

An introduction to Attention Deficit Hyperactivity Disorder (ADHD)

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Educational Psychology

- The practice of applying psychological theories and ideas to the difficulties that can arise for pupils, teachers, families and schools
- Support young people's learning, development, and emotional wellbeing from age 0-25
- Consultation, assessment, training, intervention
- Traded service through Cognus with some core services provided by the London Borough of Sutton

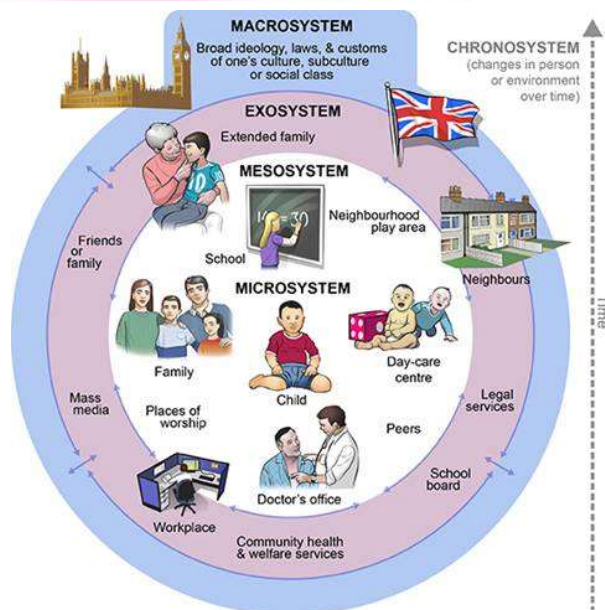
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Session objectives

- To increase knowledge of ADHD
- To have a better understanding of how it feels to be a child/young person with ADHD
- To share the most up to date research and understanding about ADHD
- To share strategies that can be used to support pupils with ADHD at home and in school

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Holistic approach



Source: <https://fosteringandadoption.rip.org.uk/topics/child-development/>

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What do you know about ADHD already?



What do you think of when ADHD is mentioned?
Put in the chat

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What is ADHD?

- ADHD is a common, lifelong, neurodevelopmental disorder that affects a person's ability to focus their attention, regulate activity levels and control their impulses.
- NHS England estimates 3-5% of adolescents meet the diagnostic criteria.
- It is not known why some people have ADHD however it is likely due to a combination of genes and environmental factors.

Co-morbidity with:

- Sleep disorders (50-60%)
- Anxiety/depression (25%)
- ODD (35-45%)
- Dyslexia/literacy difficulties (25-40%)
- Speech and Language difficulties (20-40%)
- Substance misuse (2-5x increase)...

ADHD affects
young people in
different ways.

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ADHD is characterised by

Inattention



Impulsivity



Hyperactivity



Exactly how the disorder manifests depends on the subtype...

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Inattention



Difficulty in **sustaining concentration** due to being highly distractible

Difficulty **staying on task** long enough to take on board and register what needs to be learnt

Difficulty **filtering distractions**, attending to work tasks attention to detail, careless mistakes

Short term memory **processing problems**, does not follow through with tasks,

Difficulty in **sustaining mental effort** to a task within their capability and often fails to complete

Can seem **oblivious** and is often day-dreaming

Poor organisation of self, tasks, and activities

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Hyperactivity

Often **fidgets** with hands and feet
Often **leaves seat** when expected to remain seated
Often **runs about or climbs** excessively in inappropriate situations
Difficulty in engaging in activities **quietly**
Could be described as '**always on the go**' as if driven by a motor
Often **talks excessively**



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Impulsivity

Acting without thinking of the possible consequences of their actions

No sense of fear: children with ADHD can seek attention and acceptance and be spurred on to dangerous acts for peer approval.



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Subtypes of ADHD

Predominantly inattentive subtype

- Careless mistakes, difficulty sustaining attention, does not seem to listen, does not follow through on instructions / finish tasks, organisational difficulties, avoids engaging in tasks that require sustained mental effort, forgetful.

Predominantly hyperactive subtype

- Fidgety, leaves seat, often runs about, has difficulty playing or engaging in leisure activities quietly, 'on the go,' talks excessively, blurts out, has difficulty awaiting turn, has difficulty curbing immediate responses, interrupts or intrudes, spontaneous, may be aggressive to peers; may have difficulty making friends

Mixed subtype

- Show signs of both sets of symptoms and are described as having a mixed subtype.

