

ADHD: What to do?

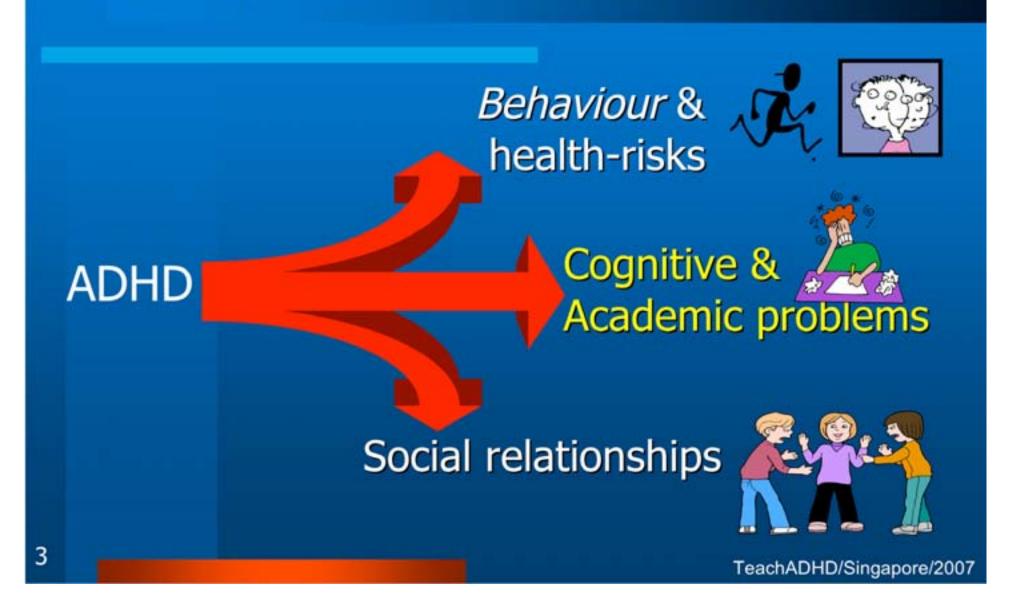
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What does ADHD mean for my child?

Your child is facing many tough challenges everyday at home & school & in the community.

Your child needs your love & support!

Untreated, ADHD causes major impairments







- Research indicates that children, adolescents, & adults with ADHD are likely to exhibit 3 types of interrelated cognitive problems
 - Executive Function
 - Working Memory
 - Speed of Processing Information

Executive function

- Behaviors that allow us to act in a goaldirected, flexible & intentional manner.
- These behaviors include:
- Goal setting
- Planning & Organization
- Keeping in mind (working memory)
- Shifting set
- Self-monitoring/checking

Executive function in daily life

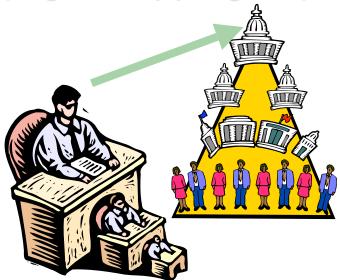
- Goal: get to this meeting
- Plan & Organize
 - Time
 - Dress
 - Supplies
 - Travel
 - Scheduling
 - Family
 - Meals
 - Initiate plan
- Keeping important information in mind (during the journey)
- Shifting set
 - Traffic problems
 - Call on mobile phone
- Self-monitoring
 - Check watch

What is executive function? Analogies for parents

Company CEO:

Longer-term
Overall planning

(e.g., shopping list)



Conductor:

Moment-to-moment Context-specific

(e.g., while shopping)



Executive function in daily life

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CEO

Conductor

Tannock/TeachADHD/Singapore/2007

Impact of EF weaknesses at home & school

Problems

- getting started on complex task
- holding instructions in mind while completing multi-step tasks
- multi-tasking: trying to organize & complete several tasks within a specified time
- monitoring errors
- monitoring how one's actions affect others in social context
- reasoning through social and academic problems

What is Working Memory?



