

Understanding ADHD

11th November 2025

ADHD 





*In the world of ADHD,
ignorance remains public
enemy number one.*

Dr Ned Hallowell



Agenda

- What is ADHD?
- Key differences in the ADHD brain
 - Physical differences
 - Executive Functions
 - DMN and TPN
- Co-occurring conditions
- Personal experiences

- Q&A





What is ADHD?

What is ADHD?

Attention Deficit Hyperactivity Disorder

- Inattentive type
- Hyperactive / Impulsive type
- Combined type



What is ADHD? – Inattentive Type

- Displays poor listening skills.
- Loses and/or misplaces items needed to complete activities or tasks
- Sidetracked by external or unimportant stimuli.
- Forgets daily activities.
- Diminished attention span.
- Lacks ability to complete schoolwork and other assignments or to follow instructions.
- Avoids or is disinclined to begin homework or activities requiring concentration.
- Fails to focus on details and/or makes thoughtless mistakes in schoolwork or assignments.



What is ADHD? – Hyperactive/impulsive Type

- Squirms when seated or fidgets with feet hands.
- Marked restlessness that is difficult to control.
- Appears to be driven by a motor or is often on the go.
- Lacks ability to play and engage in leisure activities in a quiet manner.
- Incapable of staying seated in class.
- Overly talkative.
- Difficulty waiting in turn.
- Interrupts or intrudes into conversations and activities of others.
- Impulsively blurts out answers before questions completed.







Differences in the ADHD Brain

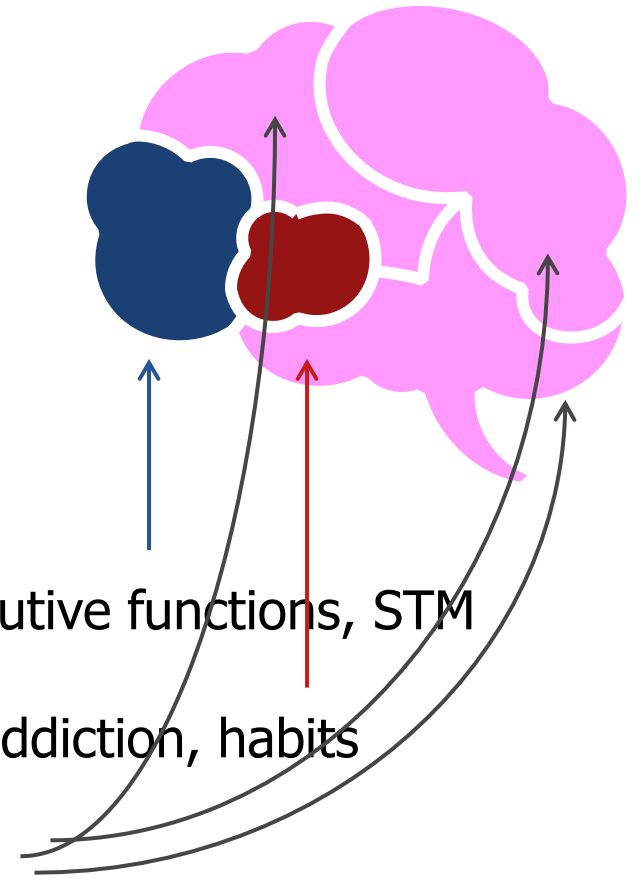
Differences in the ADHD Brain

Brain Chemistry – e.g. Dopamine

Brain development rate

Physical structure / wiring / networks

- Frontal Lobe – Working memory, Risk processing, Executive functions, STM
- Basal Ganglia – movement, decision making, reward, addiction, habits
- Limbic system – Behaviour, Emotions, Motivation, LTM





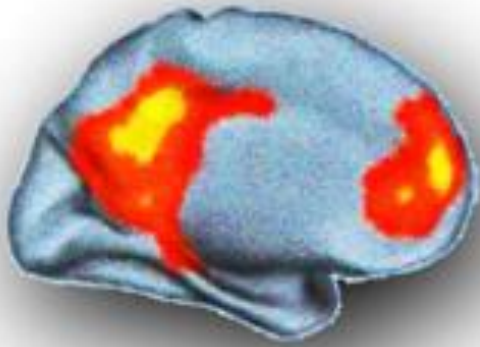
Having ADHD is like driving
a Ferrari with bicycle brakes

