Unleash your Brain Power
Agenda

Brain quiz
Understanding the brain
Factors affecting brain performance
Techniques to improve the brain
Workplace strategies
Let’s start with a quiz

We only use 10% of our brain

True / False

How many thoughts do we have each day?

What % of our thoughts are repeated from the day before?

What % of our thoughts are negative?
Understanding the brain
Neuroplasticity is the brain’s ability to reorganise and adapt by forming new connections between neurons throughout life.

- **Learning and memory**: Our brain forms new connections when learning, aiding memory.
- **Recovery from injury**: The brain reorganises to recover from injury or trauma.
- **Lifelong Learning**: Embracing neuroplasticity promotes continuous personal growth.
Factors affecting brain performance & neuroplasticity
Biological factors (factors we can’t directly change):

- Age
- Genetics
- Hormones
- Brain injury & disease
Lifestyle factors (factors we can change):

- Experience & learning
- Environmental enrichment
- Physical exercise
- Sleep
- Nutrition
- Stress levels
- Social connectedness
- Technology usage
Techniques for improving cognitive abilities
1. Improving memory

- Use **mnemonic devices** e.g., acronyms, visualisation, acrostics, rhymes, chunking, method of loci, association, story linking
- Practice **retrieval exercises** regularly
- Maintain a **consistent sleep schedule**
- Stay **mentally active** with puzzles, games, learning
Try to memorise the pictures!
How many can you remember?
Ok try again…
How many can you remember this time?
2. Attention & focus

- Practice **mindfulness**
- Minimise **distractions**
- Break tasks into smaller tasks
- Engage in activities that **stimulate multiple senses**
- Utilise **time management techniques**
- Set **specific achievable goals**
- **Prioritise tasks** & minimise multitasking
- **Take regular breaks**
Time management techniques

• **Pomodoro technique:** 25 minutes work, short break, repeat.
• **Eat that frog:** tackle most challenging task first thing
• **Time blocking:** allocate specific blocks of time for different tasks
• **Task prioritisation:** Eisenhower matrix (urgent vs. important), ABC method
• **Batching:** grouping similar tasks
• **Utilise productivity tools:** e.g. Trello, Asana
3. Problem solving

- **Break down** complex problems into smaller components
- **Practice divergent thinking** to find various solutions to a problem
- Collaborate with others to **gain different perspectives**
- Engage in **activities** that challenge problem solving (i.e. puzzles, critical thinking tasks, strategic games, moral dilemmas)
1) **Riddle**: I'm light as a feather, yet the strongest person can't hold me for much longer than a minute. What am I?

2) **The island**: If you were stranded on a deserted island, what three items would you want to have with you?
4. Creative expression

- Surround yourself with inspiring stimuli
- Engage in brainstorming sessions or idea generation exercises
- Explore new hobbies or creative outlets
- Embrace failure and learn from experimentation.
5. Experiences & learning

- Try new things!
- Embrace lifelong learning (classes, workshops, self-study)
- Extract lessons from past experiences (journalling)
- Share knowledge with others
- Try brain training apps!
Easy-to-try new experiences

• Take a different route to work.
• Try a new type of cuisine at a local restaurant.
• Explore a new hobby or activity, such as painting, gardening, or photography.
• Visit a nearby park or nature reserve and go for a walk or hike.
• Listen to a genre of music you've never explored before.
• Start a journal to document your thoughts and experiences.
• Take a virtual tour of a museum or cultural landmark online.
• Try a new exercise class or workout routine.
• Attend a local event or community gathering.
• Experiment with a new recipe in the kitchen.
6. Environmental enrichment

- Incorporate elements of nature, art, culture into your surroundings
- Personalise your home and workspace with meaningful objects or quotes
- Minimise clutter and organise your environment
Stimulating environments

- Benefit mental health and cognition because they **boost the growth and function of neurons and their connections**; the glial cells that support and feed neurons, and blood vessels within the brain.
- You can use **fractals** in nature to calm the brain
7. Stress reduction

- Practice stress management techniques (i.e. deep breathing, mediation, yoga)
- Prioritise self-care
- Establish boundaries (learn to say no!)
- Try to build resilience
Cognitive training

Growth vs Fixed mindset

- **A fixed mindset**: people believe that their intelligence is fixed and static.
- **A growth mindset**: people believe their intelligence and talents can be improved through effort and learning.
Mindfulness

• Mindfulness has been shown to change the structure of the brain
• Also changes the blood flow in the brain
• 8 weeks is enough to see a change
Box breathing

1) Find a comfortable seated position.
2) Inhale slowly and deeply through your nose, counting to 4
3) Hold your breath for a count of 4
4) Exhale slowly and completely through your mouth, counting to 4 as you release the air from your lungs.
5) Hold your breath again for a count of 4 before beginning the next cycle.

