

SENSORY 101

Understanding Sensory Processing for your child

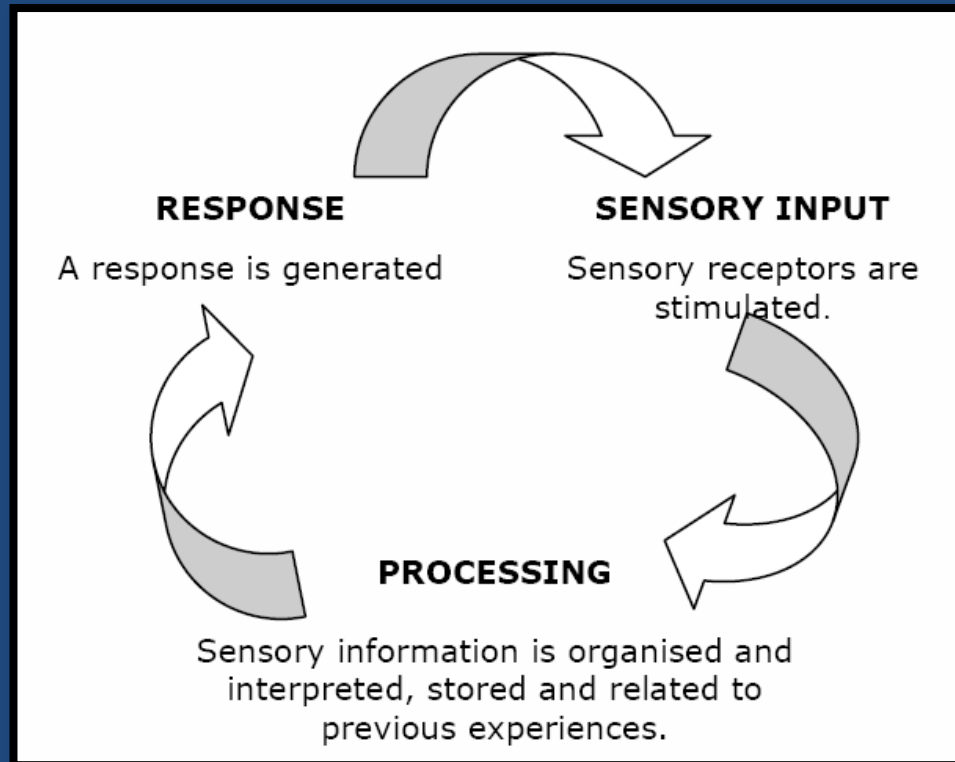


Neala Harper MS, OTR/L

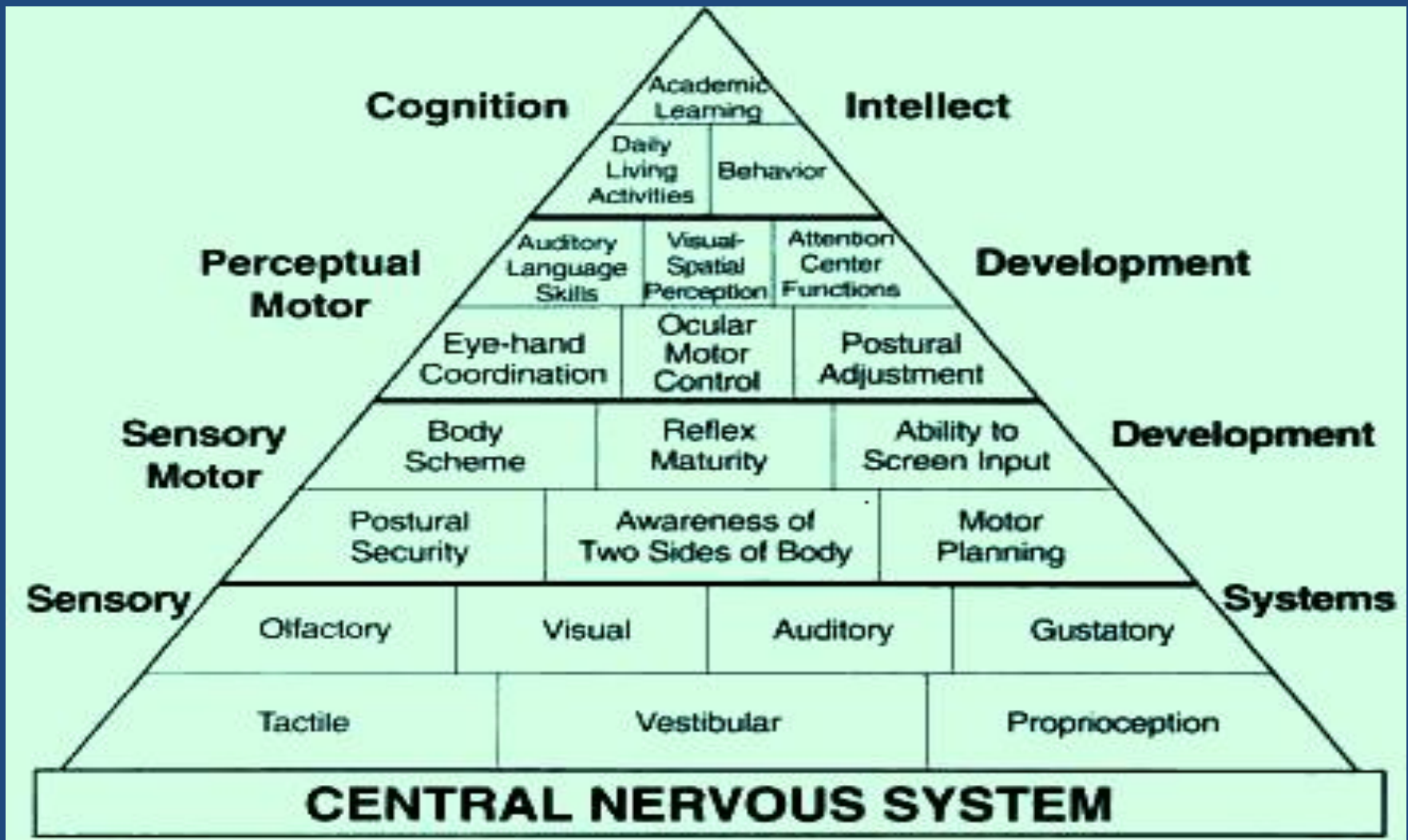
Babybird OT LLC
nealabird@gmail.com

What is Sensory Processing?

The way the nervous system receives, interprets and responds to sensory messages from our bodies and the environment.



A Developmental Perspective: Foundation of 7 senses



The 7 Senses?