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Diagnostic Criteria (DSM-V)

When does ADHD become a disorder?

Excessive: more than peers of the same age/sex

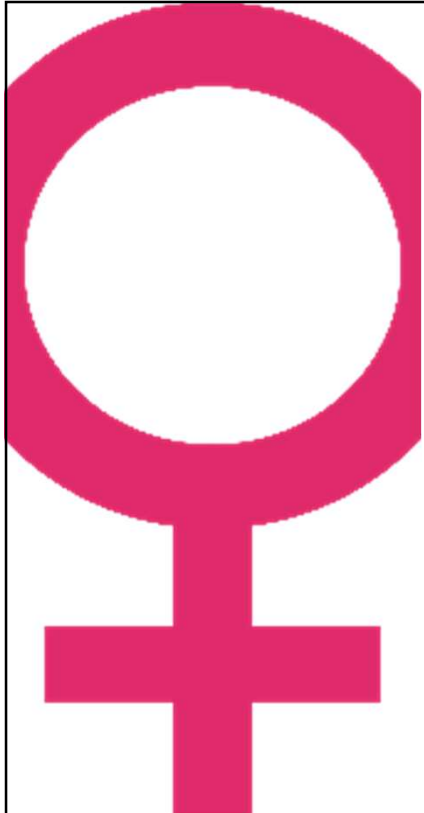
Long term: Onset before 12 years and evident for at least six months

Pervasive: in more than one setting/aspect of functioning

Clinical diagnosis by: Paediatrician, GP, or Child Psychiatrist



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Girls and ADHD

The ratio of boys to girls diagnosed with ADHD in childhood falls in the range of 2:1 to 10:1 ([Arnett et al., 2015](#)) with higher ratios seen in clinical compared to population samples. This difference highlights the **possibility that ADHD may be underdiagnosed in girls** in clinical practice ([Ramtekkar et al., 2010](#)).

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A common explanation for the observed sex differences in referral and diagnosis is that **girls with ADHD are more likely to present with predominantly inattentive symptoms**, rather than the more potentially disruptive hyperactive/impulsive symptoms, as well as **greater levels of internalising symptoms** such as anxiety and depression which might lead to alternative diagnoses ([Quinn, 2008](#)).

Sex differences in recognition of ADHD may in part also **reflect bias in the diagnostic criteria**, or the way they are applied. For example, if diagnostic criteria are based on a male presentation of the disorder then females may be less likely to meet full diagnostic criteria ([Hong et al., 2014](#)).



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What about the neuroscience of ADHD?

BRAIN NETWORKS IMPLICATED IN ADHD:

ATTENTION & COGNITIVE CONTROL NETWORKS



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Chemicals in the brain

- Symptoms of ADHD are associated with having lower levels of the brain chemicals dopamine and Noradrenaline in the brain.
- Dopamine carries signals between nerves in the brain and is linked to movement, sleep, mood, attention, learning, motivation, reward and cognition.
- Noradrenaline is linked to memory, alertness and learning.
- These chemicals promote feelings of enjoyment and reinforcement to motivate performance.

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ADHD – is it a new phenomenon?

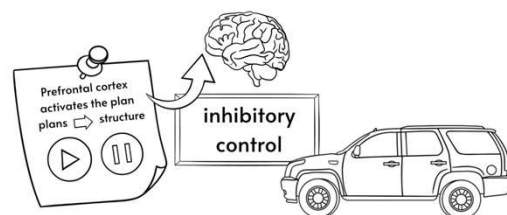
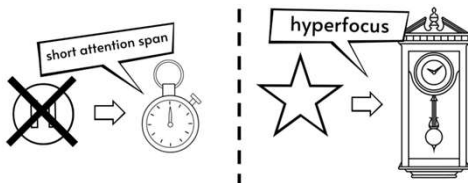
- References to ADHD-type symptoms have been found in medical literature for almost 100 years
- In the 1940s the term ‘minimal brain dysfunction’ was used to describe ADD-type disorders
- The term ADHD is officially given in 1980 by the American Psychiatric Association
- The behaviour has not changed, however our understanding of the condition has changed
- New terminology, theories on ADHD have evolved

