and interact with the world around them in many ways; there is no one 'right' way of thinking, learning, and behaving. From a neurodiversity perspective, differences are not viewed as deficits and instead there is recognition that differences can vary depending on social and environmental factors. Again, this encourages a focus upon ways to support and understand individuals with these differences, beyond individual level considerations to include social and environmental adaptations.

## **WHY IS THERE A NEED FOR EVIDENCE-BASED GUIDANCE?**

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Whilst ADHD is a common developmental disorder, (Sayal et al., 2018) currently there is no definitive or consistent understanding of its causes, or defining features, and this can lead to controversy about whether the causes are social, biological or a combination of these. Furthermore, there is no clarity about the universal effectiveness of interventions. This is important because of the negative life outcomes that individuals may suffer as a consequence of poorly supported needs in earlier life.

ADHD often occurs alongside difficulties with learning, sleep and emotional regulation (Reale et al., 2017) and other neurodevelopmental differences such as autism (e.g. Antshel, K.M. & Russo, N., 2019). ADHD is associated with school exclusion (Parker et al., 2015), lower educational qualifications (Washbrook et al., 2013), academic difficulties (Bussing et al., 2016), and this profile of needs can be disruptive to individuals and the systems that they are part of, including their family life, classroom, school, and community (Craig et al., 2020; Walker-Noack et al., 2013). In the absence of effective interventions these difficulties can persist into adulthood, with increased risks of negative life outcomes, including substance abuse, mental health difficulties, and imprisonment (Secnik et al., 2005; Young et al., 2015). The consequences of these unmet needs has been estimated to cost UK society £100,000 per individual (Khong, 2014). Therefore, there is a need for early intervention to prevent adverse long-term outcomes

## **CONCERNS ABOUT EXISTING SUPPORT FOR CYP**

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The current NICE guidelines encourage practitioners to seek and incorporate the perspectives and feelings of CYP and their parents or carers into the management of difficulties. However, research has indicated that out of seven different treatment options, stimulant medication was the least favoured option by parents and carers but the most frequently used (Town et al., 2016). It may be the case that parents made a reluctant decision to accept medication as no other treatment options were available, or that the wishes of parents and carers were not fully incorporated into decision making about the management of difficulties. It also suggests that NICE guidelines are not being followed as closely as they should in many cases, possibly because of the dominance of the medical model, lack of consideration of alternatives or because the alternatives are either not available or had not been effective.

The NICE guidelines (1.5.13) also state that medication should only be offered if the child or young person's difficulties are causing a persistent significant impairment in at least one area after environmental modifications have been implemented and reviewed. However, some EPs report that medication is often offered as the first line of treatment for CYP with difficulties with attention, activity and impulsivity (Hill & Turner, 2016).

Between 1995 and 2015, the rate of prescriptions for ADHD medication increased by almost 800 per cent in the UK (Renoux et al., 2016). More recent figures from the Care Quality Commission (CQC), have shown that this trend continues with a year-on-year rise in the number of prescriptions for medication to treat ADHD (CQC, 2020). Concerns have been expressed about the side effects of these medications such as appetite suppression, insomnia, nausea and stunted growth alongside evidence suggesting that the long-term effectiveness of medication on key educational, vocational, and social outcomes remains uncertain (Posner et al., 2020).

When appropriate support is put in place in school settings, it can make a positive difference for those with difficulties with attention, activity and impulsivity (Du Paul, G. et al., 2012; Richardson et al., 2015). The following sections outline best practice guidance for EPs and educational staff who are involved in supporting CYP with these difficulties.

# What support can be offered in schools?

The 2015 Special Educational Needs and Disability (SEND) Code of Practice (CoP) (Department for Education, 2015) sets out statutory guidance on duties, policies and procedures relating to SEND. A key underlying principle of the CoP is that CYP and their families are involved in discussions and decisions about their individual support. The CoP guides us to consider several areas when planning for those with SEND including high-quality teaching and targeted provision. The CoP is clear that high-quality teaching, differentiated for individual pupils, is the first step in responding to pupils who have or may have SEND. Therefore, this should be the first priority when considering meeting the needs of individuals with attention and inhibition difficulties.

