



# PANS/ PANDAS & SENSORY PROCESSING

***SANE SWEDEN PANS CONFERENCE  
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# INTRODUCTION

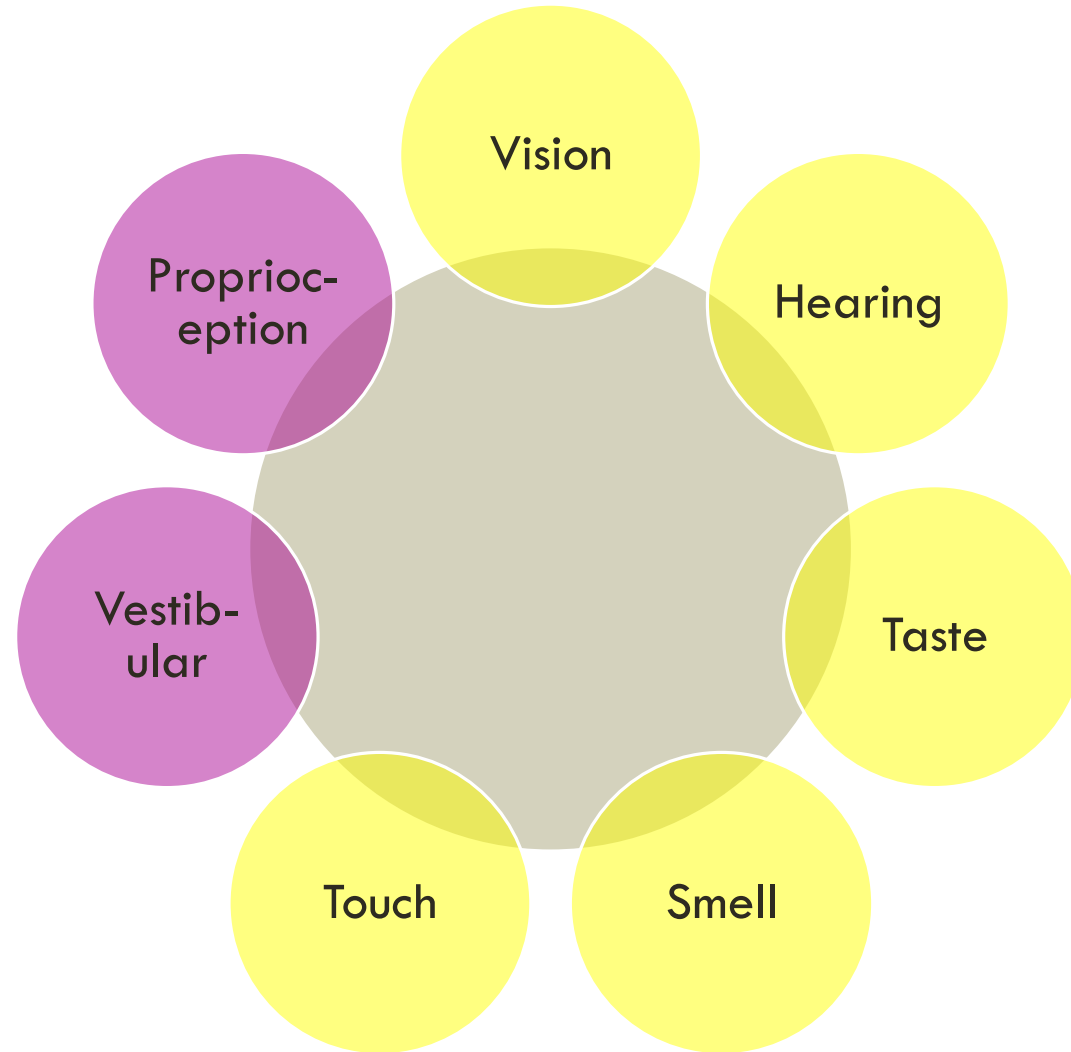