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Current theories around ADHD

Inhibitory control

- Acts like the brain's **braking system**
- Thoughts / attention / motor movements and emotions
- Activates plans in the **prefrontal cortex** which the brain then uses to decide which plans needs to be activated and inhibited in order coordinate **thoughts and actions**



How that manifests

- When the braking system struggles to **inhibit distractions** it can be difficult for the brain to keep **focused** on one activity for a long time
- If an activity is particularly rewarding, the braking system can struggle to inhibit doing the activity leading to **hyperfocus**

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Executive Function

Executive function involves:

- Planning, organising and sequencing complex behaviours
- Ability to pay attention to several components at once
- Capacity for grasping the gist of a complex situation
- Resistance to distraction and interference
- Inhibition of inappropriate response tendencies
- Ability to sustain behavioural output for relatively prolonged periods
- Monitoring and analysing how things are going and adapting accordingly

What would poor executive function look like?



The conductor



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What does it feel like for young people with ADHD?

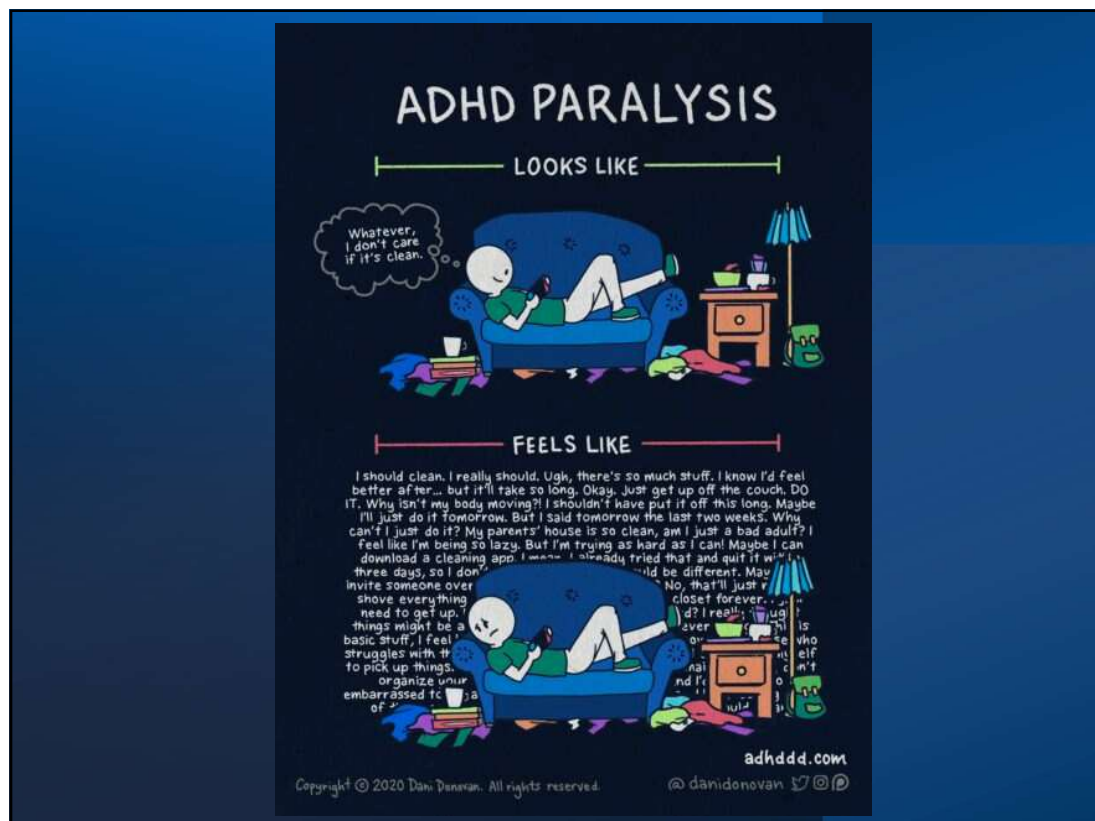
"I might as well not be in the lesson after the first ten minutes, I'm lost, I just can't follow what the teacher is saying" (17 year old A level student)