Dr Ned Hallowell

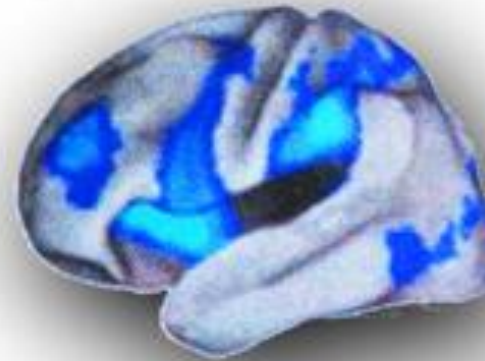


The DMN and TPN

Default Mode Network
more active at rest (task-negative)
mind wandering



Attention Network
more active during tasks (task-positive)
engaged attention



What ADHD can look like

Inattentive

Hyperactive

Impulsive

Overtalking

Oversharing

Forgetful

Lazy

Being late

Rude – butting in

Loud

Annoying

Clown / Joker

Restless

Not getting to the point

Naughty / inappropriate

Zones out

Poor concentration

Ignorant

Tiredness

Quiet

Shy



What ADHD feels like

Frustrating

Overthinking

Shameful

Overwhelming

Hard work

Stupid

Time wasting

Double edged sword

Chaotic

Physically exhausting

Mentally exhausting

Superpower or curse





Having ADHD is like trying
to climb to the top of a
mountain with a backpack
full of rocks.

Stephanie Sarkis, PhD



Advantages	Disadvantages
Can be meticulous on projects	Often disorganised with important projects
Can get a lot done in a short time	Bad sense of time
Appreciation of the unusual	Refusal to conform when in best interest
Dreamer, visionary	Easily bored
Honest, outspoken, blunt	Can hurt other people's feelings
Desire to be independent, own boss	Can find it difficult working in teams, relationships
Creative, lots of ideas	Trouble organising ideas and realising them
Energetic	Difficulty sitting still
Takes responsibility	Has trouble delegating
Good at making quick, important decisions	Can be impatient when others take their time





