Cognition

Thinking, knowing and doing

The Brain, Body & You, September 2020

THE WRIGHT FAMILY

What is left can't be right????

Cognitive Processing …….

- Is Complex
- Happens Quickly
- Requires Alertness
- Relies on Attention
- Relies on Memory
- Relies on Orientation
- Requires Problem Solving
- Requires Insight

ALERTNESS

What Can We Do To Help

- Observe the environment for sensory overload
- Choose activities that are meaningful for the person
- Break the task down into smaller components
- Be gentle

ATTENTION!

What Can We Do To Help…..

MINIMIZE NOISE AND DISTRACTIONS

PROVIDE SIMPLE AND SHORT INSTRUCTIONS

TRY TO MAKE DIRECT EYE CONTACT

GIVE MORE TIME TO THINK

PHYSICALLY ENGAGE THE PATIENT IN THE ACTIVITY

SPECIFIC TIME PROMPTS MAY ASSIST THE PERSON TO ATTEND FOR LONGER TIMES

MEMORY

What Can We Do To Help.....

- Ensure attention is adequate and provide short, simple directions
- Repetition is key
- Provide information in small amounts and when possible relate it to something the person knows
- Establish and maintain consistent routines to structure the day's activities
- Store items in the same place
- Encourage use of memory aids
- As much as possible consistent caregivers help establish routine

ORIENTATION

What Can We Do To Help?

- Link events to other events but not time
- Acknowledge a person's perception
- Maintain a consistent schedule, post it, review it
- Use compensatory strategies like a calendar, post names, use whiteboards for upcoming events
- Use signs or pictures or other familiar items to orient the patient
- Use landmark cuing and label items if needed

Problem Solving

If the hiker came upon these bears, would she be able to get herself out of that unexpected situation?

Problem solving is the ability to recognize a problem and find a solution. Difficulties with attention, memory, insight, sequencing can affect problem solving.

What Can We Do To Help?

- Facilitate problem solving during meaningful tasks
- Practice sequences of problem solving using common and relevant scenarios
- Don’t just do it! Involve the person you are working with i.e. “what should we do?”

Insight

What Can We Do To Help?

- Observe the person's behaviour when determining capability: the person may say they can when in fact they can not
- Avoid situations where the person may be challenged beyond their capability and assume a risk i.e. leaving a person who needs assist to transfer on the toilet independently
- Facilitate learning by reflecting with patient on unsafe situations as they happen
- Keep the environment safe
- Provide the necessary supervision

Impulsivity

What Can We Do To Help?

- Remind the person to slow down
- Give clear instructions
- Small steps to focus on one part of the task at a time
- Make the environment as safe as possible.

Cognition impacts everything we do.

Our awareness and understanding are key to helping the people we care for as these deficits can be overwhelming, frustrating, isolating and change life.

Perception

"optical illusion - this way" by Leo Reynolds is licensed under CC BY-NC-SA 2.0

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Video about Perception!

https://youtu.be/-IWk5NkxQF8

https://www.youtube.com/watch?time_continue=16&v=-IWk5NkxQF8&feature=emb_logo

Adapted with permission: Mary Warren Phd, OTR/L, SCLV, FAOTA – visABILITIES Rehab Services Inc.

