

Educator's Overview of Session 1

I.	Learner Pre-Session Form	5 minutes
II.	Session Introduction	12 minutes
III.	Introduction to the Brain and Cognitive Abilities	6 minutes
IV.	Perspective of a Person with Cognitive Needs	20 minutes
V.	Four Factors: Cognitive Abilities and How to Help	5 minutes
VI.	Upcoming Sessions	2 minutes
VII.	Learner Post-Session Form	7 minutes



Total time for Session 1

57 minutes

Slides for Educator Use during Session 1

1. "The Brain and Cognition" (24 slides total)
Begin using with Section III. Use with:
 - Section III: "Introduction to the Brain and Cognitive Abilities"
 - Section IV: "Perspective of a Person with Cognitive Needs"
 - Section V: "Four Factors: Cognitive Abilities and How to Help"

Participant Handouts

1. "The Brain and Cognitive Abilities"
2. "Four Factors: Cognitive Abilities and intervention Strategies"
3. "Overview of Five Sessions: Cognitive Abilities and intervention Strategies (CAIS) Educational Series"

Evaluation Materials

1. Learner: "Pre-Session Form"
2. Learner: "Post-Session Form"
3. Educator: "Educator's Evaluation of Education Session"

Additional Resources

1. Improving MI Practices Website for the Michigan Department of Health and Human Services <https://www.improvingmipractices.org/populations/older-adults>
This website has updates and many additional handouts and resources, including the Cognitive Abilities and Intervention (CAIS): **Questions to Ask** and **CAIS: Intervention Strategies**, the **CAIS Online Course**, as well as the **Caring Sheets**: Thoughts and Suggestions for Caring that are a part of the Michigan Dementia Care Series. These were referred to at the end of the handout for Session #1 of this CAIS educational series.
2. Mace, N., Coons, D., Weaverdyck, SE. (2005) Teaching Dementia Care: Skill and Understanding. Baltimore, Md.: Johns Hopkins University Press.

Original Sources

3. Weaverdyck, S.E. (1990) "Neuropsychological Assessment as a Basis for Intervention in Dementia". Chapter 3 in N. Mace (Ed.) Dementia Care: Patient, Family, and Community. Baltimore, Md.: Johns Hopkins University Press.
4. Weaverdyck, S.E. (1991) "Assessment as a Basis for Intervention" and "Intervention to Address Dementia as a Cognitive Disorder". Chapters 12 & 13 in D. Coons (Ed.)

Specialized Dementia Care Units. Baltimore, Md.: Johns Hopkins University Press.

Objectives: At the completion of this session each participant will be able to:

1. Describe how changes in the brain resulting in changes in cognitive abilities play a major role in a person's ability to perform a task, communicate, and feel competent and comfortable, as well as in a person's emotions and behavior.
2. Identify changes in the brain and cognitive abilities (rather than carelessness, stubbornness, meanness, manipulation, or intentional agitation) as a major cause of distress and behavior that creates distress.
3. Identify changes in specific parts of the brain as the cause of changes in specific cognitive abilities.
4. Identify the spread of brain changes (that is, pathology) across the brain as a cause of the stages that occur in dementia.
5. Identify effects of brain changes evident in a person's cognitive abilities, emotions, and behavior during a task, such as bathing or showering.
6. List four factors that are key to understanding cognitive abilities and planning intervention or support strategies.
7. Identify each of the four factors as the topic of each of the upcoming four educational sessions.



I. Learner Pre-Session Form



II. Session Introduction



- Hello. I'm [redacted]. I am the presenter of all five sessions in this series.
- Our goal in this series is to help you help a person feel genuinely

- comfortable and happy regardless of what they are doing, and for both of you to enjoy your time together.
- You are welcome to this series as a participant who interacts with or assists a person as a health care provider, a care partner, a friend, or a family member, or if you relate to them in some other way.
 - This series explores how to help a person throughout their day, while communicating, or during a task in a way that feels good to a person with cognitive needs and strengths and to you.
 - We will focus on how to help a person in a way that is individualized to this particular person and to their specific cognitive abilities. This series describes how to individualize all your support and intervention strategies to this person and this situation.
 - We do this by learning how to watch a person with cognitive needs and strengths to understand what makes communication or a task easy or difficult for them, and what might increase their comfort or their distress.
 - We look at this person's specific cognitive abilities to identify which cognitive abilities are strong and which need additional support.
 - We also look at the room, the way we interact with this person, and how the task is set up to see how each can be changed to make it easier for this person and for you.
 - The concepts and intervention or support strategies in this series apply to all tasks, including leisure activities, activities of daily living, and decision making. We will use bathing and showering (or other task) to illustrate the concepts and strategies, since bathing and showering involve a variety of challenges that can make any task difficult.
 - All the concepts in this series can be used with any person, and any task, in any setting.
 - Each session is one hour long.
 - It is important to come to every session on time and stay the entire time. Thank you for doing that as well!

