

**NC Department of  
Health and Human Services  
NC Nurse Aide I Curriculum**

**Module R  
Cognitive Changes Due to Aging**

July 2024

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**Objectives**

1. Discuss the healthy aging brain
2. Identify cognitive changes due to aging
3. Describe the importance of pacing and patience while delivering care to the older adult

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**Cognition**

- Refers to the mental processes involved in thinking, learning, understanding and remembering
- Messages sent to the brain from the five senses are:
  - changed
  - stored in memory
  - recovered from memory
  - used to answer questions
  - used to respond to requests
  - used to perform tasks
- Cognitive function is related to use

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### The Healthy Aging Brain



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### Learning in the Older Adults

- The gaining of information, skills, and knowledge
- Older adults learn easier and better when they can set their own pace
- Learning is dependent on memory
- Memory involves the storing of information in the brain for later use

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### “Use It Or Lose It”



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### Cognitive Changes Due to Aging

- Size of neurons (brain cells) progressively decrease
- Total brain mass decreases
- Responses slow down
- Increased learning time needed



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### Cognitive Changes Due to Aging

- Mild short-term memory loss
- Motivation to learn decreases
- Feels threatened when changes are evident in public
- Challenged by more than one task or more than one request
- Unable to ignore external stimuli while performing basic tasks

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### Understanding Reaction Time

Changes in reaction time vary from person to person

Reaction time decreases gradually after age 60

May be impaired by aging process, sensory deficits or chronic disease

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### Reaction Time in Older Adults

- Responses slow down
- Increased time for learning new activities
- More difficulty in re-learning motor skills
- Decreased ability to process conversation
- Decreased reaction time

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### Reaction Time in Older Adults



- More deliberate, less frequent responses
- Less effective performance when pace is fast
- Easily confused at times

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### Workload of the Nurse Aide



Nurse Aides have multiple tasks to accomplish in a short period of time

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### Effects of a Fast-Paced Environment for an Older Adult

Resident's ability to learn, perform a task, or maintain motivation can be negatively affected in a fast-paced environment.

Residents are more cautious and less willing and able to respond quickly

Residents may be less willing to complete task due to fear of failure

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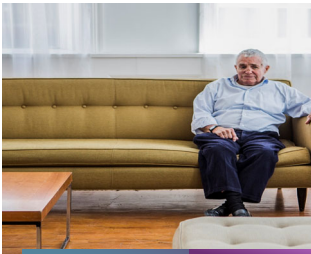
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### Social Breakdown Syndrome



- Occurs if a resident is rushed or not allowed enough time to complete tasks
- Blames self for not being able to keep up
- Begins to feel incompetent with decrease in self-esteem

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### Social Breakdown Syndrome

Society becomes impatient with those who cannot keep up



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### Effective Responses by the Nurse Aide

Pacing and patience can be used to offset the effects of a resident's slowed reaction time



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### Pacing and Patience

Residents who are encouraged to set their own pace:

- Are better able to perform or learn new things
- Will establish enough time to use assets to the best of their abilities
- Feel better about themselves, competent, and in control



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### Role of Nurse Aide

-  Inform resident of the task ahead of time
-  Relate new information or tasks with the past
-  Identify supplies and equipment needed to complete a task
-  Demonstrate for the resident what is to be done

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**Role of Nurse Aide**

-  Ensure hearing aid(s) are in place, glasses are clean and properly worn
-  Slow down pace when working with residents
-  Allow the resident to set the pace
-  Provide time for the resident to focus

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**The End**

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