

MESSAGES ABOUT COGNITIVE INTERVENTION

Suggestions about the Basics of Addressing a Person's Cognitive Abilities

Shelly Weaverdyck

APPLIES TO ALL OF US; WE ARE EACH UNIQUE

1. Cognitive abilities include a person's ability to **think, understand** what they see or hear, **figure out** how to do things, **remember, imagine**, and many **other cognitive functions**. Cognitive abilities allow us to **communicate, understand** and **respond** to our surroundings, **create**, and **perform tasks**.
2. There are **many specific cognitive abilities** (or cognitive functions). These include this person's ability to, for example: understand speech, produce speech, read words aloud, understand what they are reading, know what an object is when they see it, recognize where objects are relative to other objects or to themselves, shift their attention to someone else or to a different task, stay focused on a task or on what someone is saying, get started on a task, know when a task is done, stop themselves from saying or doing something impulsively, remember an event or what was said, noticing people and objects in all parts of the space round them, sense touch accurately and easily, or know how much time has passed. (Please see **CAIS Handouts #3, #4, #6, #7, #8, and #35** for a list of some of the many cognitive abilities, as noted at the end of this handout.)
3. **Cognitive interventions** (these include support strategies) address a person's **cognitive abilities**, including their cognitive **strengths** and weaknesses (**needs**). They support this person and their cognitive abilities to help this person understand, communicate, and perform tasks more easily and to feel more comfortable and competent.
4. Cognitive interventions focus on **understanding** a person's specific cognitive abilities and **modifying** this person's **environment, interactions** with others, and the **task** structure and timing to accommodate this person's cognitive strengths and needs. They **use and rely on** this person's cognitive **strengths** and **nurture or compensate** for their cognitive **needs**.
5. Cognitive interventions are for **anyone**, including yourself or others whether they are healthy or not, regardless of their age or their specific strengths and needs. For example, they are for a student doing homework, an architect learning new skills, a neighbor you are conversing with, an athlete, a store employee, or a person diagnosed with a disorder or who has difficulty speaking and understanding.
6. Cognitive abilities are associated with specific parts of the **brain**. None of us has a perfect brain, that is, a brain where all parts work equally well and can make every cognitive ability strong. **We each** have a **unique pattern** or set of **strong and weak cognitive abilities** (that is cognitive strengths and cognitive needs). We each have specific cognitive abilities or skills that are easier for us and some that are more difficult.
7. This means we also each have our own **unique set of cognitive interventions** that are helpful.
8. Each of us has since birth created cognitive interventions for ourselves that use our cognitive strengths to compensate for or adapt to the cognitive abilities that are difficult for us. We are unaware of or **not conscious** of most of our cognitive strengths and needs, or of our cognitive interventions. So we usually **cannot easily talk about them**.
9. Often, the more different another person's pattern of cognitive strengths and needs is from our own, the easier it is for us to feel irritated by **their behavior**, or for **our behavior** to **unintentionally** cause

them distress and fatigue. We may misinterpret or not recognize another person's cognitive interventions that compensate for their cognitive needs. For example, we may get irritated when someone insists on frequently accessing directions to a destination instead of just remembering or sensing how to get there, or when someone says "so then" frequently in a conversation if we don't recognize it as an intervention they use to address their tendency to stutter. Or we may unintentionally upset another person by talking too fast or moving too suddenly for them.

