

**Supplemental Guidelines for the Administration of the
Cognitive Assessment Interview (CAI) 5-10-09
Joseph Ventura, Ph.D.
UCLA Department of Psychiatry**

Basic Principles of interview-based measures of cognition: The CAI interviewer is making an expert judgment about the individual's cognitive functioning that is not solely based on self-report or the individual's perception of his or her cognitive functioning. The interviewer attempts to link the individual's cognitive functioning with activities of daily living such as school performance, success in employment, and social interactions. Attempts are made whenever possible to separate the influence of positive and negative symptoms or depression on daily functioning from the effects of poor cognitive functioning. Regarding individuals for whom symptoms appear to be the primary contributor to functional outcomes, cognitive deficits on the CAI are rated somewhat lower as compared to individuals for whom cognitive deficits are more obviously associated with functional impairments. Although the time frame for the CAI assessment is the past month, the interviewer will often need to broaden the period of inquiry to include previous periods when the individual might have been employed, attending school, or had a higher frequency of social interactions.

Guidelines on Conducting an Interview:

- 1) Early in the assessment process, begin to make links between the individual's cognitive functioning and work functioning, school performance, homemaking tasks, or other activity that require cognitive ability. Do not expect to learn everything about this link immediately because part of the CAI assessment involves educating the individual in understanding the link between cognitive thinking skills and functioning. If the individual is not currently attending school, working, or socializing, ask him or her to provide information about the last time thinking skills were required to function or to speculate about his / her current performance ability.
- 2) Asking the individual to speculate about the link between cognition functioning and daily living in some circumstances will be a useful method for obtaining information, e.g., when asking about why the individual is not working or going to school. If the individual acknowledges that attending school or working would not be possible because of deficits in memory or concentration, that information should be used to make a rating. Another example of where the interviewer might evaluate working memory functioning is by asking if he / she can recall a telephone number that was just learned. If the individual says he / she always writes down the number, ask if he would be able to recall a phone number if the opportunity to write down the number (or instructions) were not available.
- 3) When administering the items that require the individual to describe what behavior would be appropriate in certain problem-solving circumstances, carefully evaluate the individual's reply. Ask for clarification if any ambiguity exists regarding the rationale for a behavior, e.g., if locked out of the house, I would go to a neighbor's house. The interviewer should ask "why would you go to a neighbor's house?" Presumably the individual responds that he or she would use the phone to call a relative or wait for the appropriate person with a key to return home. If during any part of the CAI the individual gives a response that appears rote, challenge the individual to provide the rationale for a behavior and rate accordingly, e.g., "I never get lost," "I know this entire city after having lived here

for 18 years.” That individual should be asked, “What if you were in an unfamiliar city, could you use a map to find your way around?”

4) As the interviewer inquires about the various domains of cognitive functioning, an effort should be made to define each cognitive domain in lay terms, e.g., working memory is defined as “short-term memory” and attention / vigilance is defined as “concentration.”

General Supplemental questions: Here are a set of suggested follow-up questions and probes that can be used to obtain additional information about the how the individual performs cognitively in daily life. Generally, the basic probes in the CAI start at high levels of cognitive deficit so considering that most individual are not highly impaired, they should be supplemented with more challenging questions to accurately assess cognitive functioning.

Background Assessment:

Have you had any changes in your medication status or any injuries? The reason I ask is because I want see if those changes might have in any way affected your thinking abilities. Actually, this interview is about your thinking skills.

Domain: Working Memory

1. Difficulty maintaining newly learned verbal information...?

If you attended a party and met 4 – 5 new people, how many names would you be able to remember in the few moments after you hear them? If less than four or five: How many times would you need to hear their names before you would be able to recall them? What would you do if you called 411, to get the phone number of a pizza place, and did not have a pencil or pen to write down the number, could you recall the phone number?

2. Difficulty performing “on the spot” mental manipulations...?

Reminder that for this “working memory” item, the interviewer is asking if the individual can keep figures in his or her head while paying bills. If individual pays his own bills. If not, ask why not? If the individual gives an indication that the reason is not related to his cognitive functioning, e.g., my mother takes care of all the household finances, then ask the individual if he would be able to keep figures in his or her head in order to pay the bills if his mother were not able to help out.

Domain: Attention / Concentration

3. Problems sustaining concentration over time (without distraction)

Suggested follow-up probe: After reading an article or watching a movie, would you be able to recall what you just read or discuss what you learned or the plot of a movie with another person? Do you tend to forget what you just read or have trouble keeping track of the information in the article, a TV show, or a movie?

4. Difficulty focusing on select information (if there is not obvious distraction)

If after asking the question: *Is it difficult for you to pick out the correct route on a bus map?* The individual indicates that he or she uses over-learned behavior, rote memorization, or technology to navigate around, ask if the person would be able to perform in a novel situation such as an unfamiliar city or without aids.

Domain: Verbal Learning and Memory

5. Trouble learning and remembering verbal material?

What would happen if you did not write down instructions or information? Do you rely on the help of others because writing things down isn't enough?

6. Difficulty recalling recent events?

Ask if the individual has been out recently with family or friends. If so, can he or she recall any details about the activity such as the type or location of the event, e.g., name of movie, the movie theater location, the movie plot, or type and/or location of the restaurant, type of food that was ordered? If the individual does not socialize, the interviewer can ask what the individual had for dinner last night or two nights ago.

Domain: Reasoning and Problem-Solving

7. Lack of flexibility in generating alternate plans when needed?

Just a reminder that generating alternatives about what an individual would do if a store was closed which is among one of the simplest problems of daily living. Thus, be sure to set up the question indicating that an item is needed that day, e.g. an ingredient is needed to complete a meal or an item is needed for the home. If the individual says that if a store was closed, he would go home. Ask why? The individual's response might help sort out a "defeatist attitude" or negative symptoms as compared to the inability to generate alternatives.

8. Problems in situations requiring judgment?

Regarding questions related to a power outage, being locked out of a residence, and having a clogged sink, the response "I would call the manager" should be followed up with what would you do if the manager is not available?

Domain: Speed of Processing

9. Performs tasks slowly?

If the interviewer is concerned that the individual lacks insight about his or her slow speed of processing, ask if anyone complained that the individual was too slow in performing a task, e.g., individual's mother or supervisor

Domain: Social Cognition

10. Difficulty appreciating another person's intentions/point of view?

This item is assessing an individual's ability to make an abstraction about how another person's point of view, which differs from the individual's, might be influenced by differences in age and status. Ask the individual: If you are speaking with a person younger than you or older, or from a different part of the county or the world, would you have trouble understanding how or why that person's opinion might differ from your own? Asking a person if they understand the meaning of person looking at one's watch is not very challenging. Follow-up questions could include asking if the individual understands a person's intentions or emotions from their facial expression, tone of voice, or behavior?