

Interoception

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Interoception Activity



Sensory

There are now known to be EIGHT sensory modalities:

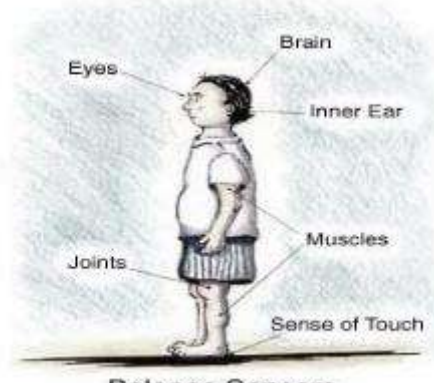


6. Proprioception



Where is my body in space?

7. Vestibular



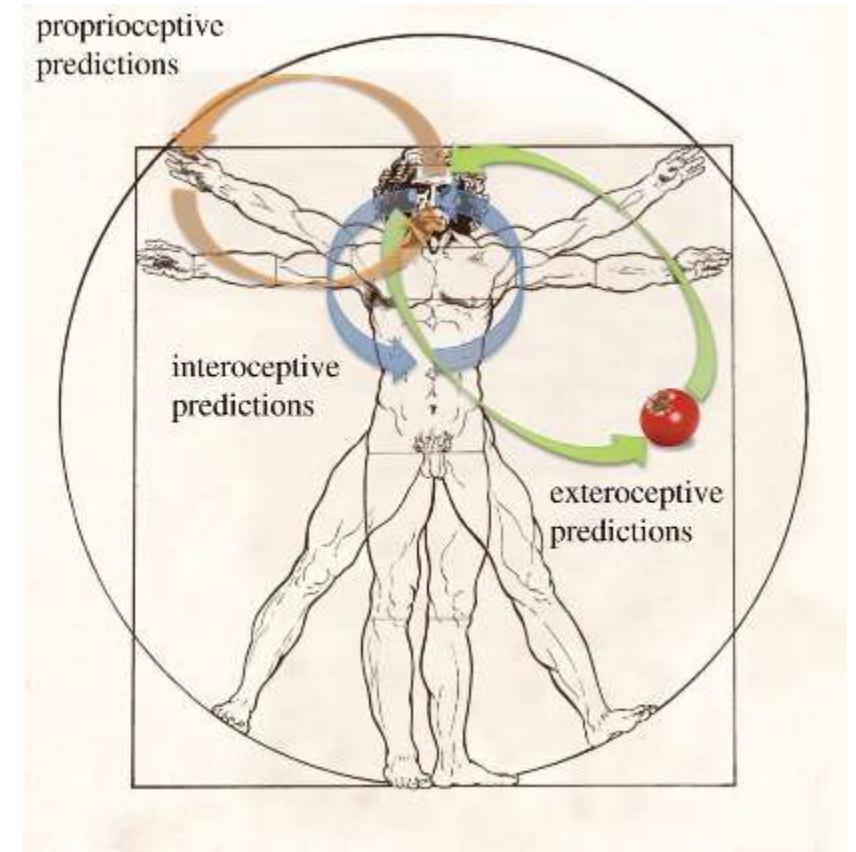
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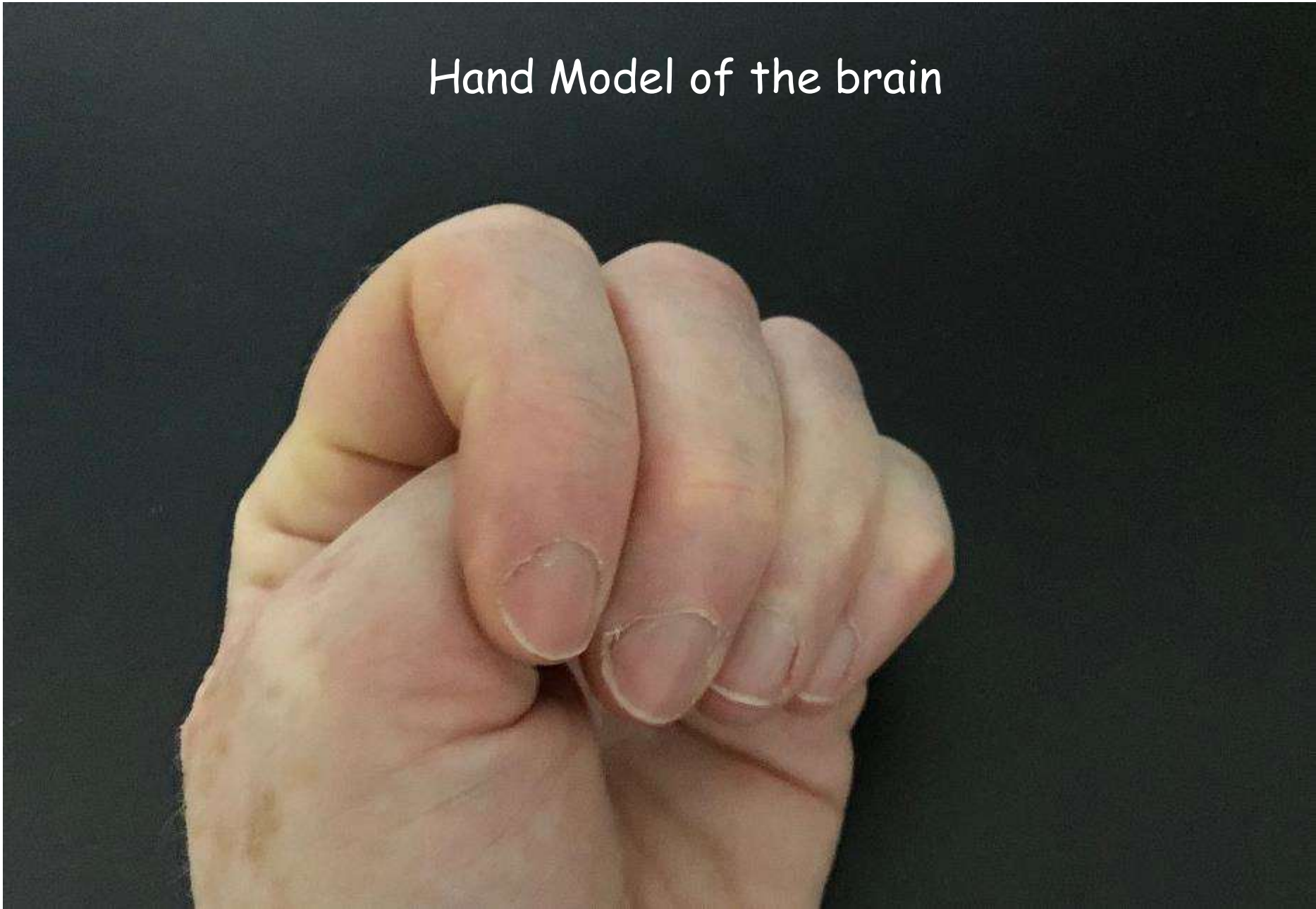
What is Interoception?