"I don't like it when the teacher has to keep stopping to deal with other peoples' questions or behaviour, I forget what she said before" (Year 8 student)

"I understand things better when the teacher uses pictures and diagrams to explain" (Year 6 student)

*"Sometimes I say things without thinking (like you're ***** stupid to a boy who needs a lot of help) but it's too late and then I get into trouble....I got an exclusion once for hitting that boy, he was annoying me, like really annoying me but I was the one who got the blame. It's not fair" (Year 9 student)*

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Impact of ADHD



Friendships

Difficulties with:

- Making and maintaining friendships
- Friendship choice – sensation seeking
- Peer acceptance
- Increased disinhibition
- Understanding social situations



Emotional wellbeing

Difficulties with:

- effective emotional regulation
- recognising emotions of others
- Emotional development and maturation.
- Self-esteem
- Family functioning

Learning & Living

Difficulties with:

- Academic attendance and attainment
- College or university adjustment
- Driving behaviours e.g. speeding
- Finding appropriate, suitable jobs
- Maintaining jobs
- Increased risk of substance abuse

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ADHD myths

ADHD is not a medical condition	ADHD is a medical disorder, not a condition of the child's will. A child with ADHD does not choose to misbehave.
ADHD is caused by bad parenting	ADHD is not caused by bad parenting. But parenting techniques can often improve some symptoms and make others worse.
ADHD is a life sentence.	Although ADHD symptoms usually continue into adulthood, the person learns ways to cope with the symptoms. People with ADHD have plenty of energy, are creative, and can often accomplish more than people who do not have the condition.
People with ADHD have a low IQ.	ADHD has nothing to do with a person's intellectual ability. Some highly intelligent people have ADHD.
ADHD is confirmed using psychostimulants	Children without ADHD respond to psychostimulants similarly to children with ADHD. A trial of medicine is not used to diagnose the condition.
Medicine for ADHD will make a person seem drugged.	Properly adjusted medicine for ADHD sharpens a person's focus and increases his or her ability to control behavior.
Children with ADHD will use their condition as an excuse for their behaviour.	Children with ADHD have to learn ways to deal with their symptoms (inattention, impulsivity, and hyperactivity) that cause them to have difficulties in life.
Children outgrow ADHD.	About 70 out of 100 children with ADHD continue to have symptoms during their teen years and about 50 out of 100 have symptoms into adulthood.
ADHD is diagnosed by a doctor in isolation.	A child may not always show symptoms of ADHD, especially in an unfamiliar setting. Evaluating a child from one office observation may result in failure to recognise or diagnose symptoms.

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Reclaiming Special Abilities

Individuals diagnosed with ADHD can be:	Very energetic	Hands on workers	Spontaneous
Creative	Entrepreneurial	Passionate	Resourceful
Quick at thinking	Humorous / Quick witted	Generators of lots of ideas	

