

# Brain Injury Basics and Strategies

**Presented by:**

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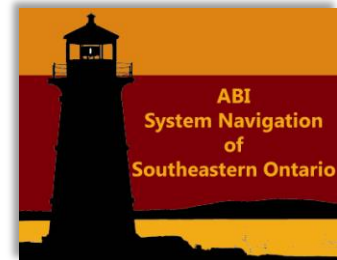
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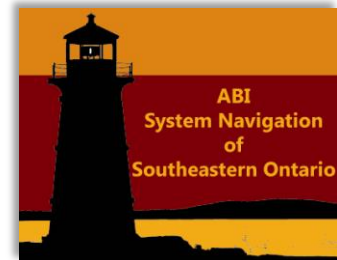
# Acquired Brain Injury:

Damage to the brain, which occurs after birth and is not related to a birth disorder or a progressive disease such as Alzheimer's disease or MS. The injury may be caused by a violent movement of the head (traumatic) or non-traumatic cause (e.g. tumour). A mild traumatic brain injury can occur even without the loss of consciousness although a brief loss of consciousness is common.



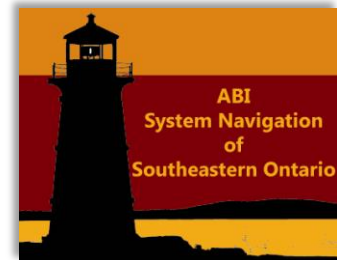
# Recovery from Brain Injury

- Begins within 24 hours and continues for a lifetime.
- Brain chemistry returns to normal.
- Injured neurons sprout and establish new connections.
- Uninjured areas of the brain take over from injured areas.
- Improvement can be impacted by other factors



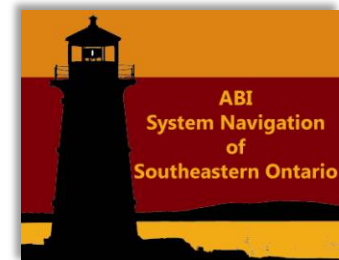
# Factors which affect Recovery

- Age
- Health & other medical conditions
- Nature and extent of injury
- Quality of early medical care
- Length of coma
- Amount of time since injury
- Pre-injury personality and level of functioning
- Recovery is not enough; rehabilitation and support are also needed.



# Consequences of Injury to the Human Brain

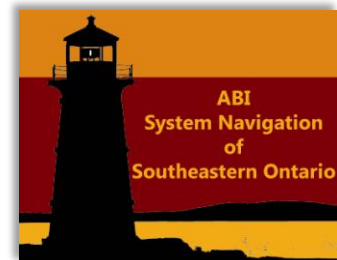
- Motor — strength, coordination, speed, balance, energy & fatigue levels
- Sensory — sight, hearing, touch, proprioception, taste, smell, balance
- Cognition — language, visual-spatial awareness, attention, memory, processing speed, executive function
- Behaviour/Emotion - strength, stability, and control



# PROBLEMS RELATED TO PERCEPTION

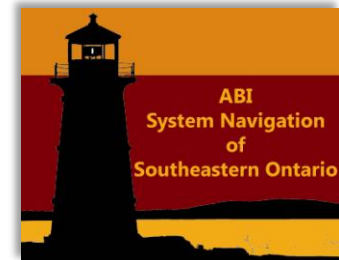
Perception is the integration of sensory impressions into psychologically meaningful information.

It is how we understand and move through our daily world.



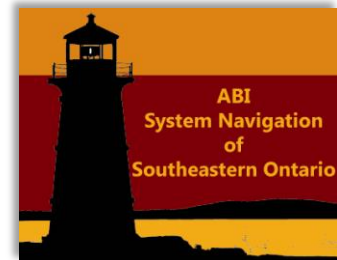
# Attention

- Difficulty in stimulating environments
- Distractible
- Trouble returning to task when interrupted
- Cannot do more than one thing at a time
- Cannot concentrate for long periods of time



# Strategies for Attention

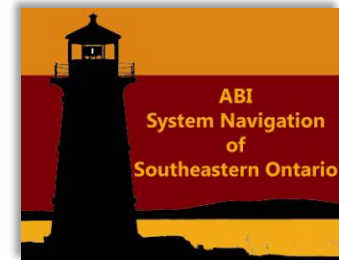
- Reduce level of stimulation
- Stay organized
- Do one task at a time
- Monitor and provide prompts back to task, or to start another step
- Manage fatigue; take breaks and address sleep issues
- Avoid interruptions
- Work slowly
- Write instructions down





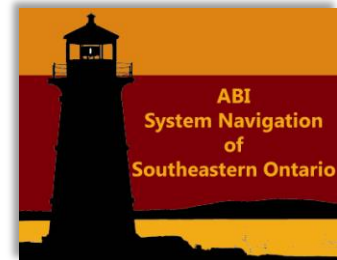
# Strategies for Memory

- Always keep things in the same place
- Carry a notebook to write things down
- Use a journal/calendar to keep track of appointments and dates, as well as to record conversations or activities
- Keep a schedule and plan ahead
- Develop routines and keep following them
- Provide verbal reminders
- Post reminders in prominent locations



