



Rehabilitation for your brain: Strategies to optimize cognition and communication in Parkinson's disease

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Agenda

Provide an overview of:

- The role of the SLP in PD
- Cognitive changes associated with PD
- Other factors that affect cognition
- Descriptions of cognitive processes
- Tools and strategies for cognitive changes

SLP Role in PD

- Cognition
- Communication (Language and Speech)
- Voice
- Swallow

Cognition in PD

- Incidence:
 - 20-57% of people with PD experience cognitive impairment.

Cognitive Difficulties in PD

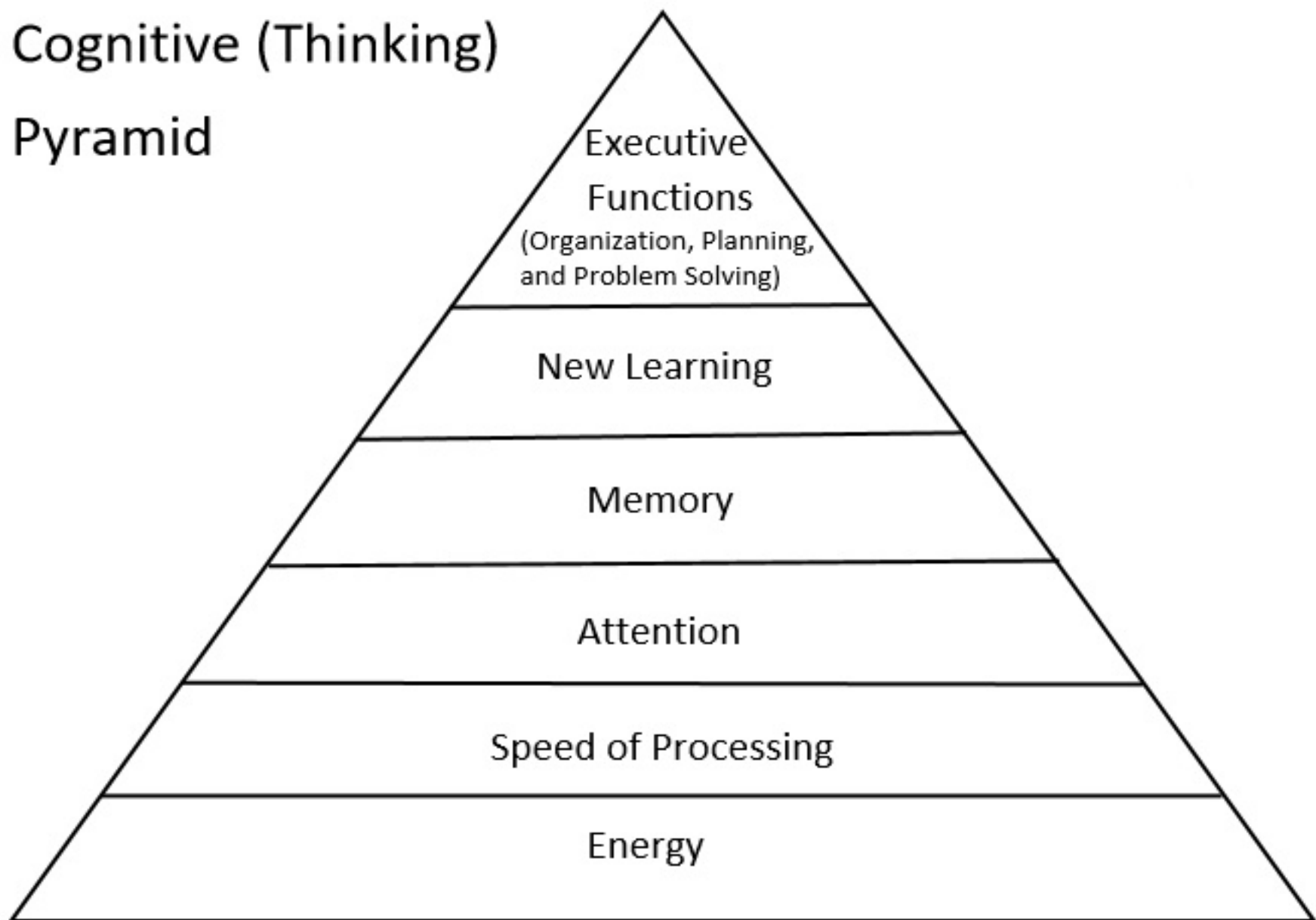
- Present in some or all of these areas:
 - Speed of Processing
 - Complex Attention
 - Memory
 - Executive Functions
 - Speech and Language
- Time of onset varies from one person to another
- Severity can range from mild (hardly noticeable) to severe (significantly impacts daily functioning)

Factors Which Make Cognitive Function Worse

- Medication
- Pain
- Poor sleep
- Low Mood / Depression
- Stress / Anxiety
- Overstimulation / Distraction

Cognitive (Thinking)

Pyramid



Pain Sleep Illness/Injury Balance/Vision Nutrition Stress Mood Activity Meds

Speed of Processing

Definition: the speed at which someone takes in information, processes it, and responds to it.

In PD, slowed processing speed may result in:

- Taking longer to complete tasks
- Delays in response time
- Taking longer to make a correct judgment about visual stimuli

Speed of Processing Strategies

- For people with PD, ask others to:
 - Slow down
 - ✓ Can you slow down?
 - Repeat
 - ✓ Would you repeat that?
 - Say one thing at a time
 - ✓ Can you say one thing at a time?
 - Ask for info in writing
 - ✓ Could you write that down for me?