Interoceptive awareness (IA) can be broadly defined as the conscious perception of internal bodily cues such as heartbeat and breathing and is related to emotional experiences.

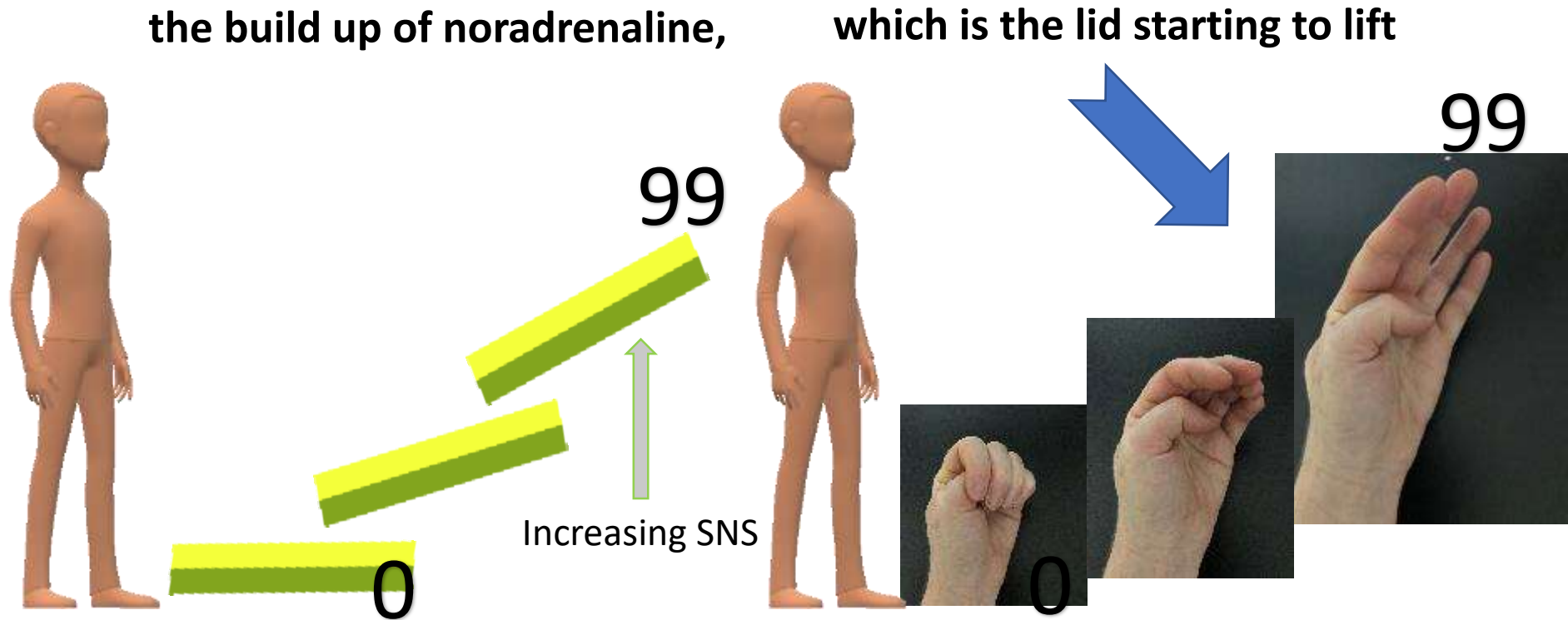
Interoception is atypical in individuals on the autism spectrum (*Schauder, Mash, Bryant, & Cascio, 2015, Mahler, 2016*) as well as in others with a range of mental/physical health issues.