Sensory processing

PANS/ PANDAS & Sensory Processing

Supporting sensory processing

# SENSES

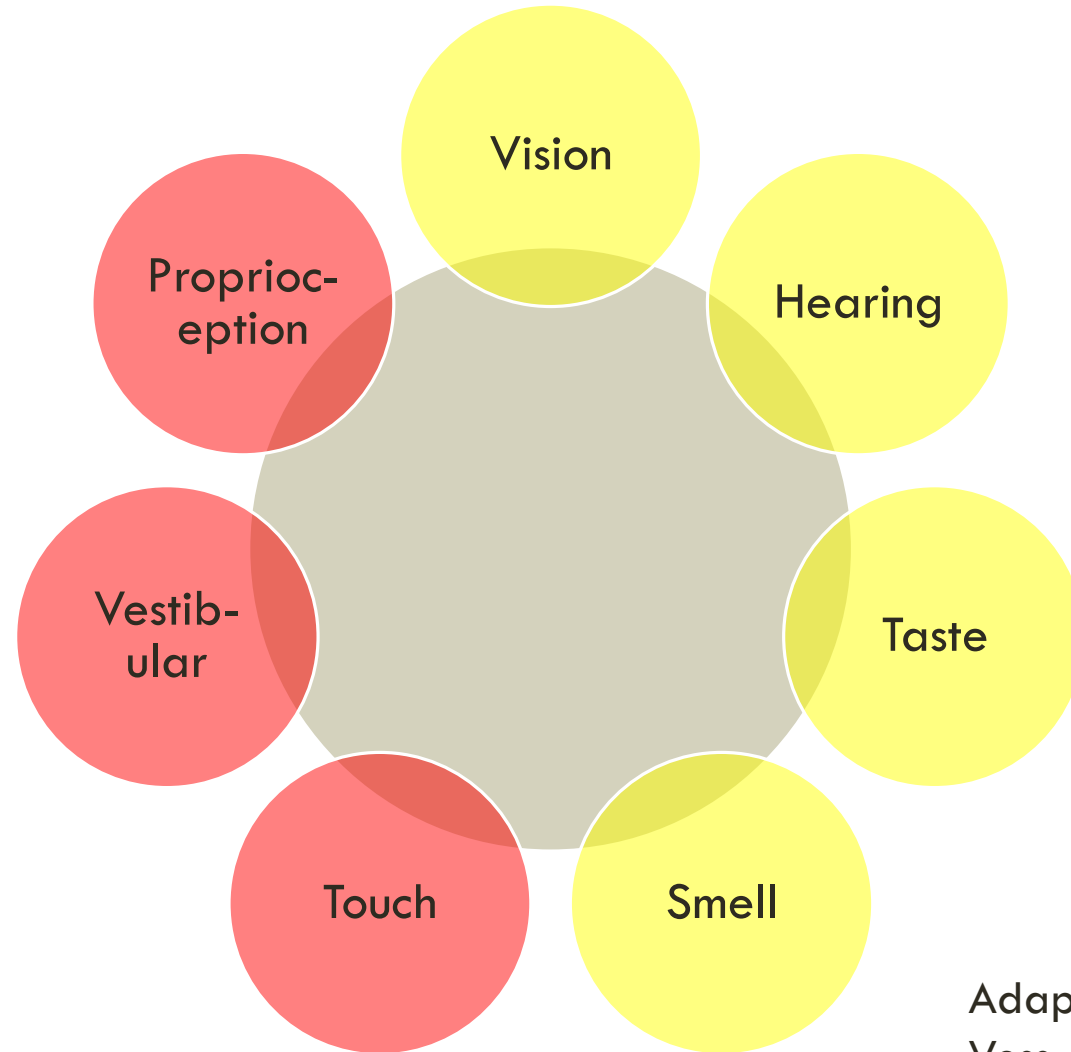
Purple = body senses



Adapted from Anzalone & Lane, 2012.