When CYP with differences with attention, activity and impulsivity have difficulties in school, despite high-quality teaching, the four-part graduated response should be applied – assess, plan, do, review (APDR). Families and CYP should be involved at every stage of this process. Good records should be kept at each stage of the graduated response. Support from outside professionals such as EPs may be helpful as Hill and Turner (2016) argue that EPs can play an important role in increasing the awareness of contextual factors in children’s behaviour and are well placed to support the development of individually tailored interventions across the appropriate systems and contexts of the child.

## ASSESS

Where CYP have difficulties with attention, activity and impulsivity the assessment could involve the steps outlined below.

Gather information from the CYP themselves.

Staff, with support from EPs if necessary, should consider how these difficulties impact the child or young person’s learning, social relationships in school and at home, and the consequences of those difficulties (e.g. detentions).

Relevant information should be gathered about the child or young person’s developmental history and living arrangements. This could include establishing whether there are any formal diagnoses, other SEN, family or environmental factors that need to be considered. The child or young person’s lifestyle including exercise, diet and sleep patterns should also be discussed.

Structured observations could be conducted across the school day to understand the context for the presentation of the difficulties. An example of an observation sheet is appended. This observation sheet can be used to obtain an objective assessment of behaviour, to see which day-to-day modifications work, and before and after any longer-term interventions.

Observations could be supplemented with the use of questionnaires such as the Strengths and Difficulties questionnaire (SDQ), the Motivation Assessment Scale or Behaviour Rating Inventory of Executive Function (BRIEF). Attention, as noted above is a complex activity and one of a range of skills which comprise executive functioning.

Gather information from all staff who know the CYP and parents and carers.

## PLAN

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Following a thorough, holistic assessment of a pupil's strengths and needs, provision can be planned. Evidence suggests that combining different types of interventions may be more effective than providing a single intervention (Moore et al., 2018) so it may be helpful to consider multiple strategies at the planning stage.

Strategies and interventions which can be used are identified below. They include modifications to the environment including the classroom and learning environment, improving the social and emotional climate within the setting, and dealing with unstructured times. Interventions focusing directly on the CYP and their families are also outlined including promoting physical activity, developing personal skills, using approaches based on Cognitive Behavioural Therapy (CBT), and simple behavioural interventions. Class teachers, with the support of special educational needs coordinators (SENCOs) and other appropriate professionals should formulate a plan.

## DO

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Class teachers are responsible for implementing and managing the agreed plan. Teachers may sometimes be supported by teaching assistants or specialist staff but teachers will retain responsibility for the child or young person.

## REVIEW

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The quality and impact of the support and interventions on the pupil's progress should be evaluated, along with the views of the pupil and their parents or carers. This should feed back into the analysis of the pupil's needs. SENCOs, working with teachers, should revise the support considering the pupil's progress and development, deciding on any changes to the support and outcomes in consultation with the parent/carer and pupil.

A selection of environmental modifications and interventions which could be trialled are outlined overleaf. This list is not exhaustive but identifies some potential ideas in relation to key areas for CYP with attention, activity and impulsivity difficulties.

# Environmental modifications

## THE CLASSROOM ENVIRONMENT

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Many aspects of typical classrooms can exacerbate difficulties with attention, activity and impulsivity. However, there are a range of ways in which adaptations to the environment can help as outlined below.

### SEATING

- Seat the pupil close to the teacher to allow close monitoring and support which can be accessed discretely.
- Seat the pupil away from potential distractions such as windows or corridors.
- Seat the pupil near the front of the class to minimise visual distractions caused by other students.
- Give the student the option of working in a distraction free area where distractions are minimised.

### AIDS AND TOOLS CAN SUPPORT MOTIVATION AND CONCENTRATION

- Use of computers and other technology such as 'Talking Tins' to verbally record ideas.
- Use checklists as reminders for routines, for example, what needs to go into their school bag before school, how to prepare for the start of the lesson and what equipment they need.
- Timers (e.g. digital timers, sand timers) can help pupils to understand what is expected of them in certain time frames and help them to stay focused whilst working independently. The exact time frames that pupils should be given to work independently will depend on the individual's needs but will generally be shorter, relative to their peers. Rewards could be given when targets are reached, and these could be extended over time.
- Provide simple fidget tools for students which can occupy their hands but do not require too much attention, otherwise they may become a distraction. Soft putty, squeeze balls or Blu Tack may be good options.
- Seek advice from an occupational therapist regarding activities and equipment which could help the pupil to attend (massage, weighted blankets, wiggle chairs, stretching, push-ups in their chair or against a wall etc).
- Encourage the pupil to use self-calming techniques which could include 7-11 breathing for example.