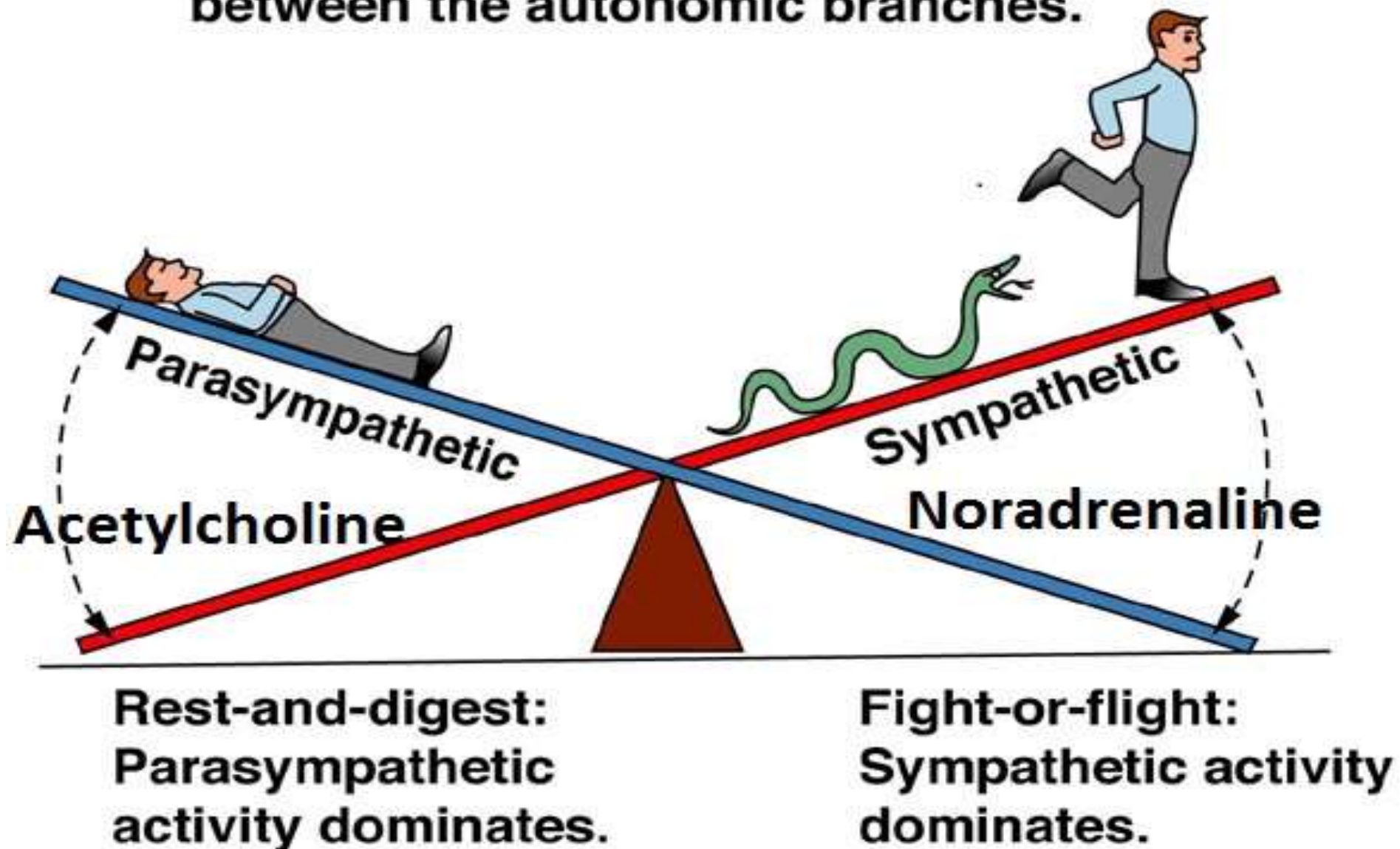
Hand Model of the brain



If you have low interoceptive awareness you do NOT FEEL or EXPRESS 0-99



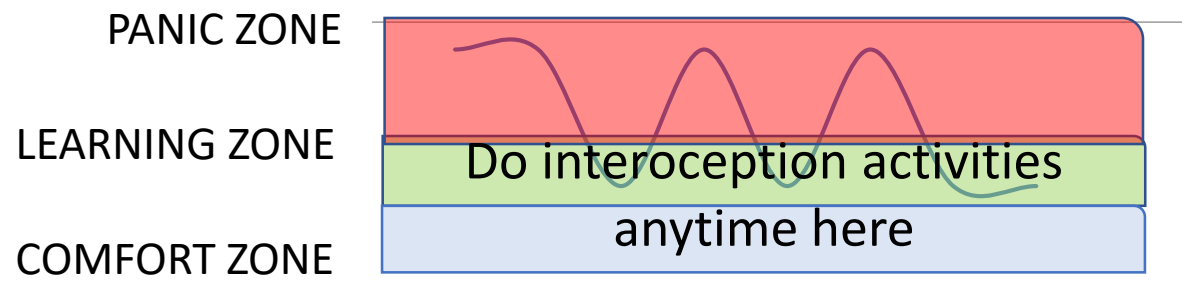
Homeostasis is a dynamic balance between the autonomic branches.