Visual Acuity Loss

ACCOMODATION DIFFICULTIES

DOUBLE VISION

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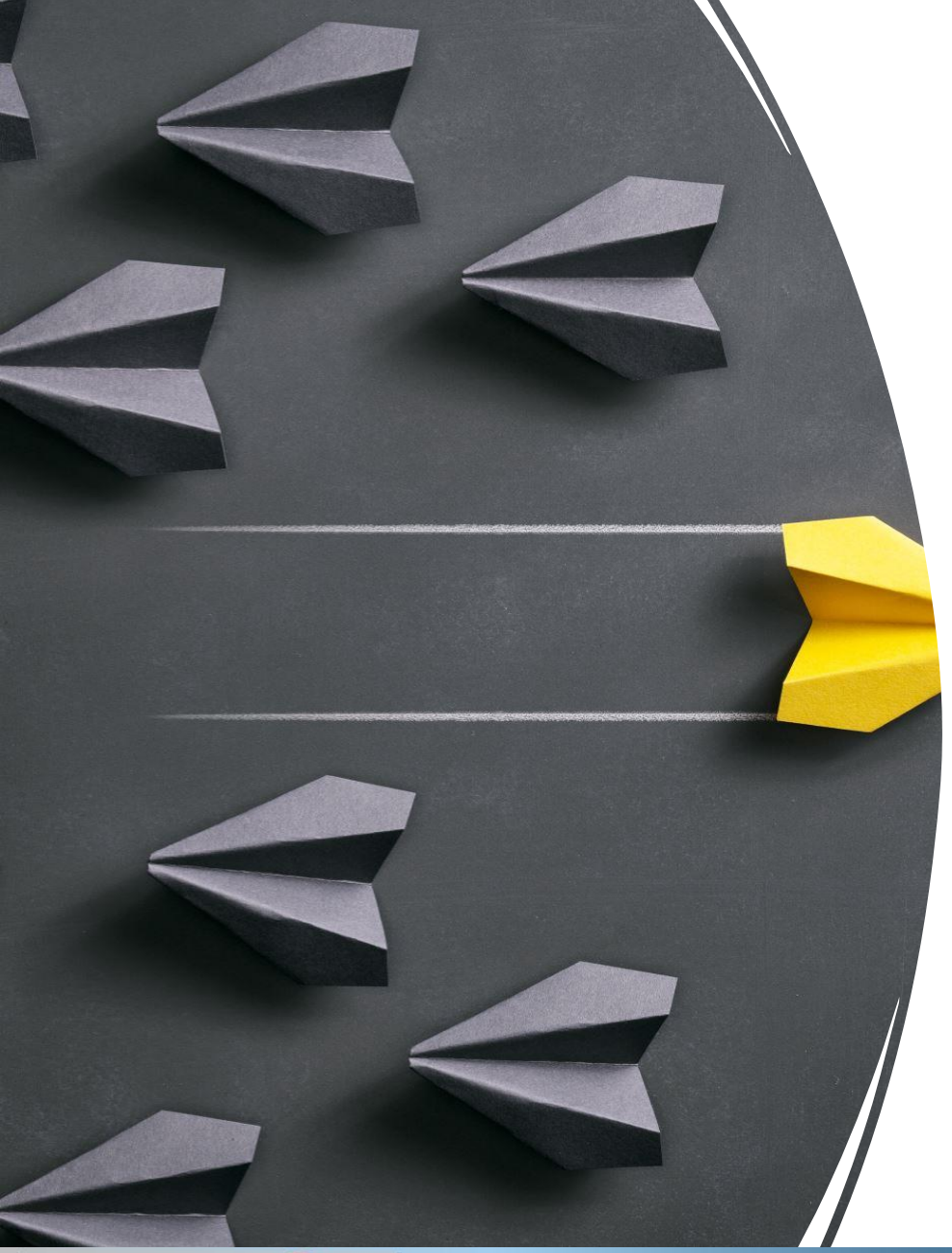
Hemianopsia

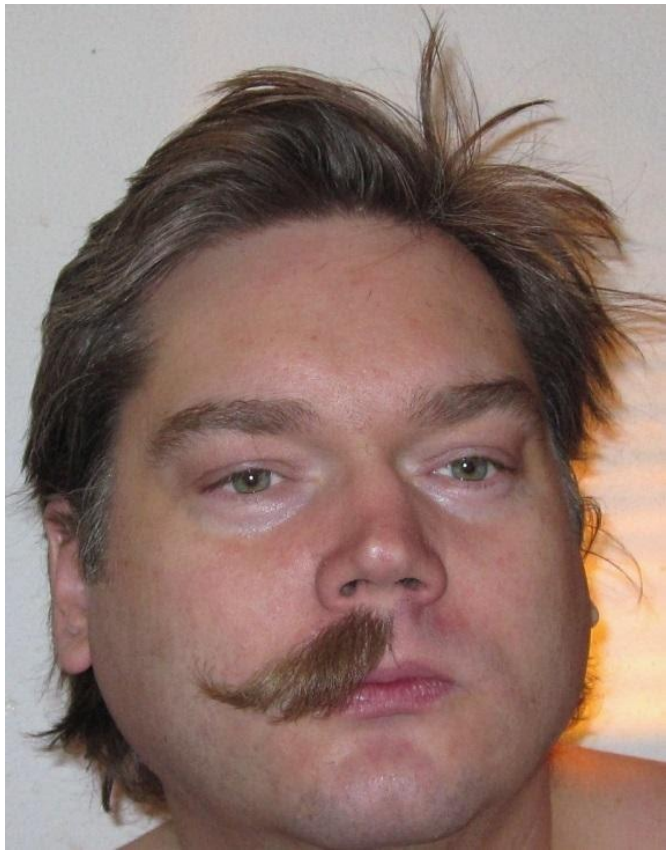
HOW DO THESE CHANGES AFFECT PEOPLE?

Headaches	Anxiety	Difficulty finding items	Getting lost	Overfilling water glasses
Missing when reaching	Tripping	Misjudging distances	Bumping into things	.....