Speed of Processing Strategies

- For caregivers and family:
 - When giving instructions:
 - ✓ Say one thing at a time
 - ✓ Write down more complex or multi-step instructions
 - Allow extra time for responses

Attention

- Sustained: ability to focus attention for a period of time to complete a single task (e.g., reading a book).

Complex attention deficits are well-documented in PD.

- Selective: ability to maintain attention in presence of internal or external distractions (e.g., listening to your spouse in a loud restaurant).
- Alternating and Divided: shifting attention between two or more tasks or activities (e.g., reading a recipe and preparing a meal, walking and talking).

Attention Strategies

- Aim for a non-distracting environment when focus is required
 - Eliminate distractions and reduce clutter
 - Do difficult tasks when you are most alert
- Do one thing at a time whenever possible
- Use self-talk
- Set reasonable goals and make time for breaks

Memory

- Short-term memory:
 - Holds info for 30-45 seconds
- Long-term memory:
 - Remembering experiences from years ago or knowing how to do things (e.g., how to make coffee)
- Working memory:
 - Holding onto info and manipulating it (e.g., mental math, remembering what you want to say when someone else is talking)
- Prospective memory:
 - Remembering tasks you need to complete in the future (e.g., taking medications, appointments)

Memory Strategies

- Write it down
 - Appointments, to-do lists, grocery lists, notes from phone calls, questions for doctors
- Use visual reminders
 - Post-it notes or other small signs can cue you to do something you may otherwise forget
- Medications
 - Use alarms and a pill box -- www.epill.com
- Use a “memory shrine”
 - Designate one place to keep important items like keys, wallet, purse, glasses

WEEKLY **OCTOBER** PLANNER

Sunday

- meet Sallie in cafe
- rearrange toy closet
- Costco
- laundry
- clean bathrooms

Monday

- cancel subscription
- return Nordstrom order
- clean office area
-
-

Tuesday

- carpool round
- pick up pants from Ashley
- kids' dentist @ 4
- burritos recipe presentation
- request textbook

Wednesday

- library day
- call babysitter
- file taxes
- update COS account
- Take recycling out

Thursday

- schedule ortho appt
- buy pampers
- pay babysitter \$20
- RENT DUE!!!
-

Friday

- confirm photographer
- Dance 4:15 - 5:30
- Cambridge Plaza Event
-
-

Saturday

- Photo session @ 10
- carnival round the corner
- Shopping -
- Set up guest room
-

Notes:

Family Photo Session
at beach!!!!

borrow fedora
leave house at 8



we are all wearing white!! no exceptions. Jay!



Executive Functions

- The “CEO” of our brain
 - Planning
 - Organization
 - Problem-solving
 - Time management
 - Inhibition
- Working memory and complex attention are key components of executive functions

Executive Function Strategies

- Stick to a consistent daily routine
- Have a daily plan
 - Calendar + short to-do list
- Break down larger tasks into individual steps
 - Set the goal
 - Create checklist of steps needed to reach goal

Communication

- Communication difficulties in PD include:
 - Difficulty following complex commands
 - Word retrieval difficulties
 - Organizing thoughts in conversations

Factors Which Make Communication Worse

- Feeling rushed
- Distraction
- Stress
- Fatigue
- Low mood/depression
- Illness

Communication Strategies

- Organize communication ahead of time
 - 3x5 card in pocket with bullet points
 - Write down questions before appointments or phone calls
- Keep it simple and allow yourself time
- Go someplace quiet to talk; eliminate distractions
- Ask people to slow down or repeat what they say

Tips for Communication Partners

- Give the “gift of time” – do not rush to respond
- Get the other person’s attention before you start speaking
- Introduce one topic at a time
- Use active listening – paraphrase for clarity
- Have an empathetic attitude – this will reduce stress and help your loved one communicate

Communication Tips

- Educate others (family, friends) about ways to help communication by developing scripts:
 - For family members and friends:
 - ✓ “_____ is learning to optimize life with communication changes in PD. Group conversations are difficult. Please talk with him one-on-one.”
 - For non-familiar communication partners:
 - ✓ “_____ has Parkinson’s disease. Please be patient with his speech.”
- Communication is 35% verbal, 65% nonverbal
 - Educate others about Masking in PD

Speech & Voice Changes in PD

- Speech changes in PD – hypokinetic dysarthria:
 - Decreased loudness level
 - Increased rate of speech
 - Short rushes of speech
 - Repeated sounds in words
- Lee Silverman Voice Treatment (LSVT)
 - Intensive voice treatment program - 16 sessions in 4 weeks
 - Focuses on increasing vocal loudness

Other Considerations for Cognition and Communication

- You can make a difference in the course of your disease by what you choose to do!
 - Cardiovascular exercise
 - Social interaction
 - ✓ Volunteer, join a spiritual group, sing, lectures
 - Cognitive stimulation
 - ✓ No single “right” mental exercise
 - ✓ Puzzles, playing cards or games, reading, going to lectures, learning a new activity
 - ✓ Social interactions are an important piece of mental stimulation

Q & A

- Thank you for inviting me here to speak today!
- Contact me with additional questions:
 - knikris@ohsu.edu