# SENSES

Red = Power senses



Adapted from Anzalone & Lane, 2012;  
Voss, 2011

# TACTILE, PROPRIOCEPTION & VESTIBULAR



Tactile = outline

Proprioception = fill in outline

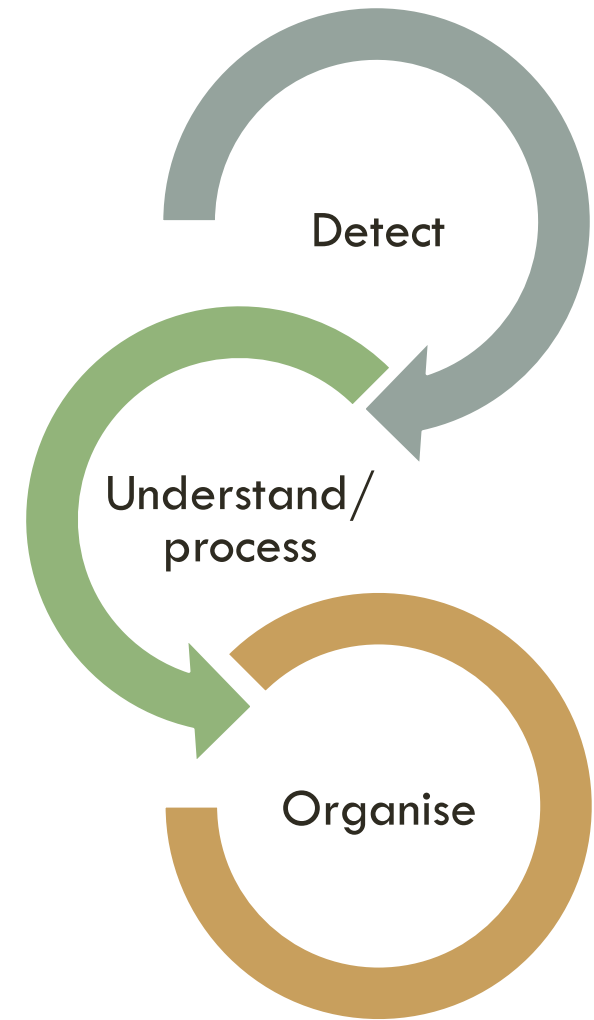
Vestibular = 3D movement

*Shelly Lane 2018*

# WHAT IS SENSORY PROCESSING?

-The ability to use *sensory information* from the *environment* & from within our own *body* to carry out our daily tasks.

-NEUROLOGICAL PROCESS



# SENSORY PROCESSING

Tuning into the right frequency

- Filtering out unnecessary sensory information

Volume

- Too high
- Too low

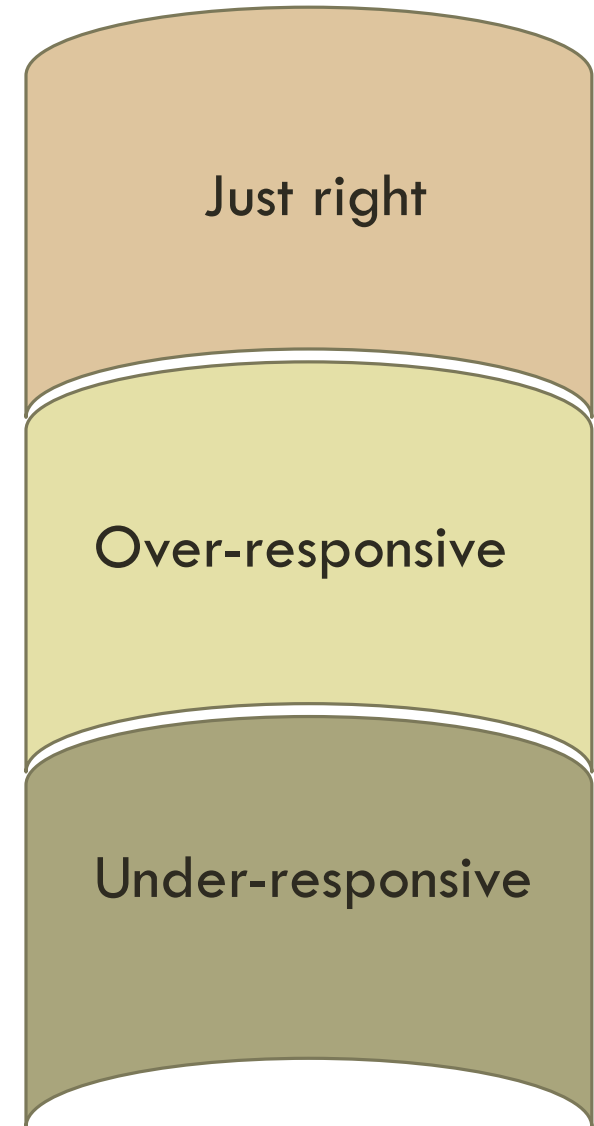


Impact on:

- focused attention
- learning
- Mastery/ success

# SENSORY PROCESSING

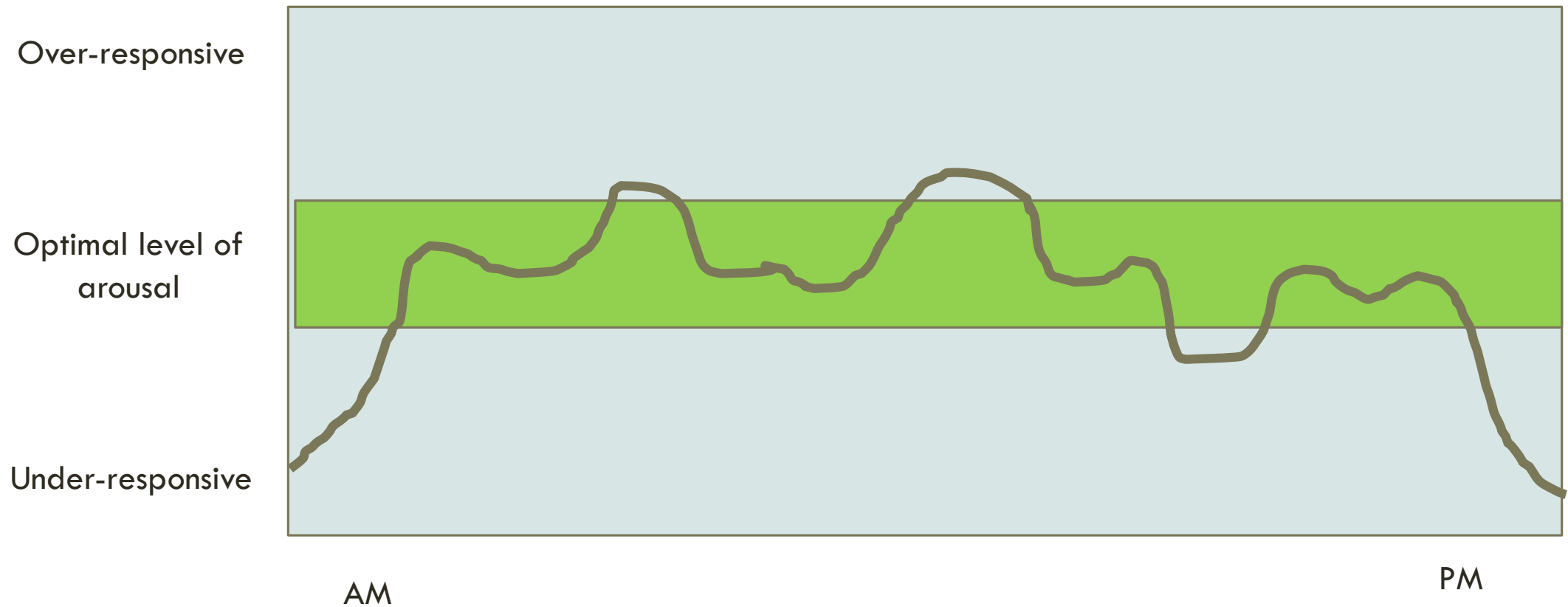
Responses match the demands of the environment