## THE LEARNING ENVIRONMENT

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When staff can meet the needs of those with difficulties with attention, activity and impulsivity, they can thrive and show excitement and energy for many aspects of the curriculum. Conversely if these difficulties are not supported learners can lose confidence and become increasingly disengaged from the curriculum.

Pupils with difficulties with attention, impulsivity and activity may also have additional learning needs. Tasks should be accessible and pitched at an appropriate level where they are a challenge but not so difficult that the pupil becomes defeated and gives up. Support should be provided in line with the pupil's strengths and needs, for example, using writing frames if written work is a struggle. Where appropriate, targeted intervention should be provided for maths and literacy skills.

### ACTIVELY SEEK TO ENGAGE THE STUDENT THROUGHOUT THE LESSON

- Say the pupils name before speaking to them to ensure that they are attending to what you are saying.
- Ask the student questions and engage them in dialogue.
- Let them hand out books and other materials.
- Let the student run errands when necessary.
- Get them to participate in demonstrations as the teacher's assistant.
- Use a variety of modalities and active, hands-on teaching strategies and learning activities during both the input and activity stages of lessons. This could include acting out stories or talking out loud as they undertake an activity e.g. conducting an experiment.

### CREATE A PREDICTABLE SCHEDULE AT SCHOOL AND AT HOME

- Each morning explain to the pupil what will happen that day so that they know what to expect.
- Use visual prompts and visual timetables.
- Give warnings about upcoming transitions from one activity to another. For example, 'once we have written our practice sentences, we are going to move into science'.
- In secondary schools when pupils will be moving from one classroom to another, give a five-minute warning before the end of the lesson and check that the pupil has their timetable and knows where they are going.



## COMMUNICATE CLEAR RULES AND EXPECTATIONS POSITIVELY TO THE STUDENT.

Consistency of approach, both at home and at school is important.

- Tell the pupil what you would like them to do rather than what you do not want them to do (e.g. 'please walk' rather than 'do not run').
- Use agreed non-verbal signs to indicate when the pupil is behaving inappropriately.
- Offer the pupil two or three acceptable behaviour choices as alternative options for the problem behaviour.

## WORKING MEMORY SUPPORT

- Frequently repeat important information.
- Break instructions down into smaller steps, giving one or two steps at a time to minimise memory load.
- Support verbal explanations and instructions with visual or written information such as equipment and task checklists.
- Provide memory aids such as wall charts, personal dictionaries or number lines and explicitly teach pupils how to use them.

## USE TOOLS AND QUESTIONING TO HELP DEVELOP THE PUPIL'S THINKING AND LEARNING SKILLS, KNOWN AS METACOGNITIVE SKILLS (INCLUDING IDEAS FROM DEUTSCH & MOHAMMED (2010))

- When starting tasks:
  - Ask questions when beginning tasks such as: What do we have to do? Where will we start?
  - Model your planning when starting a task and encourage pupils to do the same. Explicitly label your processes and why it is important to make a plan, for example, 'if I forget what I've got to do next, then I can just go back to my plan'.
- During tasks:
  - Ask 'process questions' to help the pupil pay attention to their own thinking, for example, 'tell me what you did', 'why are you doing it that way?'
  - Ask the pupil 'how is this similar to something you have done before?' and help make links for the pupil if they are struggling themselves.
  - Encourage the pupil (or the whole class) to use traffic light cards to show you how they are getting on with a task.
- When finishing tasks:
  - Challenge pupils and ask them to justify their answers, for example, 'are you sure that's right?', 'How did you know?'
  - Ask pupils what they liked and disliked about the task, what they learnt and what parts were easy and difficult.

## THE SOCIAL AND EMOTIONAL CLIMATE

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The social and emotional climate of school and the classroom is important for all CYP and is especially significant for those with difficulties with attention, activity and impulsivity because they are at an increased risk of experiencing social and emotional difficulties in both the school and family context as noted above.

### POSITIVE TEACHER-PUPIL RELATIONSHIPS

- There is a wealth of evidence which supports the importance of positive teacher-pupil relationships in the classroom. Staff should take an active approach to developing these relationships early on when getting to know pupils.
- Engage in regular interactions and dialogue with pupils in a way which expresses empathy and positive regard.
- Take time to get to know a pupil and engage in 'problem-free talk', for example, exploring their interests, what they did at the weekend. Humour (non-sarcastic) can also help.
- Regular praise and positive affirmations can work well to support the development of positive relationships with pupils.
- Feeding back positive comments to parents via phone calls or post cards can also be a great way to support the development of positive relationships.
- Agree consequences with pupil for inappropriate behaviour.