1. Touch (tactile)
2. Sound (auditory)
3. Sight (vision)
4. Smell (olfactory)
5. Taste (gustatory)

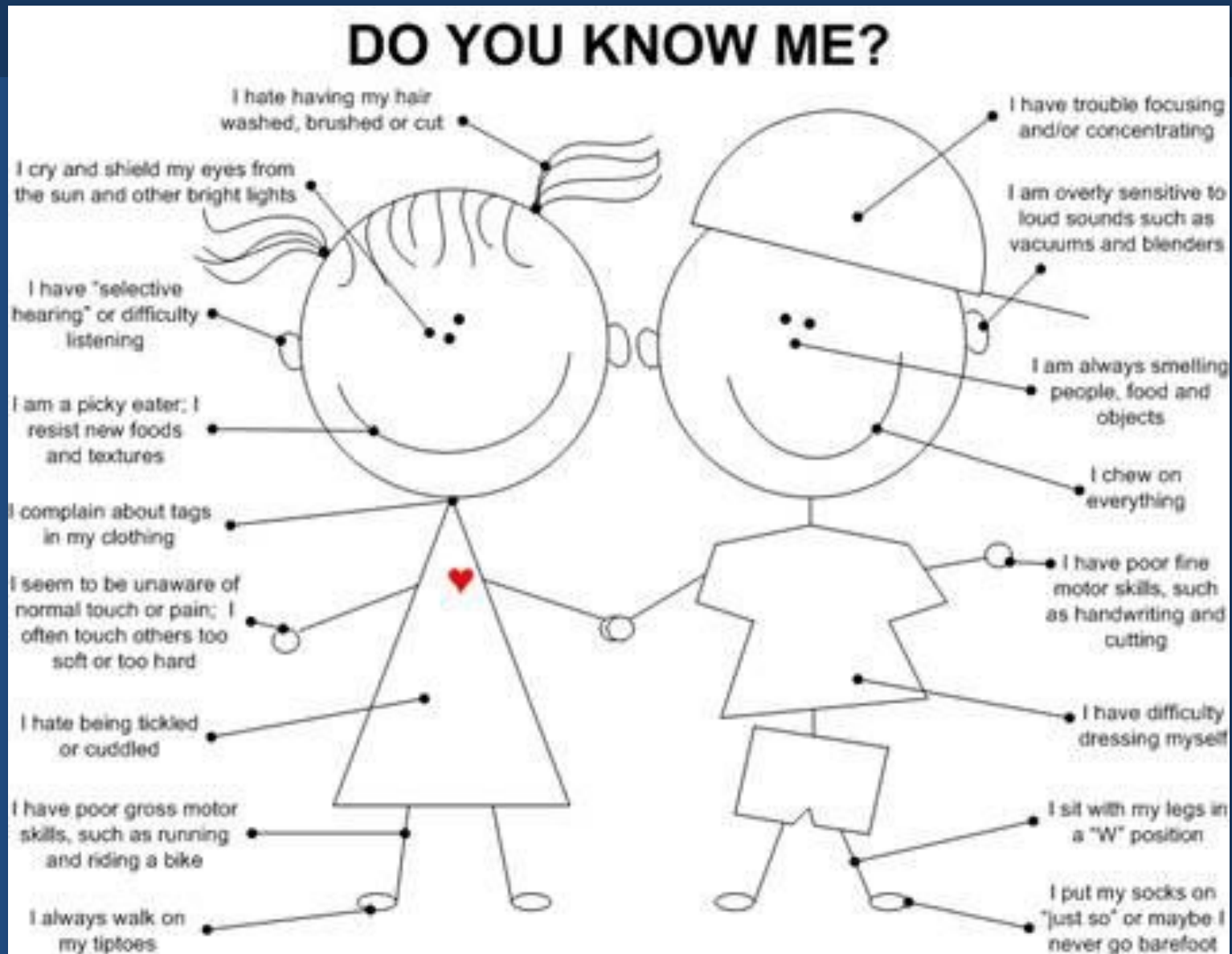
6. Vestibular

- Equilibrium/balance
- Movement perception

7. Proprioception