WHEN THERE ARE MANY COGNITIVE NEEDS OR A DISORDER

10. A person with cognitive needs that interfere significantly with daily functioning, emotional stability, or social interactions usually has many or significant **brain changes** or a disorder that is affecting brain functioning. They may not be able to create for themselves cognitive interventions that are effective enough.
11. A person with many brain changes may not be able to **easily control** their behavior or their responses to you. The changes in their brain are causing various cognitive abilities to become too difficult for them. Avoid assuming they are being stubborn, ornery, lazy, manipulative, or "mean".
12. This person's ability to think is not a unitary concept. There are **many cognitive abilities** or cognitive functions this person performs in order to respond to you and their environment and to perform a task. These individual cognitive abilities are specific and are associated with specific parts of the brain that may or may not be working well.
13. When there is a brain disorder, the specific parts or functions of the brain affected vary with the **particular disorder** a person has. Therefore, the **cognitive abilities** that are difficult for this person or that are easier vary with their particular disorder. Each disorder affects specific parts of the brain and specific cognitive abilities.
14. When brain changes or any disorder or injury affect a particular part of the brain, the same cognitive abilities are altered, regardless of the brain disorder, injury, or what causes the brain changes. It can be helpful (though not required) to **identify** the part or **parts** of the **brain involved**, such as with a stroke, traumatic brain injury, psychiatric disorder, neurological disorder, dementia, or disease. When you know the parts affected, you will have a better idea of which cognitive abilities might be altered, which may be strong or weak, and which might even improve as the brain learns to compensate.
15. A person's cognitive preferences or which cognitive abilities seemed to be easy **before** they acquired the cognitive **disorder** (and which parts of their brain were particularly proficient) will also affect their cognitive abilities after their **brain changes** or they acquire the disorder. For example, this person may have been "left-brained" or "right-brained", or they might have always had a good "sense of direction", or they could always remember faces easily.
16. A disorder or injury to any part of the brain has an impact on the functioning of the **whole brain**. The various parts of the brain interact in complex ways to perform cognitive functions. The efficiency with which parts of the brain communicate with each other varies with the disorder or type of injury to the brain.

CONSIDERING COGNITIVE INTERVENTIONS

17. **Anyone** can create and use cognitive interventions. It is not necessary to know about the brain and the relationship of parts of the brain with specific cognitive abilities, to develop and use cognitive interventions. You may be, for example, a caregiver, care partner, direct care worker, companion, social worker, nurse, mental health worker, friend, family member, psychologist, psychiatrist, or a server in a restaurant. Or you may be a lawyer helping a person just one time with a specific task.
18. **Cognitive interventions** directly or indirectly address specific individual cognitive abilities.

19. Cognitive interventions are most effective when they are based on observation and an **understanding** of a particular person in a specific situation or set of conditions.
20. **You can recognize** this person's cognitive strengths and needs by carefully observing them perform various everyday tasks. (Please see **CAIS Handout #5** for suggestions of how to recognize a person's cognitive abilities, as noted at the end of this handout.)
21. Look for parts of a task or cognitive functions this person seems to have **difficulty** performing.
22. Look for tasks, parts of a task, or cognitive functions this person seems to be **doing well**.
23. Look for tasks, parts of tasks, and cognitive functions this person not only does well, but does **more easily** or successfully than they could before they had the brain changes or disorder, or because they have a brain different from most people.
24. **Ask yourself "why"?** You likely won't know how to help a person until you ask why they are having difficulty communicating or performing a task, or are distressed. Asking "why?" is fundamental to recognition and understanding that leads to intervention.
25. Ask "why?" by **asking yourself specific questions** about this **person** and their emotional status and cognitive strengths and needs, and how well the **environment**, your **interactions** with this person, and the **task** structure and timing support this person and their cognitive abilities. (Please see **CAIS Handout #4** and the *CAIS Questions to Ask and CAIS Intervention Strategies* for specific questions to ask yourself and specific intervention options, as noted at the end of this handout.)

