Mental Illness

Alzheimer's Disease
Alzheimer's disease is the most common type of dementia accounting for 60-70% of all dementias.

Vascular Dementia
Vascular dementia is the second most common type of dementia, accounting for approximately 15-20% of all dementias.

Lewy Body Dementia
Lewy Body dementia is the least common type and accounts for approximately 1-2% of all dementias.

Fronto-Temporal Dementia
Fronto-Temporal Dementia accounts for approximately 5-8% of all dementias.

Other Dementias
Include dementia associated with Parkinson's disease, Huntington's disease, other neurodegenerative diseases and traumatic brain injury.
Physical Disability

When we ask “Is it Behavioural?”

We are really asking “Is the behaviour willful?”

“Willful” implies that the person is conscious of what they are doing and actively made a decision to act that way.

It suggests that the behaviour is within the person’s conscious control.

Arousal and Self-Regulation Drive Behavioural Responses
Arousal is the Foundation of Behaviour

- Arousal describes how alert one feels.
- To attend, concentrate, and perform tasks in a manner suitable to the situation, one's nervous system must be in an optimal state of arousal.

How does the Brain Change States to Match the Demands of the Environment?

- Overload or Sensory Shutdown
- High Level of Arousal
- Optimum state of arousal
- Low Level of Arousal
Sensory Over-Responsivity

Hyper-sensitivity to sensations e.g. sights, sounds, touch, movement, smells, taste

Bothered by:
- Smells
- Being touched unexpectedly
- Being in a car or up high
- Loud unexpected sounds
- Having hair cut or brushed

Behaviours:
- Aggressive
- Irritability or aggression “fight or flight”
- Upset by transitions and changes

One of my sensory problems was hearing sensitivity, where certain loud noises, such as a school bell, hurt my ears. It sounded like a dentist drill going through my ears.

— Temple Grandin —

Sensory Sensitivity
**Sensory Under-Responsive**

- Doesn’t cry when seriously hurt
- Doesn’t seem to notice when touched
- Nearly always prefers sedentary activities
- Can be unaware of the need to use the toilet
- Passive, quiet, withdrawn
- Often gets lost in his own fantasy world
- Exhibits no inner drive to get involved in the world


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**Sensory Seeking/Craving Behaviours**

- Is on the move constantly
- Moves intensely crashing, bashing, bumping, into objects for feedback to body
- Excessive pacing, rocking, wandering
- Constantly touches objects and/or intrudes on people
- Hard to stop talking; trouble turn-taking in conversation

**Behaviour:**
- Constantly wants control over every situation
- Does not wait turn, interrupts constantly
- Frequently labeled “bad” and “disruptive”

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**Sensory Defensive Behaviours**

**Tactile Defensiveness:**

- Reacts negatively and emotionally to light touch; anxiety hostility or aggression.
- Dislikes textures that are messy
- Irritated by certain textures of clothing
- Gags on particular foods
Gravitational Insecurity

Irrational fear of movement and heights
Anxious when feet leave the ground
Easily disoriented in space

Auditory Sensitivity

- Overly sensitive to sounds
- As many people age, they develop a common hearing loss condition, called presbycusis, in which hearing gradually deteriorates and certain sounds become distorted.
- The elderly’s perception of high frequencies diminishes, and low frequencies – like the bass and drums of rock music – are magnified.
- "When older people lose the high frequencies, they hear a distortion. What they hear resembles sound from an Edison phonograph more than sound from a high-quality stereo," Fucci said. "With rock music, they still are hearing the low frequencies, and the beat and rhythm knocks their heads off."

Visual Sensitivity

- Squints in sunlight
- Avoids eye contact
- Dislikes glare from TVs or computers

The Magic of Connection

What is Attachment?

1. A pattern of interaction in a specific relationship.
2. These patterns are learned; they are self-protective strategies.
3. In times of stress, these default patterns are evident throughout the lifespan.
4. The strategies are formed during early connection with caregivers; early attachment grows the brain.

