Memory and Focus 101

Science and Strategies to Promote Cognitive Functioning

Psychoeducational Course Structure

Psychoeducational course	4 sessions	Participation
Not psychotherapy group, crisis management, case management, etc.	Each session will have an agenda, topic, skill, and practice assignment.	Even though this is a course, there will be some opportunities for participation.

Goals & Expectations

Goals

- Understand how healthy behaviors and habits affect your brain
- Understand executive function and memory, how they operate and common difficulties
- Learn strategies to enhance brain functioning, particularly in the areas of memory and executive function

Expectations

- Attend sessions
- Engage in respectful behavior towards course co-leaders and other patients
- Practice skills outside of course

Informed Consent

- **Psychoeducation.** The courses are educational in design and purpose, and do not provide individual therapy or group therapy. In these psychoeducational group courses, the facilitator will present scientific and theoretical material that may be applicable to a variety of life circumstances and problems. Psychotherapy services are entirely distinct and separate from the psychoeducational group experience.
- **Confidentiality.** All information about participants in the course will be kept confidential within Ochsner Health. There are exceptions to confidentiality that are required by law. We have a duty to report if you are a danger to yourself or someone else, or that a dependent child or adult is being abused or neglected. You can view Ochsner's privacy policies online: https://www.ochsner.org/patients-visitors/privacy-policies/ochsner-privacy-policy.
- **Confidentiality of Other Attendees.** With full understanding of the need for confidentiality for all attendees, you accept the following: (1) You will not disclose personal information about other attendees to anyone outside of the course; (2) any activity between attendees outside of the course is solely based on the choice of these attendees and is not the responsibility of the facilitator.
- **Respect for Dignity and Safety.** You are expected to treat other attendees and the facilitator with respect for their dignity and safety. Intimidation and threats to any attendees or the facilitator will not be tolerated. The course facilitator reserves the right to terminate any attendee's participation in the course for violating these rules.
- **Limitations.** These psychoeducation courses are not built to manage high-risk conditions or crises (i.e., substance abuse, psychosis, severe cognitive issues, suicidal or homicidal ideation, non-suicidal self-injury, etc.). Please do not contact your course facilitator for help in a high-risk or crisis situation. If you have an immediate and severe crisis, please call 911 or go to an emergency department or urgent care.

Curriculum

Session	Content
Session 1	Introduction to Brain Health
Session 2	Attention
Session 3	Memory
Session 4	Executive Function

Session 1:
Introduction to Brain Health

Session 1 Agenda

1. Overview of the brain
2. Cognitive health & neuroplasticity
3. The 6 pillars of brain health
4. Homework #1

THE HUMAN BRAIN



Frontal Lobe

- ❑ Reasoning
- ❑ Planning
- ❑ Emotion Regulation
- ❑ Judgment
- ❑ Movement
- ❑ Short-term Memory

Parietal Lobe

- ❑ Touch
- ❑ Smell
- ❑ Pain
- ❑ Hearing
- ❑ Directions

Temporal Lobe

- ❑ Understanding Language
- ❑ Memory (Storage and Retrieval)

Occipital Lobe

- ❑ Visual Processing
- ❑ Color Identification

What is Cognitive Health?



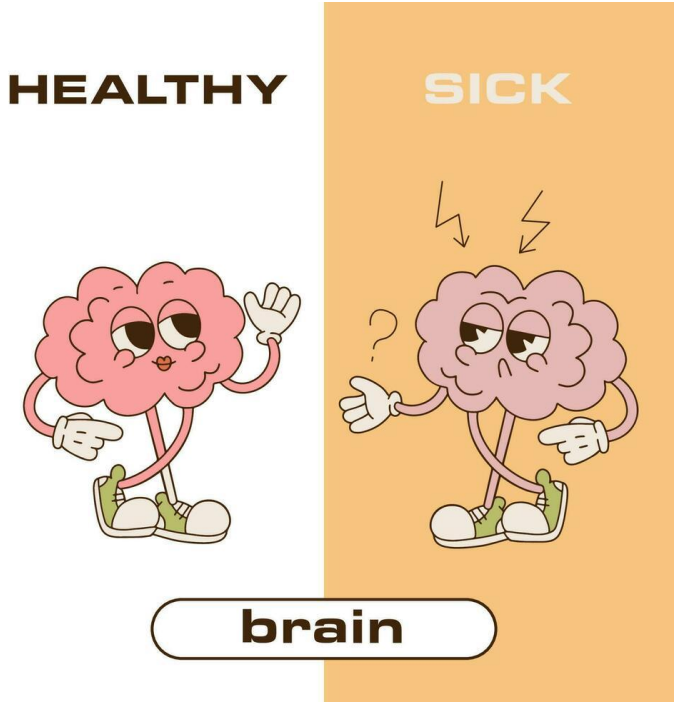
Common Cognitive Complaints



- Difficulty paying attention
- Procrastination
- Distractibility
- Forgetfulness
- Fidgeting
- Racing thoughts
- Restlessness

What Interferes with Cognitive Health?

- Lifestyle factors
- Medical conditions
- Psychiatric disorders and symptoms
- Injuries
- Substance use
- Other factors



Attention-Deficit/Hyperactivity Disorder (ADHD)

- Neurodevelopmental disorder
- Symptoms:
  - Difficulty paying attention (*inattention*)
  - Too much energy (*hyperactivity*)
  - Trouble with self-control (*impulsivity*)
- Diagnosis:
  - Symptoms started before age 12
  - Present for at least 6 months
  - Affect 2+ areas (work, school, social, etc.)
- Other causes of symptoms: depression, anxiety, poor sleep, stress, physical illness



Brain Aging



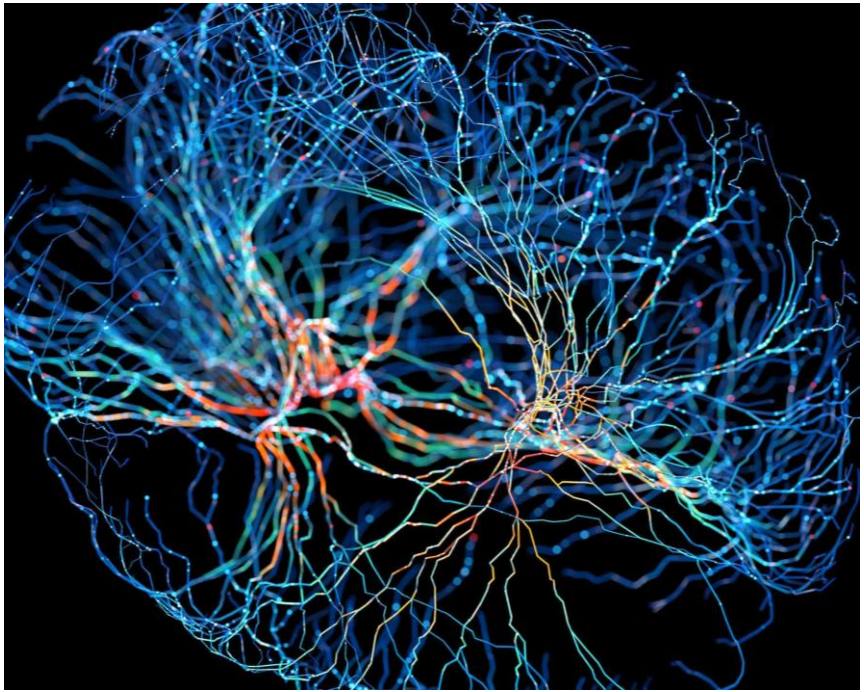


Chronic Stress & The Brain

The Long-Term Consequences

- Disrupts memory processes
- Changes the brain's structure
- Kills brain cells
- Shrinks brain cells
- Higher risk of mental health problems

Neuroplasticity

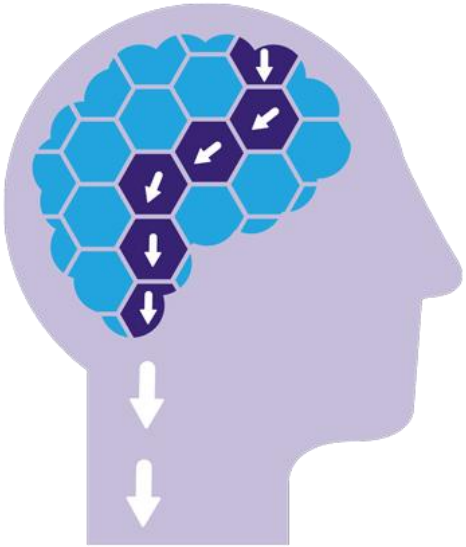


Neuroplasticity is the brain's ability to change and adapt.

- Neuro = Brain and neurons
- Plasticity = ability to be changed

Essentially, this is when your neurons reorganize to make new connections or strengthen existing ones.

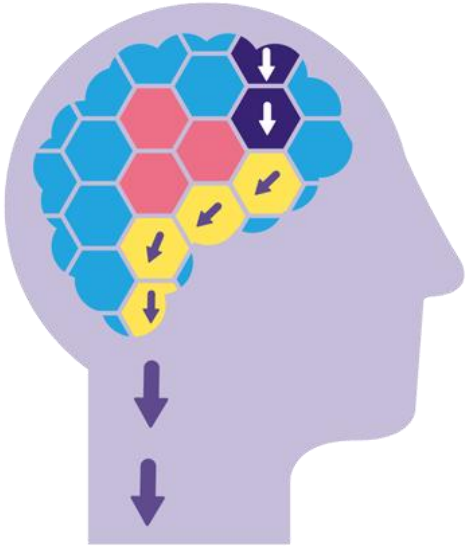
Example: Stroke



1. Signals go from one cell to another forming a connection in the brain.



2. When a stroke kills brain cells, it damages the connection.



3. Brain cells can sometimes form new connections, and start sending signals again.

Source: Stroke Association of UK

Why Neuroplasticity is Important



- Allows us to learn new things and recover lost abilities
- Example: ***Physical Rehab***
  - The more a particular movement is performed, the stronger the brain pathways for that movement become and the easier it gets to perform that movement in the future
- Limitations: Not all areas/functions can be improved

What we do and how we live is important!!!

The percent that lifestyle factors influence individual health and well-being

The Six Pillars of Brain Health

1. Physical Activity
2. Food & Nutrition
3. Medical Health
4. Quality Sleep
5. Cognitive Fitness
6. Social Interaction



Source: Cleveland Clinic

Pillar 1: Physical Activity

- ***Physical Activity*** = "any bodily movement produced by the contraction of skeletal muscle that increases energy expenditure above a basal level"

- **Some physical activity is better than none** & those who sit less and move more experience more health benefits

- **Recommendations for Adults**
  - 150 to 300 minutes of moderate-to-vigorous per week
  - Include cardiovascular and weight training for variety for health benefits and motivation

Benefits of Staying Active
Improved Sleep
Lower Depression & Anxiety
Better Health & Functioning
Weight Loss
Improved Cognition
Reduced Risk of Dementia

Source: U.S. Department of Health and Human Services

How to Become More Active



- There is no one size-fits-all recommendation for physical activity
- Recommendations are based on each person's unique symptoms
- Consult your doctor, physical therapist, or other professional for personalized recommendations

Brain Benefits of Physical Activity

One study[1] showed that…

- Those who moved more performed better on cognitive tests
- 31% lower risk of dementia
- Cardiovascular exercise is particularly healthy

Another study[2] showed that..