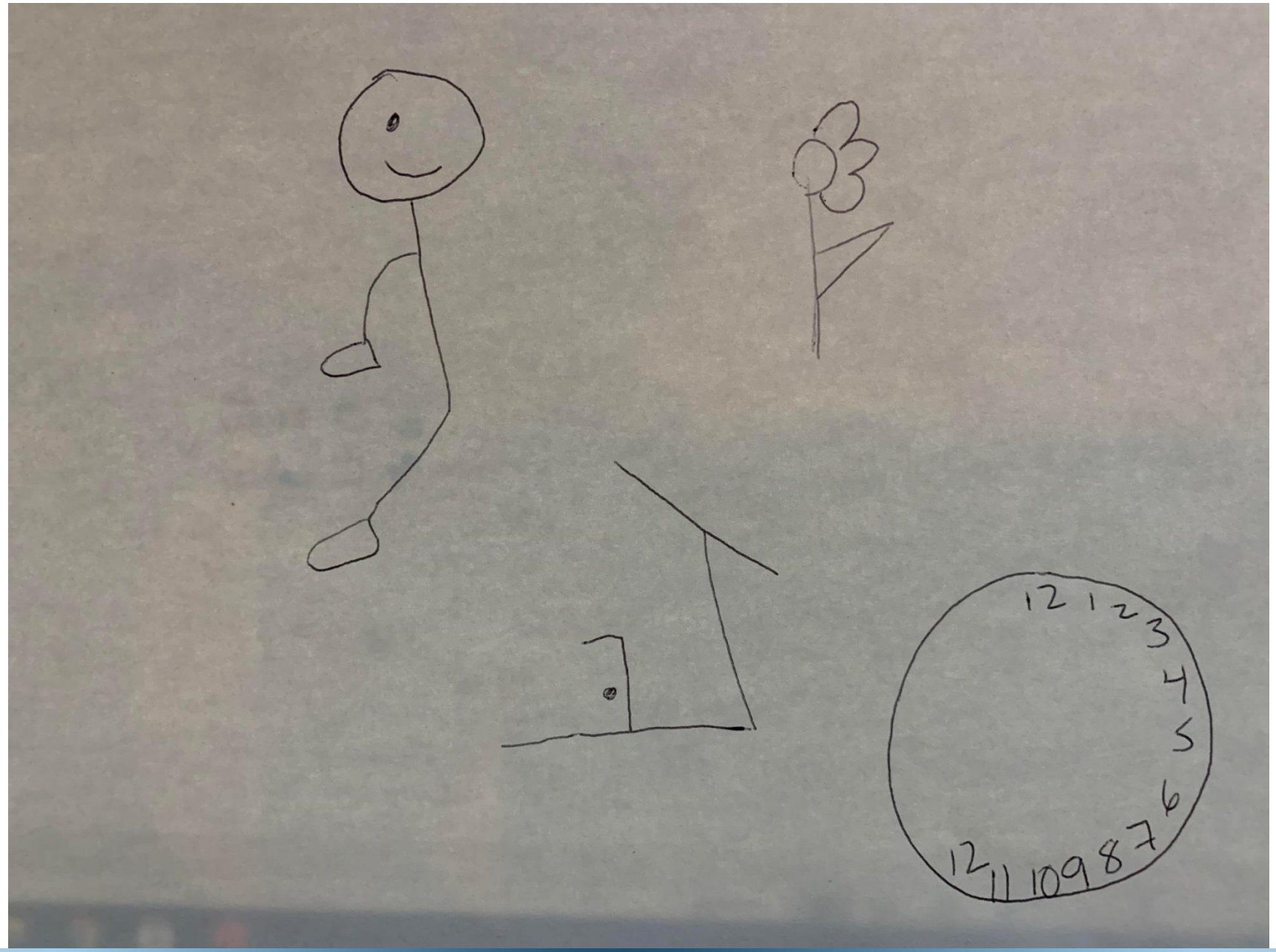


How to Help?????

- supervision
- reducing obstacles and clutter
- using adaptive equipment when needed
- taking same routes to get somewhere
- keeping items in the same place
- contrast colours
- identifying yourself when approaching



Unilateral Neglect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How Can We Help????