A limited-capacity cognitive system that allows us to actively *keep critical information in mind*, despite ongoing distraction

- for 1 or 2 seconds!

current focus of the mind

Working memory & the cocktail party phenomenon (Conway, Cowan, Bunting, 2001)

Humans exhibit the ability to attend to only part of a noisy environment, yet a highly pertinent stimulus, can suddenly capture one's attention

In approx 33% individuals...
Those with **low working memory capacity**

Working memory is required in social interactions, in games & sports

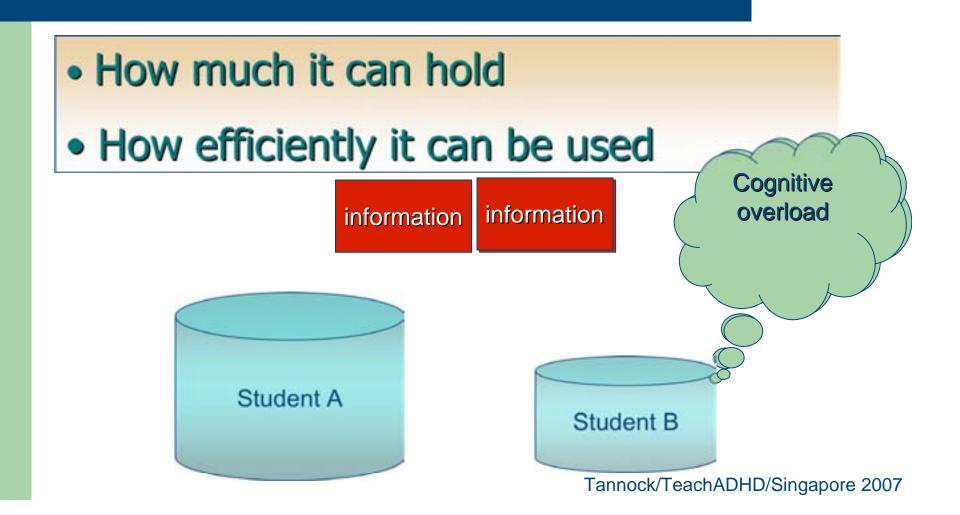
- Keeping track of a conversation
 - Who said what..to whom
 - who asked what...
- Keeping track of a game
 - Whose turn is next...
 - What cards have already gone...
 - What stage the game is at...





Two important aspects of working memory (Conway et al., Psychon Bull Rev,

12:769-786, 2005)



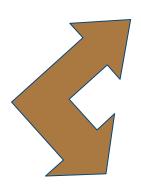
ADHD: Slow Processing Speed

Children with ADHD may move fast...

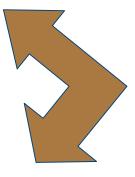
But research shows that children, adolescents, adults with ADHD are <u>slow & inconsistent</u> in <u>processing information</u>:

- Slower and more variable in responding
- •Slow and inaccurate (not fast & inaccurate!)

A Triad of Risk Factors



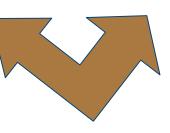
Inattention



Executive Function Impairments

Academic Impairments

Slow processing speed



What does ADHD mean for my family?

ADHD is a 'family affair' It can be stressful for everyone in the family – so help each other & seek help



ADHD: Impact on parents

- Parents of children with ADHD typically spend more time helping these children
 - get up and dressed in the morning
 - get ready for school in morning,
 - complete homework,
 - get ready for bed at night
- Not surprisingly, parents of children often report high levels of stress, frustration, & exhaustion
- ADHD can cause stress in a marriage