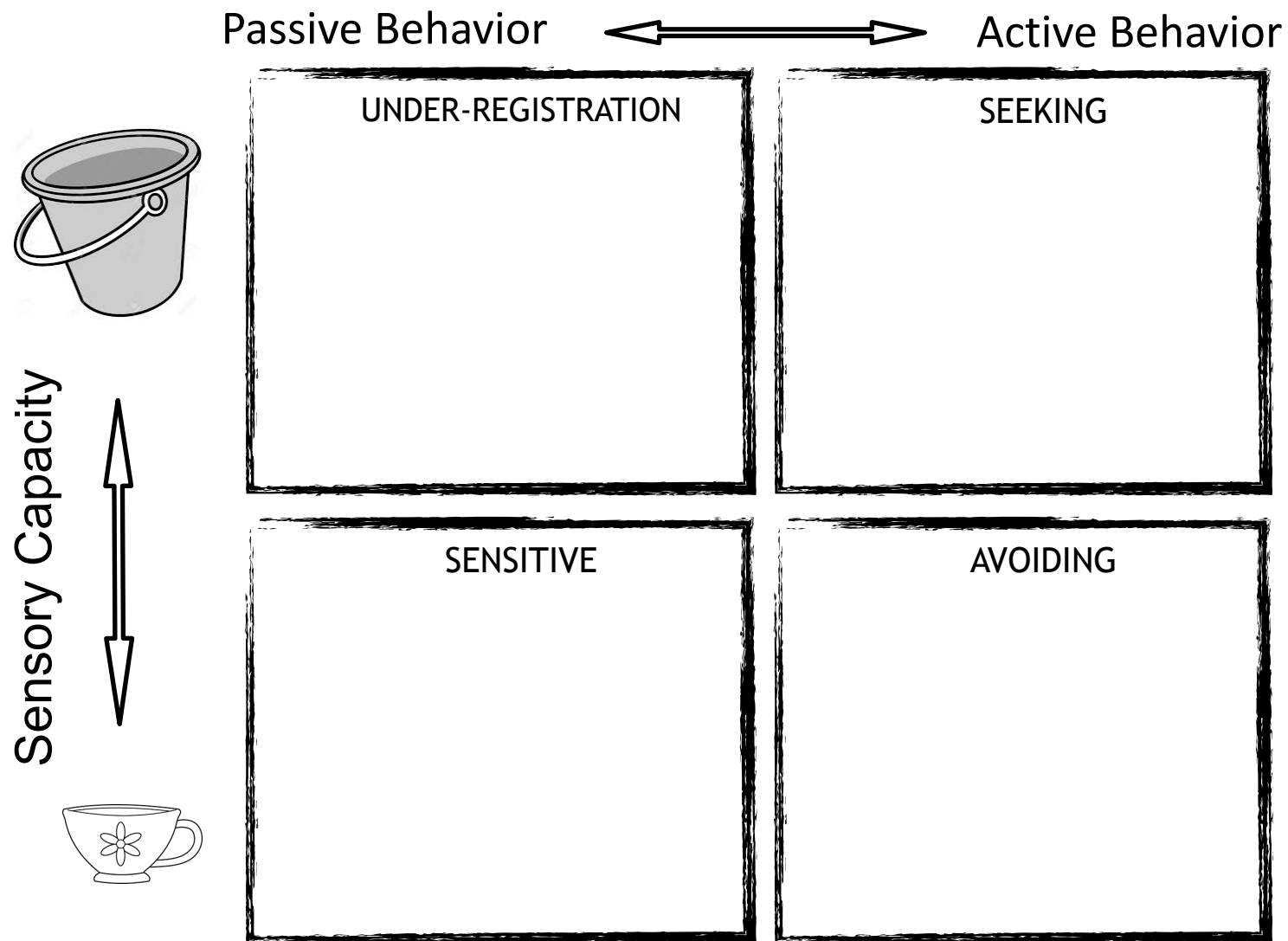
- Body awareness
- Brain-body connection through receptors in muscles and joints

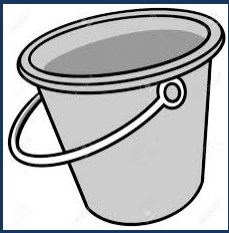
Why Do We Care About Sensory Processing?