### PRAISE

- Frequently praise those children who are following rules and expectations.
- Use praise strategically: Students with these difficulties deserve praise for achieving seemingly simple things that other children can do without much effort, for example, staying in their seat or putting up their hand before speaking. Positive attention is really valuable so do your best to 'catch them being good'.
- Be specific about what you are praising, describing the behaviour in concrete terms.

### UNDERSTANDING

- Living with these difficulties can be distressing and associated with rapid changes of mood. It can be exhausting feeling a bit confused, not being able to inhibit your responses and constantly getting into trouble. Teachers need compassion for the lived experiences of those who have these difficulties.

## PEER ROLE-MODELS AND MENTORS

- Seat pupils near to students who are better able to follow classroom routines and expectations.
- Paired work rather than group work may be more suitable for students with these difficulties as group situations may prove overwhelming.
- Where group work takes place, provide structure for the students' interactions.

## MANAGING UNSTRUCTURED TIMES

Unstructured times such as break and lunchtimes can pose a serious challenge for CYP with difficulties with attention, activity and impulsivity as they can struggle to navigate the social and emotional demands of the playground and control their impulses. Settling down to learn following unstructured times can also prove challenging.

Promote physical activity at break times by providing equipment to facilitate this, e.g. sports equipment, climbing frames, obstacle courses as well as structured activities.

Use a buddy approach/peer support programme. Older children can be great at taking up these roles.

Set aside a few minutes following each break and lunchtime for calming activities. When difficulties have arisen, CYP are likely to need an increased amount of time for calming activities to help them regulate and get ready to engage in the classroom.

## MANAGING HYPERACTIVITY/IMPULSIVITY

Many of the modifications suggested above should help to reduce difficulties with attention. Specific modifications for reducing hyperactivity and impulsivity are shown below.

Encourage the pupil to write down their thoughts and ideas to show the teacher later if they are keen to share their ideas with the teacher but are struggling not to call out.

If a pupil calls out, don't address them personally. Instead address the problem in general terms. You might say: 'It makes things difficult when people call out and interrupt when I am talking.'

Teach the pupil the strategy to stop and count to 10 before acting or speaking.

Allow periods of physical activity, or use of equipment such as trampettes or wobble chairs (further information on this is outlined in the next section).

Encourage the pupil to take notes, draw or doodle during teacher input if this helps them to focus.

Play games such as musical statues or Simon Says to learn to control impulsivity (or other age-appropriate activities).

Break down tasks into steps and cross off each step before moving to next. This can help to reduce the urge to action steps of a task before being ready.

# Pupil focused and family interventions

## PHYSICAL ACTIVITY

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Physical activity has been consistently shown to enhance cognitive performance. For example, a recent study demonstrated statistically significant benefits to executive functions including working memory and inhibition ten minutes after physical activity compared to ten minutes before (Kingston et al., 2020). Positive outcomes have also been found in research exploring the relationship between physical activity and impact measures for those with ADHD. For example, a systematic review of 26 studies found that in general, physical activity enhanced cognitive and behavioural outcomes such as attention and hyperactivity (Song et al., 2016).

Physical activity could be increased by timetabling short periods of physical activity throughout the day. This could be on an individual or whole-class basis as physical activity has been shown to benefit all children. As outlined above, physical activity could also be encouraged at break and lunch times. It is important that opportunities for physical activity are not used as a sanction or used as an opportunity to catch up on work from other areas of the curriculum.

## SLEEP AND DIET

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Advice could be sought from relevant professionals (e.g. school nurses, community paediatricians) to address these aspects of the pupil's lifestyle, if appropriate.

## PERSONAL SKILL DEVELOPMENT AND COGNITIVE BEHAVIOURAL THERAPY (CBT)

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The current NICE guidelines suggest that CYP with ADHD can benefit from support which addresses the following areas:

Social skills with peers

Problem-solving

Self-control

Active listening skills

Dealing with and expressing feelings.

Supporting skill development is a longer-term strategy which addresses one of the concerns related to medication: that the benefits of medication stop as soon as a person stops taking it.

