

Understanding Visual Perceptual Changes Empowerment Tool

The ability of the brain to process visual information sent from our eyes and turn it into a meaningful message or perception is known as visual perception.

Changes in the brain due to Alzheimer's Disease and other causes of dementia can affect the way the brain processes visual information and alter the perception of the world or the ability to understand it.

Different types of dementia can damage the visual-perceptual system in different ways depending on how the disease changes the structure of the brain. Common visual perceptual difficulties are:

- Less sensitivity to variations in the contrast between objects and background
- Diminished ability to detect movement
- reduced ability to see different colors
- Problems directing or shifting gaze
- Problems with recognizing things and faces
- Reduced sensitivity to depth perception

COMMON VISION PERCEPTION CHANGES IN PEOPLE LIVING WITH DEMENTIA

1. The change in-depth perception doesn't allow them to understand exactly where something is in space making it difficult to reach for objects accurately.
2. They may have difficulty feeding themselves because they cannot recognize the food on the plate or find their drinking glass.
3. They may attempt to grab objects that appear on TV or pick up things depicted in a painting. They may also process images on TV for real people and become confused or frightened.
4. An uneven or heavily patterned floor can turn into an obstacle or a step, making them apprehensive to move. They may raise their foot, suddenly freeze, and then not want to continue.
5. A person living with dementia may have difficulty recognizing and distinguishing the faces of even close family members like children and siblings.

COLOR AND CONTRAST:

For someone living with dementia, using contrasting colors can help to draw attention to objects making them easier to see. Examples:

- Serving meals on red plates can make each food item easier to see.
- Red plates may also stimulate appetite.
- Painting a door a color that contrasts with the wall makes the door easier to find.
- Putting colorful tape on the handles of walkers makes them easier to locate.
- A contrasting color toilet seat (ex: a black seat on a white toilet) makes the toilet stand out from the wall and easier to see.
- Color can also be used to highlight important objects and orientation points (ex: the toilet door), or for camouflaging objects the person doesn't need to use (ex: exit doors).

KEY CONSIDERATIONS

- **Try not to make too many changes** to the location of objects in a person's environment. This can help the person feel confident and reduce their fear of tripping or falling.
- **The pupils take longer to adjust to light** for people living with dementia. Lighting should be even around the home and should minimize shadows – some people resist going near dark areas in corridors and rooms. Consider assistive technology products such as automatic lights.
- **Stand straight in front** of someone living with dementia before you speak. Loss of peripheral vision causes them to only see things right in front of them.
- **Avoid 'busy' patterns** (ex: on the walls or floors) and changes in floor patterns or surfaces. They may be seen as an obstacle or barrier and the person may avoid walking in these areas.
- **Remove clutter and obstacles** to reducing the risk of trips and falls.
- **Regular eye check-ups** continue to be important for people living with dementia to maintain their quality of life.