All the concepts and intervention or support strategies we talk about in these sessions apply to **any person**, regardless of their age, how healthy this person is, what diagnosis they may have, how independent they are, or how much they can move or speak. These concepts and strategies can apply to your own family or to a cashier in the grocery store.

They are useful **in any setting**, whether it is a private home, a grocery store, an office, a gathering space, a group residential setting, or long-term care.

And they apply to **any task**, including a leisure activity such as playing a game, an abstract task such as making a decision, or an activity of daily living such as preparing food, dressing, eating, using the toilet, bathing, or showering. Even visiting or daydreaming can be considered a task.

The concepts apply in general and to situations that may or may not involve a

task. We are using the process of performing a task as a way of exploring these concepts to make the underlying cognitive abilities and avenues of support more apparent. But they apply to any situation.

We are using bathing and showering to illustrate the concepts, because of all tasks, bathing or showering is likely the most difficult for someone with significant cognitive needs, due to the complex emotional, social, physical, and cognitive aspects of this task. We will continue to focus on showering and bathing throughout these five sessions since the assumption is, if you can successfully assist a person with compassion and understanding while they are bathing or showering, then you can likely assist well with almost any other task, with anyone at any age, or with a variety of cognitive needs and strengths.

Feel free to ask questions or share thoughts about any concerns, such as other tasks or interactions.

- Would someone like to describe for the rest of us what happens during a typical bath or shower with this person?

- What are some of the strategies you use that work for this person?

What I'd like us to talk about today is:

- Why do certain strategies that you've described work well for some people at certain times, and yet at other times they're not as successful?
- What are the changes that occur when a person has significant cognitive needs and strengths that cause them to act in a certain way or to have difficulty doing certain tasks?

III. Introduction to the Brain and Cognitive Abilities



This section takes approximately 6 minutes.

We will use this handout today.

It is called “The Brain and Cognitive Abilities”

Please feel free to follow along now or save it to read later. The handout won't exactly match what I will be saying, but it generally follows the same order.

Note at the end of the handout there is more information that we may not talk about today, including information about the brain and resulting cognitive and behavioral changes, as well as additional resources.

Most of the information in the slides today is also in your handout.

Changes in the brain cause changes in a person's cognitive abilities. The brain changes change the way a person feels and perceives things.

Cognitive abilities are a person's ability to think, that is, their ability to understand what they see or hear, to remember, or to figure out how to do things.

None of us has a perfect brain. Each of us (that is everyone healthy or not) has our own unique set of cognitive abilities, our own set of cognitive skills we do well, and those we don't do so well; our own set of cognitive strengths and weaknesses. This means we each have our own set of cognitive needs. Most of the time we are not conscious of our cognitive abilities or what our cognitive strengths and needs are. In fact, most of our thinking is not conscious at all. So we each know very little about our own cognitive abilities.

This is also true of someone with an unusual brain or a diagnosis of a brain disorder.

When someone has a brain disorder like an irreversible dementia, their cognitive abilities begin to change in a way that is usually more obvious, at least to people other than the person with the dementia.

Dementia is a gradual decline in a person's ability to think, including the ability to remember and understand, due to brain changes. The brain changes are severe enough to affect this person's ability to communicate and to perform tasks,

including those of everyday life.

Some cognitive abilities in dementia decline and some may even get better. But most, at least in ways that we easily notice, decline. As a person's set of cognitive strengths and weakness change, this person develops cognitive needs they didn't have before.

As the dementia progresses (that is, as the brain changes spread throughout the brain) the cognitive abilities continue to get weaker.

Keep in mind that each part of the brain is related to specific cognitive abilities or skills. For example, if during surgery, an electrode is placed on a particular spot of a person's brain to stimulate it, it can make the person's finger move, or a foot move. It can also make this person suddenly stop talking.