# Executive Function

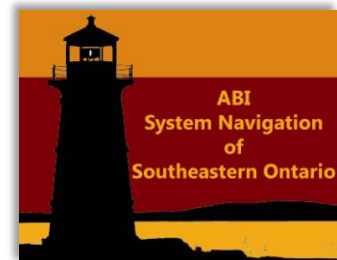
- Abilities that include planning, organizing, monitoring, initiating and sustaining performance
- Executive function requires attention
- It includes the ability to use imagined future consequences to guide present behaviour
- Executive function is the last of the cognitive abilities to mature



# Executive Function

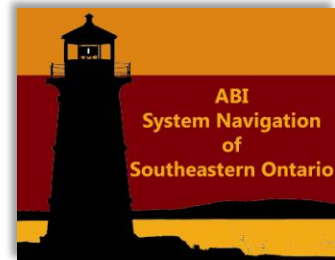
Executive Function is:

- Initiating – getting started
- Sustaining – keeping going
- Planning
- Organizing
- Self – monitoring
- Self – evaluating
- Getting realistic goals
- Judgment



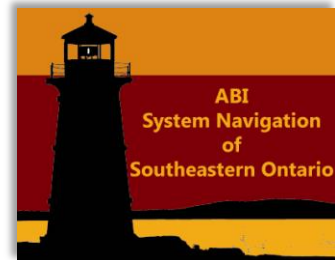
# Problems with Executive Function

- Have lots of ideas and things to do but cannot get started on them or finish them
- Feeling disorganized and overwhelmed
- Being unprepared for appointments and activities
- Make mistakes without knowing it
- Make mistakes because working too quickly
- Describe yourself differently than others do
- Difficulty solving problems/making decisions
- Set goals that you are unable to keep



# Strategies for Executive Function

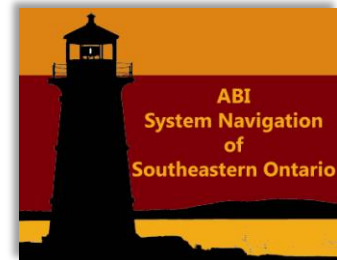
- Make “to do” lists, and check them off as you complete each task
- Engage the resident in problem solving; if not able to generate own ideas, offer suggestions
- Prompt to “Stop and Think”
- Work slowly and carefully
- Provide feedback (respectfully) about how things are going
- Reflect on previous experience
- Get organized yourself before engaging the resident! Have a clear plan and know that the whole team is working in a similar fashion



# Communication:

## Aphasia (>10% of people)

- Reduction in abilities of listening, speaking, reading and writing.
- Often know what they want to say, but have trouble putting the right words together
- Difficulties related to language content, form and use.
- “Communicate better than they talk”



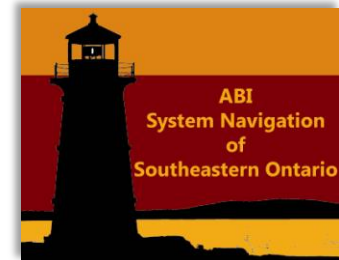
# Cognitive-Communicative Problems (90 + %)

- Reduction in abilities related to use of language (verbal/non-verbal)
- Related to cognition; If you have difficulty organizing your thoughts, your speech will be disorganized as well.
- Ability to comprehend language
- Typically diffuse/widespread damage.
- “Talk better than they communicate”



# Communication Strategies for Others

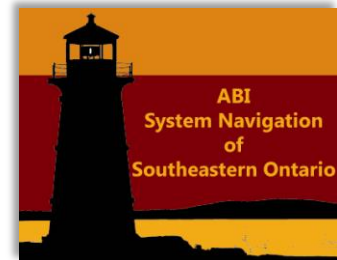
- Speak clearly, slowly and in short phrases
- Take your time to listen. Patience is key.
- Offer another way to communicate such as writing it down or using gestures
- Ask if the patient understands, rephrase and review as needed.
- Reduce background noises ( i.e. TV, radio, bystanders)
- Ask specific questions or restate previous points to help stay on topic.





# Behavioural and Emotional Problems

- Disinhibition: Not being able to stop thoughts or behaviour that may be inappropriate.
- Emotional lability: mood changes
- Denial
- Egocentrism: Unable to see from others point of view
- Depression and withdrawal from others
- Easily Frustrated, Irritable, Temper Outbursts
- Impulsivity
- Unrealistic expectations: may be overly optimistic or pessimistic
- Lack of motivation
- Dependency on others

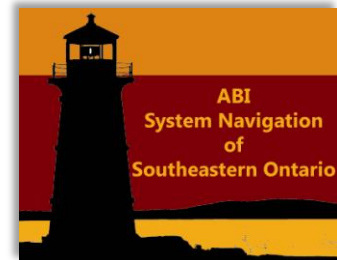


# Strategies for Behavioural and Emotional Problems

Two ways: Changes to the Person and the Environment

Personal Changes through education and counselling to:

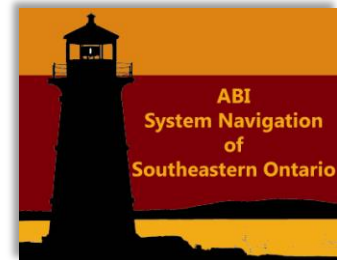
- Build self-esteem and recognize strengths
- Increase self-awareness
- Develop, encourage and support use of compensatory strategies.
- Take time to get used to “new” self and grieve the old self
- Offer opportunities to talk about and vent frustrations if able to remain in control



# Strategies for Behavioural and Emotional Problems

Precipitating Factors: Internal and external factors which may contribute to behaviour. Also known as “Triggers”

What triggers can you think of?



# Some examples of triggers include:

## Internal

Fatigue

Hunger

Grief & Sadness

Medication

Illness & Pain

Hormones

Blood Sugar

Confusion

## External

Lack of Choice & Control

Particular People

Changes in Routine

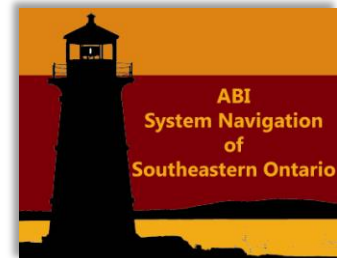
Noise

Holidays

Weather

Other's Expectations

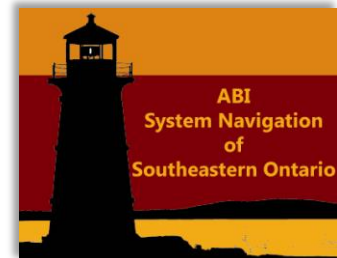
Disappointments



# Strategies for Behavioural and Emotional Problems

## Change the situation:

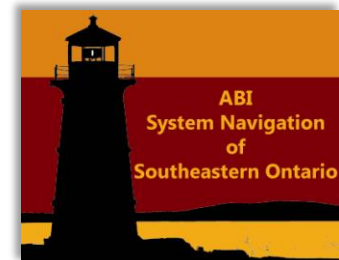
- Identify behaviour and emotional triggers
- Be clear and direct in giving feedback
- Slow down and reduce pressure
- Remove distractions – find a quiet place
- No surprises – involve the person and let them know what you're going to do
- Write things down to increase understanding
- Provide the opportunity to be successful & give praise
- Be interested in the past, honest about the present and hopeful for the future



# Assertiveness

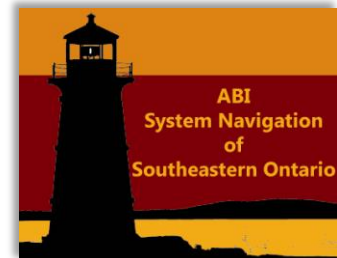
As caregivers, it's important to be able to ask for things you want and refuse things you don't want, in a way that is *respectful* to your client and maintains a good relationship.

Can you think of situations where you have needed these skills?



# Safety Tips

1. Be knowledgeable about your patient.
2. Always explain what you want to do to and ask permission, Eg: Can I push you back to your room now?
3. Be aware of potential safety hazards – objects in their hand, etc.
4. Respect personal space – if upset give extra!
5. Have a plan in place for potential problems and work as a team. It is better to have just one approach than many.
6. Help the client understand what to expect by having a consistent response to behaviour by you and other staff.
7. Be aware of where you are located in a room. Don't place yourself so the client is between you and the door/exit.

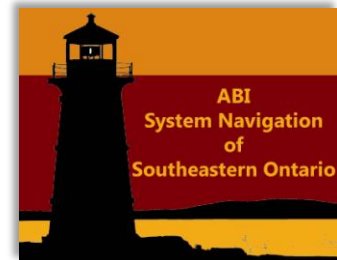


# Controlling Negative Behaviour

Patients will generally respond best when treated with respect, empathy, and clear guidelines.

These can include:

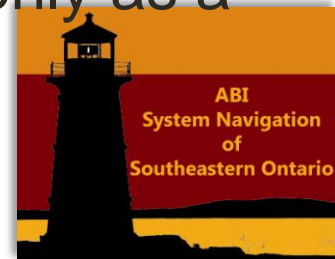
- Planning ahead and making plans to address needs such as pain, hunger, loneliness, boredom, etc.
- Noticing early warning signals
- Avoiding triggers
- Redirecting or distracting from the problem
- Talking with the patient
- Directing the resident to their own room where they can calm down naturally
- Stating clear boundaries and not reinforcing negative behaviour





# Controlling Negative Behaviour, con't:

- Although physical restraints or medications are sometimes useful in controlling behaviour, they place patients at risk and can sometimes escalate the situation
- Clients with brain injury may be made **more confused** and agitated when medicated or restrained
- They may struggle and injure themselves or others
- Medications can cause negative side effects
- Because of this restraints should be used only as a last resort.



# Time for Discussion

Questions ? Comments?