The People Who have ADHD

The people who have ADHD



Famous People with ADHD



Simone Biles



Nicky Campbell



Britney Spears



James Haskell



Michelle Carter



Jessie J



Ben Fogle



Justin Timberlake



Ant McPartlin



Johnny Vegas



James Watt



Charley Hull



Dave Grohl



Heston Blumenthal



Lewis Hamilton



Michael Phelps



Robbie Williams



Zoe Ball

Other important points

No 2 people are the same

Chronic

Affects many aspects of life

ADHD doesn't define a person

Highly heritable

Time shift

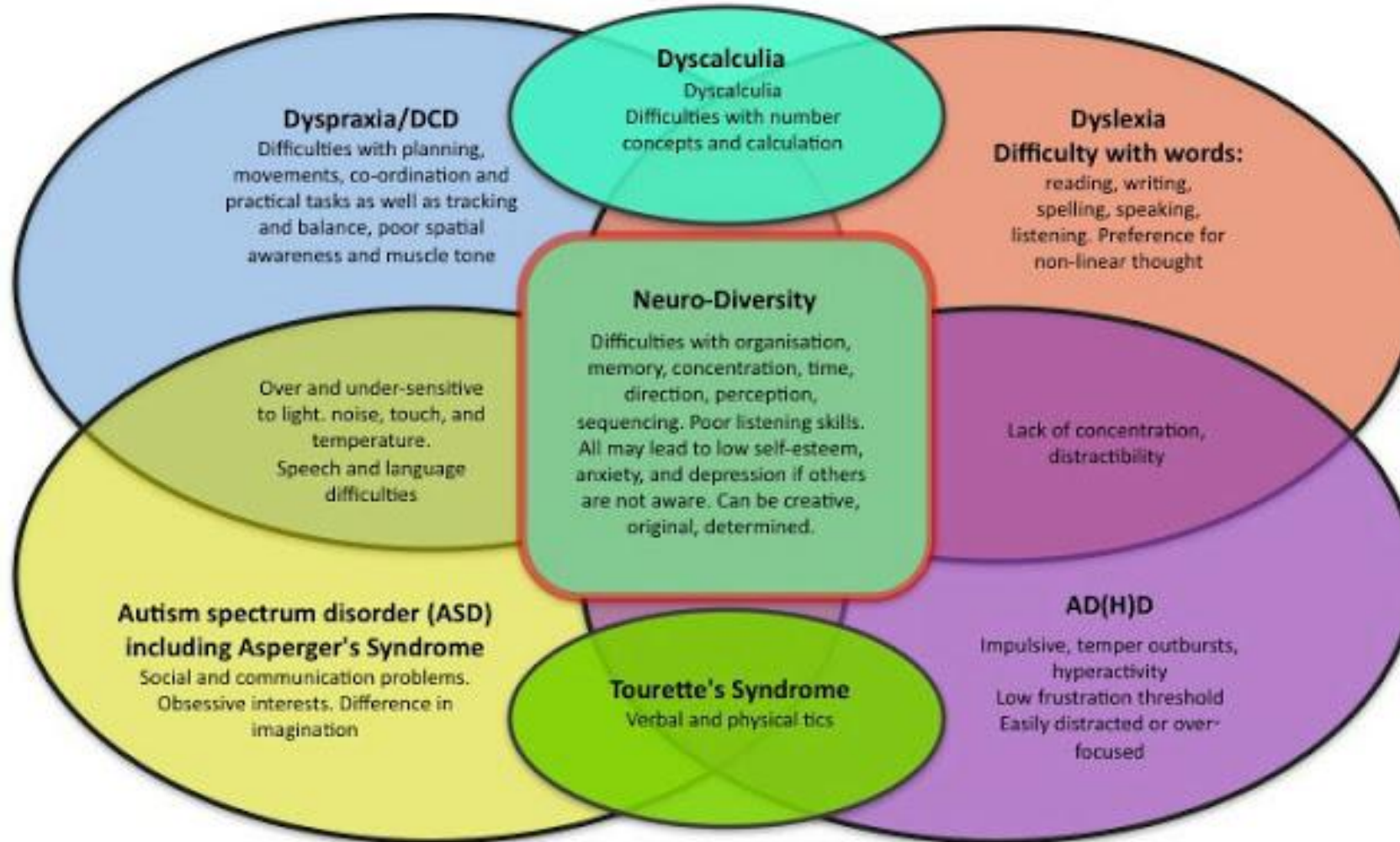
High Co-occurrence