Training versus Accommodation

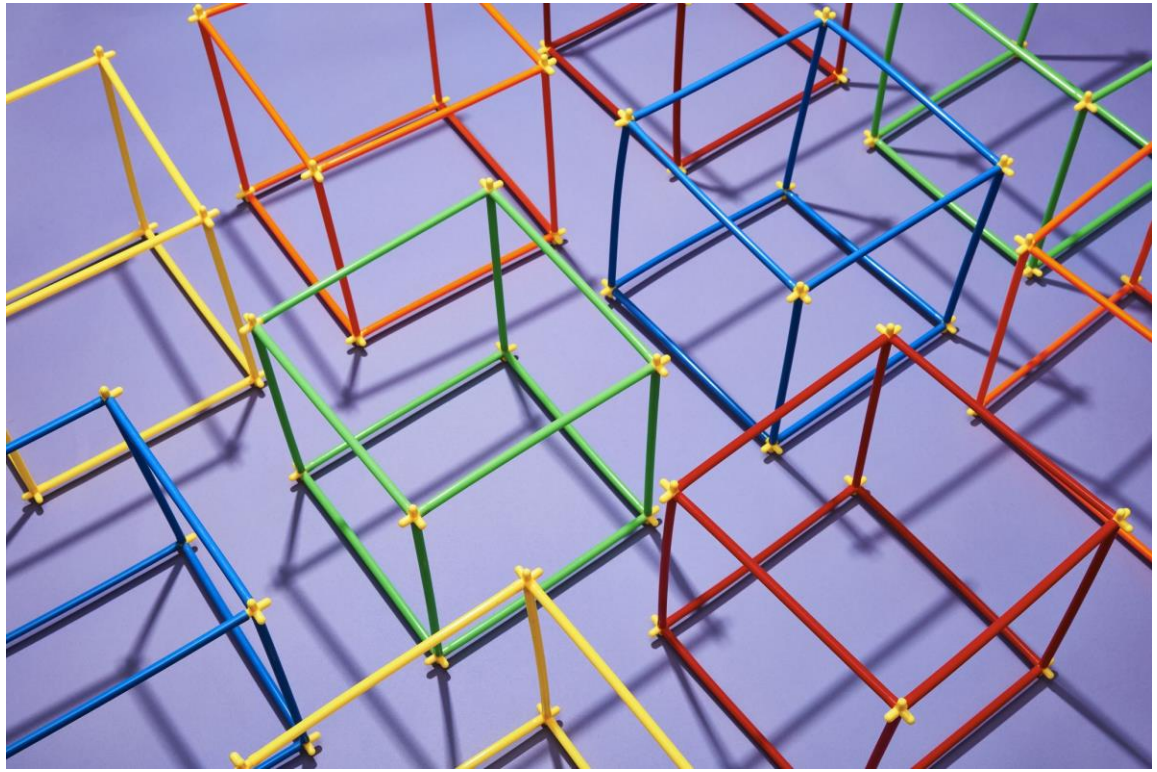
- Approach client from the neglected side (training)
- Carry out interactions from the neglected side (training)
- Ensure essential items are positioned towards the intact side i.e. phone, urinal, water, remotes etc. (accommodating)
- Place toiletries to the neglected side if you can cue to scan to locate items
- Encourage person to wash neglected side
- Keep clothes on the neglected side and encourage dressing of the neglected side first
- Place your hand on the neglected side to give sensory feedback to this side.

Figure Ground Discrimination

LEFT RIGHT DISCRIMINATION

Body Scheme Disorders

Spatial Deficits



How to Help in General……

- Organize and unclutter the environment
- Use contrasting colours whenever possible
- Signs to help locate items
- Limit right and left directions
- Provide cuing when needed
- Reinforce body parts during personal care activities
- Touch the limb you are referring to
- Set up the environment for success

PICK SOMETHING UP THAT IS CLOSE BY YOU. IT CAN BE ANYTHING

WHAT IF YOU WERE ASKED TO USE IT TO TIE YOUR SHOE???

Apraxia

- The inability to perform purposeful movement in the presence of intact motor control, coordination, sensation and comprehension

Ideomotor

- inability to carry out a movement or task to command or imitation but they can perform spontaneously i.e Person can't brush their teeth when asked to do at a certain time- later you may see them brushing their teeth

Ideational Apraxia

- Inability to carry out the steps of the task in the correct sequence or at all- overall concept of the task is lost. You may see a person being able to perform each individual step however not put it all together. i.e. using a toothbrush to brush hair, toothpaste on comb

Dressing Apraxia

Occurs when a person has difficulty dressing themselves even though they are physically capable of doing so. They may orient the clothing the wrong way, upside down, inside out, two legs in one pants hole, arm through the head hole of the sweater. It is difficult to figure out what is wrong and how to fix it.

How To Help?

- Keep instructions simple and brief
- Keep routines as familiar as possible
- Provide hand over hand to guide if needed
- Have a person visualize task prior to performing
- Have the person verbalize the steps out loud while performing tasks
- Break the task down into smaller, more manageable parts
- Do activities where it makes sense to do them

We are Here to encourage strengths and to build up weakness.

Questions.....
Thank You!