



Understanding How Our Brains Work: Why We Think and Feel Differently as Neurodivergent Adults

As neurodivergent adults, we often think, feel, and respond to the world in different ways. Our brains may process information differently, experience emotions more intensely, or find everyday tasks more challenging, especially in environments that aren't designed with neurodiversity in mind [1, 2]. These differences are not flaws; they reflect the many ways human brains work.

The set of skills that helps us **plan, organise, remember information, manage emotions, and get things done** is known as **executive functioning** [3]. Often described as the brain's management system, executive functioning supports everything from getting to work on time to staying regulated during a stressful meeting to remembering we need to pay our phone bill. These are areas that often uniquely impact neurodivergent people



How our brain works

What are the key areas of how the brain works?

- **Working memory** – Holding and using information in the short term
- **Cognitive flexibility** – Shifting thinking or adapting to change
- **Inhibitory control** – Managing impulses and self-regulation
- **Task initiation and completion** – Starting and finishing tasks
- **Planning and organisation** – Structuring steps and prioritising
- **Time management** – Estimating time and meeting deadlines
- **Emotional regulation** – Managing feelings in the moment [4]

Many neurodivergent adults experience **challenges** in one or more of these areas, not because of a lack of **intelligence** or **effort**, but because their brains work differently. These same differences can also support strengths such as creativity, deep focus, problem-solving, and innovative thinking.

How Neurodivergent Conditions Can Affect Executive Functioning

Autism (Autism Spectrum Disorder)

Adults with autism may:

- Prefer structured routines and find it difficult to **shift focus** or transition between tasks (reduced cognitive flexibility) [5]
- Experience sensory or **emotional overload** leading to feelings of “shutdowns” (going inward) that interrupt executive processing [5]
- Struggle with **time perception** or planning long-term projects [5]
- Use repetitive behaviours or intense focus as **coping mechanisms** [6]

These differences are simply part of how autistic people experience the world, though they may cause **misunderstandings** in settings such as the workplace and in education, where awareness is limited.

How Neurodivergent Conditions affect how our brain works

ADHD (Attention-Deficit/Hyperactivity Disorder)

ADHD affects the brain's ability to manage attention and **regulate** effort due to a lack of **dopamine** and **norepinephrine**, which are chemicals produced by the brain.

Adults with ADHD may:

- Become easily **distracted**, have difficulty staying **organised**, lose **track of time** or miss **deadlines** despite strong intentions (inattention)
- Have lots of **energy** in the body and mind (hyperactivity)
- Struggle with **impulse control**, either through actions and or words (impulsivity)
- Experience emotional **outbursts** or mood **instability** (difficulties regulating emotions)
- Switch quickly between ideas, leading to **innovative thinking**, but also difficulty completing tasks [7]

ADHD is not a lack of **discipline**; it's a difference in how the brain prioritises and responds to **stimulation**. Nonetheless, these differences may lead to **misunderstandings** in settings such as the workplace and in home life, where understanding may be limited.