This is especially important given the impact of ADHD on people's self-esteem


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Two sides of the same coin

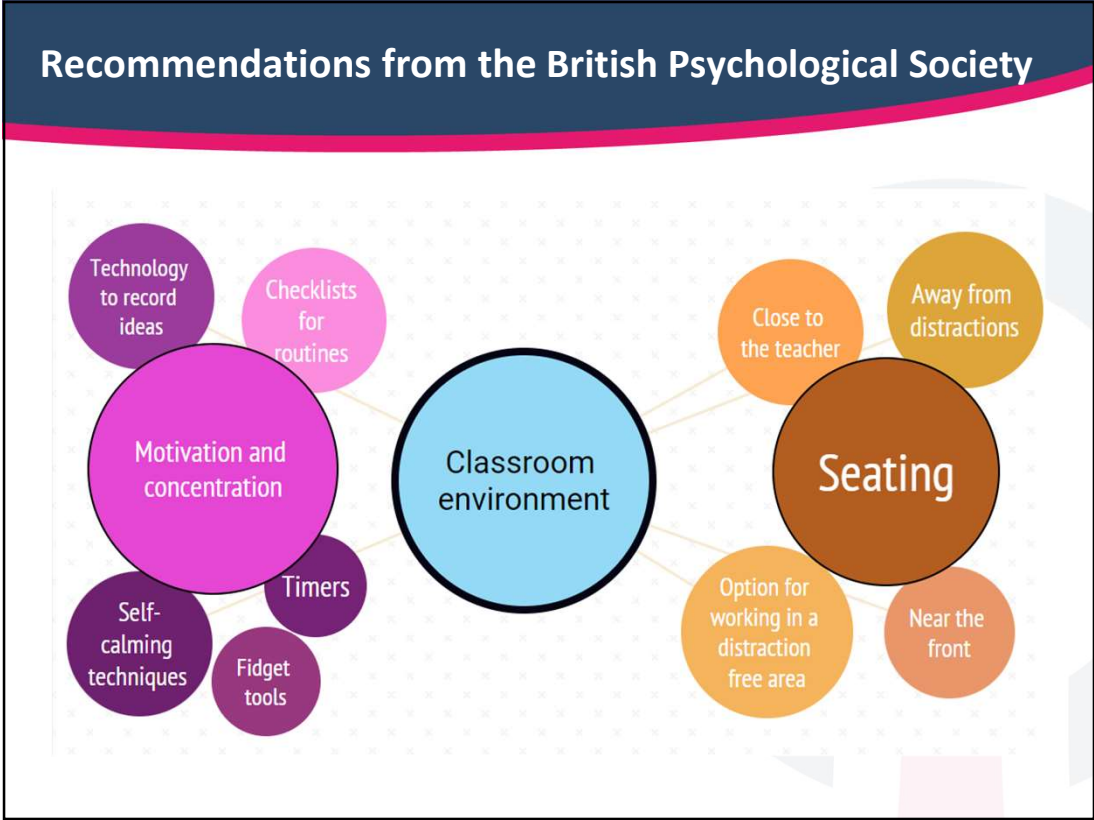
Need for a balanced perspective by understanding that some of the negative traits can be reframed as positive ones:

See if you can have a go at reframing these behaviours

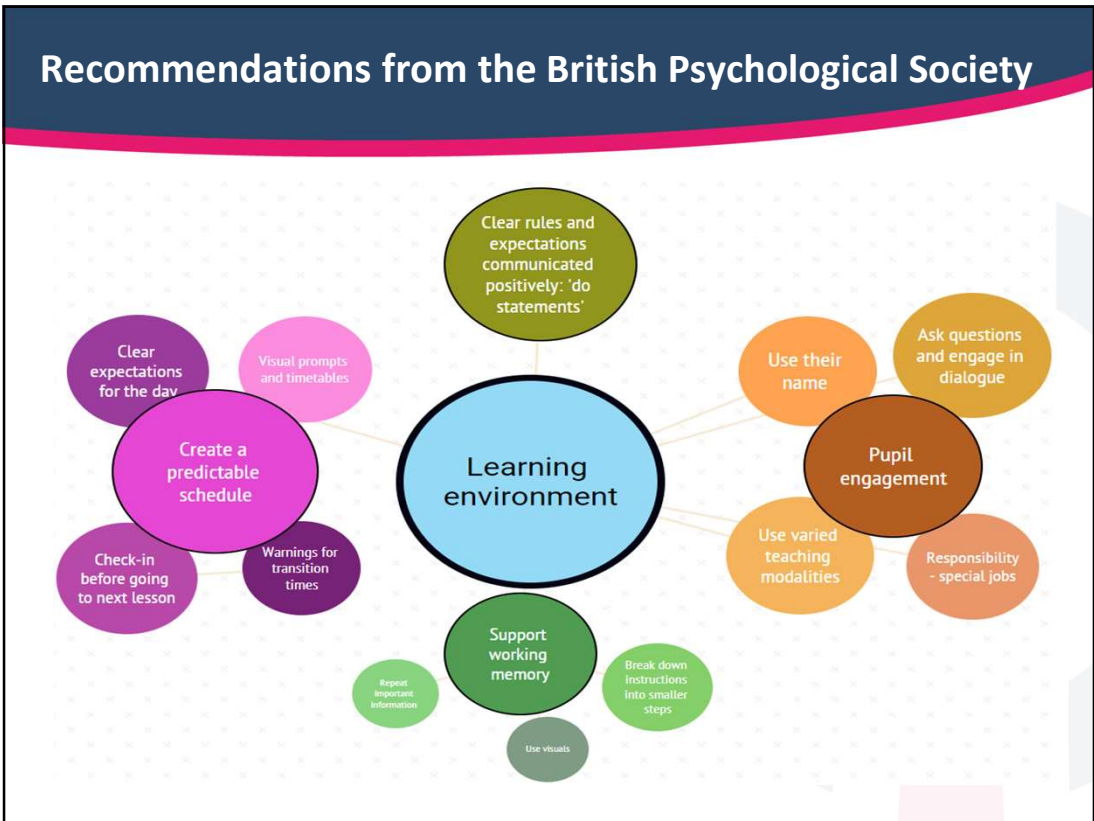
- Student doodling while the teacher is talking/giving instructions
- Student is fidgeting about, squirming on chair, rocking back and forth
- Student is blurting out, interrupting the person they are talking to