- Physical activity is associated with better cognitive functioning
- HOWEVER, individuals who **combine physical activity with a MIND diet** show even greater improvements

[1] Mortimer & Stern, 2019; [2] Blumenthal et al., 2018

Pillar 2: Food and Nutrition



Mediterranean Diet Pyramid

Red meats & sweets
Enjoy Sparingly



Poultry, eggs & dairy
Enjoy 1-2x/wk



Fish, seafood &
omega-3 rich foods
Enjoy >3x/wk



Whole grains, legumes,
fruit, vegetables, healthy
fats, herbs & spices
Enjoy Daily

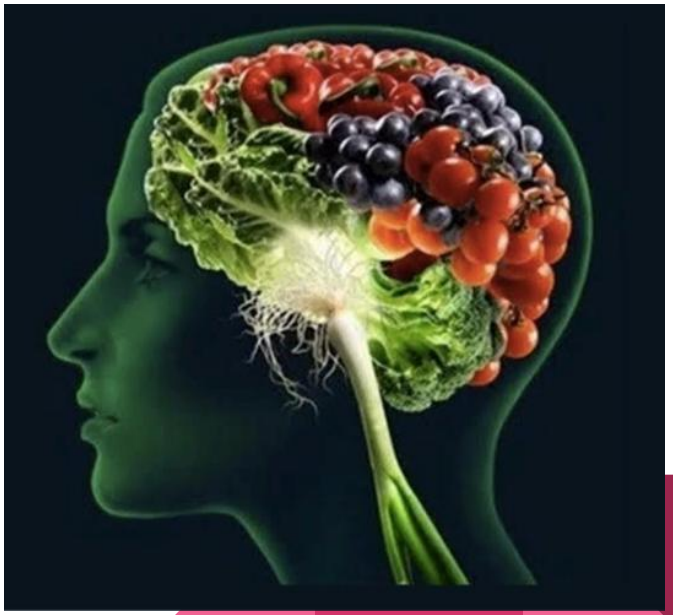


Physical activity, meal
& family time
Practice Daily



The "MIND" Diet

The MIND Diet = Mediterranean-DASH Intervention for Neurodegenerative Delay



The MIND diet combines **two popular diets**:

- Mediterranean
- Dietary Approaches to Stop Hypertension (“DASH”)

MIND Diet

Why it matters:

- 30 to 35 percent lower risk of cognitive impairment
- People with certain conditions are more likely to experience cognitive decline: heart disease, high blood pressure, obesity, and diabetes
- **Eating for cardiovascular and heart health is important**

What's in it?

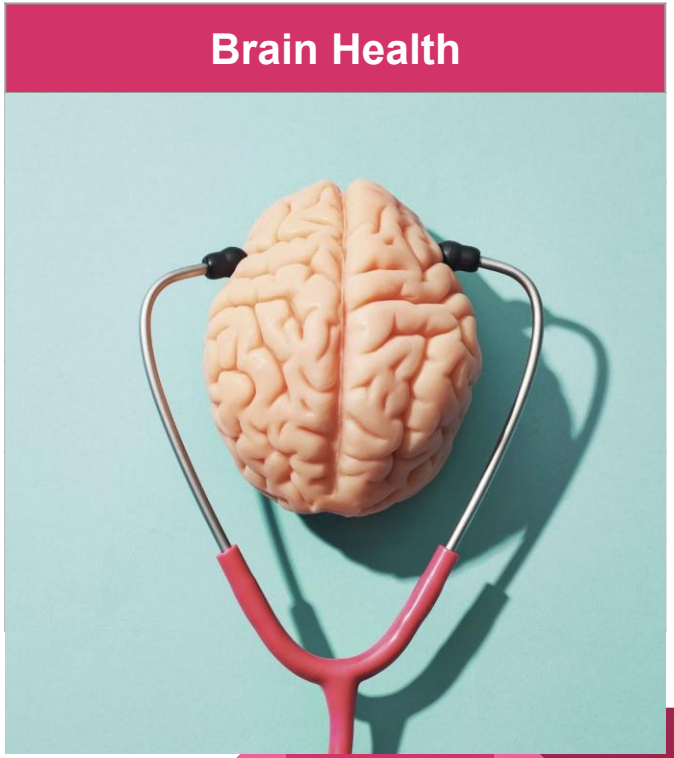
- Leafy Greens
- Colorful Fruits & Vegetables
- Fish
- Nuts, whole grains, legumes and olive oil

Morris et al, 2005; McEvoy et al., 2017; Theodore et al, 2021; Tian-Shin et al, 2021; Kaplan et al, 2022;

Pillar 3: Medical Health

- A variety of health conditions can affect brain health:
  - Hypertension
  - Diabetes
  - Hyperlipidemia

- **Controlling risk factors** can help you maintain physical and mental well-being
- **Health-promoting behaviors** (such as taking medications or regular physical activity) can help manage medical conditions
- **Consult your doctor** for support in staying in tip-top physical health



Pillar 4: Quality Sleep

- During sleep, your brain performs a "**clean up**"
  - Clears lymphatic waste
  - Remove toxic byproducts that build up during the day
- Most adults need between 7 to 9 hours of sleep nightly
- **Consult a doctor** if you are having trouble sleep problems

Rules for Better Sleep
Get up at the same time
Keep a Regular Physical Activity Regimen
Develop a Sleep Time Routine
Limit Caffeine Intake
Reduce Bedtime Device Use
Keep Worry Out of the Bed

Pillar 5: Cognitive Fitness

- "**Cognitive Reserve**" refers to the brain's ability to withstand cognitive dysfunction and brain damage
- More cognitive reserve means someone is more likely to **stave off symptoms** of cognitive decline
- **Staying curious and learning** new things promotes cognitive reserve and brain resilience

Stimulating your Brain
Learn a new language
Play Boardgames
Read Fiction
Take a class
Start a knitting project
Build a model

Pillar 6: Social Interaction

Benefits of Staying Connected

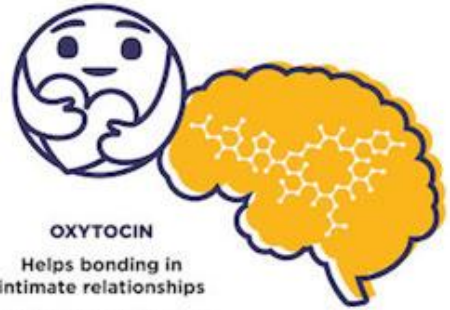
- Lower Stress levels
- Better mood
- Higher life satisfaction
- Cognitive Stimulation

Social Relationships and connectedness has been associated with better brain health and can prevent or lower your risk for Alzheimer's Disease and other dementias.

Sample Social Activities
Visiting Friends & Loved Ones
Video Chats & Phone Calls
Dining Out with Others
Joining an Exercise Group
Participate in Clubs or Interests Groups
Meet New People in Your Community

Relationships and Brain Health

Our brains and bodies innately promote relationships and social connections with hormones and neurotransmitters



OXYTOCIN

Helps bonding in intimate relationships

Helps you emotionally connect to others

Has anti-anxiety effects

Has anti-stress effects

Drives your social behaviors during difficult times



SERETONIN

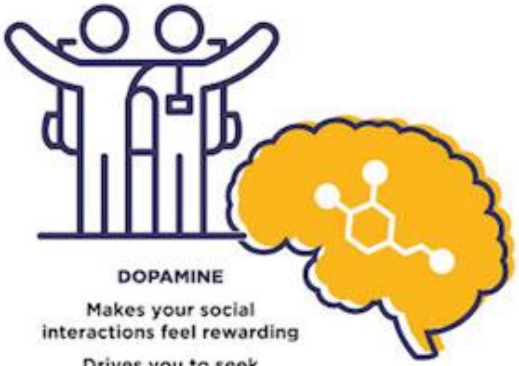
Helps you enjoy social relationships

Helps your feelings of happiness

Responsible for your regulation of mood

Increases your pain tolerance

Helps you respond to + and - social environments

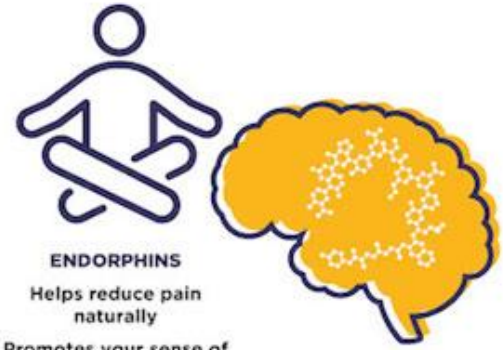


DOPAMINE

Makes your social interactions feel rewarding

Drives you to seek social interaction

Motivates you to overcome challenges



ENDORPHINS

Helps reduce pain naturally

Promotes your sense of overall well-being

Drives social behaviors during difficult times

Homework #1



1) Select 1 Pillar of Brain Health to focus on: _____
2) What are you doing now for this pillar?

   _____
3) What would you like to do differently or add to your life for this pillar?

   _____
4) Making a plan:
   - **a)** **What** will you do, specifically? _____
   - **b)** **When** will you do it? _____
   - **c)** **Why** is this important to you? _____
   - **d)** **Who** can help support you in this goal? _____
   - e) If something gets in your way, **how** will you solve it? _____

Key Takeaways

- Neuroplasticity refers to the brain's ability to change and adapt.
- What we do and how we live promote our brain health
- Remember the "6 Pillars of Brain Health”:
  - Physical Activity
  - Food & Nutrition
  - Medical Health
  - Quality Sleep
  - Cognitive Fitness
  - Social Interaction

Session 2:
Attention

Session 2 Agenda

1. Review Homework #1
2. Defining attention & concentration
3. Attention problems
4. Strategies to improve attention
5. Homework #2

Review: Homework #1



- Setting goal for 1 Pillar of Brain Health to improve
- Optional: Share your plan and how it’s going!