Adapted from Lane, 2002



# SENSORY PROCESSING JUST-RIGHT



Adapted from Williams & Shellenberger, 1996; & Lane, 2002

# SENSORY PROCESSING

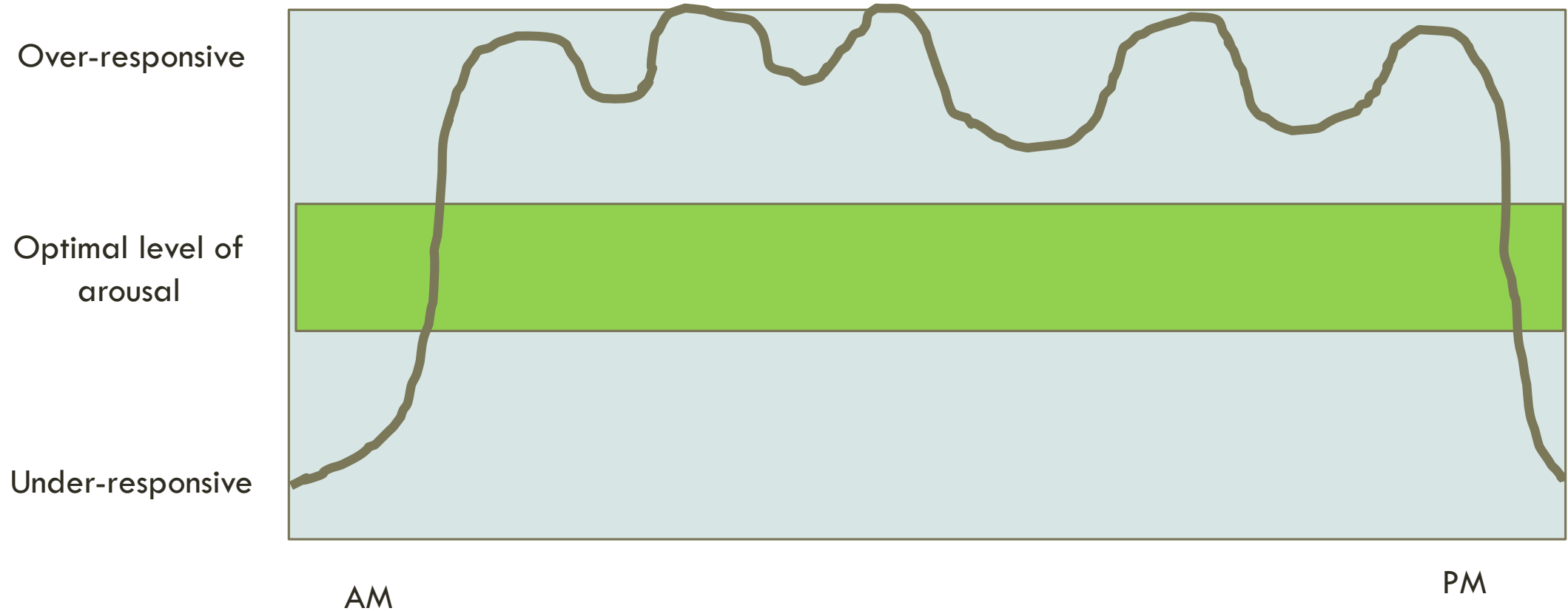
## JUST-RIGHT PERFORMANCE

Respond appropriately to environmental demands

- Filter out unnecessary information
- “Turn-up” sensations

Calm, organised

# SENSORY PROCESSING OVER-RESPONSIVE



Adapted from Williams & Shellenberger, 1996; & Lane, 2002

# SENSORY PROCESSING OVER-RESPONSIVE

Low threshold

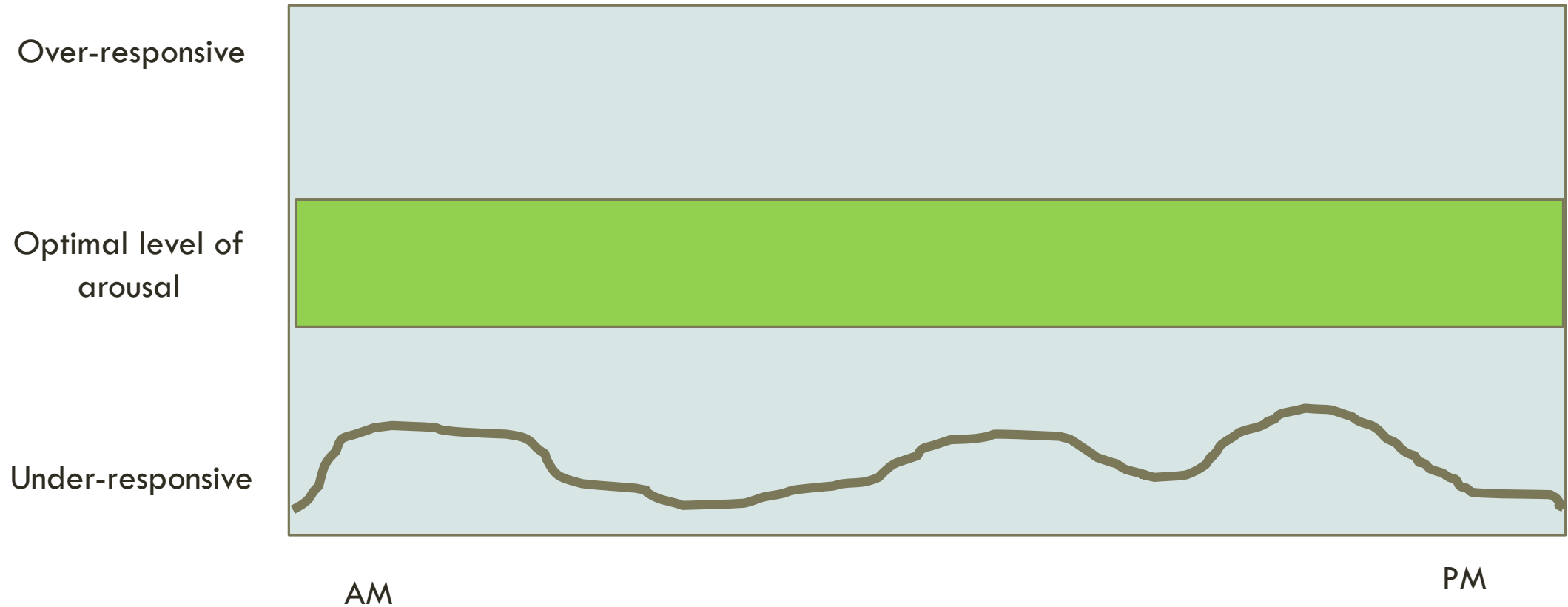
Often have strong, negative reactions

