

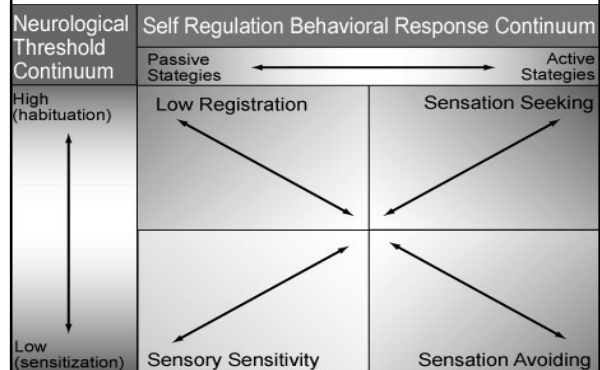
4 basic patterns of responding to sensory events in everyday life

- ▣ **Sensation Seeking** is the combination of high neurological thresholds and an active self regulation strategy
- ▣ **Low Registration** is the combination of high neurological thresholds and a passive self regulation strategy
- ▣ **Sensation Avoiding** is the combination of low neurological thresholds and an active self regulation strategy
- ▣ **Sensory Sensitivity** is the combination of low neurological thresholds and a passive self regulation strategy

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Dunn's model of sensory processing (2007)



Working knowledge of sensory processing (SP) required

- ▣ Occupational therapy field
- ▣ For clinical use: To understand our clients
- ▣ To teach families to understand the behaviours of their children
- ▣ To understand yourself
- ▣ *SLT's and A's understand the sense of hearing, auditory processing and CAPD*
- ▣ Need to understand other senses and SP disorder
- ▣ Essential interdisciplinary knowledge

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4 patterns found in children and adults with:

- ▣ ASD
 - Autism: Coplan, 2010: 4th symptom
 - Asperger syndrome
- ▣ AD(H)D
- ▣ Schizophrenia
- ▣ Developmental disability: Infants and children with LBW and preterm birth
- ▣ Learning disability

Sensory processing knowledge has developed more specificity over the last several years

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Auditory processing disorder

- ▣ Children with disabilities have
 - Distinctive processing patterns
 - More intense processing patterns
 Than their peers without disabilities
- ▣ ASD auditory processing
 - Extremely variable responses to sound
 - Appear deaf to speech, but hears distant machine noises
 - Find high frequency sounds unpleasant
 - Increased range of hearing
 - Often cover their ears

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4 phases of self-regulatory development (Greenspan, 1981)

1. First month: try to find homeostasis by means of neuro-physiological behaviours
 - Eye closing
 - NNS & KMC
2. Attachment 2-7m
 - Selectively interested in people
 - Change action in response to events
 - The child can adapt and recover if his/her signals are not attended to immediately
 - The more adaptive infant expresses a wide range of affect

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4 phases cont ...(Greenspan, 1981)

3. Somatic-psychological differentiation 3-10m

- Attachment is attained by reciprocal responses between infant and caregiver
- Use past experience to self-regulate
- Disengage attention to self-soothe
- Moving or looking away

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4 phases cont ...(Greenspan, 1981)

4. Behavioural organization, initiative and internalization 9-24m

- Differentiate self from non-self
- Increased memory to guide actions
- Two dimensions of variability
 - Approach and inhibition
 - Organize themselves in response to environment

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Clinical use of screening instrument



- Part of CHRIB assessment protocol: Level 1
- Link patterns of sensory processing to everyday life behaviours
- Sensory processing is not the only determinant of behaviour, but it is
 - Complex
 - Can affect emotions, confidence, learning ...
- Relationship between sensory processing and everyday functioning informs intervention

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Use knowledge of SP to

- Understand behaviors
- SP manifests differently in different environments
- Tailor activities and interventions to support children to participate better in everyday life, and in therapy
- Bathing, dressing, mealtime, playing, waking, outings
- See Tables 1-4 for activity ideas



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References

- Coplan, J. 2010. *Making sense of autistic spectrum disorders*. New York: Bantam Books.
- Dunn, W. 2007. Supporting children to participate successfully in everyday life by using sensory processing knowledge. *Infants and Young Children*, 20(2):84-101.

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