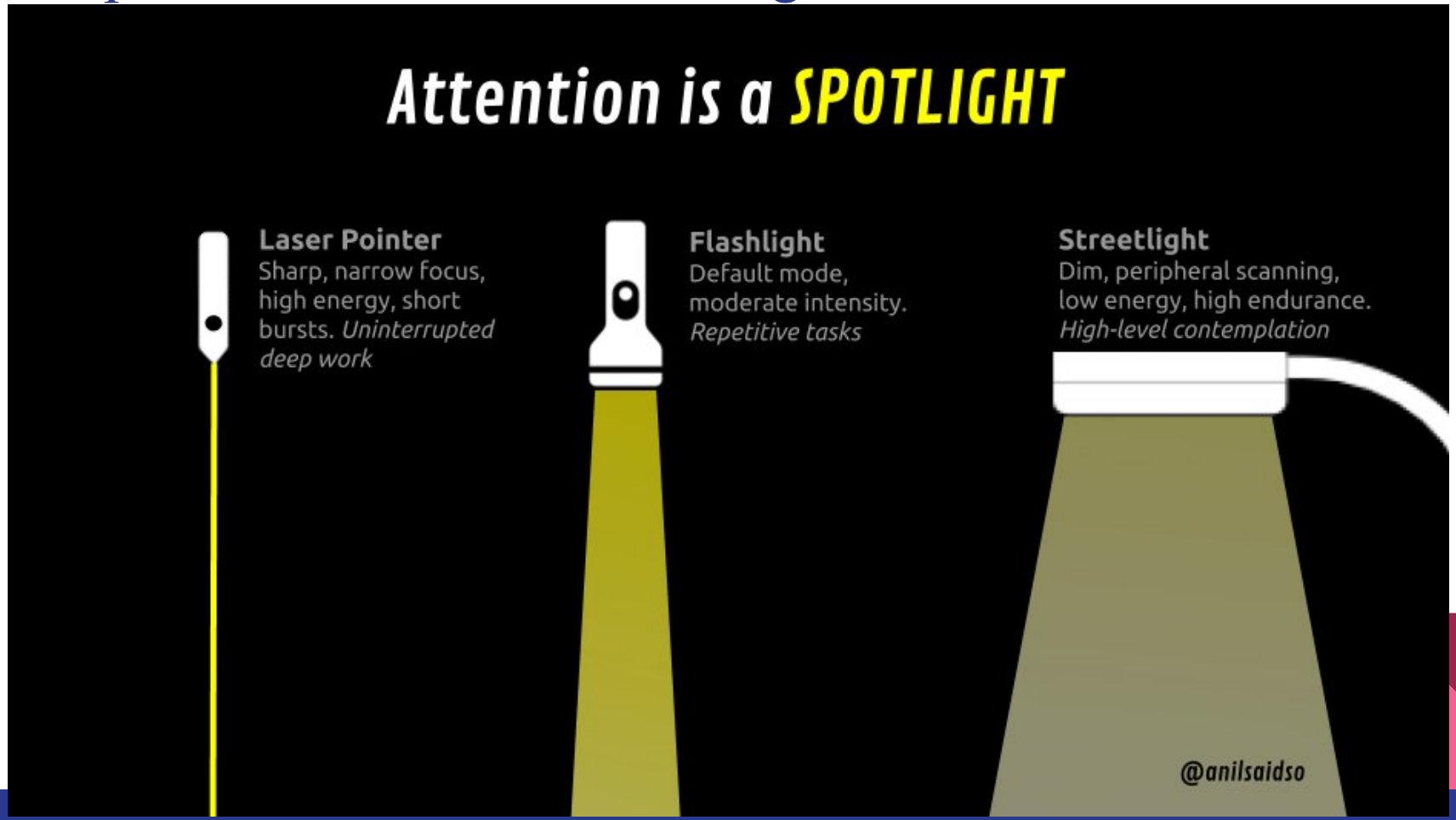
What are Attention and Concentration?

- **Attention** is the ability to focus on the task at hand
- **Concentration** is the ability to maintain attention over time

