



Understanding The Environment: Questions to Ask

Here are some questions to ask yourself about the environment to better understand how well the physical environment supports a person's cognitive abilities. These questions are based on brain functioning and specific cognitive skills. However, you do not need to know anything about the brain or cognition to ask them. The questions are organized under general intervention concepts that address needs a person might frequently experience in most environments.

A "yes" answer suggests the environment is currently effective in supporting cognitive abilities. The answers to these questions can suggest environmental changes that could build on this particular person's cognitive strengths and that could increase support for this person's cognitive needs.

These questions apply to any room in any setting.

More information is on the last page of this handout.

A. CONTRAST: Look for contrasts in:

- **Color intensities** (dark against light)
 - **Amount of lighting** (dim versus bright)
 - **Busyness** (patterns versus plain solids, or commotion versus quiet)
1. Are there contrasts that draw attention to areas of the room this person might need or want to use? (For example, brighter lighting in safe areas and dimmer lighting near dangerous unused exit doors?)
 2. Are there contrasts that highlight objects this person might need or want to use? (For example, toilet seat different from floor; closet door different from wall?)
 3. Are edges of surfaces and changes in floor height highlighted with contrasts? (For example, edges of stair steps?)
 4. If this person needs to avoid an object, does that object look similar to the area around it? (For example, is an electrical outlet or dangerous exit door the same color as the wall around it?)
 5. Is there a variety of moods created by various spaces, so this person can be drawn to an area that matches the particular mood they are in at the moment? (For example, busy high energy living room versus cozy quiet den?)

B. PATTERNS: Look to ensure there are no visual patterns that could:

- Be **distracting**
 - Be **misinterpreted**
 - Cause **nausea or dizziness**
 - **Camouflage** an object
1. Are the floor and other surfaces free of patterns that seem to “move” when this person looks at them or when this person moves? (For example, free of alternating squares or blocks on floors, and free of plaids and repetitive patterns on floors, chairs, and shirts?) (Note your shirt and the clothes other people are wearing.)
 2. Are all surfaces free of patterns, stripes, borders, or figures that look like changes in height or depth, bugs, specks, or pieces of paper to pick up? (Note for example, floors, walls, curtains, counter tops, and clothing.)
 3. Are all objects easy to see because they are not in front of or beside a patterned surface or object? (For example, a pill or comb is not held in front of a patterned shirt?)

C. CLUTTER: Look to ensure there are not:

- Too many **objects** in the environment
 - Objects and information that are **recognized or useful only to other people, and not to this person**
 - Objects that are too **distracting or confusing**
 - Objects, people, sounds, or unusual lighting that are **inappropriate** for this person, causing them to feel overwhelmed, confused, or tired; but instead, are appropriately limited and selected to be **useful, interesting, inspiring**, and to **offer choices** to this person.
1. Is there an appropriate amount of clothing in the closet and drawers?
 2. Is there an appropriate number of items served at a meal or placed on the table?
 3. Is there an appropriate limit to the variety, frequency, and volume of sounds?
 4. Are all sounds recognizable?
 5. Is there an appropriate limit to the number of people?
 6. Are all people familiar to this person?
 7. Are all notes, instructions, and equipment for other people out of sight? (For example, are notes and equipment for care partners (caregivers) and medical professionals inside drawers or behind cupboard doors?)
 8. Is the room free of sounds that, while not intended for this person, might elicit a response from them? (For example, doorbells, phones, conversations between other people, public address systems, televisions, radios?)
 9. Is the room free of objects that attract unnecessary attention and prevent other objects or spaces from being noticed?
 10. Is the room free of objects that are dangerous to this person at this time? (For example, small rugs on the floor or sharp corners on tables?)

D. CUEING: Look for information that this person:

- Can **understand**
 - Can **see easily without searching**
 - Can **see without moving too much**
 - Recognizes through **various senses** of hearing, seeing, feeling, touching, and tasting
 - Can use and trust
 - Is stimulated by
1. Does the room tell this person what they need to know? (For example, that lunch is at 12:00 and the time is now 12:00?)
 2. Does the room say what is expected of this person and give ideas of what to do? (For example, we want you to feel at home here, or now it is time to sing or take a bath or shower, or would you like to fold the laundry in this basket?)
 3. Are all signs recognizable? (For example, do signs use written words only if they can read and understand the words?)
 4. Are all cues low enough or high enough for this person to see?
 5. Are the cues frequent enough so this person doesn't have to remember? (For example, multiple signs directing to the bathroom?)
 6. Are other people in the room performing the same task as this person is? (For example, everyone is eating the meal, or singing the song?)

E. NORMAL: Look for objects and spaces that:

- Are **familiar and recognizable** to this person
 - Match their **history, preferences, expectations, culture**
 - Are in the **normal, expected place** for them
1. Does the room look like a room this person would recognize or expect? (For example, does the bathroom look normal or like this person's bathroom in the past?)
 2. Do objects look normal? (For example, the bathtub looks like a recognizable bathtub, dishes like normal dishes?)
 3. Are tasks performed in the room where that task is normally done? (For example, hair combed in bedroom rather than living room?)
 4. Are objects in normal, expected places? (For example, mirrors over sinks or dressers rather than in hallways or on doors?)
 5. When an object doesn't look normal, is it because it's dangerous or distressing and has been made to look like something else? (For example, does a door lock or an elevator button look like a picture of a flower?)