CBT can be useful for helping develop skills in these areas (e.g. Phifer, 2017) and are recommended in the NICE guidelines as a supplementary intervention for those who do not see the expected benefits of medication. The CBT approach is based on exploring the links between thoughts, feelings and behaviour and it focuses upon re-structuring thoughts to promote more adaptive emotional and behavioural reactions (Stallard, 2002). Whilst more intensive CBT must be delivered by qualified professionals, some lower intensity programmes and resources based on a CBT approach can be delivered in schools by staff. EPs can offer support to staff with this if needed.

## SIMPLE BEHAVIOURAL INTERVENTIONS

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Research supports the use of behavioural interventions for those with ADHD (e.g. Moore et al., 2018). In general, priority should be given to reinforcing positive behaviour rather than sanctioning inappropriate behaviour. Target charts can be a helpful way of establishing and positively reinforcing expected behaviour. The targets that are set will depend on the individual and should be agreed in conjunction with the child or young person. For example, targets could include certain periods of time on task or making use of a memory aid that has been provided. The rewards for meeting targets should also be agreed with pupils to ensure that they are meaningful and should be given immediately. When pupils meet their targets, their positive progress should be shared with parents and carers. However, it should be noted that whilst there is some evidence to support the positive impact of behavioural interventions, the use of reward systems has been criticised for its undermining impact on intrinsic motivation (Deci, Koestner & Ryan, 2001). Therefore, caution should be exercised when implementing such an approach and the impact on the child or young person should be carefully considered when reviewing interventions as part of the graduated response.

## PARENT TRAINING PROGRAMMES

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The DECP commissioned a study to evaluate a parent training programme (Fitzer et al., 2014) based on Glasser's (1999) 'The Nurtured Heart Approach'. This programme was chosen because it was not built around a diagnostic label. This eight-week intervention comprised four half day workshops led by EPs who were trained to deliver this approach. The study identified four factors which contributed to successful engagement by parents and could be used as the basis for other parent training programmes. The four factors are support from family and friends, voluntary participation, the home environment and practical considerations for example where and when the intervention is delivered.

## CONCLUSION

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Whilst the reported prevalence of CYP who have difficulties with attention, activity and impulsivity is relatively low, the consequences for these individuals can be serious and can last into adulthood. Therefore, it is important that these difficulties are recognised early and supported in a systematic way through an assess, plan, do and review process.

Developing a personalised plan for each learner following a holistic assessment of their strengths and needs, developmental history and environmental factors is key. Teachers, families and the CYP themselves should be involved in developing and monitoring the plan, making appropriate adjustments over time based on the evidence.

EPs are uniquely placed to consider support for CYP who present with these difficulties by helping with the assessment, planning and implementation of appropriate interventions, reviewing and fine tuning the support in the light of the success of the interventions.

The modifications and interventions outlined in this guidance can be implemented prior to, alongside or instead of medication, in line with NICE guidelines thus providing safe and cost-effective solutions for CYP, families and schools.

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# Appendix A: Observation Sheet

OBSERVATION SHEET														
Pupil name e.g John		Date 10.5.2021	Observer TA											
Context *	Time**	Behaviour (***)	1	2	3	4	5	6	7	8	9	10	Total	Consequences
Registration	8-8:05	Engaged/on task	/	/	/	/	/	/	/	/	/	/	8	
Teacher: GK		Calling out (or other impulsive behaviour)		/	/								2	J calmed down after being reminded of rules
		Left seat (or other movement)												
		Fidgeting												
		Distracting others												
		Pupil distracted (e.g. by noise outside class)												
English/literacy	9-9:05	Engaged/on task	/	/	/	/	/	/	/	/	/	/	7	
Teacher: AB		Calling out (or other impulsive behaviour)	/										1	Calling out ignored
		Left seat (or other movement)		/									1	J reminded of rules after leaving his seat. He sat calmly for short period
		Fidgeting												
		Distracting others						/					1	J continued to be engaged after distracting other pupil
		Pupil distracted (e.g. by noise outside class)												
		Not prepared for lesson (e.g. no pen)												
Break	10-10:05	Appropriate behaviour	/	/	/					/	/	/	3	
		Intruding on others' games/play	/	/	/								3	
		Not following rules			/	/	/						4	J calmed down after being reminded of rules
Science	1-1:05	Engaged/on task	/	/	/	/	/	/	/	/	/	/	5	
Teacher: LM		Calling out (or other impulsive behaviour)	/										1	
		Left seat (or other movement)												
		Fidgeting												
		Distracting others												
		Pupil distracted (e.g. by noise outside class)		/	/	/	/						4	J calmed down after being moved to another seat
PE	2-2:05	Appropriate behaviour/following instructions	/	/	/	/	/	/	/	/	/	/	10	
Teacher: RS		Not following rules/instructions												
		Distracting others												
Prepare to leave	3-3:05	Engaged/on task					/	/	/	/	/	/	5	
Teacher: GK		Calling out (or other impulsive behaviour)												
		Not following rules/instructions	/	/	/	/							5	Given a warning
* Choose a mix of contexts which include structured and unstructured activities at different times of the day, with activities pupil likes/does not like														
** Over a 5 minute period, observe for 20 seconds then record activity for 10 seconds. Record 10 observations in each 5 min slot (2 per minute)														
*** Have list of inappropriate behaviours as relevant for that CYP in that context														
Summary												%		
Total appropriate behaviour												63		
Total inappropriate behaviour												37		