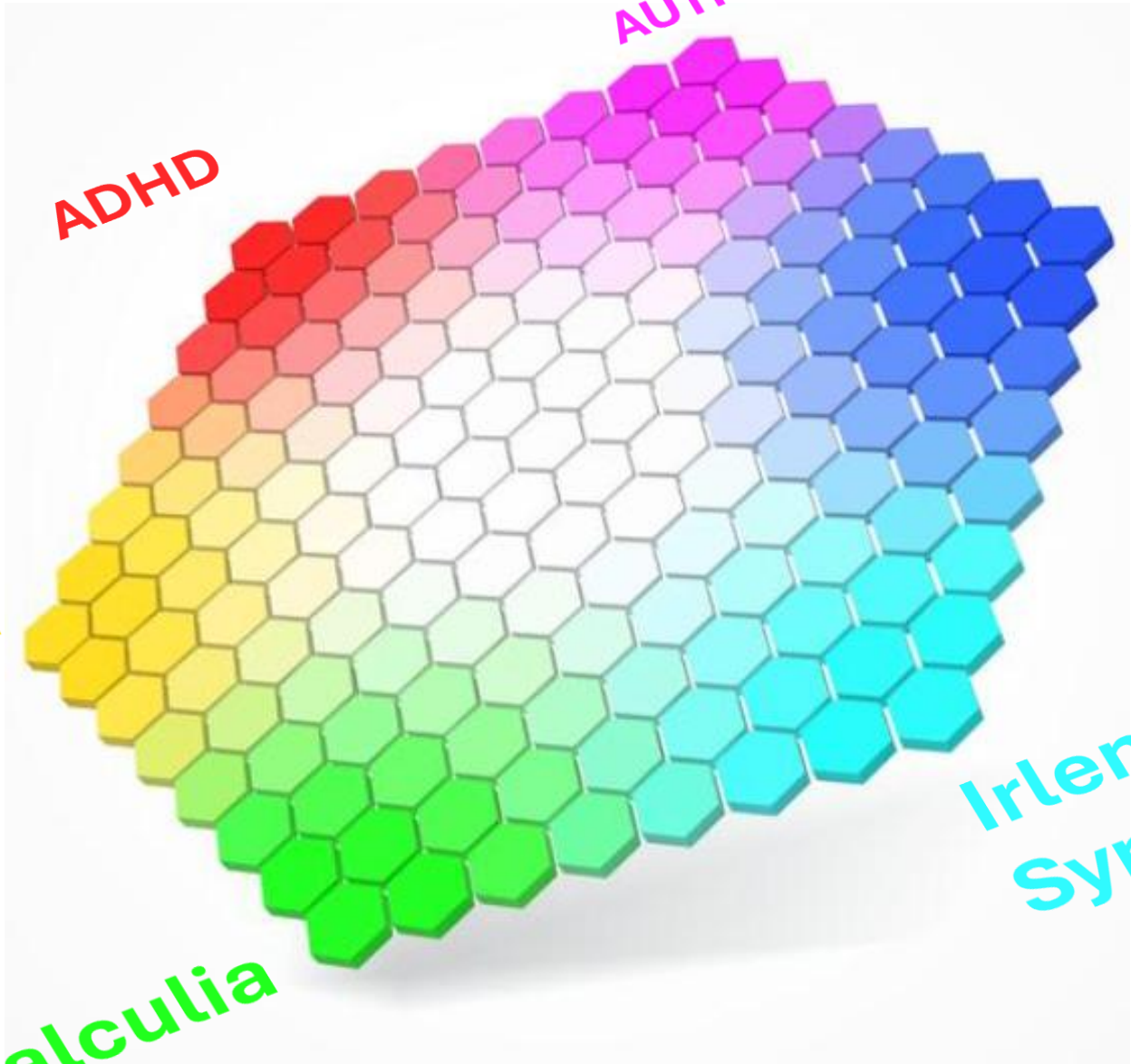
Co-occurring conditions

Co-occurring neurodiversity



Created by Mary Colley





ADHD

AUTISM

Dyslexia

Dyspraxia

Irlen Syndrome

Dyscalculia



Co-occurring conditions

Anxiety

OCD

Depression

Bi-polar disorder

Mood disorders

Borderline Personality Disorder

Antisocial Personality Disorder

Sleep disorders

Speech and language

Memory

Substance abuse disorder

Sensory processing disorder

Learning disability

Rejection sensitivity



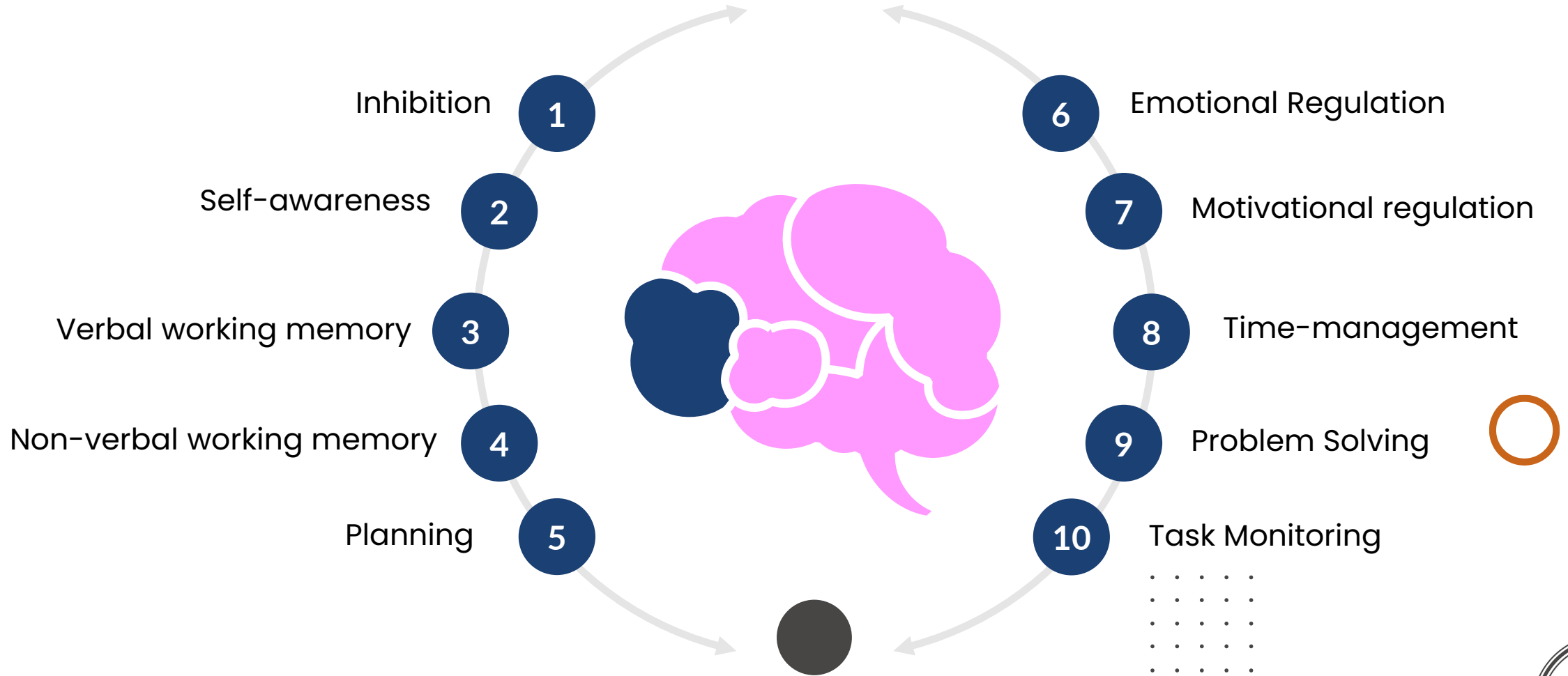


ADHD is not a problem with knowing what to do. Instead, it's a problem of doing what you know.

