# **Cognitive Abilities**



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# **Today's Topic**



- Today, we'll talk about cognitive abilities, or a person's ability to think
- We'll ask some questions to help us understand why a person does some tasks more easily than others or feels a certain way
- These questions are based on brain functioning, but you don't need to know anything about the brain to ask them

# **Cognitive Abilities Questions**

- These questions can help you understand a person's cognitive strengths and needs
  - While you are helping a person with a task or communicating with them
  - When you want to improve communication or a task
- Anyone can ask these questions
- They can generate **strategies** (interventions) to support a person's cognitive abilities to:
  - Help with any task and communicate
  - Help everyone feel better, prevent and reduce distress and distressing situations

# **Ideas of Intervention Strategies**

- These strategies change the environment, your communication, or the task to adapt to or compensate for cognitive changes
- These intervention ideas are useful in all tasks, such as making decisions, playing a game, dressing, eating, using the toilet, and bathing

#### **5 Phases of Cognitive Processing**

- 1. Sensory Phase: Can this person receive information from the environment through their five senses?
- 2. Comprehension/ Perception Phase: Can this person's brain recognize and understand the information received from the senses?



# 5 Phases (continued)

- 3. Executive Phase: Can this person organize and use the information to decide on a response?
- 4. Expressive Phase: Can this person's brain tell their body what to do in order to respond?
- 5. Motor Phase: Can this person's body physically respond to the instructions from their brain?

# **5** Phases Illustration

- Sensory phase Can this person see the object (such as a washcloth) and **hear** the instructions?
- Comprehension/ perception phase Can this person **recognize** the objects and know what the words mean?
- Executive phase Can this person use cognitive abilities like memory and logic? 7

### 5 Phases Illustration (continued)

- Expressive phase Can this person's brain tell them how to take the object, and how to coordinate all the body parts to make the movements in the task?
- Motor phase Can this person's body respond to their brain's instructions? Arthritis, muscle weakness or pain can make this very difficult

# Sensory Phase Explanations

- Most older people have sensory loss due to normal aging
- Healthy older people can compensate for this loss by using other clues to figure out what they are hearing and seeing
- If the part of their brain that compensates for sensory loss is not working well, senses are crucial

# Sensory Examples

- Ms. Smith may have difficulty seeing how deep the water is in the bathtub, if a shiny floor is wet, or if a dark spot on the floor is a hole or something to step over
- Ms. Smith may not be able to easily hear words with high pitched consonants, such as "shower", "meal, "bathroom", "dressed"





# Sensory/Perceptual Examples

- Ms. Smith's ability to feel through her skin may be affected. A soft touch may feel like being hit or the shower spray like needles digging into her skin
- The feel of the temperature of a room or of water may change minute by minute or feel colder or warmer than you feel it

### Comprehension/Perception Examples

- Ms. Smith may read notes and signs well, but may not understand what she is reading
- Ms. Smith may respond more quickly when approached from the front or from one side versus the other
- Objects may be closer or farther away than Ms. Smith realizes
- The environment will likely look or feel different to Ms. Smith than it does to you

# **Explanations**

- Executive functions are the most complex abilities and are usually the most difficult of all cognitive phases
- Shifting from one activity to another can be difficult so you need to allow enough time for "shifting gears"

# **Executive Phase** Explanations (continued)



- Misjudging the amount of time that has passed is common
- Often, a person with cognitive needs does not know when they make a mistake. It is better to discreetly assist rather than call attention to their mistake



- "Word finding difficulty" is common
- Using song or rhythm when talking, walking, or performing a task can be helpful
- Ms. Smith may be able to do a task more easily if she doesn't think about it. Distraction can be useful

# Motor Phase Explanations

- Pain: a very common cause of distress and of behavior that causes distress
- Many people don't exercise enough and may have difficulty moving body parts
- Distances may be too far for a person to easily walk, so they become tired and confused before being asked to perform a task

#### Assessing the Whole Person Physical, Emotional, & Cognitive

- Understanding a person's medical and emotional status is extremely important
- Why? Because it will give us ideas of what to say and how to touch a person who may be experiencing pain
- It will also allow us to have realistic expectations

### Understanding this Person's History



- How did Ms. Smith cope with stress, trauma or tragedy in her past? (Pacing? Shouting? Going for a walk?)
- What were Ms. Smith's life-long goals or self image? (Independent? Modest? Productive?)