Winnie Dunn Model

4 Quadrants and The Sensory Profile

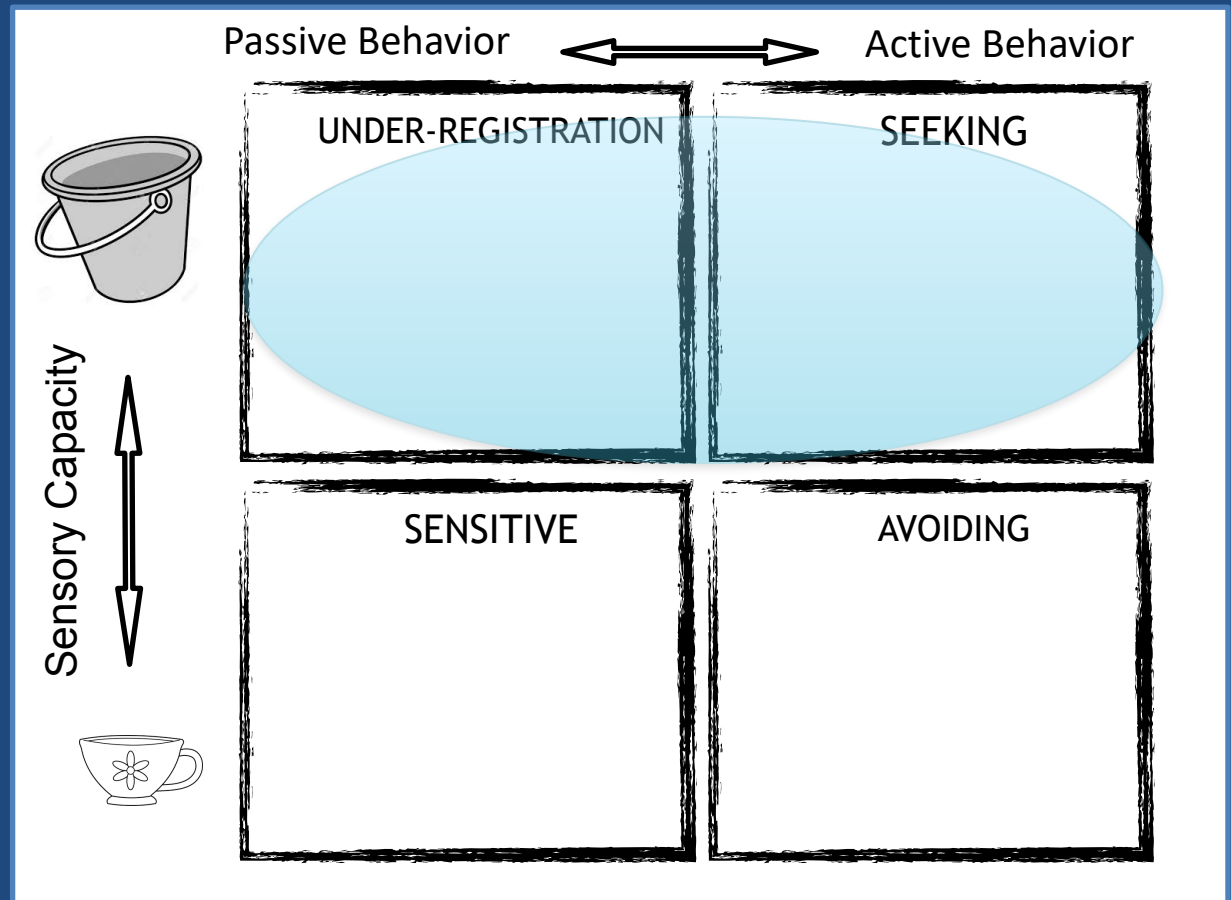




BIG BUCKET

(High Capacity)