Brains Light Up Like Christmas Tree Lightbulbs

- When mom and baby first meet after delivery, they typically fall in love instantly as their brains both become very active - each lighting up like a lightbulb in the same parts of their brains.
- It is the right side of the front of their brains that light up.
- Baby’s brain follows mom’s. G. Dawson, et al. (1999)
The Right Orbitofrontal

- This is the area most responsible for top down regulation of arousal.
- The ROFC regulates heart rate, hormones, and controls the autonomic nervous system.
- The ROFC tells the amygdala to calm down when it notices the person is dysregulated.

Schore, 2005

Right Side of the Brain

- The right hemisphere is nonverbal, spatial processing, sing song voice, face recognition, novelty, seeing the big picture
- This is the first hemisphere to develop, during the first 18-30 months after birth, and it shuts down its development as the left hemisphere comes online.
- The right hemisphere is the CEO of self-regulation and helps to calm the limbic brain.

A. Schore, (2001)
Regulation through Sensitive Caregiving

Through soothing, the elder learns how to transform a state of distress into calm.

This state of calm is mediated by activation of the parasympathetic (calming nervous system) which slows down the heart rate and also activates brain circuits that help the child learn to self-regulate.

Amygdala

Fight, Flight, Freeze

Amygdala Pays Attention to Faces

- When we see an angry face, the amygdala immediately tells the body there is a threat.
- People with dementia rely heavily upon facial cues to interpret context.
The Role of the Amygdala

It rapidly perceives a sensory stimulus as either positive or negative. When it detects something relevant, it signals the hippocampus to start laying down memories. This is how we learn. If it detects danger, however, it activates the fight-flight system, and this prevents new learning.

Amygdala is mature six months before birth, whereas the higher order brain systems that regulate the amygdala take years to mature.

Reading the Mind in the Eyes

The eyes hold the information of emotion.

https://www.youtube.com/watch?v=pf44-9osaeg
Trauma is an experience that creates a lasting, substantial negative psychological impact.

Traumatic events may be single occurrences, or several experiences that become traumatic when they are combined.
In fact, three out of four Alzheimer’s patients (73%) had to cope with severe emotional stress - three times as many as the control group in which only 24% experienced stress, grief and sorrow during the preceding three years.

The researchers found:
- 21 patients experienced death of a spouse or partner
- 14 patients experienced the death of a child
- 20 had violent experiences, such as robbery or physical assault
- 13 had car accidents that likely resulted in emotional wounds although no serious physical injuries

The researchers also found that financial problems, diagnosis of a family member's severe illness, or migration-related adaptive changes were also stress-factors.

"Stress, according to our findings, is probably a trigger for initial symptoms of dementia. Though I rule out stress as monocausal in dementia, research is solidifying the evidence that stress can trigger a degenerative process in the brain and precipitate dysfunction in the neuroendocrine and immune system."

https://www.medicalnewstoday.com/articles/246487.php

Attachment Patterns

Three attachment patterns:
- Type A: Avoidant
- Type B: Balanced
- Type C: Connection Seeking

Mom and Baby - Secure Attachment
Happiness in the Brain

- Happy people have more activation in the left hemisphere of the prefrontal cortex.
- Depressed people have greater activation in the right hemisphere of the prefrontal cortex.
- Dr. Field found that neonates of high-anger mothers also had greater activation in the right frontal lobe of the brain.
- She noted disorganized sleep patterns in neonates of the high-anger group, and lower scores on an assessment using the Neonatal Behavioural Assessment Scale.