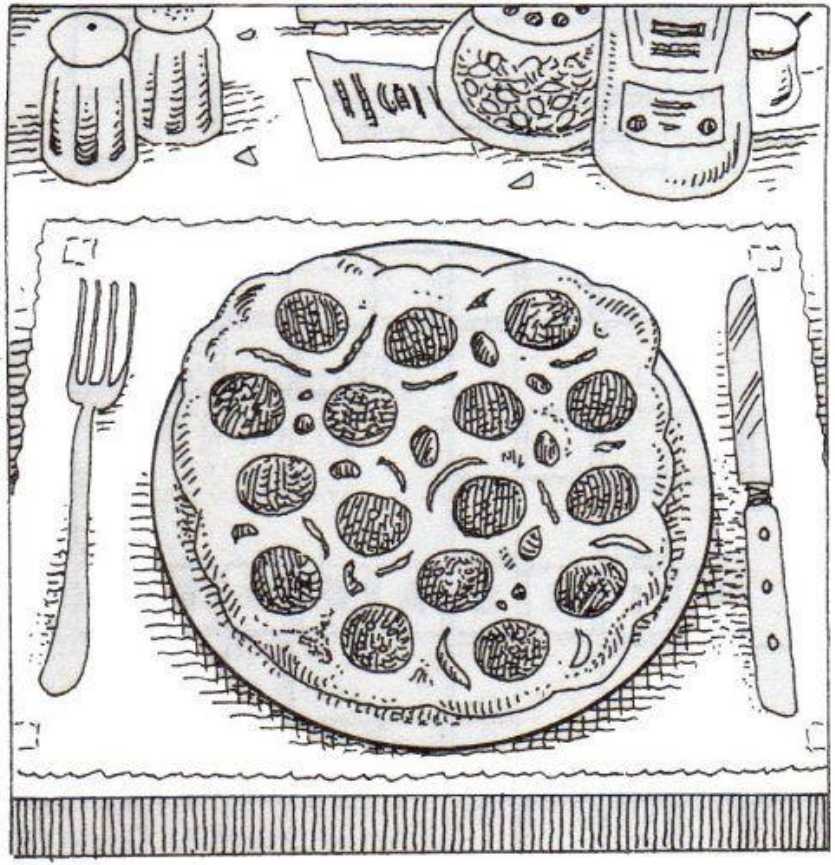


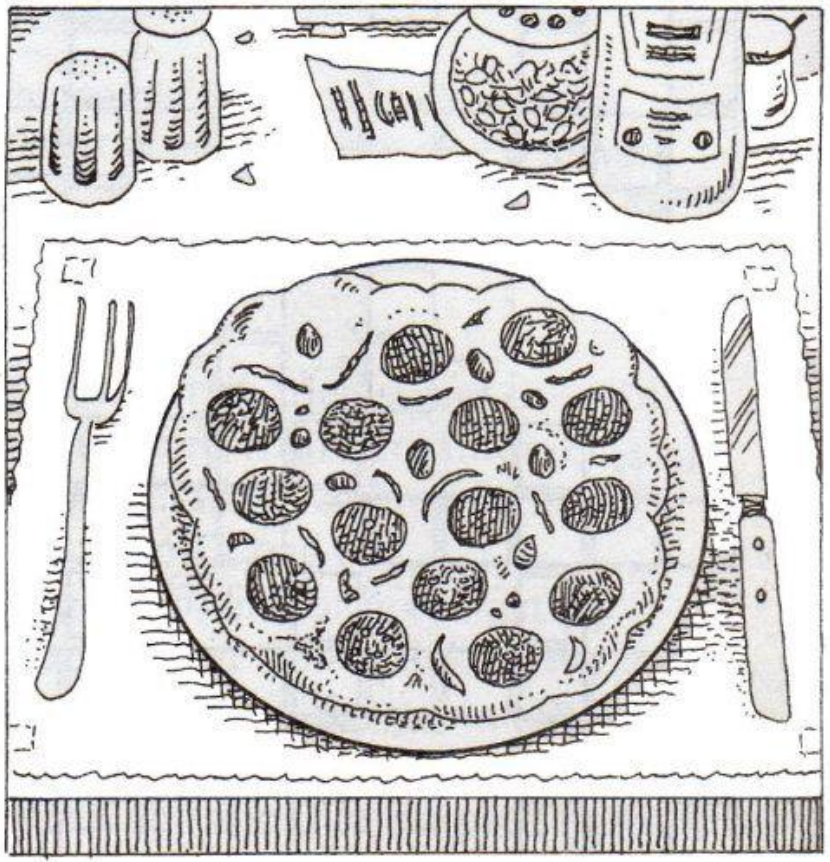


Metaphor: Attention as a Flashlight

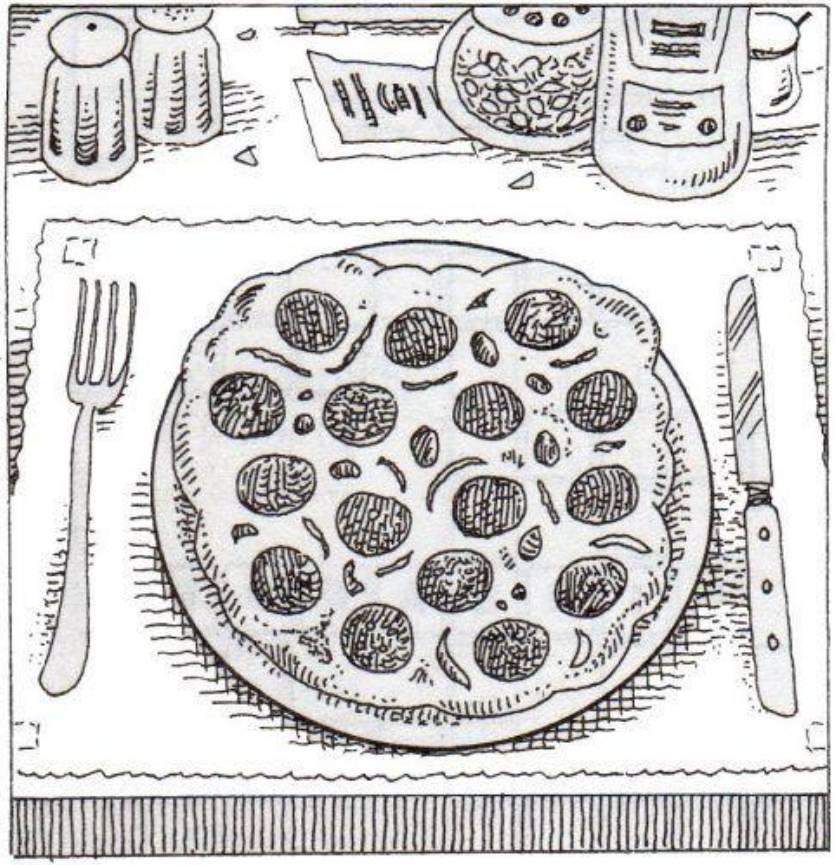


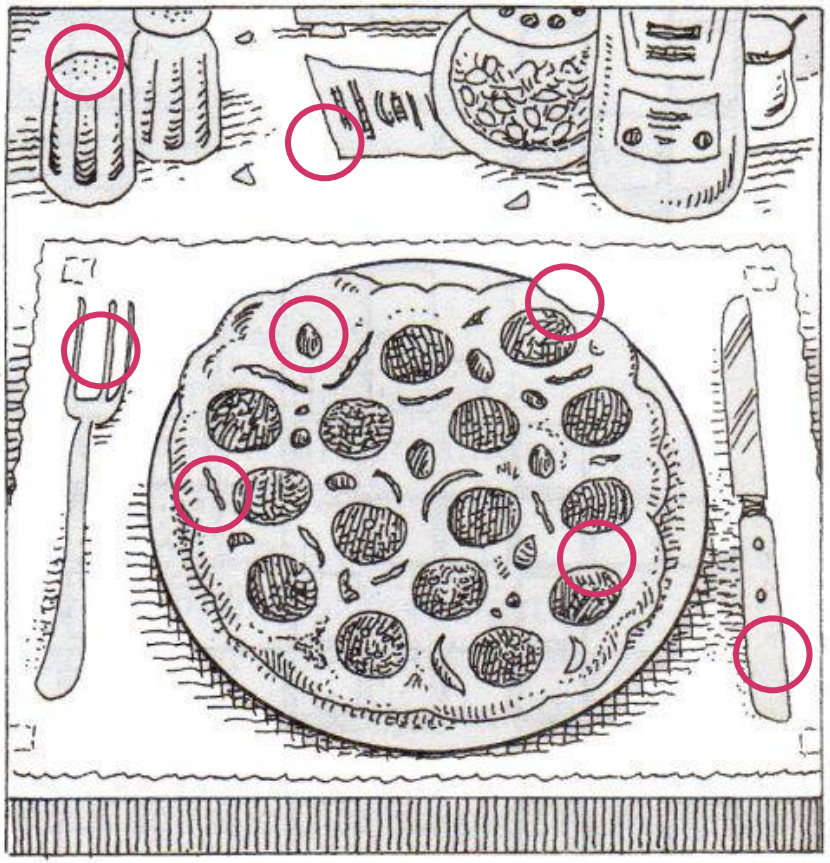
See if you can find the eight differences.





See if you can find the eight differences.





What do attention problems look like?

This is how attention and concentration **problems might show up in your everyday life**:

- Forgetting to complete tasks
- Getting distracted when reading or watching television
- Difficulty tracking conversations
- Not finishing a task that you started
- Being easily distracted by background noise
- Keeping track of multiple tasks at once

What causes attention problems?

- ADHD
- Aging
- Anxiety
- Depression
- Stress
- Environment
- Workload
- Brain injury/damage
- Hearing/vision loss

Strategies for Attention

Improving Attention

Strategy	Description	Example
Avoid distractions	Limiting what is happening in the environment around you – noise, visual distractions, etc.	• Use “do not disturb” on phone, browser • Noise-cancelling headphones
Practice active listening	Purposeful and intentional listening that helps you focus and attend to the other person	• Use LEAP (more on next slide)

Up Close: Active Listening

Listen Actively

Eliminate Distractions

Ask Questions

Paraphrase

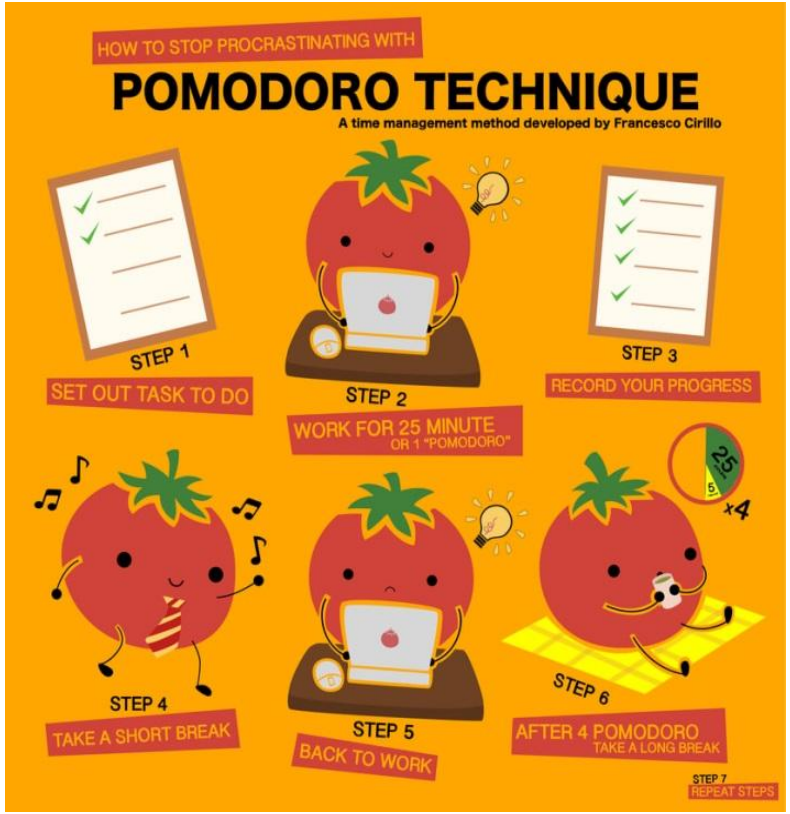


Time Management + Attention

- Recognize that attention is limited!
- Set periods of time for focus

Pomodoro Technique

- Set out to do Task
- Work - 25 minutes
- Record your progress
- Break - 5 minutes
- Back to work for another Pomodoro



Mindfulness

Mindfulness is a skill that can be improved with practice!

What:

- Intentionally paying attention to the present moment
- Without judging or rejecting the moment
- Without becoming attached to any one moment

Why:

- Evidence that mindfulness improves attention & emotion regulation
- Helps us more fully enjoy pleasant moments, and cope more effectively with unpleasant moments



Mindfulness Resources

Plum Village **-** Free website and app with guided meditations, including walking meditation.
https://plumvillage.org/mindfulness/mindfulness-practice

UCLA Mindful App **-** Free app designed to be simple and straight-forward.
https://www.uclahealth.org/ulcamindful/ucla-mindful-app

Calm App **-** Free basic version of the app and YouTube channel with calming visuals. https://www.calm.com/

Headspace App **-** Free basic version of the app and YouTube channel. https://www.headspace.com/

Example: Body Scan



Homework #2



1) Which strategy for attention will you try? _____
2) Making a plan:
   - **a)** **What** will you do, specifically? _____
   - **b)** **When** will you do it? _____
   - **c)** **Why** is this important to you? _____
   - **d)** **Who** can help support you in this goal? _____
   - e) If something gets in your way, **how** will you solve it? _____
3) Tracking your progress:

Date	Completed? Y/N	Notes

Key Takeaways

- Attention is focusing on a task, while concentration is the maintaining focus over time.
- Strategies that help with attention include:
  - Active listening
  - Avoiding distractions
  - Time-limited attention (Pomodoro technique)
  - Mindfulness

Session 3:
Memory

Session 3 Agenda

1. Review Homework #2
2. Overview of memory systems
3. Forgetting
4. Strategies to improve memory
5. Homework #3

Review: Homework #2



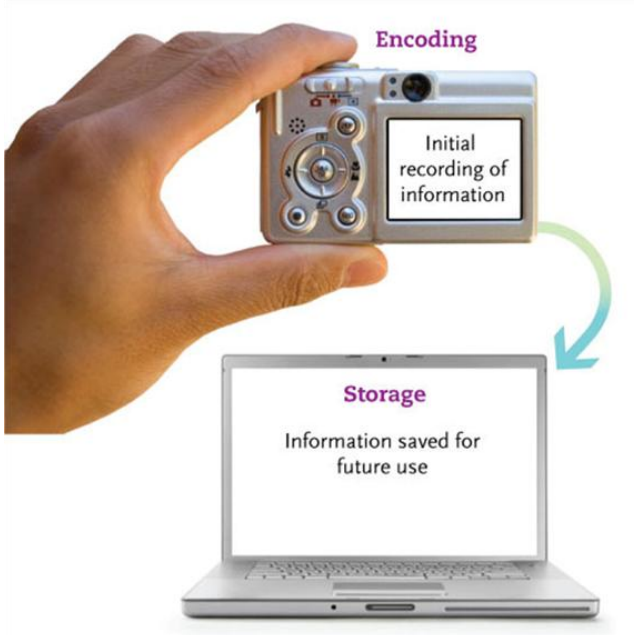
- Practicing 1 strategy for attention & concentration every day
- Optional: Share your plan and how it's going!

The Stages of Memory

Encoding

Storage

Retrieval





SHORT-TERM MEMORY

DEFINITION

Short-term memory temporarily holds and processes information for 15-30 seconds. It has a limited capacity, often cited as 7±2 items without the use of mnemonic techniques. Information in short-term memory can either fade due to decay, be displaced, or get transferred to long-term memory through processes like rehearsal.

EXAMPLES

- **Dialing a Phone Number:** After hearing or seeing a new phone number, you keep it in mind just long enough to dial it.
- **Remembering a Short Shopping List:** Before grabbing a notepad, you try to mentally recall a few items you need from the store during your quick trip.

LONG-TERM MEMORY

Long-term memory is a type of memory storage that allows for the retention of information over extended periods of time.

OVERVIEW

Long-term memory is the repository of our accumulated knowledge, experiences, and skills. Unlike short-term memory, long-term memory has a virtually unlimited capacity and can store information for years or even a lifetime. It is believed to involve changes in the connections between neurons in the brain, resulting in the formation of new neural networks.

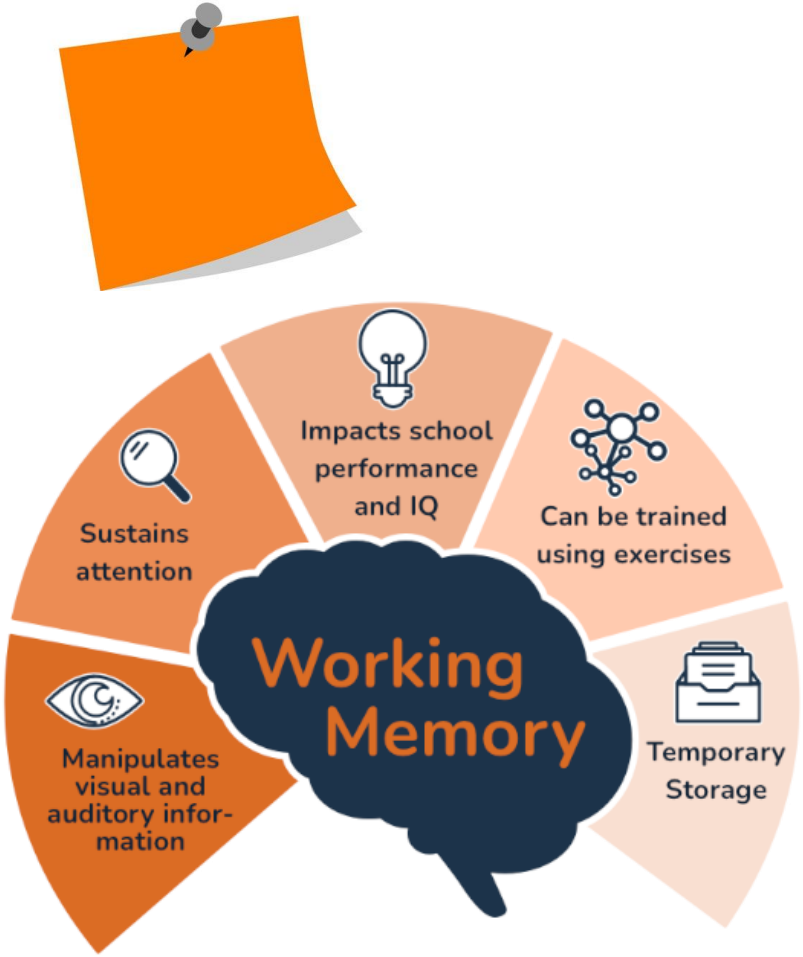
TYPES

- **Explicit memory** refers to conscious and intentional recollection of information. Sub-types include semantic and episodic memory.
- **Implicit memory** refers to unconscious and unintentional influence of information on present behavior or cognition. Sub-types include procedural and emotional memory.