This means we can prevent SNS overload (meltdown/shutdown)

By proactively and pre-emptively utilising interoception activities.

- This brings the thinking cap of the brain down and activates the parasympathetic nervous system (resets the student to calm), meaning the student can enter comfort &/or learning zones.
- Must be done PRIOR to panic zone / big emotions state. Can be programmed into whole class, group & individual timetables as regularly as needed. (min 2x day)



Muted/Heightened Interoception

- Muted state of Interoception

Example: Pain – not feeling pain at all

Late toilet training – accidents and/or constipation

Doesn't feel hungry

May not react to hot or cold

- Heightened state of Interoception

Example: Pain – can feel extreme

Intense reaction to hunger or needing to use the bathroom

Struggles with focus and attention (preoccupied with internal stimuli)



Practical Implementation



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Interoception Approach

Please note that interoception is a complement to quality differentiated teaching and does not replace this.

- In class teaching across whole school
- In class teaching across whole school with specific groups of intensive interoception
- In class teaching across whole school plus use of an interoception room

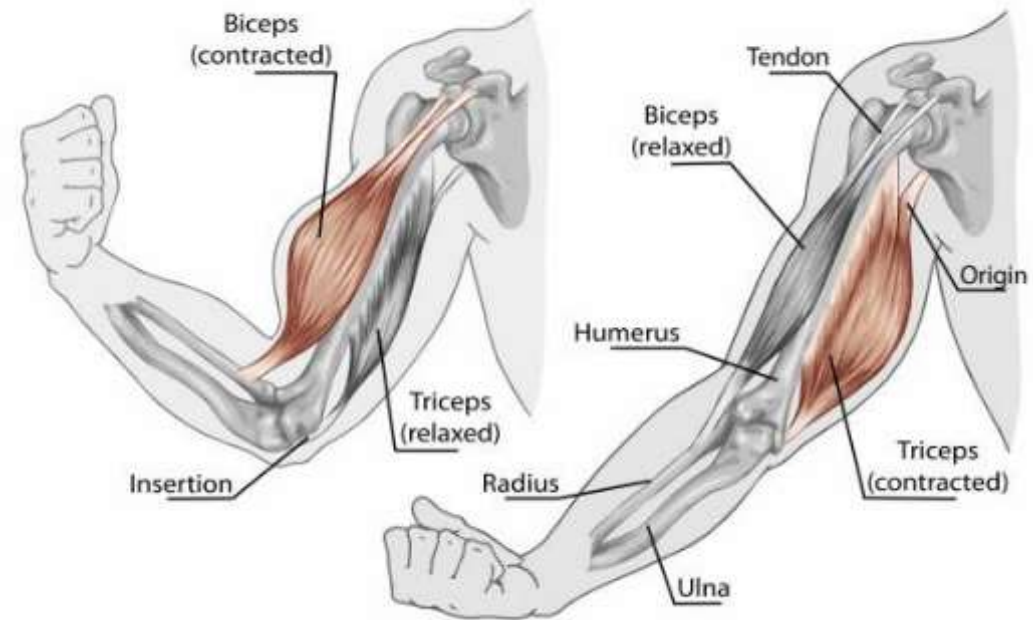


Interoception Activities

Any activity that changes your body state whilst you NOTICE how your body feels.