USING COGNITIVE INTERVENTIONS

26. **Make your interactions and the task as easy as possible.** This person with brain changes is likely working very hard to communicate and to perform the simplest of tasks. Conserve this person's energy for tasks that are more difficult or more pleasant. Avoid trying to challenge this person during everyday tasks and communication in an attempt to improve their cognitive abilities with practice. (Please see **CAIS Handouts #12** and **#31** for a description of what makes a task difficult, as noted at the end of this handout.)
27. **Modify the conditions** around this person to help them communicate and perform the task more easily and to feel more pleasure, safety, and comfort. These conditions are the **environment**, your **interactions** with this person, and the **task** and daily routines.
28. **Help this person relax** so their brain can work better. Avoid overwhelming them, embarrassing them, putting them on the spot, or making them emotionally distressed.
29. Emotional distress, withdrawal, and distressing situations frequently occur when this person has **too much difficulty meeting the cognitive demands** and expectations placed upon them by the situation or conditions around them (that is, the environment, your interactions with them, and the task).
30. Sometimes the conditions are **not cognitively stimulating enough** and this person has similar reactions, as well as boredom and lethargy.
31. **Evidence that conditions don't adequately accommodate this person's cognitive abilities** (that is, the conditions are too challenging or not stimulating enough) include: fatigue, withdrawal, lethargy, emotional distress, anxiety, confusion, irritation, anger, reduced success in performing a task or task step, distressing situations, and behavior that reflects distress or creates distress in this person or in others.
32. **Match the cognitive demands** and expectations of the conditions (the environment, your interactions with this person, and the task) **to this person's ability** to perform various cognitive functions, in a way that stimulates and supports this person.
33. Develop and use creative **cognitive interventions** that:

- a. **Help this person grow** in their ability to perform some cognitive functions and to acquire new skills or strategies that (at least temporarily) accommodate changes in other cognitive abilities. For example, increase the contrast between an object and its background, so the ability to scan an area to find an object is more often used and improves, as the ability to remember where an object is declines. Or nurture artistic, musical, and singing skills as speech declines.
 - b. **Rely on a cognitive ability that is strong.** For example, point to an object as you name it, if this person doesn't recognize the object when they see it, but does recognize the name of the object when it's said aloud.
 - c. **Make a particular skill, cognitive ability, or task step easier.** For example, sing a rhythmic song with a person on the way to lunch, so walking becomes easier.
 - d. **Compensate** for a cognitive need by performing the function or task step for this person. For example, button this person's shirt for them.
34. Use the *CAIS Questions to Ask* and the *CAIS Intervention Strategies* by S Weaverdyck to systematically explore and identify a person's cognitive abilities and to select specific intervention options as noted below.
35. **Evaluate** the effectiveness of the cognitive interventions for this person and **modify** the **interventions** as this person changes and as the situation or conditions around this person change.

FOR DETAILS, CONCRETE SUGGESTIONS, MORE INFORMATION

36. For more elaboration, concrete suggestions, and specifics to help you better understand a person's cognitive abilities and to find cognitive intervention options, see the *Cognitive Abilities and Intervention Strategies (CAIS) Questions to Ask* and *CAIS Intervention Strategies* by S Weaverdyck. The **Cognitive Abilities** part of the CAIS gives **specific questions to ask yourself** as you observe a person and their cognitive abilities. The *CAIS Intervention Strategies* provide **specific cognitive interventions** that systematically modify the environment, task, and interactions with respect to this person's specific cognitive strengths and needs.
37. More details, concrete intervention suggestions, and specifics are also in the **other CAIS Handouts** by S Weaverdyck including: “#2 Messages about Cognitive Abilities”; “#3 Cognitive Abilities Listed”; “#4 Understanding Cognitive Abilities”; “#5 Recognizing Cognitive Abilities”; “#8 The Brain and Cognitive Abilities”; “#12 Helping a Person with a Task” with rationale for specific interventions; “#31 Task Complexity and Intervention Method” that describes parts of a task and what can make a task difficult; and **CAIS handouts about interventions** for specific cognitive abilities, such as “#29 Visual-Spatial Interventions” and #35 for interventions regarding **frontal lobe functions**.
38. On the Michigan Improving MI Practices website at <https://www.improvingmipractices.org> you can find **all of these CAIS Handouts** (43 total), among many other resources, including the *CAIS Questions to Ask* and *CAIS Intervention Strategies* (including all four parts of the CAIS: 1. Cognitive Abilities, 2. The Environment, 3. Communication, 4. The Task and Daily Routines).