What is Working Memory?

Working Memory is an *Executive Function* as well as a part of memory.

- Temporary storage and manipulation information
- Examples of working memory:
  - Doing mental math
  - Following directions



Forgetting



Forgetting

Can happen at any of the 3 stages

Failure to Encode

- Lack of attention
- Too many inputs at once

Failure to Store

Failure to Store = Lack of Consolidation

- Consolidation of information into more permanent stores **involves reorganization** and wiring of neurons in various parts of the brain
- **Time** is needed to take new information and properly store it in our long term memory
- **Disruption of the consolidation process** means we do not store information

Disruptors

- Distraction
- Lack of Sleep
- Inefficient Learning Strategies
- Alcohol and Other Substances

Retrieval Failures

What is a Retrieval Failure?

- When we learn and store information, but cannot access it

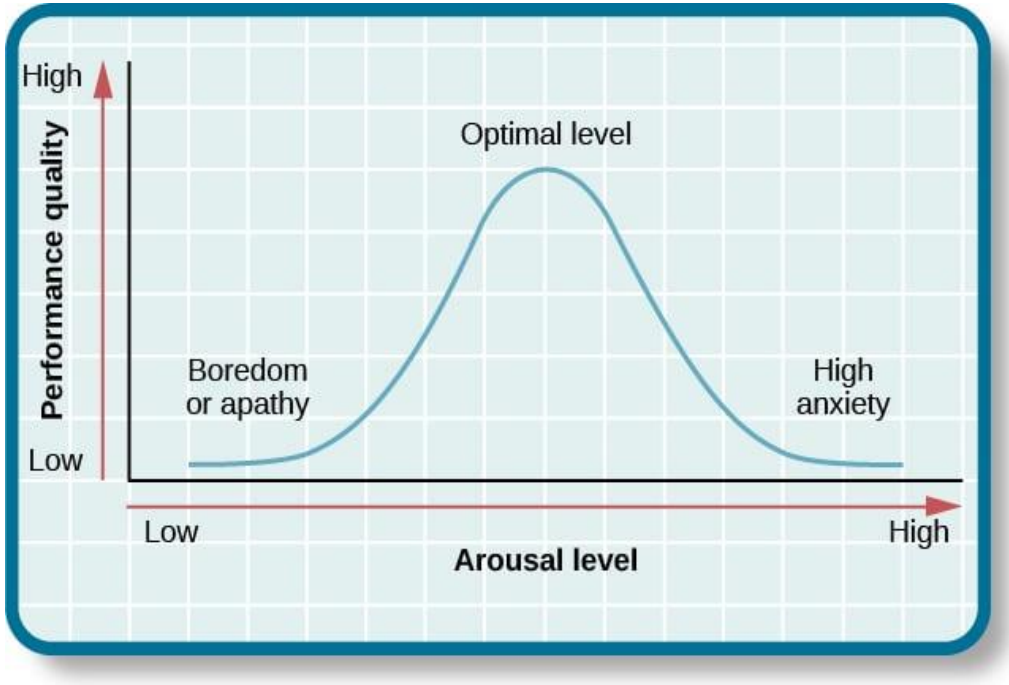
Retrieval & Context Cues

- We tend to recall information when in the same context (situation) or state (internal) → cues help us retrieve!
- Ex 1: Smell of Apple Pie reminds of Grandma
- Ex 2: Remembering a joke while out with friends after a few drinks



Think of a file cabinet and files → you have the file but are not sure where it's located

Retrieval Failure and Stress: The Yerkes-Dodson Law



- What can we do?
  - Relaxation practices (mindfulness, progressive muscle relaxation, etc)
  - Exposure/practice
  - Positive self-talk, affirmations
  - Adopt confident body language
  - Acceptance!

Strategies for Memory
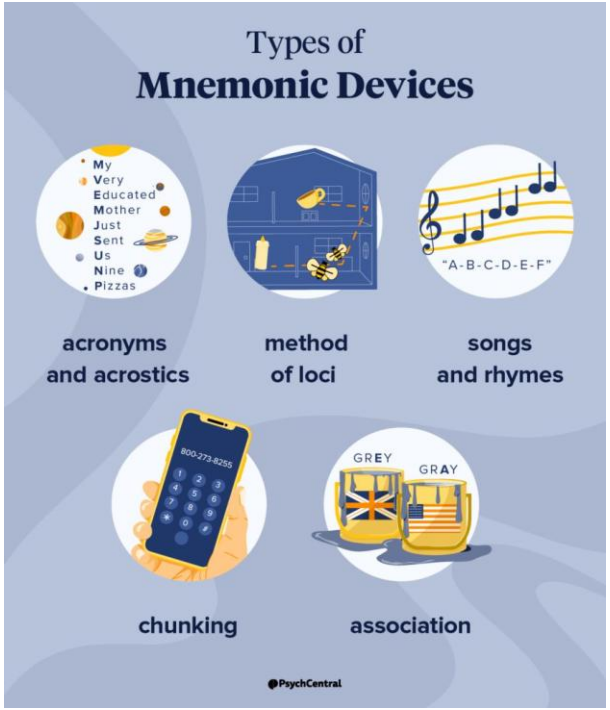
Encoding Strategies

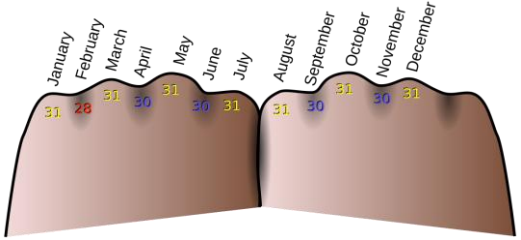
Strategy	Description
Minimize distractions	Minimize distractions to increase attention while trying to learn new information
Active listening	Ask questions, reflect back what has been said, adjust body language
Write things down	Jotting down the highlights from an interaction, presentation, or other material can help you focus on what is important



Storage Strategies

Strategy	Description
Mnemonic Devices	Strategies to help retain information.
Repetition/Rehearsal	Repeating things helps commit it to memory through reinforcement







Up Close: Mnemonics

Acrostics/Acronyms

- Imagine you have a grocery list: papaya, applesauce, nectarines, tangerines, strawberries, and lemons
- Create a word using the first letter of each item - P, A, N, T, S, L or "PLANTS."

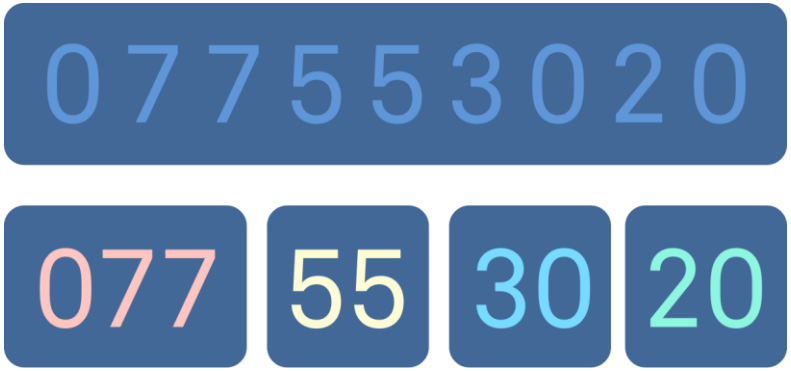
Visualization

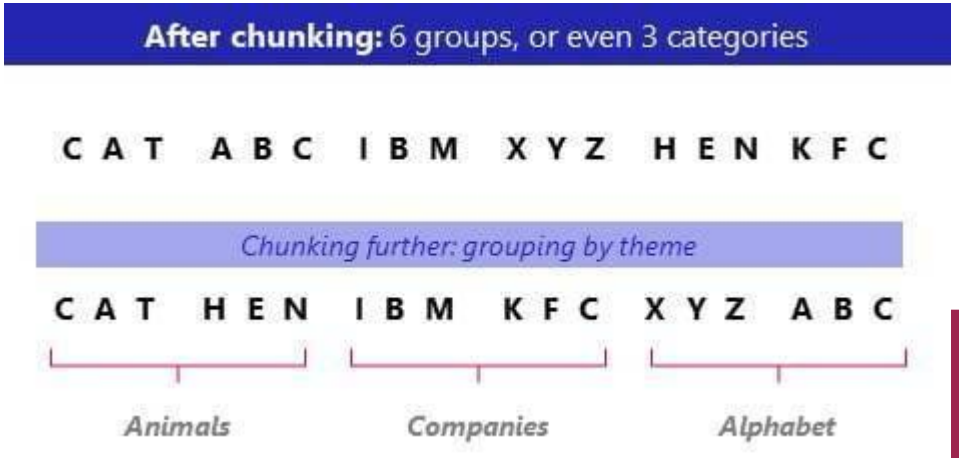
- Visualize a tree or plant with all the different kinds of fruits hanging on the branches



Chunking & Grouping

- Make information easier to remember
- Attaching meaning to information makes it more memorable!





Retrieval Strategies

Strategy	Description
Priming with Cues	Having access to cues that prompt your memory Ex: post-it note with a word on it
Alarms & Reminders	Setting alarms and reminders helps relieve you of having to remember to do something Ex: set an alarm with a note "Pay Rent"



Retrieval Strategies

Strategy	Description
State-Dependent Learning	The conditions you're in when learning something become a cue for retrieving it
Practicing Retrieval	Spacing out practice of the information that is important for you to learn



Memory Strategies

Discussion Questions:

- Which memory strategies have you used before?
- Were they helpful?
- Which strategies were the best for you?

Homework #3



1) Which strategy for memory will you try? _____
2) Making a plan:
   - **a)** **What** will you do, specifically? _____
   - **b)** **When** will you do it? _____
   - **c)** **Why** is this important to you? _____
   - **d)** **Who** can help support you in this goal? _____
   - e) If something gets in your way, **how** will you solve it? _____
3) Tracking your progress:

Date	Completed? Y/N	Notes

Key Takeaways

- Memory problems can be helped through strategies at each stage of the process, including:
  - Encoding: Active listening, avoiding distraction
  - Storage: Repetition, mnemonics, chunking
  - Retrieval: Cues, reminders, rehearsal
- Practicing these strategies daily helps to form habits that support your memory!