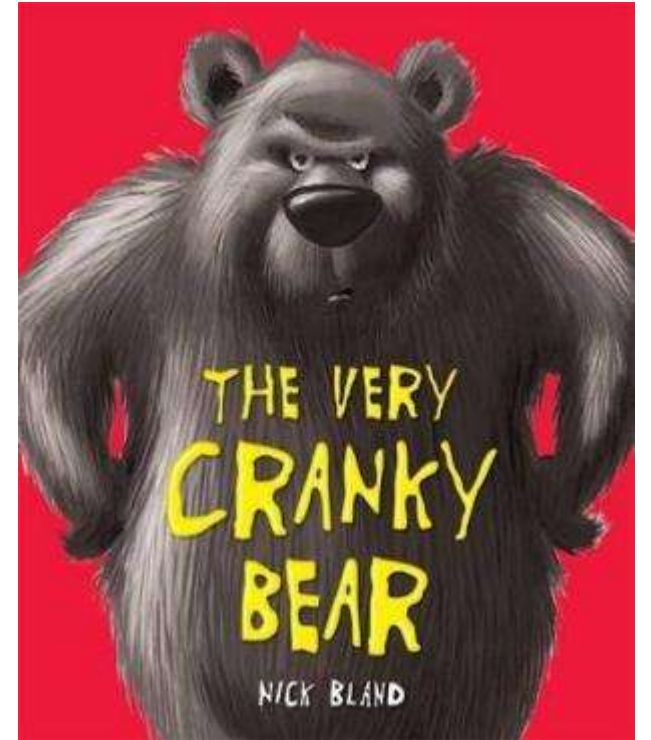
This could cover:

- Muscles
- Temperature
- Breathing
- Pulse



Variations – Junior Primary

- Songs and Games – “hokey pokey” “row row your boat”
- Vocabulary development – labelling body parts & the body signals
- Animal Yoga Poses



Variations – Upper Primary

- Procedure writing – present new activities to a JP buddy
- Gaming dances
- Turn it into a competition – wall sits
- Sensory experiences – making bread. Kneading the dough



Interoception activity

Wall Squat

Find a clear space of wall to lean against.

Press your back against the wall and slide down the wall and bend your knees, your knees should be at a 90 degrees angle.

Hold that position for 30 seconds.

Where did you feel it in your body when we were in the squat position?

We are going to repeat the activity again, but this time we are going to focus on our thigh muscles.

How did your thigh muscles feel while holding that stretch?

Can we extend the time limit for 60 seconds next time? Then 90 seconds?



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Interoception activity

Row, row, row your boat

Find a partner and sit on the ground facing your partner.

Start singing the lyrics to the don with your partner to row, row, row your boat

*Row, row, row your boat
gently down the stream,
Merrily, merrily, merrily, merrily
Life is but a dream*

As you are singing the song, put your hands up against your partners hand, have your knees slightly bent.

Push your hands against your partners as you rock backwards and forwards in a 'rowing motion'.

Where did you feel it in your body?

We are going to repeat the activity again, but this time we are going to focus on our wrists.

How did your wrists feel while moving?



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Interoception activity

Regulating body temperature

Trace a student on paper, or have a blank body drawn on a piece of paper.

After coming inside from play, ask the students to sit and notice where inside their bodies they feel heat.

Ask each student to circle on the paper body where they are noticing heat.

Example, they could feel that their face feels hot, or their underarms feel hot and sweaty.

Ask the students to share where they noticed the heat.

Discuss strategies they can use to cool down.

Example, take their jumper off; have a drink of water; turn on the air conditioner.

It may be useful to use a mirror to show students their body cues.

Example, use a mirror to show students that their face is red, they are puffing and they are sweating.

These body cues show the the body is hot and needs to cool down.



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Structured into categories



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Interoception activity

Follow the leader

Find a partner to work with.

Hold both of your left pointer fingers up and press your pointer finger against your partner's finger. Choose one of you to be the leader.

The leader will move the pointer finger around, the other partner needs to follow the leader's finger and try to stay connected.

Which body part did you feel when we were completing that activity?

Now switch roles, the other person will now be the leader.

We are going to repeat the activity again, but this time the new leader will control the direction of the fingers.

Now join both of your pointer fingers together, each person will lead a finger each.

This time we are going to focus on the pressure between our fingers as we try to stay connected.

What did you notice about the pressure between your fingers?