F. HOMEY: Look for spaces and decor that:

- Feel **cozy**
- Help this person feel **comfortable and relaxed**
- Look and feel like **home**

1. Is the room cozy and emotionally comforting?
2. Are the colors warm and bright?
3. Are all objects in the room recognizable and comforting? (For example, no medical equipment in sight?)
4. Would everything that is visible in the room normally be in a home? (For example, no blood pressure cuff or scale in the living room?)
5. Would all sounds normally be in this person's home? (For example, no public address system, all bed or chair alarms sound like music or are audible only to you?)
6. Is the temperature warm or cool enough?

G. LIGHTING: Look to ensure there are no areas where:

- This person must **work hard to see** well
- Eyes are required to **change** because this person moves **from light to dark** spaces or vice versa
- **Shapes and movement could be easily misinterpreted**

1. Is the lighting bright enough to read and see well?
2. Are floors, walls, and surfaces free of all shadows?
3. Do all areas of the room have the same amount of light (that is, no darker areas) even by windows, in corners, down hallways, and in closets?
4. Are stairwells as bright as or brighter than other spaces?
5. Are all objects easy to see and recognize? (For example, no objects are in front of windows or down long hallways that look like frightening or confusing shadows and shapes?)

H. TEXTURE: Look for varied textures that:

- **Reduce noise**
- **Reduce glare**
- **Identify objects**
- **Are stimulating to touch**

1. Do the floors, walls, and ceilings absorb sound?
2. Are objects, the floor, wall pictures, and other surfaces free of glare (that is, they do not reflect light)? (Glare can make objects and surfaces look wet or difficult to see.)
3. Are there interesting surfaces or objects to feel?
4. Are floors non-slippery, even when wet?

5. Are hard surfaces covered to be more interesting, easy to identify, and sound absorbent? (For example, are there cloth wall hangings on the wall?)

I. PRIVACY: Look for ways this person can:

- Be **alone**, but able to see and get company or help when desired
 - Keep **personal items** away from others, yet readily accessible when this person needs or wants them
1. Is there space that belongs only to this person? (For example, a bedroom when dressing or bathroom when bathing?)
 2. Are there doors in rooms that prevent other people from entering without knocking?
 3. Are there drawers or objects that belong only to this person?
 4. Does this person always have access to their own private space and possessions?

More about these Questions

This handout lists questions you can ask yourself to understand how well the physical environment meets a person's cognitive needs, and how well the environment relies on or uses a person's cognitive strengths. The questions are based on specific brain functions and cognitive abilities. They focus on ways in which the environment can make it easier or harder for a person to communicate, perform tasks, and to feel competent and comfortable.

The environment has a major impact on behavior, on the amount of distress and fatigue a person experiences, and on how easily and successfully you can assist a person. These questions help explore why a particular person communicates or performs a task more easily some times than other times, is distressed, or is acting in a way that is distressing to others, as well as why the environment or **our own** behavior might be **unintentionally** distressing to this person. They also suggest intervention or support strategies.

While this handout focuses on the cognitive abilities, some rooms or environments are more likely than others to trigger emotional distress for a person. This is especially true for a person who has in their past or recently experienced a sexual, physical, or emotional encounter that was uncomfortable or traumatic. Rooms where such encounters might have occurred could easily cause distress for this person (for example, bedrooms, bathrooms, shower rooms, or others that involve removing clothing or being touched or someone else having control over this person). It is important to stop an interaction or task, or leave the room if this is the case. Watch and listen closely to notice how this person seems to be feeling. Moving slowly, gently, and with respect and compassion is important.

A person usually works much harder to understand a room, communicate, or do a task than you or even they realize, particularly when they have significant cognitive needs. Even for a person who moves around an environment, communicates, or performs a task well, making the environment, communication, and task easier for them can conserve their energy for more difficult or more pleasurable experiences, and can help prevent fatigue and emotional irritation or distress.

These are questions to ask yourself or other care partners, NOT to ask the person you are observing. The questions can be asked informally or more systematically by family, other care partners, or professionals. They should be asked frequently enough to accommodate changes in a person's needs, strengths, and desires.

The "**Cognitive Abilities and Intervention Strategies (CAIS): Environment Questions to Ask**" presents these questions in more detail and in a more formal structure in two formats: a Yes/No response format and a Four Point response format with additional instructions for quantifying your observations. It also includes additional questions.

The "**Cognitive Abilities and Intervention Strategies (CAIS): Environmental Intervention Strategies**" presents a variety of intervention strategies for each question in the "CAIS Environment Questions to Ask".

The CAIS consists of four parts, each with a list of questions and ideas of intervention strategies. The four parts are: 1) Cognitive Abilities, 2) Environment, 3) Communication, and 4) Task and Daily Routines. The questions in this handout are similar to the questions in the "CAIS Environment Questions to Ask" and the "CAIS Environmental Intervention Strategies".

The questions are meant to be asked through general observation or while you are helping a person with a task. The answers to these questions can help you modify the environment, the task, or your communication strategies to accommodate this person's cognitive abilities and challenges. When you answer the questions during a task, you can intervene immediately and respond to subtle changes that occur minute by minute in this person's cognitive abilities.

The interventions generated are individualized to a particular person and a particular situation.

These questions apply to any environment (for example, any room or building) in any setting, and to any task (for example, decision making, housekeeping chores, hygiene, leisure activities, or a visit with a friend).

Answers to all of these questions can help determine which intervention strategies might be most effective in helping this person be happier and function more independently.

For more information

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 Strategies (CAIS): Questions to Ask and Cognitive Abilities and Intervention Strategies (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.
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.