Session 4:
Executive Functioning

Session 4 Agenda

1. Review Homework #3
2. Defining executive functions
3. Executive dysfunction
4. Strategies to improve executive function
5. Course review
6. Planning for the future

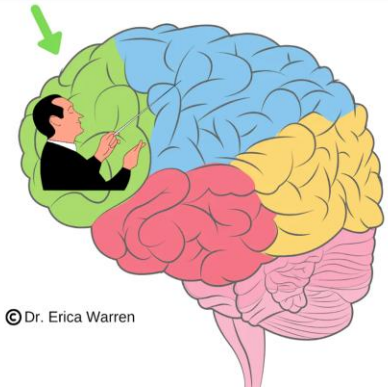
Review: Homework #3

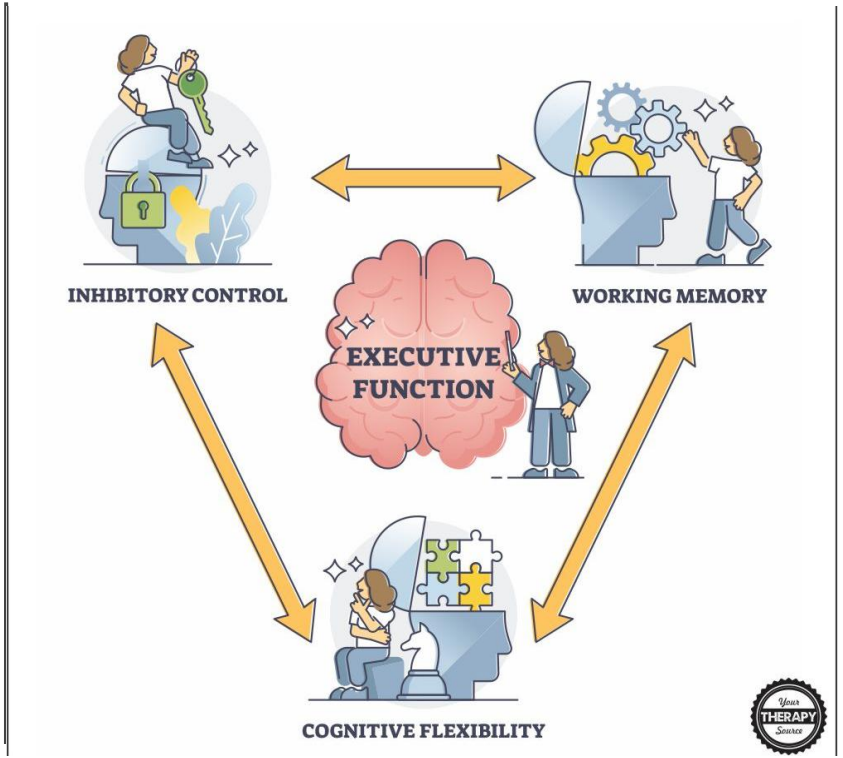


- Practicing 1 strategy for memory every day
- Optional: Share your plan and how it’s going!

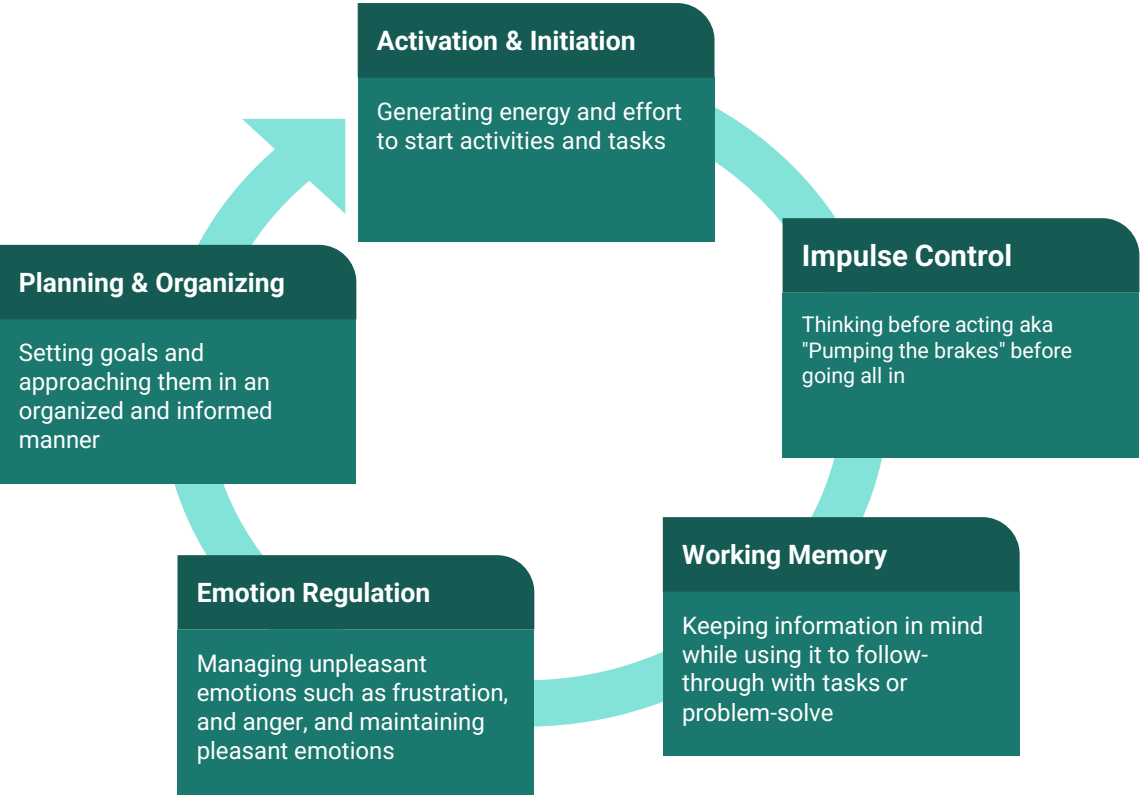
Executive Functioning

- 3 core components:
  - Working Memory
  - Inhibitory Control
  - Cognitive Flexibility
- Involves the frontal lobe - the "conductor" of many cognitive functions



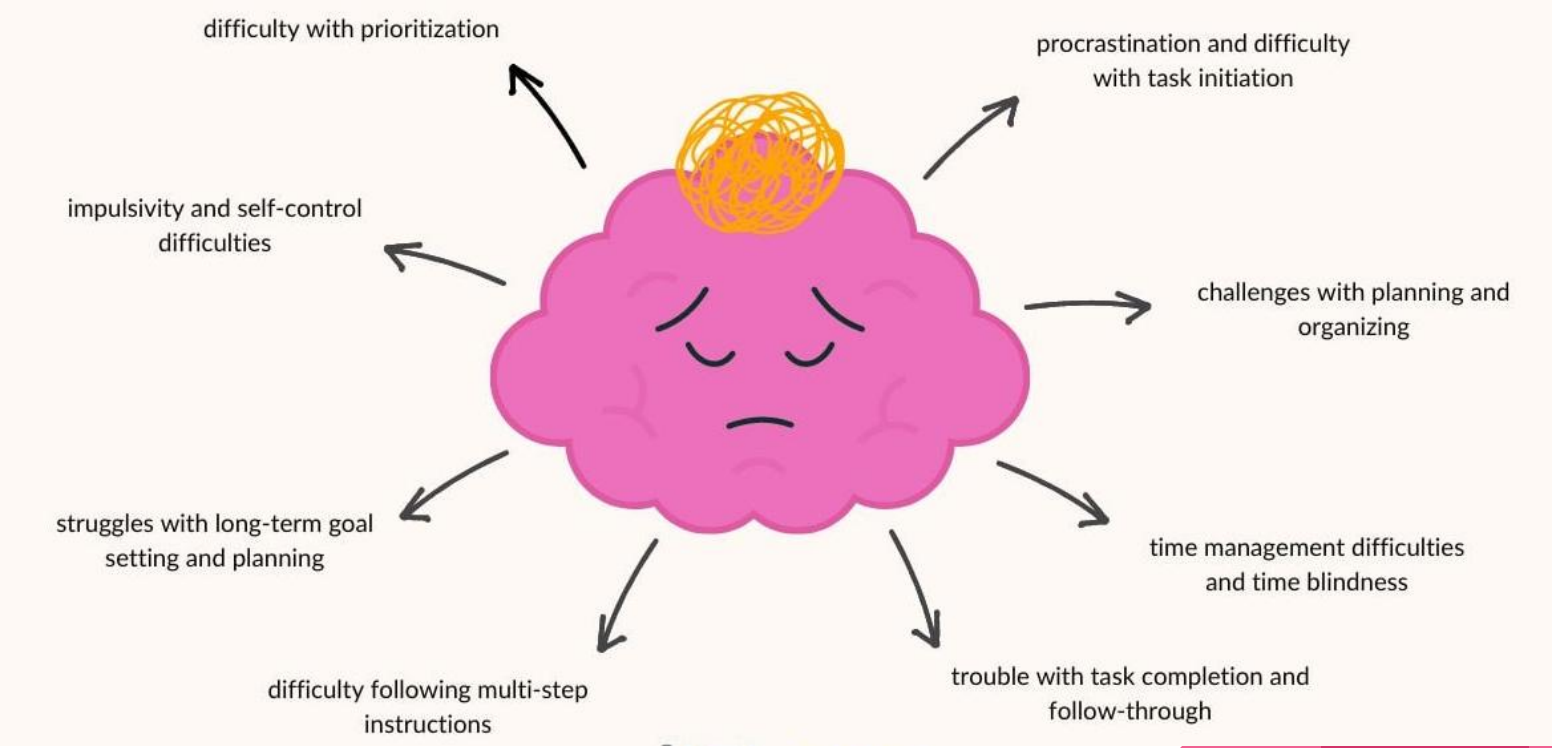


Executive Functioning impacts many areas:



Flexible Thinking
Self-Monitoring
Time Management
Meta Cognition
Decision Making
Problem Solving
And more…

Executive Dysfunction

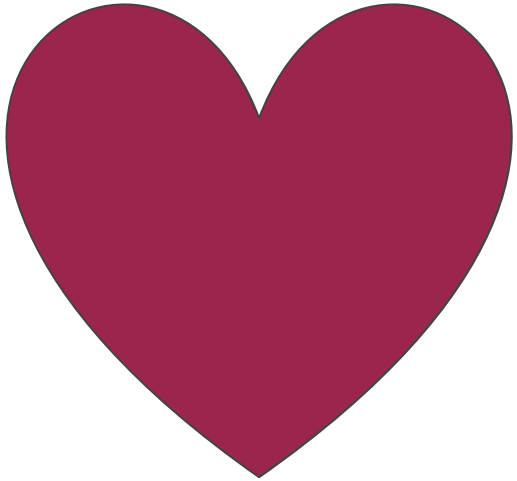


Let's Try it Out

1-Back Task

Directions:

1. Make a list of numbers 1-10 down the side of your paper
2. Pay close attention to the starting shape and each shape thereafter
3. Write Yes (Y) or No (N) if the shape matches on the previous slide
    - Starting Item. —
    - 1. Y/N
    - 2. Y/N
    - 3. Y/N
    - …

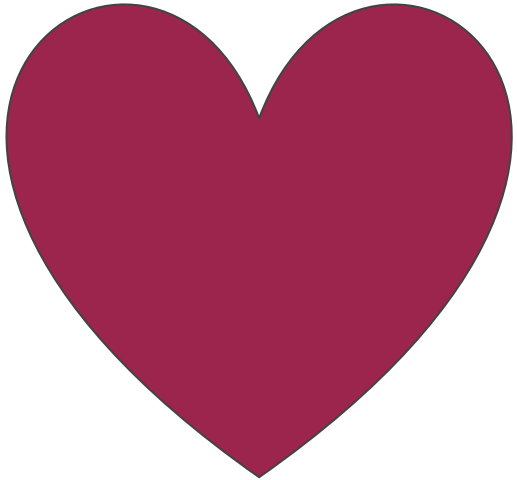


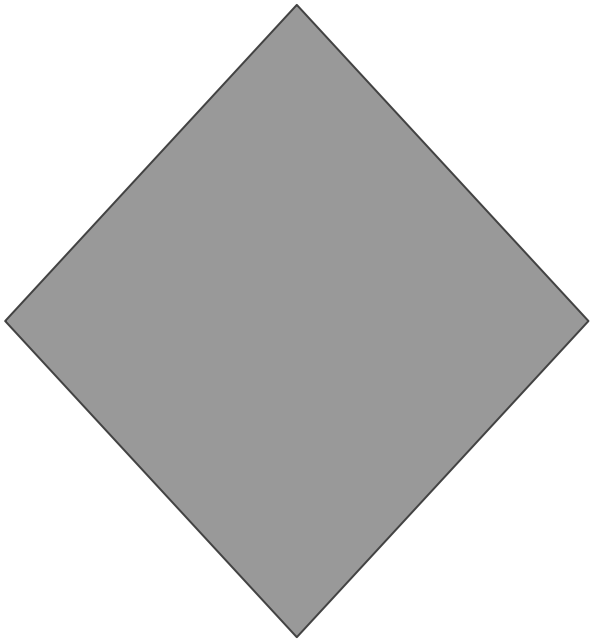
Starting Item

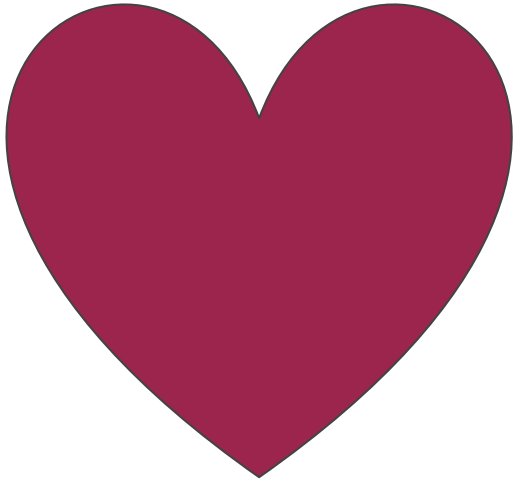
Does this shape match the one you just saw?

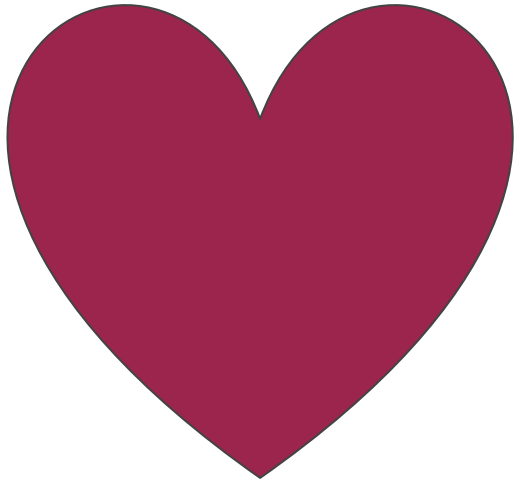
- **If yes, write Y**
- **If no, write N**







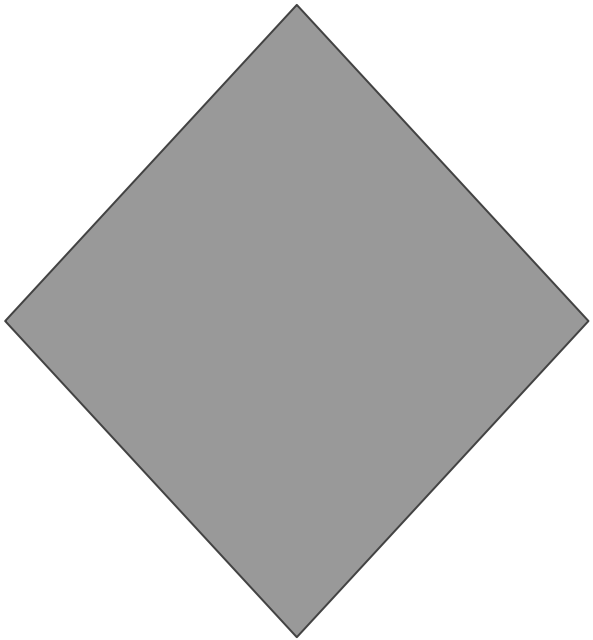














How Did you Do?

Answers for 1-Back Exercise:

1. No
2. No
3. No
4. No
5. Yes
6. No
7. Yes
8. Yes
9. No
10. No

Strategies for Executive Functioning

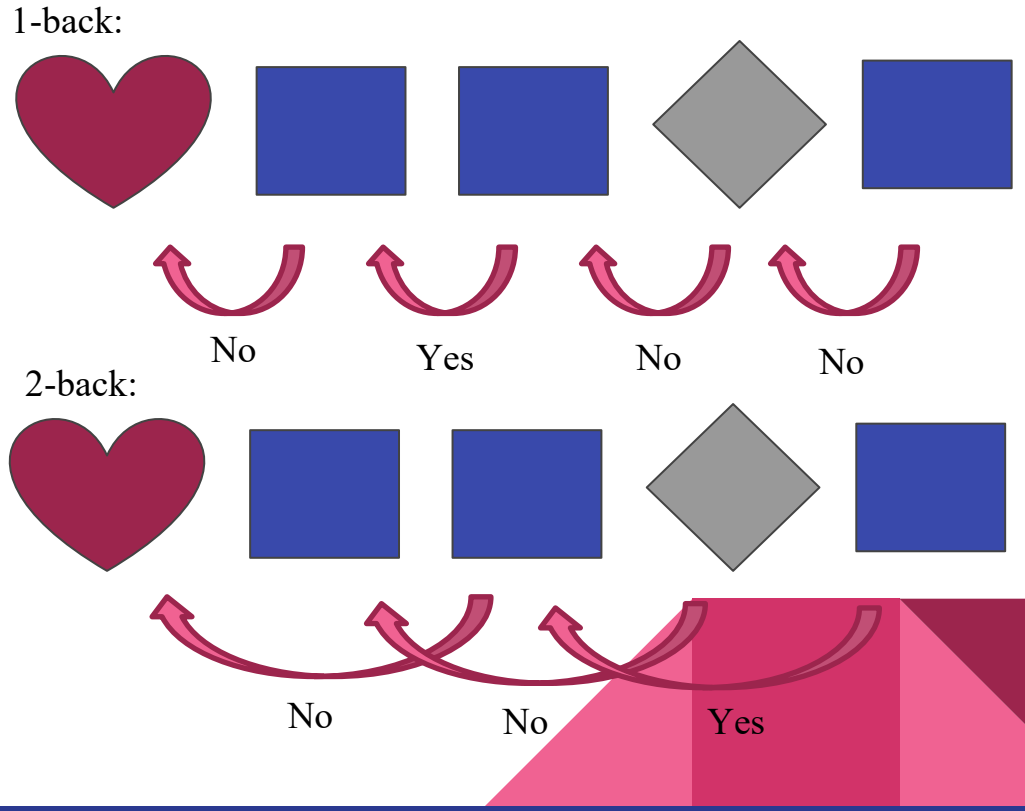
How to Improve Executive Functioning

- Training exercises
- Organization strategies
- Time management strategies
- Planning strategies
- Mindfulness



Working Memory Training: N-back Task

What is This Exercise?
The exercise we did earlier was an example of a *1-back task.*
N= number of objects back to remember
The N can be 1, 2, etc. *The higher the number, the more difficult the task*
Practicing the N-back task can boost your working memory capacity



Resources for Cognitive Fitness Training

Websites:

- ***Brain Gymmer*** - Free website with games for working memory, attention, planning, cognitive flexibility, etc. https://www.braingymmer.com/
- ***Seattle Times Crossword*** **-** Free crosswords. https://www.seattletimes.com/games-nytimes-crossword/

Apps:

- ***Elevate*** - https://elevateapp.com/index.html
- ***Lumosity*** - https://app.lumosity.com/landing

NYT Games (website and app): https://www.nytco.com/games/

Working Memory Training: Sentence Variations

Reverse the Words

1. The door is open
   open, is, door, the
2. Don’t act that way
   way, that, act, don’t
3. My Pizza is cold
   cold, is, pizza, my
4. She ate too fast
   fast, too, ate, she