Can lead to avoidance/ withdrawal  
or anger

Cumulative effect

# SENSORY PROCESSING

## UNDER-RESPONSIVE



Adapted from Williams & Shellenberger, 1996; & Lane, 2002

# SENSORY MODULATION

## UNDER-RESPONSIVE

High threshold

Needs a lot of stimulation to get going

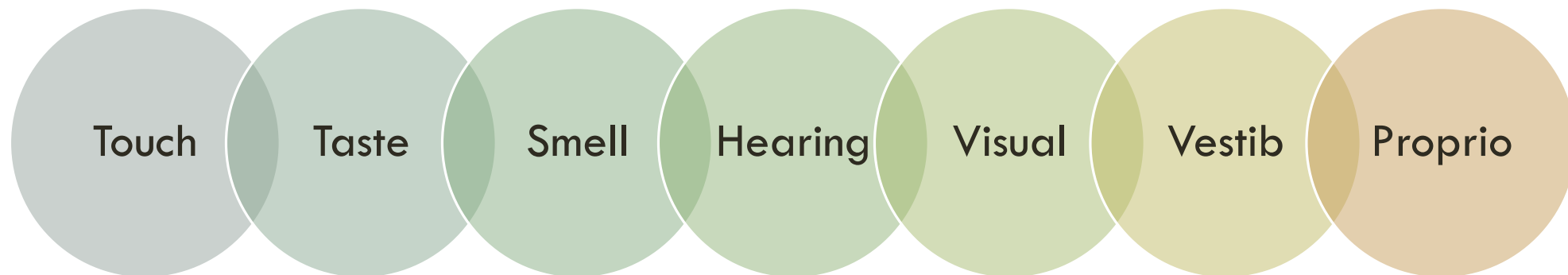
- May seek extra stimulation
- May be totally unaware

# PANS/ PANDAS AND SENSORY PROCESSING

111 children with PANS/ PANDAS

During exacerbation:

- Majority experienced sensory deficit (71.2%)
- Sensory systems affected widespread