As the brain changes spread across the brain, new cognitive abilities become weaker. This results in a person going through stages of dementia.

Even as the brain changes spread to new parts of the brain, the brain changes increase in the parts that have already been affected, so the cognitive abilities associated with those parts already affected keep getting weaker and weaker, as new cognitive abilities begin to change.

There are more than 100 different disorders that cause dementia.

By far the most common cause of irreversible dementia is Alzheimer's Disease. Other causes of dementia include:

- Dementia with Lewy Bodies (where there are abnormalities called Lewy Bodies within the brain cells)
- Frontotemporal dementia (where the frontal and temporal lobes of the brain are especially affected)
- Vascular dementia (where there are small strokes or changes in blood supply to the brain)

In each type of disorder that causes dementia, the brain changes that occur affect parts of the brain in a different order. This results in each disorder having a different progression of cognitive and behavioral changes, so the dementia caused by each disorder looks different over time.

When the cognitive change or difference is not dementia, and is due to a disorder such as a major stroke, traumatic brain injury, Down syndrome, or a psychiatric illness, then the brain changes may not spread as much to other parts of the brain, but may stay more confined to certain areas. The area affected depends

upon the specific disorder.

Since a person with any brain disorder, including dementia, has their own unique set of cognitive strengths and needs at any given time, we need to look closely at this particular person to discover what their strengths and needs might be, and how they might change in ways unique to this person over time and day to day.

It you are following along in the handout, then note we will now talk about the issues raised in the section “Emotion and Behavior”. Again, they won’t be in the exact order I will be talking about them.

The brain changes cause cognitive changes in a person’s ability to think, understand, and respond. (For example, a person with brain changes may have difficulty understanding what the word “shower” means.)

These changes in cognitive abilities cause most of the distress and the behavior that is distressing to others. (For example, sometimes when a person refuses to take a shower, it is because they don’t understand what the word “shower” means.)

When distressing situations occur, they nearly always result from brain changes that cause changes in cognitive abilities, not from a person being stubborn, careless, manipulative, “mean”, or “ornery”. The cognitive changes cause the changes in emotions and behavior.

In fact, these brain and cognitive changes can also make someone else’s behavior (for example, **our behavior**) feel distressing to the person with the cognitive changes. Our behavior that might **unintentionally** cause distress could include our words, movements, or actions. For example, talking or moving too quickly or our continuing to use the word “shower” as we take a person’s clothes off when this person doesn’t understand what the word “shower” means could be so distressing to this person they might try to push us away.

We can reduce distress and behavior that causes distress by considering a person’s cognitive abilities, both their needs and their strengths.

We also need to remember that there are various emotional causes of distress. In this series we focus on a person’s cognitive abilities. But some interactions, tasks, or environments can unexpectedly trigger emotional distress for a person, especially if this person has in their remote past or recently experienced a physical, sexual, or emotional encounter that was uncomfortable or traumatic. Situations that involve, for example, removing clothing or being touched or

someone else having control over this person can easily cause distress. Being in a room similar to where such encounters happened to this person can cause distress. It is important to stop an interaction or task or leave the room if this is the case. Watch and listen closely to this person so you can notice how they seem to be feeling or responding to your words, movements, and actions. Moving slowly, gently, and with respect and compassion is important.

Other triggers or causes of distress, and of behavior that creates distress, are listed near the end of this handout in a section called “Some triggers of momentary changes in cognitive abilities, emotions, and behavior”. These are causes that we can often easily address.

Our goal in this series is to help you help a person feel genuinely comfortable and happy regardless of what they are doing, and for both of you to enjoy your time together.

To do this we will explore which cognitive abilities are changed as a result of a person’s brain changes, and how those changes in cognitive abilities are creating frustration, anxiety, or confusion in this person, that then cause a distressing situation or behavior that others find distressing.

To help a person we need to first **address the distress** rather than simply trying to stop behavior. We look for the immediate cause of the distress now, then search for the underlying cause of the distress by **asking “Why?”** “Why is this distress or distressing situation occurring?” “Why is this person having difficulty communicating at this moment?” “Why is this person having difficulty doing this task?” By **searching for the possible reasons or causes, we can address** the reasons or causes.

By looking at the changes in this person’s cognitive abilities and the challenges those changes create resulting in distress, we can intervene or develop support strategies that support this person’s cognitive abilities, improve the situation, and reduce distress for everyone.