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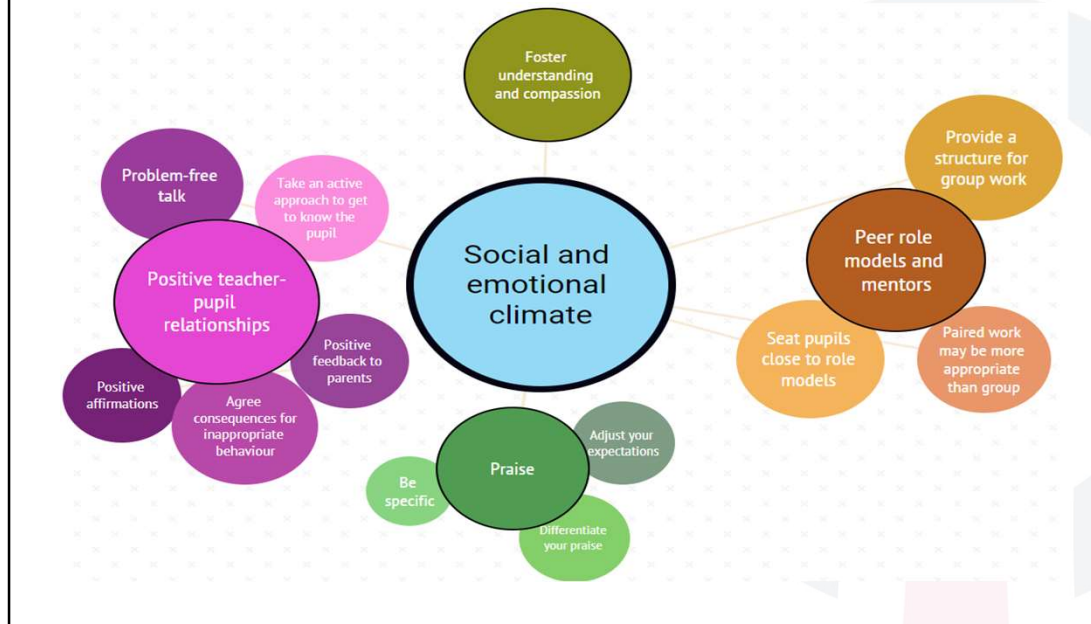


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Recommendations from the British Psychological Society



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Strategies for home

- Set up a workstation together in a part of the house where there are fewer distractions
- Avoid nagging! This is attention and a distraction!
- Encourage short quizzes at home to increase readiness for exams
- Use peer review and active learning – have your child share something they are learning about
- Help them create homework and revision timetables which include breaks
- Role play situations they are finding difficult to manage
- Practice and remind "stopping and thinking" before talking
- Build in rewards – make sure these are immediate
- Make explicit how their behaviours or words have impacted you
- Be careful with criticism or anything which could be perceived as criticism



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Final thoughts

“Success is achieved by developing our strengths, not by eliminating our weaknesses”

- Marilyn Vos Savant



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Any questions?



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Other Useful Information

Support Group

This group- provides advice, information and support to individuals and families and also promotes better awareness of ADHD

ADISS – ADHD Information services

www.addiss.co.uk

Websites

www.livingwithadhd.co.uk

www.mentalhealth.org.uk

www.chadd.org

www.lanc.org.uk

<https://www.youngminds.org.uk/young-person/mental-health-conditions/adhd-and-mental-health/>

Book

Fintan O'Regan. How to teach and manage children with ADHD (2002 LDA, Wisbech)