# PANS/ PANDAS AND SENSORY PROCESSING

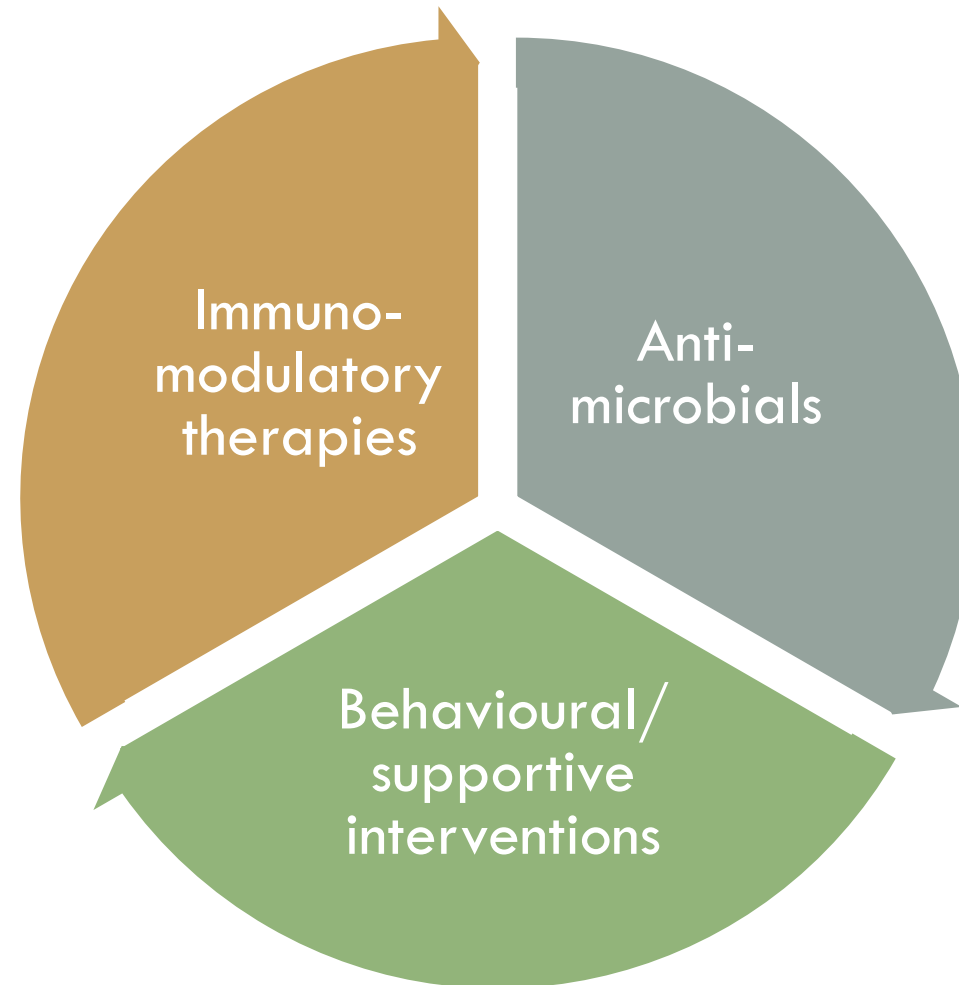
686 children with PANS/ PANDAS

Sensory defensiveness (i.e.: over-responsiveness)