These sessions explore ways to **address the distress**, and not simply the behavior. To address the distress, we will address a person’s cognitive abilities.

This will lead to a more effective approach to behavior and distress, both immediately and when planning intervention strategies.

So, let’s first look at the brain.

Point to the right side of the drawing on slide #6 to show where the eyes would

This is a view of the right side of the brain. The eyes are here and this is the back of the head.

The brain has right and left sides (or hemispheres). All of the parts of the brain we talk about today are on both the right and left sides. The right side of the brain controls the left side of the body, and the left side of the brain controls the right side of the body.

In dementia, the brain changes usually occur on both sides. This is true in many disorders, but not all, for example not always in stroke and traumatic brain injury.

IV. Perspective of a Person with Cognitive Needs



In each disorder, particular cognitive abilities change depending upon which part of the brain is affected. To illustrate the specific cognitive abilities associated with each part of the brain, we will describe the many parts of the brain affected in Alzheimer's disease.

Regardless of the disorder causing the brain changes (stroke, head injury, mental illness, brain disorder from birth, dementia), when a particular part of the brain changes, the same cognitive abilities change.

Hippocampus

In Alzheimer's Disease, the brain changes resulting in cognition and behavior change that we see easily occur first in the hippocampus, which is a structure tucked up inside the brain behind the temporal lobe on the right and left sides.

One function of the hippocampus is to create your memory for very recent events or information. For example, it lets you know:

- What you just said.

- What you had for lunch.
- That your daughter just visited.

It also tells you what to remember and what to forget.

When your hippocampus changes, these memory cognitive abilities change.

Some of the changes in cognitive abilities and behavior that result from changes in your hippocampus may cause you to:

- Repeat a question or concern.
- Forget an answer or request someone just said to you.
- Not remember your daughter's visit.
- Be surprised and angry when someone begins to take your clothes off because you forgot you just agreed to take a shower.
- Remember the food someone was eating rather than what they told you.

Temporal Lobes

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In Alzheimer's Disease, the brain changes in the hippocampus increase as they also begin to spread to the temporal lobes and parietal lobes (and a little bit of the frontal lobe). The temporal lobes are located on the side of your head.

Some of the cognitive abilities associated with the left temporal lobe include understanding and producing speech.

When your left temporal lobe changes, these cognitive abilities change.

Some of the changes in cognitive abilities and behavior that result from changes in your left temporal lobe may cause you to:

- Make nonsense sounds.
- Use the wrong words.
- Substitute a similar word (e.g. “pip” for “pen”).
- Use fewer words (can’t think of words to use).
- Say “yes” when you mean “no”.
- Not understand what someone tells you or asks you to do.
- Use swear words without realizing it.
- Take longer to understand what someone said and to produce a response.

Parietal Lobes

The parietal lobes are located above and behind the temporal lobes.

Some of the cognitive abilities associated with the right parietal lobe include helping you to locate and arrange objects in space relative to each other and to you, and telling your brain to notice everything in your visual field (that is, everything in the space you see).

When the right parietal lobe changes, these cognitive abilities change.

Some of the changes in cognitive abilities and behavior that result from changes in your right parietal lobe may cause you to:

- Use an excessive amount of energy (not obvious to yourself or others) to put your arm into an armhole of a shirt.
- Put a glass down on the top edge of a plate, instead of beyond it, and spill what's in the glass.
- Have difficulty responding to stimuli in the left part of your visual field.
- Have difficulty tolerating clutter, many objects, and movement in the environment.

- Feel angry, frustrated, stressed out, or fatigued from all the confusing stimuli in the environment.
- Respond more easily when someone approaches from the right (or from the front if there is dementia, where both the right and the left parietal lobes have changed).
- Resist stepping into tub or shower because you aren't sure:
 - How high the side of the tub or edge of the shower is.
 - Where your feet or hands should go.
 - How deep the water is.

Frontal Lobe

In typical Alzheimer's Disease, the brain changes then spread to the frontal lobe, while the changes in the other lobes keep increasing. The frontal lobe is located at the front of the brain.

The cognitive abilities associated with the frontal lobe are the most complex of all. Some of these cognitive abilities:

- Let you do more than one thing at a time.
(This is as long as you don't have to think to do all of the tasks. You can focus attention on only one thing at a time. This is why it's not possible to focus on driving and focus on texting at the same time. That requires alternating attention.).