Changaris, 2015

Caregiver Behaviours Leading to Insecure Attachment
- Inability to read infant/child cues
- Lack of empathy toward child
- Turning away from the child
- Rejecting affection
- Intrusiveness
- Reducing requests for help
- Frightening the child
- Being frightened of the child

Left brain/Right brain

- Language
- Imagery

- Limbic system
  - Motivation & emotion

- Brainstem
  - Regulation of autonomic function, arousal & pain systems
Still Face Experiment

Attachment “A” Strategy

- These individuals learn that their feelings make others feel uncomfortable.
- They learn at a very early age to shut down their negative feelings to protect themselves from harm and judgment.
- Uncomfortable with closeness and intimacy.

Attachment - Dad with Son
The Guardian - “A” Strategy as an Adult

“A” Strategies Disconnect from their Bodies

Insula:
• The home of interception and embodied experiences.
• “A” strategies disconnect from their emotional experiences and have been shown to have a smaller insula.
• Needs more proprioceptive input.

DeWall et al., 2011

Attachment “C” Strategy

• This child seeks connection through threat and helplessness.
• These individuals are anxious without connection.
• They are preoccupied with negative emotions (sadness, anger and fear) and come across as unpredictable in their behaviour.
The Family Guy - Classic “C” Strategy

Driving Miss Daisy

How do we Support People Using these Strategies?

- Be aware of what strategy they are using in the moment
- Know our own strategy, and our own triggers
- Keep both them and you in your mind
- With “A’s” - give space, sideways approach
- With “C’s” - prevent, be clear, be close
- Have compassion for both strategies

Whenever you can, remember:
People are doing the best they can with what they have.
Self-regulation is about how we manage our levels of arousal. Heightened arousal can come from our senses, emotions, even thoughts. Problematic behaviours can be seen as invaluable signs that a child’s arousal level is out of balance.

Techniques for Self-Regulation

Weighted blanket
The Impact of Touch

Rhythm provides structure for movement, telling us how to move through time and space.

Speed of the rhythm can help either up-regulate or down-regulate dependent upon what is needed.
Therapeutic Listening

Colour Therapy Glasses
Art of Attuned Regulation

Mindfulness

There's a Micro Expression for Compassion - It Helps Regulate Others

- soften and open eyes
- lean to the right
- genuinely care about the other

Try it
Pay attention to your facial expressions, postures, and tone of voice because they have a powerful influence on the emotional climate of the room.

Make sure to take care of yourself and enjoy life because people around you feel your exhaustion, sadness, or despair.

Practice what you preach.

A therapist’s stress, fatigue and anger will resonate within clients via their mirror neuron systems.

Cozolino, 2014

Non-Verbals in Relationship

Be aware of how the situation affects you personally, and therefore, how your reaction affects the situation.
When we are under stress, our tone of voice changes, taking on a quality of irritability and frustration. This will immediately stimulate a defensive reaction in the listener’s brain that will undermine the potential of having a productive dialogue — even before the conversation begins.

Brain imaging shows the more deeply we listen the more our brain will mirror the activity in the other person’s brain. This helps us feel understood and valued. Speak briefly; brevity followed by intense listening increases the other person’s understanding. Extreme brevity keeps the emotional centres of the brain from sabotaging a conversation.

It is hard enough to speak mindfully under normal circumstances, but it is truly remarkable when we’re able to hold steady during a painful moment. Speaking gently increases the chances that what we say will be heard. Reframe from exaggeration or generalization and maintain a we-first perspective when we’re angry or in pain.
“We don’t see things as they are, we see things as we are”.

- Anaïs Nin

In your eyes I see myself as…….

Self-Reflection

- When we use the sensitive emotional ups and downs of everyday conversations, we make life into a personal growth opportunity.
- We can observe ourselves opening up and closing down in small ways throughout the day.
- This type of self-reflection begins to develop a sense of awareness of how experiences affect you.
It is helpful to everyone to be
Aware of our judgments

Brené Brown, Empathy

With a partner, share a time when you were triggered by someone.

In telling it, try to realize that your response was really about you and not about the other person.
There’s Always a Reason for the Behaviour

How does this information apply to your practice?
Thank you!

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