## REFERENCES

- Antshel, K.M. & Russo, N. (2019). Autism Spectrum Disorders and ADHD: Overlapping phenomenology, diagnostic issues, and treatment considerations. *Curr Psychiatry Rep* 21, 34 (2019). <https://doi.org/10.1007/s11920-019-1020-5>
- Avramides, K., (2020). Retrieved from [https://discovery.ucl.ac.uk/id/eprint/10132761/1/Avramides\\_K%20-%20DEdPsy%20thesis%20-%20final.pdf](https://discovery.ucl.ac.uk/id/eprint/10132761/1/Avramides_K%20-%20DEdPsy%20thesis%20-%20final.pdf)
- Avramides, K. (2021). *Bridging research and educational psychology practice on restricted and repetitive behaviours and interests in autism*. Doctoral thesis (D.Ed.Psy), UCL (University College London).
- Bronfenbrenner, U. & Morris, P.A. (2006). The bioecological model of human development. In W. Damon (Series Ed.) & R.M. Lerner (Vol. Ed.), *Handbook of child psychology: Theoretical models of human development*, (pp.793–828). New York: Wiley.
- Bussing, R., Koro-Ljungberg, M., Gagnon, J.C. et al. (2016). Feasibility of school-based ADHD interventions. *Journal of Attention Disorders*, 20(5), 400–413.
- Care Quality Commission (2020). *The safer management of controlled drugs: Annual update 2019*. (Online). Available at: [www.cqc.org.uk/sites/default/files/The\\_safer\\_management\\_of\\_controlled\\_drugs\\_Annual\\_update\\_2019.pdf](http://www.cqc.org.uk/sites/default/files/The_safer_management_of_controlled_drugs_Annual_update_2019.pdf) (last accessed 03.03.2021).
- Craig, F., Savino, R., FaniZZa, I. et al. (2020). A systematic review of coping strategies in parents of children with attention deficit hyperactivity disorder (ADHD). *Research in developmental disabilities*, 98, 103571, 1–13.
- Deci, E.L., Koestner, R. & Ryan, R.M. (2001). Extrinsic rewards and intrinsic motivation in education: Reconsidered once again. *Review of Educational Research*, 71(1), 1–27.
- Deutsch, R. & Mohammed, M. (2010). *Cognitive Abilities Profile*. UK: Real Group.
- Division of Clinical Psychology (2013). *Classification of behaviour and experience in relation to functional psychiatric diagnoses: Time for a paradigm shift*. DCP Position Paper British Psychological Society.
- DuPaul, G.J., Eckert, T.L. & Vilaro, B. (2012). The effects of school-based interventions for attention deficit hyperactivity disorder: A meta-analysis 1996–2010. *School psychology review*, 41(4), 387–412.
- Department for Education (2015). *Special Educational Needs and Disability Code of Practice: 0 to 25 years*. (Online). Available at: [www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/398815/SEND\\_Code\\_of\\_Practice\\_January\\_2015.pdf](http://www.gov.uk/government/uploads/system/uploads/attachment_data/file/398815/SEND_Code_of_Practice_January_2015.pdf) (Last accessed 03.03.2021).
- First, M.B., Gaebel, W., Maj, M. et al. (2021). An organization and category level comparison of diagnostic requirements for mental disorders in ICD-11 and DSM-5. *World Psychiatry*, 20(1), 34–51.
- Fitzer, M., Gillum J. & Whitehead, J. (2014). *Delivering and evaluating a programme to support parents of children with inattentive, impulsive and hyperactive behaviours*. Unpublished paper.
- Glasser, H. & Easley, J. (1999). *Transforming the difficult child: The nurtured heart approach*. Tucson, Az: Worth Publishing.
- Hill, V. & Turner, H. (2016). Educational psychologists' perspectives on the medicalisation of childhood behaviour: A focus on Attention Deficit Hyperactive Disorder (ADHD). *Educational and Child Psychology*, 33(2), 12–29.