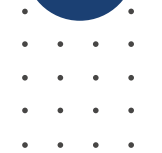
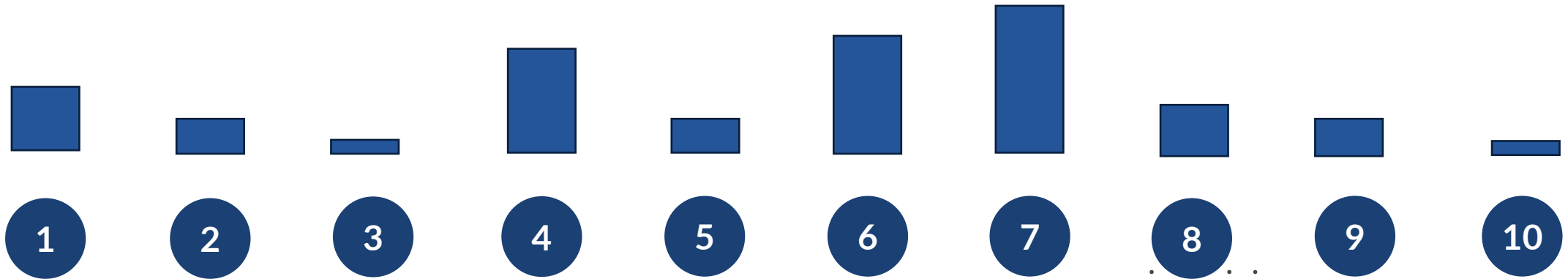
Dr Russell A. Barkley