Interoception activity

Spinal Twist

In a seated position, ensure your feet are placed on the ground and you sit up straight.

Place both of your hands to the right side of your chair.

Gently rotate your torso to the right.

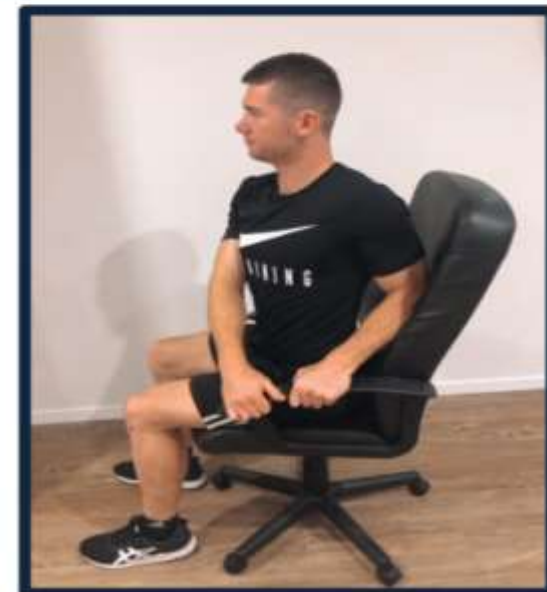
Only twist as far as you feel comfortable and keep your back straight while your hips square.

Hold the stretch for 30 seconds.

Where did you feel it in your body when we held that stretch?

We are going to repeat the activity again, but this time we are going to focus on our back muscles.

How did your back muscles feel while holding that stretch?