ADHD: impact on siblings

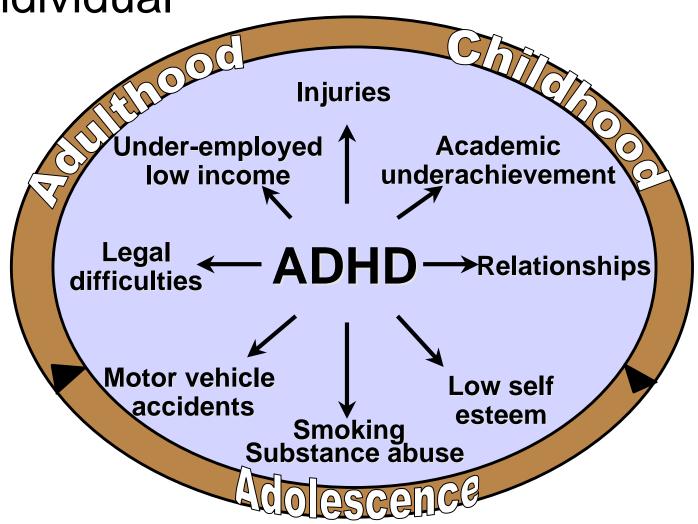
- Siblings may have a some similar but milder difficulties
 - □ [e.g.,Schachar et al, 2007, Am J Psychiatry]
- Sibling perspective: Qualitative study: Interview & diary data from 11 families identified sibs concerns: [Kendall, J. (1999) Family Process]

Core concern	Effects of Disruption	Coping Strategies
Disruption	Victimization Caretaking Sorrow & Loss	Retaliation Accommodation Avoidance

Why is it important to seek help for my child with ADHD?

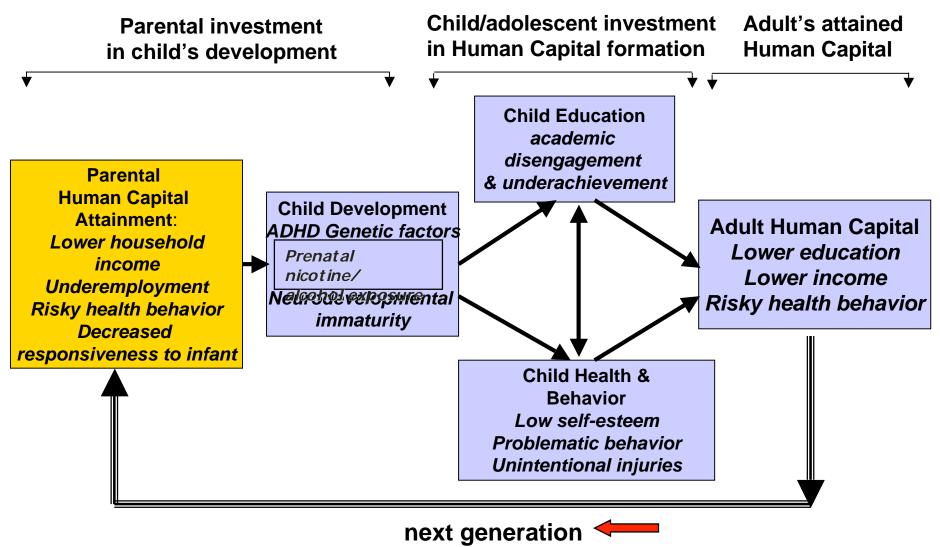
Left untreated, ADHD can cause impairments in virtually every aspect of life: academics, social, lifestyle, health, earnings

Life-span impairment associated with ADHD at the level of the individual



Intergenerational cycle of lower human capital formation in family with ADHD

(Tannock & Sagvolden in preparation)



Socioeconomics of untreated ADHD

- High costs of dropping out of school
 - lower incomes
- High costs to companies for "absenteeism & presenteeism" in adults with ADHD
- > Health costs are 2 times as high



ABC's of ADHD: The Facts...

- ADHD is a neurobiological disorder
- ADHD is common ~ 5% students
- ADHD persists into adulthood, but symptoms change with age
- ADHD is impairing -
 - Academic achievement & school functioning
 - □ Employment, income, & workplace functioning
 - □ Family functioning & social relationships



I think my child may have ADHD-What should I do?