Repeat the cycle of inhaling, holding, exhaling, and holding for several minutes, focusing on the rhythmic pattern and maintaining a steady pace.
8. Social connectedness

- Cultivate **meaningful relationships**
- Engage in **regular social activities**
- Volunteer
- Get a hobby
- **Prioritise quality time** with loved ones
- Utilise **social apps** (*such as Meetup*)
Emotional intelligence

Emotional intelligence is the ability to recognise, understand, and manage emotions in oneself and others.

Individuals with high emotional intelligence are better equipped to navigate interpersonal dynamics, resolve conflicts, and build strong relationships with colleagues and loved ones.
8. Look after yourself physically!

- Do **physical activity**
- Ensure you are **getting enough sleep**
- Ensure your body is **getting enough nutrition**
- Cut out **unhealthy lifestyle habits** (gradually)
Nutrition: What it means in practice – daily habits

- **Omega 3** – oily fish
- **Probiotic rich foods** – kimchi, kefir, kraut
- **Healthy fats** – avocados, olive oil, seeds, nuts
- **Nutrient boost** – green leafy veg, whole grains (B vitamins and fibre)
- **Complex carbs for long-term energy** – sweet potatoes, legumes, starchy veg, whole grains
- **Antioxidants** – berries, herbs, spices, rainbow foods
- At least **2 litres water**
- **Protein** with every meal/snack
- Consider good quality supplements (i.e. multivitamin)
Workplace strategies for enhancing brain performance
Workplace strategies for enhancing brain performance

1) **Create a brain friendly work environment**: ergonomic, natural elements, flexible work arrangements
2) **Encourage regular breaks and mindfulness**: scheduled breaks, meditation, wellness programs
3) **Foster culture of continuous learning and development**: training and development opportunities, knowledge sharing, recognition & feedback
4) **Incorporate brain activities**: quizzes, collaborative mind mapping or problem solving
Putting it into practice – what strategies are you going to focus on?
Further info…

**Books**
- How to Build a Healthy Brain – Kimberley Wilson
- The Change Mindset – Andy Craggs

**Websites**
- The Association for NLP: https://anlp.org/
- Food for the Brain: https://foodforthebrain.org/

**Apps**
- Lumosity
- Impulse
- Elevate
- Peak
- MindPal

**Cognitive training ideas**

7 Brain Exercises to Strengthen Your Mind:
https://www.verywellmind.com/brain-exercises-to-strengthen-your-mind-2795039

Engage Your Brain: GCBH Recommendations on Cognitively Stimulating Activities
Research


Research

- https://www.verywellmind.com/what-is-brain-plasticity-2794886
- https://www.psychologytoday.com/gb/basics/neuroplasticity
- https://www.verywellmind.com/great-ways-to-improve-your-memory-2795356
- https://www.medicalnewstoday.com/articles/326068#caffeine
- https://www.linkedin.com/pulse/13-science-base-tips-improve-your-focus-concentration-rozen-akfie
- https://www.forbes.com/sites/bryancollinseurope/2020/03/03/the-pomodoro-technique/?sh=c74627439857
- https://clockify.me/time-management-techniques
- https://elevateapp.com/blog/improve-problem-solving-skills
- https://www.verywellmind.com/how-creativity-positively-impacts-your-health-5113162
- https://www.boonmind.com/neuroplasticity-explained-how-new-experiences-change-your-brain/
- https://www.bakkerelkhuizen.com/knowledge/enriched-environment/?country=I&lang=EN
- https://boonecenter.pepperdine.edu/relationship-ig/blog/posts/technology_effects_on_our_brains_and_bodies.htm#:~:text=1.,%2C20personal%2C20and%20professional%20tasks.