- Prioritize what to focus on.
- Sense how much time is passing.

- Switch your attention from one idea or task to another.
- Tell you when a task is done.
- Keep you focused on a task until it's done.
- Control impulsive responses to thoughts and desires.
- Identify the order of task steps or of pieces of information.

When the frontal lobe changes, these cognitive abilities change.

Some of the changes in cognitive abilities and behavior that result from changes in your frontal lobe may cause you to:

- Have difficulty focusing and staying focused on a task, object, event, or what someone is saying.
- Get overwhelmed by someone entering your visual field (space), talking, and gesturing all at the same time.
- Have difficulty following the logic of an argument.
- Need the most important words said first in a sentence.

- Need short simple words and phrases to accommodate difficulty with concentration.
- Refuse a bath because you can't think of how to do it.
- Leave a shower before finishing because you think you've been there long enough.
- Be unable to stop yourself from striking or grabbing someone because you can't control impulses or switch gears quickly.

There is more information at the end of your handout, so you can read more details and more content than what we can cover today.

V. Four Factors: Cognitive Abilities and How to Help



Here is another handout.

It is called “Four Factors: Cognitive Abilities and Intervention Strategies”.

Please feel free to follow along with your handout or save it to read later.

It becomes obvious that brain changes and the resulting changes in thinking or cognitive abilities can cause distress and many of the distressing situations that we see when we are communicating with someone or assisting them with a task.

Some things can make it harder or easier for a person with cognitive needs and strengths. These in turn can make distress -or behavior that causes distress- increase or decrease. Or they might even trigger distress or cause behavior that creates distress. These things might relate to:

- A person’s cognitive, emotional, physical, and medical condition and history (including medications).
- What is going on in the environment around this person.
- How we communicate with this person.
- How we organize a particular task.

To help a person in any situation or with a task we need to examine four factors:

- The **Person**
- The **Environment**
- **Communication**
- The **Task**

These are listed in your handout “Four Factors: Cognitive Abilities and intervention Strategies”.

We need to understand where each of these four factors is making it harder or easier for this person to understand what is going on, to feel comfortable, and to do a task.

Once we see what this person’s cognitive needs and strengths are, we can change the environment, our communication strategies, or the task itself to better address those cognitive needs and strengths. This can make it easier for this person to feel calm, comfortable, and successful in general and during a task. We can help this person and us enjoy our time together and can make the task easier for this person and for us as we assist them.

Making communication or a task easier for a person can conserve their energy for more difficult or more pleasurable experiences, and can help prevent fatigue,

confusion, and emotional distress or irritation. A person usually works much harder to understand their environment, communicate, or do a task than you or even they realize, particularly when they have significant cognitive needs. A simple task such as picking up a spoon, or putting on a coat may take a great amount of energy. Even for a person who does all of these well, making communication, the environment, and the task easier for them can conserve their energy, and greatly increase their comfort and quality of life.

Because of brain changes and resulting changes in a person's cognitive abilities, this person needs us, the environment, and the task structure to address their cognitive needs and strengths. We need to support or compensate for their cognitive needs and help them rely on and use their strong cognitive abilities.

The more we know about a person's cognitive abilities (their strengths and needs), the more we will know how to help.

VI. Upcoming Sessions



In the next four educational sessions, we will look at each of these four factors and see how they can be examined and changed to help this person and all of us to feel better, to perform a task more easily, and to reduce distress, distressing situations, and behavior that causes distress, or even to prevent distress from occurring in the first place.

This is a third handout.

It is called "Overview of Five Sessions: Cognitive Abilities and Intervention Strategies (CAIS) Educational Series".

These sessions are listed on page 2 of the handout.

Please feel free to follow along with page 2 of your handout.

We will focus one session each on:

1. The person (mostly on cognitive abilities)
2. The environment

3. Communication
4. The task

We will learn how to examine each of the four factors by asking ourselves a series of questions about each factor.

Answers to these questions can give us ideas about how to help a person be successful and how we can prevent and respond to distress while helping a person.

You can use these handouts as reminders of what we talked about today and for more information.

Thank you for coming and for participating! I look forward to seeing you for session 2!

VII. Learner Post-Session Form



[Large grey rectangular area representing the Learner Post-Session Form content.]