- Ask your child's teacher how things are going at school
- If you are worried about your child's behaviour at home & school, you should take him to your family doctor
- Your family doctor will need detailed information about the behaviours that worry you
- You may be referred to a team of specialists to assess your child fully
- Inform the school so that you can work together in arranging a full assessment

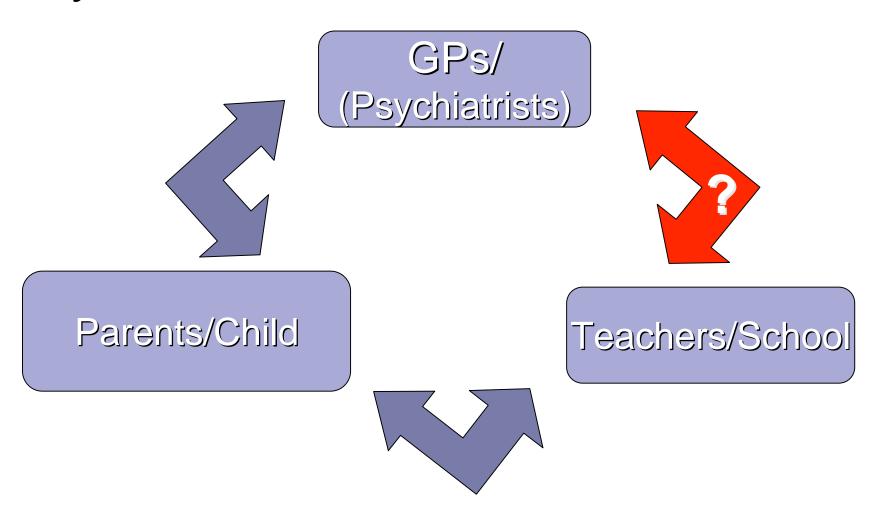
Coping with ADHD

What can parents and teachers do?

Home-School-Doctor Communication



Cycle of Communication





Child/Family Specific:

Parents

Teachers

GPs

Pediatricians

Psychiatrists (Child)



Agencies/Systems:

Daycare

Preschool

Neighborhood Watch

Community Health Care

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Coping with ADHD

- Understand ADHD
- Show your child that you understand
- Let them know that you are going to help him/her
- Let them know that you care

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What can parents & teachers do?

- Be informed about ADHD
 - □ Find out as much as you can about ADHD
 - ☐ Help your child understand ADHD (Pay Attention Alex –IMH)
- Seek help for your child
- Advocate for your child
 - □ Help your child begin to advocate for him/herself
- Work together (parents, teachers, doctors)
- Praise not punish
 - □ Ignore unwanted behavior
- Take care of yourself

Direct face-to-face communication





First establish eye contact;

then give instructions.,



Tips for Living & Working with Children with ADHD

repeat/rephrase, & wait

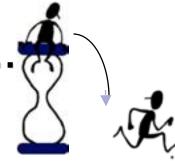
Have child repeat instructions:

"So, what must you do?"

"What is the rule?"

Use direct requests

"When... Then...







Speak short & sweet!

- Australian researchers showed that children with attention problems cannot hold and process accurately many words at a time!
 - □ 5-7 yr olds: no more than 7 words
 - ■8-10 yr olds: no more than 9-10 words
 - □ 11-12 yr olds: no more than about 12 words
- So use short sentences, chunk & repeat
- Use gestures, pictures, charts to help

Teach listening skills explicitly

Active listening: a 3-part skill
 STOP what you are doing
 LOOK at the speaker
 BE QUIET ("quiet hands and body")

■ Take turns (one thing at a time)

Active listening

Talking

Active listening

■ Teach rule: I talk, you listen You talk, I listen



Help child focus & be organized







Helping students with ADHD



- Routine
 - □ Homework Chart
 - □ Contact
- Location



- Timer / breaks
- Back in Backpack& Backback Back









Helping students with ADHD

Break into smaller units / shorter period







Help get started: Check understanding





Help with longer-term assignments





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Help with schoolwork:

Encouragement "I know this is hard, but I'm sure you can do it with just a little help. Let's start with one small part"



- Segment "Let's start with this part. Let's go over the directions (instructions). What is the first step?
- Positive Feedback "It's great that you did X! Now let's go on to do Y"



6 C's

Managing the dreaded homework!