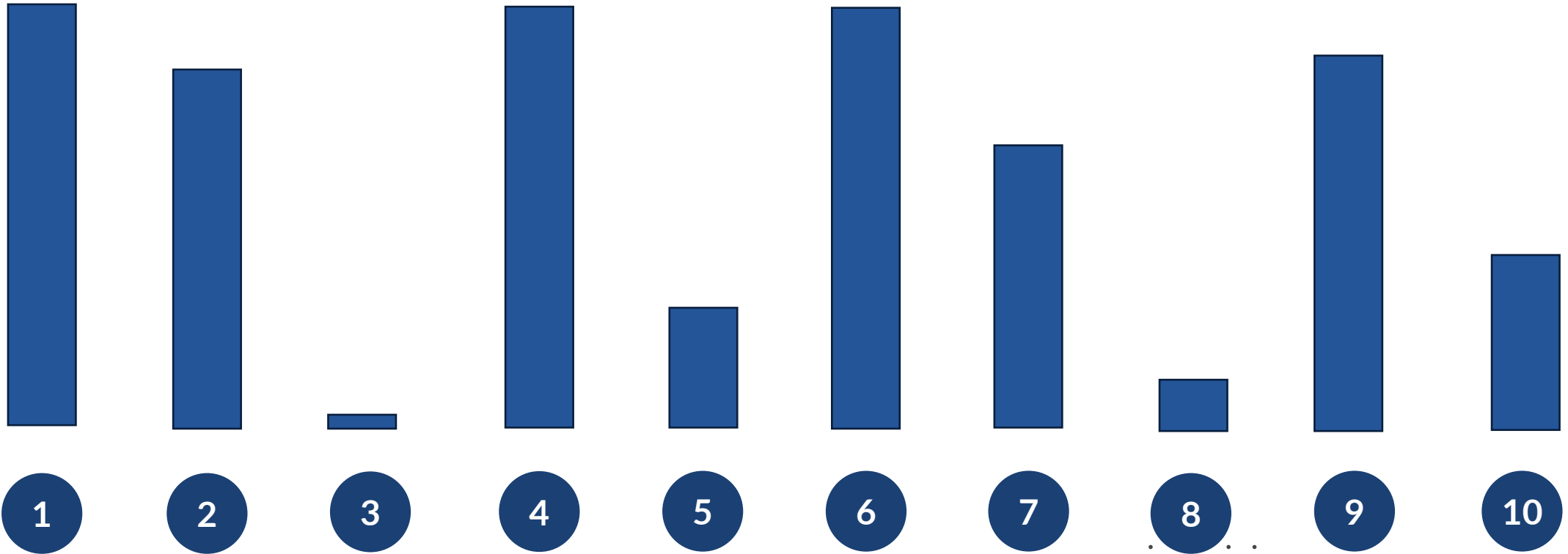
Executive Functions



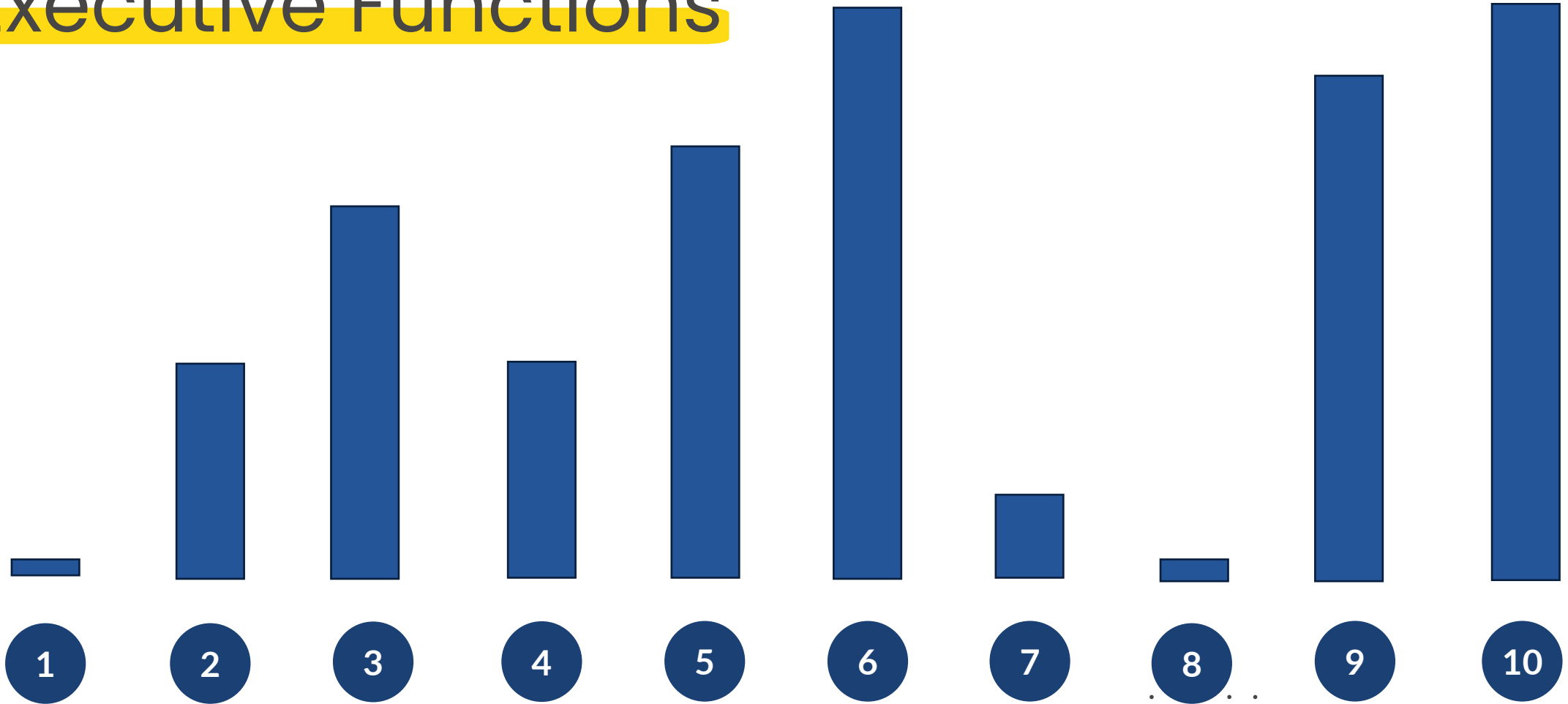
Executive Functions



Executive Functions



Executive Functions



Increasing baseline dopamine

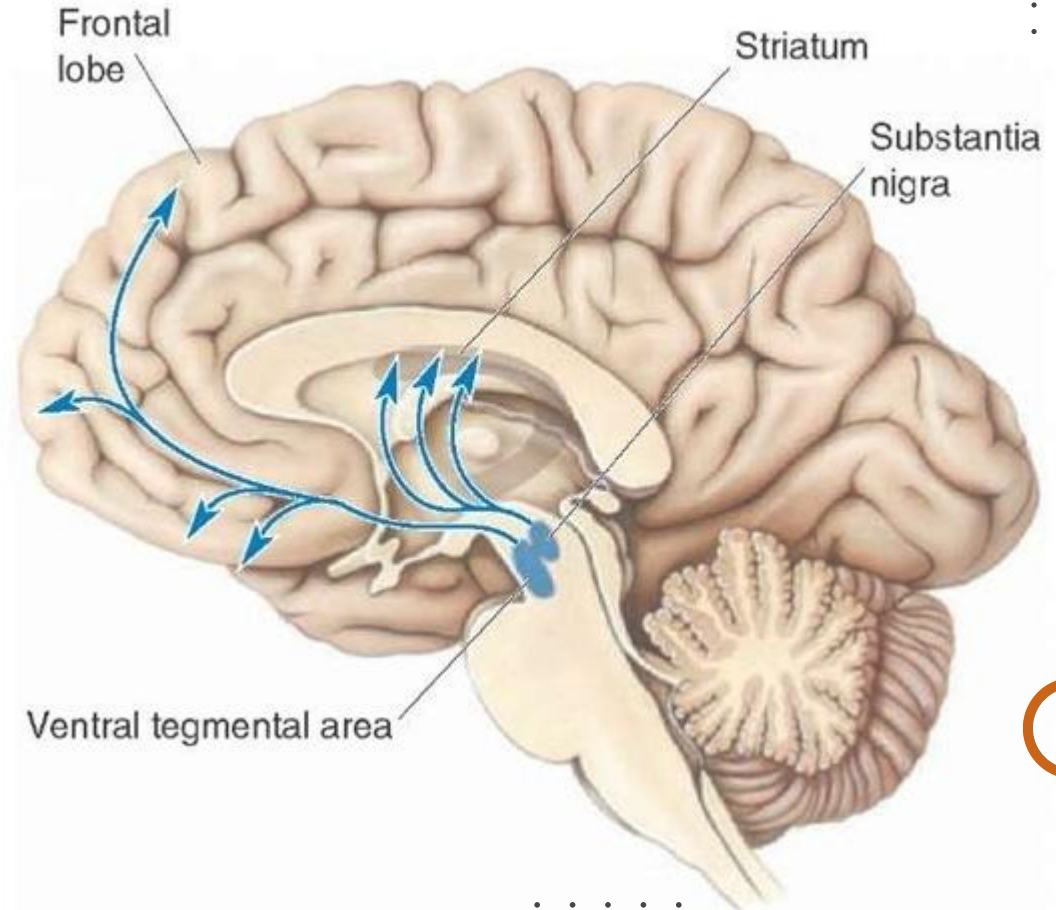
SLEEP

NSDR

Increase Tyrosine

Morning sunlight 5/10/20

Movement / Exercise





EF's
Deficit



Dopamine
Deficiency



DMN/TPN switch
'problem'

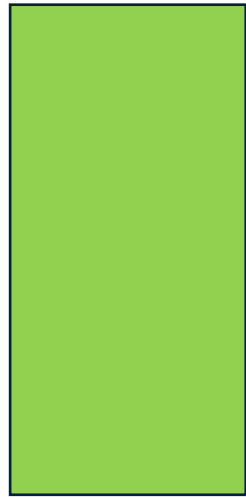


Cognitive Skill
Deficiency





EF's
Deficit



Dopamine
Deficiency

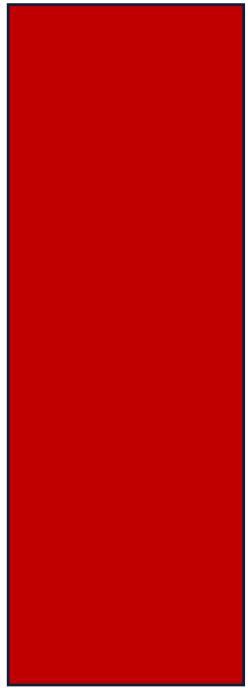


DMN/TPN switch
'problem'

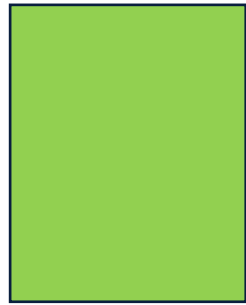


Cognitive Skill
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EF's
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Dopamine
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DMN/TPN switch
'problem'



Cognitive Skill
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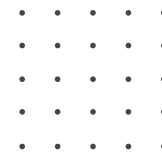
Recommended Reads

ADHD 2.0 – Ed Hallowell, John Ratey

Taking Charge of Adults ADHD – Russell Barkley

Smart but Stuck – Thomas E Brown Phd

Mindfulness prescription for ADHD - Lidia Zylowska



Recommended Podcasts

ADHD AHA!