- Any history 79%
- Chronic 23%



# OCCUPATIONAL THERAPY: PANS/ PANDAS



Adapted from Swedo et al 2017

# WHAT CAN WE DO TO HELP?

## SENSORY DIET

Based on Occupational therapist assessment

Carefully planned program

**Individualised!!**

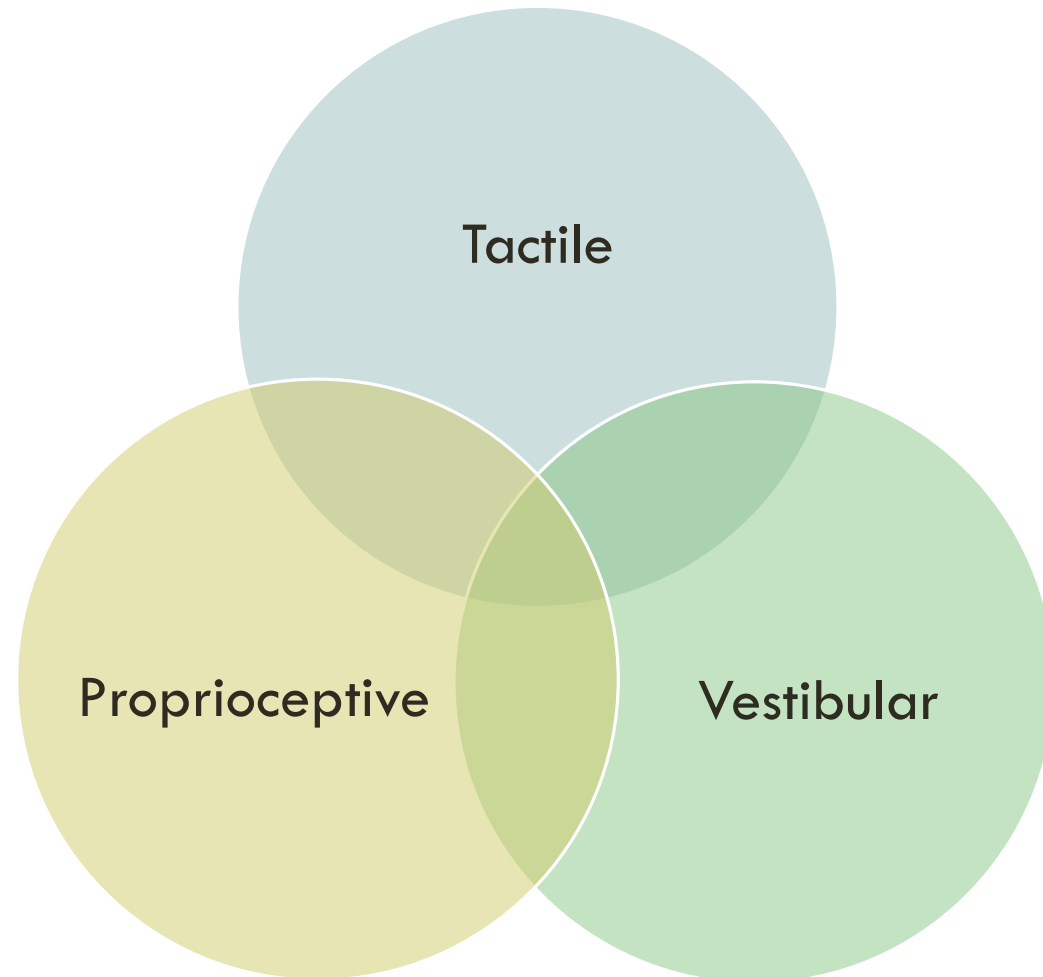
Specific Sensory activities

Scheduled according to needs

- Fluctuating needs of PANS/ PANDAS
- PANS/ PANDAS aware therapist

Can help child stay calm and organised

# SENSORY DIET: UNDER-RESPONSIVE & OVER-RESPONSIVE



# TACTILE

## Arousing

- Light touch
- Cold touch
- Sharp/ painful touch

## Calming

- Deep pressure
- Warmth

# PROPRIOCEPTION

Arousing/  
Calming

- Heavy work
- Pushing/ pulling
- Resistance activities

# VESTIBULAR

Arousing

- Movements that are:
  - Fast
  - Angular
  - Spinning

Calming

- Movements that are:
  - Slow
  - Rhythmic
  - Linear

Adapted from Tona 2017

# CONCLUSION

Sensory Processing: What is it?

Sensory processing and PANS/ PANDAS

Sensory Diet

# WANT TO LEARN MORE ABOUT STEPPING STONES?



[www.facebook.com/steppingstonesTFC](https://www.facebook.com/steppingstonesTFC)



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[www.steppingstonesforchildren.com.au](https://www.steppingstonesforchildren.com.au)

[michelle@steppingstonesforchildren.com.au](mailto:michelle@steppingstonesforchildren.com.au)



ARE YOU A THERAPIST?

Join the PANS/ PANDAS Therapists Collective

[www.facebook.com/groups/panspandas](http://www.facebook.com/groups/panspandas)

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