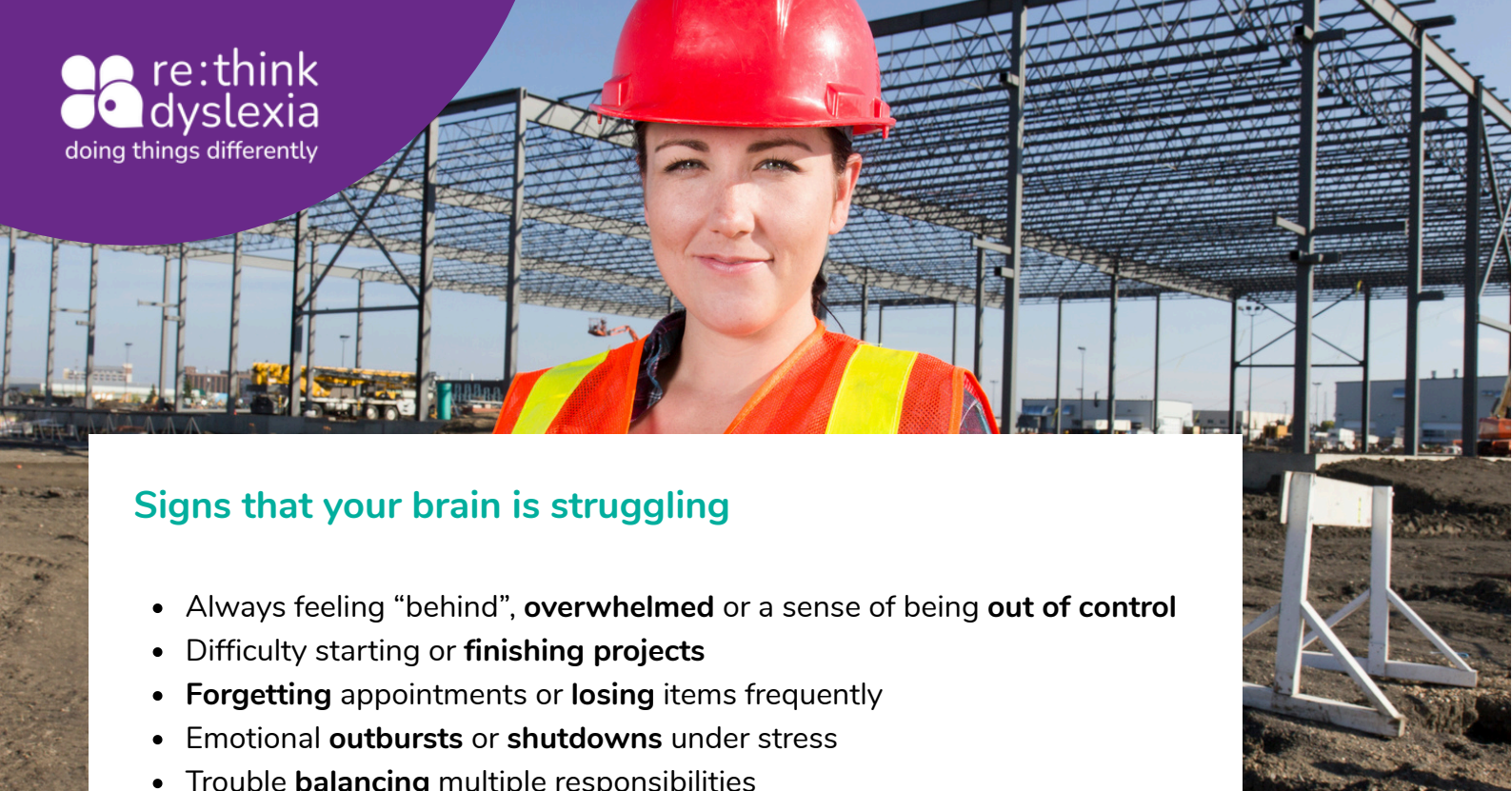
Specific Learning Disabilities (Dyslexia, Dyscalculia and Dysgraphia)

Learning disabilities often affect someone's ability to **read, write, and or do maths** and certain **executive functioning skills** such as planning, memory, and emotional regulation in ways that are less obvious but can still have a big impact:

- Following multi-step **instructions** or holding **verbal** or **written** information in mind (working memory)
- Difficulties **organising** thoughts and putting them into writing
- Slower **processing speed** to complete **reading, writing** and **maths** tasks
- Challenges understanding **time** concepts, leading to being late and appearing **disorganised** [8, 9]

These differences often remain hidden in adulthood, leading to **stress, mental fatigue** and **burnout** in settings such as the workplace, higher education and in home life where understanding may be limited.

We know that these conditions/ differences often **co-occur** together, e.g. Dyslexia and ADHD, Dyslexia, Dysgraphia and Dyscalculia and or ADHD and Autism, for example, which can further impact executive functioning skills.



Signs that your brain is struggling

- Always feeling “behind”, **overwhelmed** or a sense of being **out of control**
- Difficulty starting or **finishing projects**
- **Forgetting** appointments or **losing** items frequently
- Emotional **outbursts** or **shutdowns** under stress
- Trouble **balancing** multiple responsibilities
- Struggling to **adapt to change** or unexpected events
- Challenges retaining information and **following instructions**, such as turning off the lights before bed
- Struggling to **stay organised**, **misplacing** daily items such as your phone, wallet or car keys, even though you only had them 5 minutes ago
- Half-completing tasks, such as emptying half the dishwasher and then getting **distracted** by the clothes not being folded

Tips to Help at Work or in Study:

- Use **digital calendars**, reminders, and task apps to assist memory
- **Break tasks** into small steps with visual checklists
- Utilise **flexible deadlines** where possible
- Minimise **sensory distractions** and offer **quiet** spaces
- Colour-code **keywords** in documents or calendars for better visibility
- Use **headings**, **dot-points**, and line spacing to break up information
- **Break text** or information down into its key words or concepts (colour code to assist)
- Take **regular breaks** to reset focus
- Use Apps and AI tools to help with reading and writing tasks [10, 11]

Tips to Help Manage Daily Life:

- Set consistent **routines** and use visual cues
- Delegate or **outsource tasks** that drain mental energy
- Use **timers** or visual clocks to manage time
- Practice **self-compassion** and set realistic expectations
- Use a Virtual Assistant like Siri or Alexa
- Move your body, get enough **sleep** and **eat well**
- Reduce alcohol and other substances
- Have a psychologist or **counsellor** to support you
- Take **time out** to do things you enjoy
- Set boundaries to help conserve energy
- Try to create environments where your nervous system feels safe [7, 12, 13]



Set yourself up for
visibility and success.