Alphabetize the Words

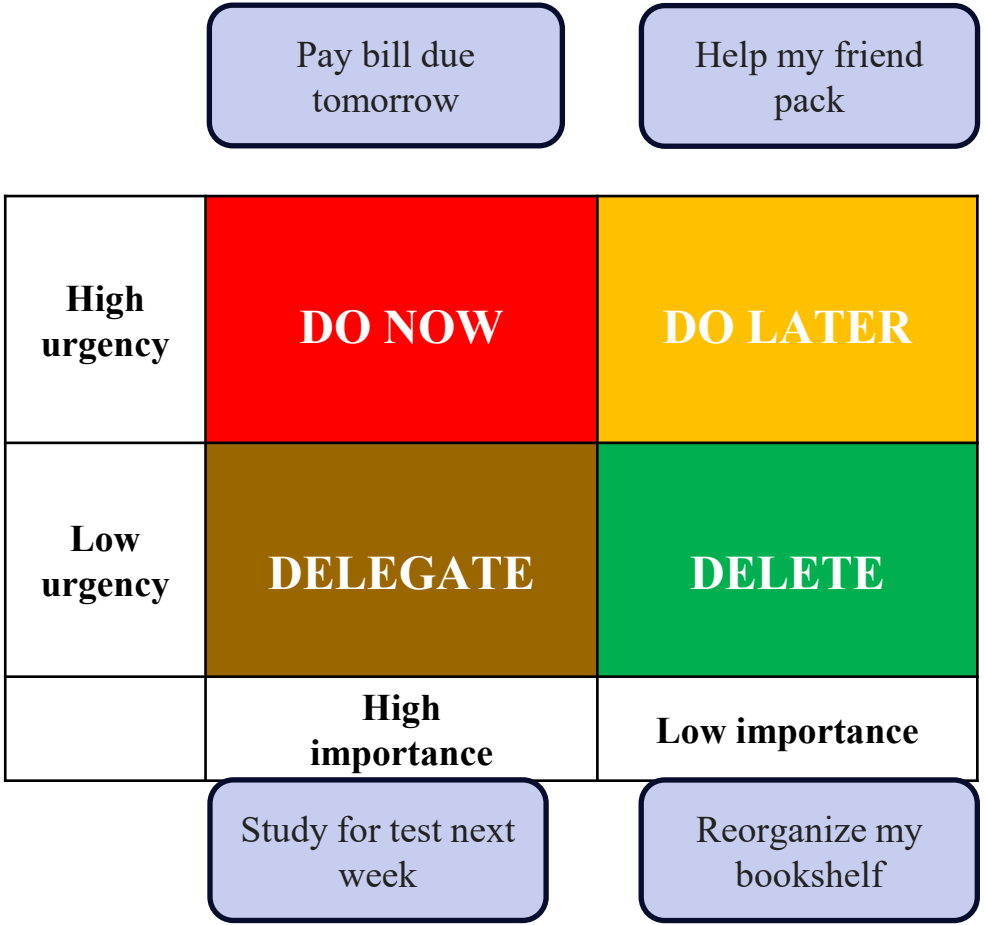
1. The door is open
   door, is, open, the
2. Don’t act that way
   act, don't, that, way
3. My Pizza is cold
   cold, is, my, pizza
4. She ate too fast
   ate, fast, she, too

Organization & Time Management

Prioritization Matrix

Designed to help you discern which tasks/projects are “Important” and which are
“Urgent,” so you can focus on what matters most.

Study for test next week
Help my friend pack
Pay bill due tomorrow
Reorganize my bookshelf

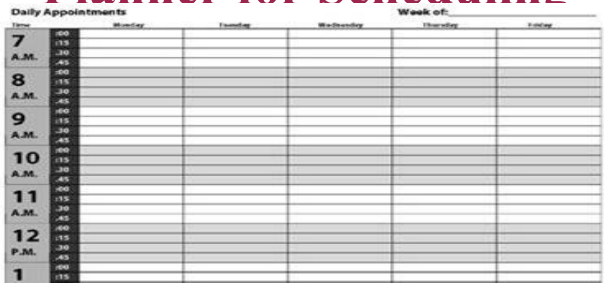


Organization & Time Management

Notebook for Meetings



Planner for Scheduling



Keep ONE Task List

TickTick

todoist

Slips of paper get lost. Keep all information in one place!
TickTick includes to-do lists, notes, grocery lists, calendar, prioritization matrix, pomodoro timer, and more!

Organization & Time Management

Combined Planner/Notebook:

https://a.co/d/ioj6mUo



Planning: Setting SMART Goals



Problem-Solving

5 Step Approach

1. Define the Problem
2. Brainstorm Solutions
3. Pick a Solution
4. Implement the Solution
5. Review the Results



Let's look at an example

***Problem**: I feel exhausted and I'm looking for a way to feel more energized*

1. Define the Problem

What are you trying to solve?

- Identifying and clearly defining the problem is essential for solving it.

Questions to Ask:

- What is the basic need?
- What are we trying to achieve?
- What do we want and why?

***Problem**: I feel exhausted and I'm looking a way to feel more energized*

2. Brainstorm Ideas

***Problem**: I feel exhausted and I'm looking a way to feel more energized*

Brainstorming is generating possible solutions without regard to whether they are feasible or not (at least at this stage)

Possible Solutions
Drink Lots of Caffeine
Improve my sleep
Consult my doctor
Find a magic pill

3. Pick a Solution

***Problem**: I feel exhausted and I'm looking a way to feel more energized*

Picking a solution might involve exploring the pros and cons of an idea

Possible Solutions	Pros	Cons
Drink Lots of Caffeine	Does give energy	Can worsen anxiety
Improve my sleep	Could help with energy	Takes effort to change behavior
Consult my doctor	Maybe they have a solution	I've tried already, but maybe will again in the future
Find a magic pill	I wish! Would make my exhaustion disappear	Doesn't exist

4. Implement the Solution

***Problem**: I feel exhausted and I'm looking a way to feel more energized*

This is the step where you plan how to implement the solution:

1) Review sleep improvement strategies
2) Develop a sleep routine that includes good sleep hygiene and stimulus control
3) Start using my sleep routine on October 5th at 7:00 pm each night
4) Describe what can help or impede pursuing your plan
5) Evaluate after two weeks

5. Review the Results

***Problem**: I feel exhausted and I'm looking a way to feel more energized*

During this step, you evaluate what worked, didn't worked, and how it feels

Evaluation: Improve Sleep
I still feel exhausted but I have more energy than before. These strategies, although not 100% effective, have been extremely helpful in improving my sleep and energy levels. I will continue using these strategies but try another solution from my list.

Meditation

Practicing meditation and other forms of mindfulness can improve concentration and emotion regulation.

Benefits:

- Triggers the relaxation response
- Promotes brain regeneration
- Improves mood

Changing Perspectives
Taming the Mind
Let's Try it! - Mini Meditation



Mindfulness Resources

Plum Village **-** Free website and app with guided meditations, including walking meditation.
https://plumvillage.org/mindfulness/mindfulness-practice

UCLA Mindful App **-** Free app designed to be simple and straight-forward.
https://www.uclahealth.org/ulcamindful/ucla-mindful-app

Calm App **-** Free basic version of the app and YouTube channel with calming visuals. https://www.calm.com/

Headspace App **-** Free basic version of the app and YouTube channel. https://www.headspace.com/

Discussion

- Which of these strategies are you interested in trying?
- How will you try this strategy?

Key Takeaways

- Executive function difficulties are common and can interfere with daily life.
- There are many resources, activities and strategies you can use to improve your executive functioning, including:
  - Practicing/training your working memory
  - Time management (Pomodoro technique, priority matrix)
  - Organization (priority matrix, using a planner)
  - Planning (SMART goal setting, problem solving)
  - Emotion regulation (mindfulness practice)

Review & Next Steps

Session 1: Intro to Brain Health

- Neuroplasticity refers to the brain's ability to change and adapt.
- What we do and how we live promote our brain health – i.e., our brain's neuroplasticity properties and ability to stay sharp and bounce back from adversity.
- Research highlights six areas essential for brain health. They are known as the "6 Pillars of Brain Health"
    - Food and Nutrition
    - Physical Activity
    - Medical Health
    - Socialization
    - Sleep and Relaxation
    - Cognitive Stimulation
- Taking steps to live according to the Pillars of Brain Health will promote brain health and your overall well-being.

Session 2: Attention & Concentration

- Attention is focusing on a task, while concentration is the maintaining focus over time.
- Strategies that help with attention include:
  - Active listening
  - Avoiding distractions
  - Time-limited attention (Pomodoro technique)
  - Mindfulness

Session 3: Memory

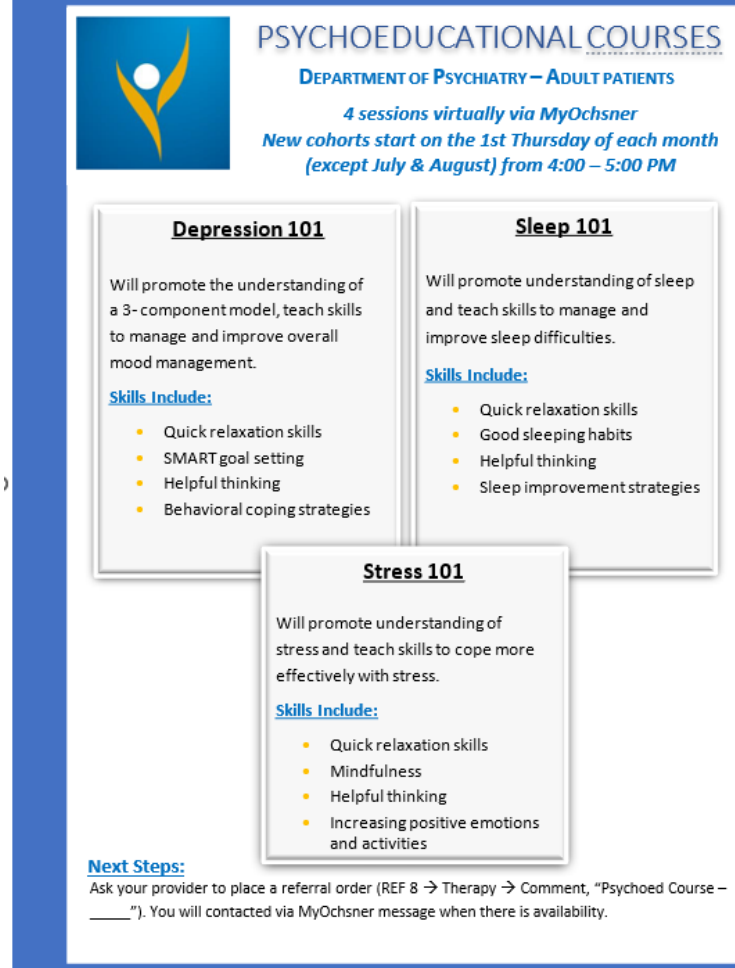
- Memory involves taking in information, processing, storing, and recalling it later.
- Forgetting happens when one or more of the steps in memory is interrupted.
- Strategies that support memory include:
  - Encoding: Managing attention, writing things down
  - Storage: Repetition, mnemonics, chunking
  - Retrieval: Cues, reminders, rehearsal

Session 4: Executive Function

- Executive functions are a collection of abilities that allow us to organize information, plan tasks, and manage our emotions.
- Executive function difficulties are common and can interfere with daily life.
- Strategies to improve executive functioning include:
  - Practicing/training your working memory
  - Organization (priority matrix, using a planner)
  - Planning (SMART goal setting, problem solving)
  - Emotion regulation/focus (mindfulness practice)

Next Steps

- Continue practicing strategies
  - Forming new habits takes time!
- Consider taking other courses to manage:
  - Sleep
  - Stress
  - Depression



Future Plans

	Pillars of Brain Health	Attention	Memory	Executive Function
Week 1				
Week 2				
Week 3				
Week 4				
Week 5				
Week 6				
Week 7				
Week 8				

Thank you!