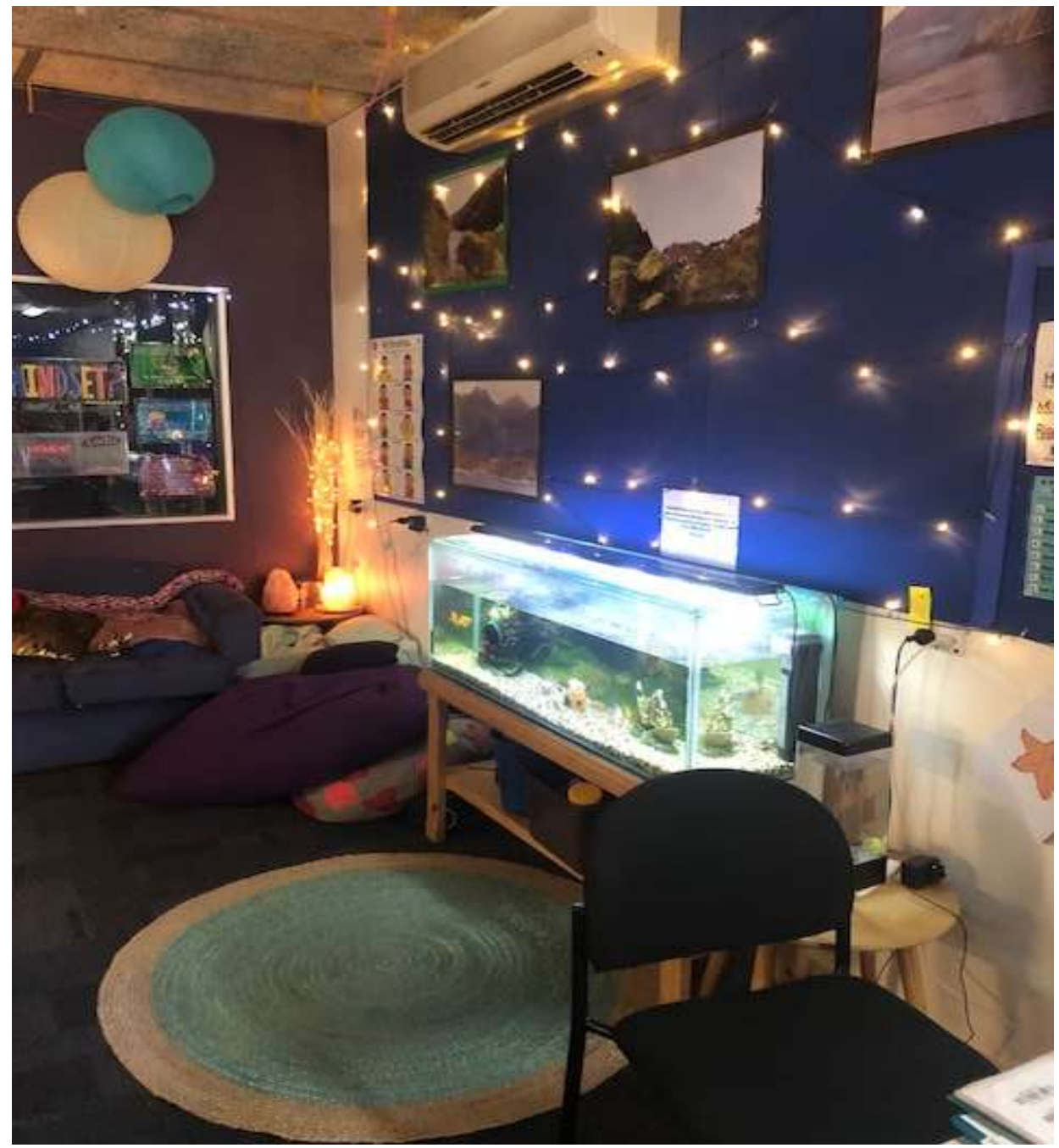


Interception Rooms



Interoception Rooms









INTERCEPTION SESSION SCHEDULE

Monkey bars	X	2 MINUTES
Mini tramp	X	2 MINUTES
Resistance Band	X	2 MINUTES
Rings	X	2 MINUTES
Ball pit	X	2 MINUTES



South Australia School Results

Types of behaviour	Increase or decrease AFTER 8 weeks (quantitative)	Increase or decrease AFTER 2 terms – qualitative evidence
Sustained off task behaviour	50% DECREASE	Continued decrease
Major disruption of class learning	80% DECREASE – across school	Continued decrease EXCEPT in the 3 classes not teaching interoception. Students request interoception in order to facilitate learning
Yard incidents reported	51% DECREASE	Continued decrease and increase in kind and pro-social behaviours
Time to settle down to work after recess	60% DECREASE	In all classes that use interoception after recess, work is able to commence immediately after interoception activity
On task/engaged in learning	Individual variations, but all significantly increased	Student requiring 1:1 no longer requires 1:1, all other students increased on task/engagement in learning

COMPARISON OF TERM 1 and Term 3 2017, 2018 and 2019 OFFICE CALL OUTS

WEEK	NUMBER OF STUDENTS TERM 1 2017	NUMBER OF STUDENTS TERM 3 2017	NUMBER OF STUDENTS TERM 1 2018	NUMBER OF STUDENTS TERM 3 2018	NUMBER OF STUDENTS TERM 1 2019
3	69	30	58	26	36
4	64	29	56	40	32
5	70	25	85	27	46
6	89	23	49	33	35
7	44	22	58	35	24* 4 day
8	65	44	59	52	55
9	64	40	57	35	51
10	80	45	67	20	50

2018		
Time Out	Take Home	Suspension
32	0	0
35	1	0
7	0	0
9	0	0
4	0	0
17	3	2
26	0	2
4	0	4
5	0	0
0	0	0
27	0	2
59	1	4
37	0	3
8	0	0
27	1	3
297	6	20

2019		
Time Out	Take Home	Suspension
0	0	0
0	0	1
0	0	0
0	0	1
0	0	0
0	0	0
1	0	2
0	0	3
0	0	0
0	0	0
1	0	1
4	1	4
0	0	2
0	0	0
0	0	0
6	1	14

“When we start to feel the volcano inside of us bubbling up, Interoception activities are like cold water running through our bodies putting the volcano out”



Year 4 Student



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