ADDitude – ADHD Experts

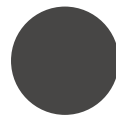
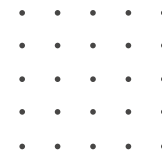
ADHD Rewired

Hacking your ADHD

I Have ADHD

Overcoming Distractions

ADHD Chatter





www.adhd-therapy.co.uk

Specialist sessions

All 2nd Tuesday of the month 7.30-9.00pm

Executive Function
'disorder'

DMN & TPN 'switch'

ADHD

Dopamine
'Deficiency'

Cognitive processing
'errors'



Executive
Functions

DMN & TPN

ADHD

Dopamine
Deficiency

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ADHD
THERAPY

ADHD Therapy Task Formula

$$T = \frac{WINERA}{D}$$



ADHD Therapy Task Formula

T	Task
W	Want
I	Importance
N	Nudge
E	Ease
R	Reward
A	Accountability
D	Distraction



ADHD Therapy Task Formula

$$T = \frac{WINERA}{D}$$



ADHD Therapy Task Formula

Want

Change your mindset

Can you make a
mundane task more
enjoyable?

I don't want to complete this task
I want to have completed this task

Stick on some loud
music while washing up

ADHD Therapy Task Formula

Importance

The more important a task,
the more likely we will do it

Be aware of all of the reasons
WHY the task is important

Values
Loved ones



ADHD Therapy Task Formula

Nudge

Use one or many tools, reminders, calendars, hi-tech/low-tech to reduce/eliminate the chance of forgetting

Lists

Post-it notes

Alexa

Calendar

Computer calendar

Watch alarms

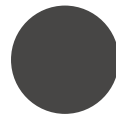
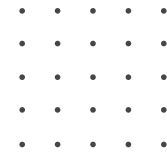


ADHD Therapy Task Formula

Ease

Do what you can to make the task easier to start, easier to do, and easier to finish.

- Have a place for stuff
- Keep similar/related stuff together
- Enlist help



ADHD Therapy Task Formula

Reward

Improve your dopamine levels.
Reframe your rewards.

- Allow more frequent smaller rewards
- Be proud of yourself
- Regular breaks *
- Mindful moments
- Visualise future rewards
- Diet / Exercise

ADHD Therapy Task Formula

Accountability

Be accountable.
If not to
someone else
then yourself.

- Coach
- Focusmate
- Write a 1 item list

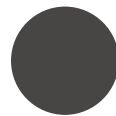


ADHD Therapy Task Formula

Distractions

Eliminate, or at least reduce your distractions as much as possible

This may include adding one larger distraction to drown more, smaller ones



ADHD Therapy Task Formula

Task 1 = WINERA
D

-vs-

Task 2 = WINERA
D O

ADHD Therapy Task Formula



Make Doctors Appointment

Reorganise Sock Drawer

Task 1 = WINERA -vs- Task 2 = WINERA

D

D O



The Three Demands - REBT

I (**self**) must do well and win the approval of others or else I am no good.

Other people must do the right thing or else they are no good and deserve to be punished.

Life must be easy without discomfort or inconvenience



A

Activating Event

- Real
- Imagined

- Past
- Present
- Future

- Internal
- External

B

Beliefs



Goal Sabotaging

Goal Assisting

C

Consequences

- Behaviour

- Emotion

- Action Tendencies

- Symptoms

- Thoughts

(BEAST at C)



www.adhd-therapy.co.uk

Specialist sessions

All 2nd Tuesday of the month 7.30-9.00pm.

10th September – Understanding ADHD

8th October - Mindfulness for ADHD

12th November – Anger, Anxiety and ADHD

10th December – ADHD, Rejection Sensitivity and Perfectionism

14th January – ADHD and Executive Functions

11th February – ADHD and Emotional Regulation

(Repeat Mar-Aug)



www.adhd-therapy.co.uk

Ask an ADHD therapist sessions

3rd Thursday of the month. *(Unless stated)

19th September

24th October *(4th Thursday)

21st November

19th December

16th January

20th February

20th March

17th April

15th May

19th June

17th July



Advantages	Disadvantages
Ability to hyperfocus	Difficulty in shifting focus
Gets things done fast, at last minutes	Procrastinates on important tasks
Tenacious. Won't give up	Stubborn
Appears Confident, self-assured	Insecure despite confident exterior
Hardworking	Doesn't know when to stop
Lightning quick mind	Trouble shutting off mind
Focuses and performs well under stress	Seeks danger to feel fully alive
Pays close attention when interested	Mind wanders, easily distracted when not interested
Enthusiastic with new projects	Enthusiasm quickly wanes
Strong leader	Applies a lot of responsibility to self