- Kingston U., Adamakis, M. & Costa J. (2020). Acute effects of physical education, structured play, and unstructured play in children's executive functions in primary school. *Journal of Physical Education and Sport*, 20(6), 3260–3266.
- Khong, B. (2014). *The lifetime costs of attention deficit hyperactivity disorder (ADHD)*. London: Centre for Mental Health. Retrieved from [www.centreformentalhealth.org.uk/Handlers/Download.ashx?IDMF=29609a18-3d7d-4fda-a314-e79265bc84b2](http://www.centreformentalhealth.org.uk/Handlers/Download.ashx?IDMF=29609a18-3d7d-4fda-a314-e79265bc84b2)
- Moore, D.A., Russell, A.E., Matthews, J. et al. (2018). School-based Interventions for Attention-deficit/hyperactivity Disorder: A systematic review with multiple synthesis methods. *Review of Education*, 6(3), 209–263.
- National Institute for Health and Care Excellence (NICE) (2019). *Attention deficit hyperactivity disorder: Diagnosis and management*.
- Parker, C., Whear, R., Koumounne, O.C. et al. (2015). School exclusion in children with psychiatric disorder or impairing psychopathology: A systematic review. *Emotional and Behavioural Difficulties*, 20(3), 229–251.
- Phifer, L., Crowder A., Elsenratt T. & Hull, R. (2017). *CBT Toolbox for Children and Adolescents*.
- Posner, J., Polanczyk, G.V. & Sonuga-Barke, E. (2020). Attention-deficit hyperactivity disorder. *Lancet*, 395, 450–462.
- Reale, L., Bartoli, B., Cartabia, M. et al. (2017). Comorbidity prevalence and treatment outcome in children and adolescents with ADHD. *European Child & Adolescent Psychiatry*, 26(12), 1443–1457.
- Renoux, C., Shin, J., Dell-Aniello, S. et al. (2016). Prescribing trends of attention-deficit hyperactivity disorder (ADHD) medications in UK primary care, 1995–2015. *British Journal of Clinical Pharmacology*, 82(3), 858–868.
- Richardson, M. et al. (2015). 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.
- Secnik, K., Swensen A. & Lage M.J. (2005). Comorbidities and costs of adult patients diagnosed with attention-deficit hyperactivity disorder. *Pharmaco Economics*, 23, 93–102.
- Song, M., Lauseng, D., Lee, S. et al. (2016). Enhanced physical activity improves selected outcomes in children with ADHD: Systematic review. *Western Journal of Nursing Research*, 38(9), 1155–1184.
- Stallard, P. (2002). *Think good, feel good*. Sussex: John Wiley & Sons.
- Timimi, S. (2017). Non-diagnostic based approaches to helping children who could be labelled ADHD and their families. *International Journal of Qualitative Studies on Health and Well-Being*, 12(sup1), 1298270.
- Town, R., Hayes, D., Lemoniatis, E. et al. (2016). Understanding the most important treatment FAQs for young people with ADHD and their families as part of the development of a decision aid for ADHD. (Online). Available at: <http://implementingthrive.org/wp-content/uploads/2016/07/Understanding-the-most-important-treatment-FAQs-for-young-people-with-ADHD.pdf> (last accessed 03.03.2021).
- Walker-Noack, L., Corkum, P., Elik, N. & Fearon, I. (2013). Youth perceptions of attention-deficit/hyperactivity disorder and barriers to treatment. *Canadian Journal of School Psychology*, 28(2), 193–218.
- Washbrook, E., Propper, C. & Sayal, K. (2013). Pre-school hyperactivity/attention problems and educational outcomes in adolescence: Prospective longitudinal study. *The British Journal of Psychiatry*, 203(4), 265–271.



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