- Count to 10 (Mornings versus evenings)
- Chunk it!
- Check understanding
- Circle unknown words
- Color critical words
- Count-down timer



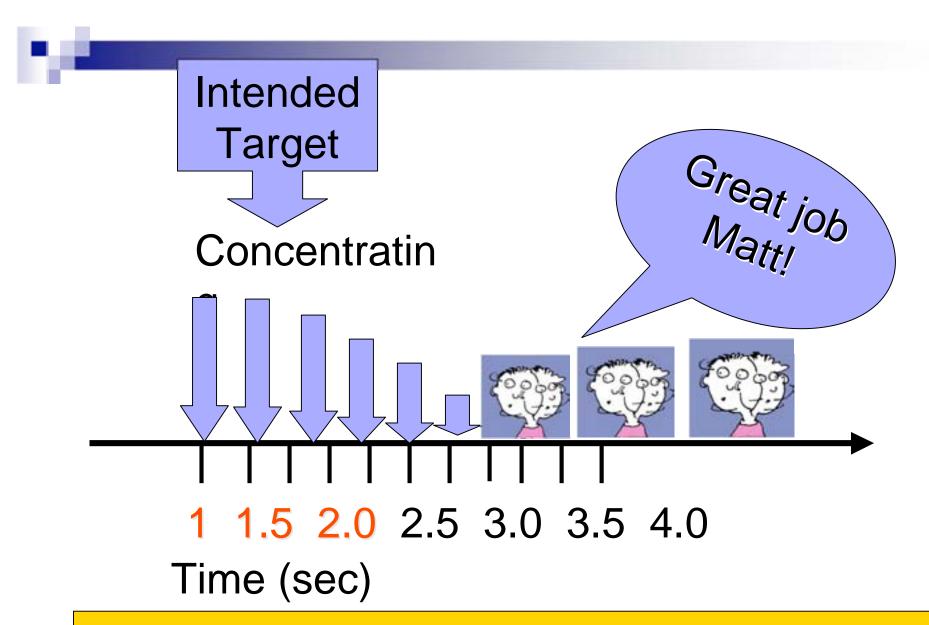


Colour Bright – Picture Right!

- Color code
- Bright colored folder for permission slips, notes, etc
- One (only 1) binder with dividers
- Picture prompts (uses for the camera!)
 - □ Step by step
 - □ Post it close
 - □ Prompt to use
 - □ Check it off!

Praise – or Prompt and praise?

Taking account of cognitive problems in ADHD

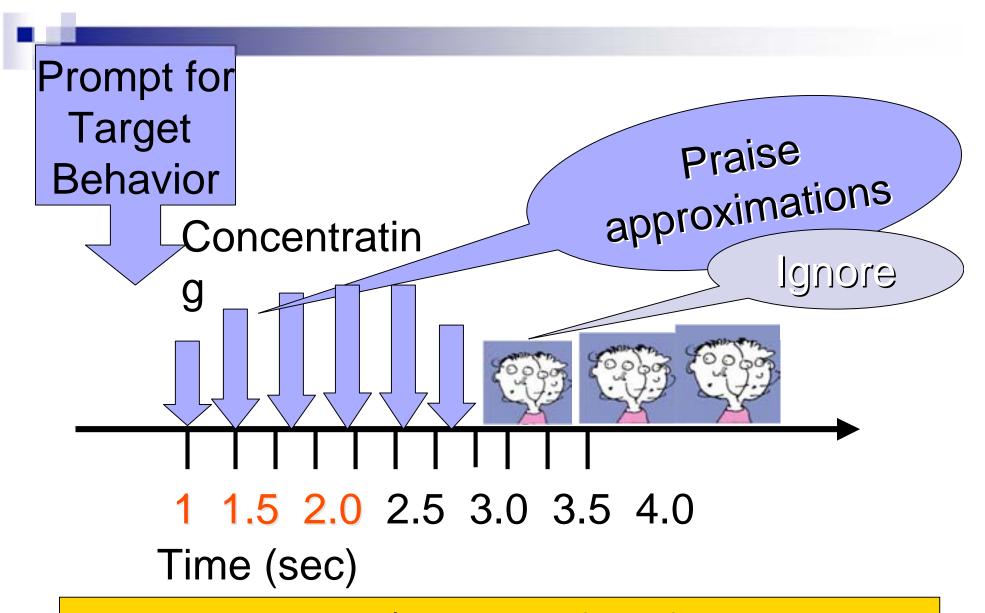


Consequential approaches may be limited by poor working memory capacity!