Strengths that come when brains thinks and work differently

While having a brain that works differently can create challenges, it also comes with unique strengths. Everyone is different, and these are just some examples of strengths:

- **Hyperfocus:** Intense focus on areas of interest can lead to mastery
- **Innovation:** Non-linear thinkers who often find creative solutions
- **Authenticity:** Many neurodivergent people value integrity and clear communication
- **Empathetic:** Heightened sensitivity to others' emotions and experiences
- **Resilience:** Navigating an often non-inclusive world builds strength and adaptability
- **Communication:** Can sometimes have a direct communication style which can make information easier to understand
- **Problem-solving:** Strong at solving problems

Towards Inclusion

Executive functioning challenges are not a sign of failure; they are a sign that the environment isn't always built for diverse brains. With the right strategies and support, you can thrive at work, in study, and in life.

Supports

Seek Support

re:think dyslexia offers guidance and care for neurodivergent people, as well as connections to community services that can help meet your needs. Contact us on our free Confidential Helpline: 1800 13 NEAP (6327) and speak with one of our Mental Health Consultants, or email us at hello@rethinkdyslexia.com.au

Our Resource

- [Understanding Neurodivergence Factsheet](#)
- [Neurodivergence Mental Health Factsheet](#)
- Inclusive Workplaces: An Employee's Guide to Psychosocial Wellbeing in the Workplace
- Neurodivergent Adults and Self-regulation Factsheet
- Neurodivergence and Burnout Guide
- Dear Dyslexic Podcast Series

External Supports

- Speak with a mental health professional (your GP can provide a referral)
- JobAccess Australia

Urgent Supports

- Lifeline: 13 11 14
- 13YARN: 13 92 76 | 24 /7 Crisis support for Aboriginal and Torres Strait Islanders
- Beyond Blue: 1300 224 636

Recommended Resources

- Self-Care for Autistic People — Dr Megan Anna Neff
- The Neurodivergent Skills Workbook for Autism and ADHD — Jennifer Kemp, Monique Mitchelson and Sonny Jane Wise
- How to Thrive with Adult ADHD - Dr James Kustow
- Executive Functioning Workbook for Adults – Dr Blythe Grossberg



This Factsheet has been developed by the **re:think dyslexia** science communicators and reviewed by our Lived Experience and Subject Matter Advisory committee, including:

Neurodivergent Advisors

Jacqueline Middleton
Danielle Harvey

Subject Matter Advisors

Dr Judith Hudson
Dr Oli Meredith

For a full list of references for this guide, go to www.rethinkdyslexia.com.au



References

1. Lonergan, A., et al., ***A meta-analysis of executive functioning in dyslexia with consideration of the impact of comorbid ADHD***. Journal of Cognitive Psychology, 2019. **31**(7): p. 725–749.
2. Pozo-Rodríguez, M., et al., ***A systematic review on the association between executive function and emotional regulation in autism, ADHD, and autism/ADHD***. Neuroscience & Biobehavioral Reviews, 2026. **183**: p. 106570.
3. Mareva, S., et al., ***Mapping neurodevelopmental diversity in executive function***. Cortex, 2024. **172**: p. 204–221.
4. Diamond, A., ***Executive functions***. Annu Rev Psychol, 2013. **64**: p. 135–68.
5. Johnston, K., et al., ***Executive Function: Cognition and Behaviour in Adults with Autism Spectrum Disorders (ASD)***. J Autism Dev Disord, 2019. **49**(10): p. 4181–4192.
6. Demetriou, E.A., et al., ***Autism spectrum disorders: a meta-analysis of executive function***. Molecular Psychiatry, 2018. **23**(5): p. 1198–1204.
7. Grossberg, B., ***Executive Functioning Workbook for Adults***. 2022, Illinois: Callisto Publishing.
8. Sharfi, K., S. Rosenblum, and S. Meyer, ***Relationships between executive functions and sensory patterns among adults with specific learning disabilities as reflected in their daily functioning***. PLoS One, 2022. **17**(4): p. e0266385.
9. Smith-Spark, J.H., et al., ***Executive functions in adults with developmental dyslexia***. Research in Developmental Disabilities, 2016. **53-54**: p. 323–341.
10. Kustow, J., ***How to Thrive with Adult ADHD: 7 Pillars for Focus, Productivity and Balance***. 2024, London Ebury Publishing. 336.
11. Wissell, S., ***Dyslexia: Insights into the hidden disability in and out of the workplace***. 2024, Melbourne: KMD Books. 280.
12. Miserandios, C., . ***The Spoon Theory: But you don't look sick***. 2003, Lymphoma Action: Aylesbury. p. 3.
13. Barkley, R.A., Benton, C ***Taking Charge of Adult ADHD***. 2022, London: Guilford Press.