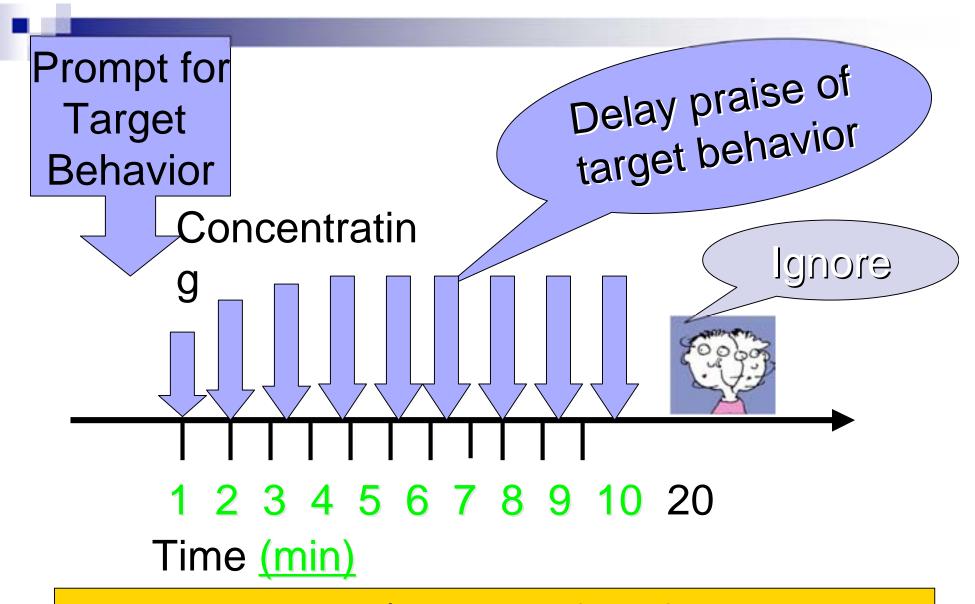
More effective: Antecedent prompt plus reinforcement

- Prompt student for desired behavior
 - □ Model, verbal prompt
 - Verbal prompt & student repeats
 - Gradually fade to non-verbal prompt & student selftalk
- Reinforce desired behavior
 - Initially praise approximations of desired behavior; ignore unwanted behavior
 - Then hold praise until desired behavior; ignore unwanted behavior
 - Gradually delay praise to extend duration of desired behavior; ignore unwanted behavior



Antecedent /at-point-of-performance approaches will be more effective

Tannock/Inattention/Psychologicadhs/2004/ce/s/mg20sbe/2000/7



Antecedent /at-point-of-performance approaches will be more effective

Tannock/Inattention/PsychologeadhSADVICES/MGapSBe220077



Prompt-Praise

Catch your child 'being good"

Recommend using prompt & praise several times throughout the day



Strategies for Compliance

Expectations:

- post rules
- state what you want, not what you don't want
- post chores be specific, what, when, who, how

Giving Instructions:

- be sure you have their undivided attention
- give one instruction at a time (chunk big jobs)
- tell them what you want them to do
- not want you want them to stop-be specific how, when, where -ask them to repeat it back to you check on them-praise them for compliance and effort



Establish House Rules

- Decide as a family the 3 most important rules in your home
- Post-them in most well-used room
 - □ Use photos, pictures to help younger children
- Remind all children in family of the rules
 - Particularly before an important event, or friends coming to play
- Praise children for following the rules
- Prompt & praise desired behavior
- Ignore other unwanted behavior



Managing Children in Public:

Before you go out.

- tell them how you expect them to behave
- review the rules
- establish a reward and consequence
- check their understanding and get agreement
 While You Are Out
 - give frequent feedback
 - reward or consequence

Celebrate!

even for small improvements... build on successes