1) Under-Registration 2) Seeking

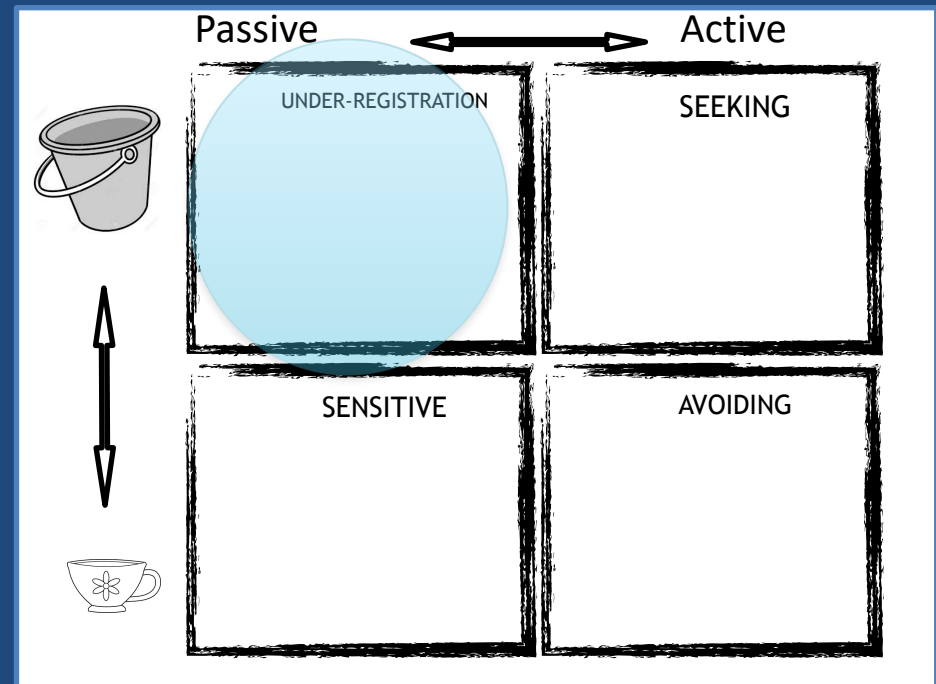


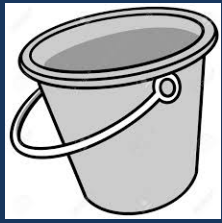


1) Under-Registration

What it might look like:

- Often easy going personality
- Activity level is lower
- May appear uninterested, bored & unaware of surroundings
- Often lower muscle tone, low endurance & harder to get moving
- Passive: quiet/low engagement
- Sometimes clumsy and awkward
- Decreased body/spatial awareness
- Drooling/open mouth position



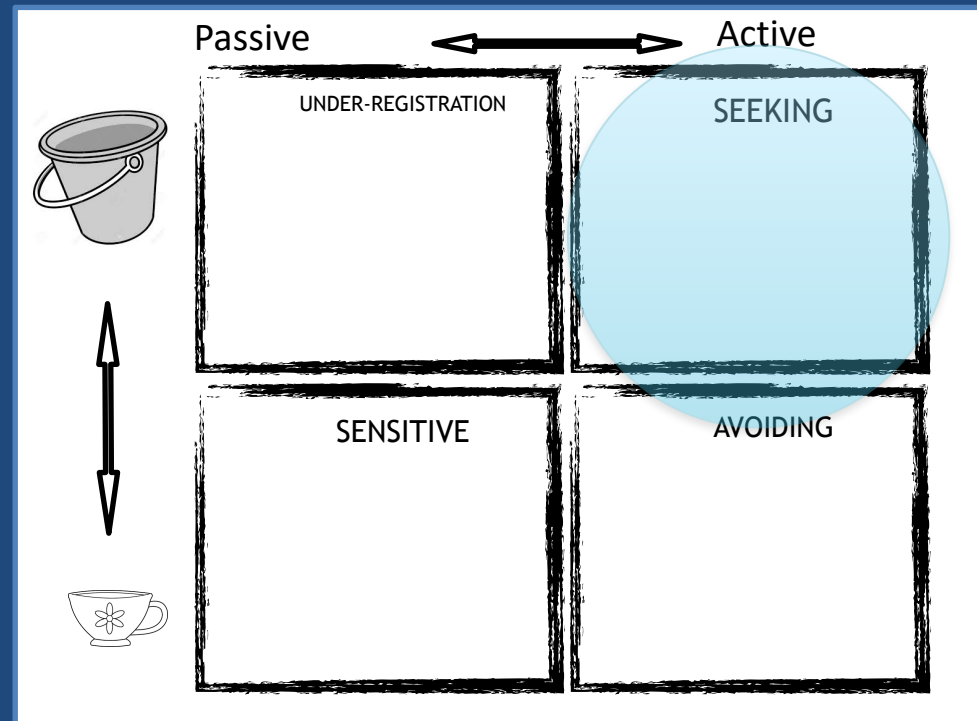


2) Seeking

What it might look like:

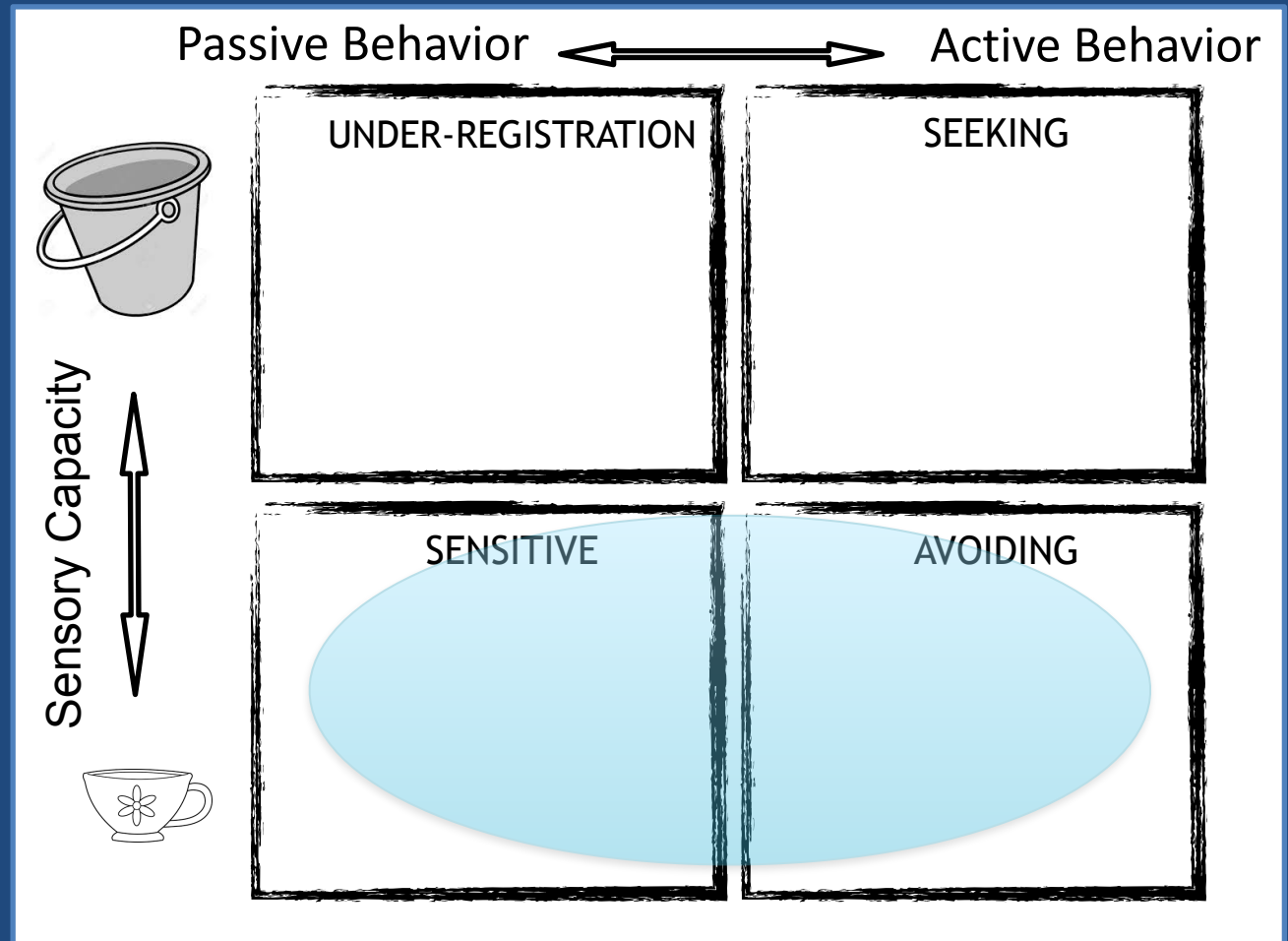


- Activity level is HIGH
- May take excessive risks during play
- “Bouncing off the walls”- jumping, spinning, crashing and rough housing
- Fidgety, difficulty sitting still
- Excitable, playful, FUN!
- Increased in mouthing or touching objects
- Can be clumsy or disorganized
- Often co-occurring with ADHD





TEA CUP (Low Capacity)



3) Sensitive

4) Avoiding



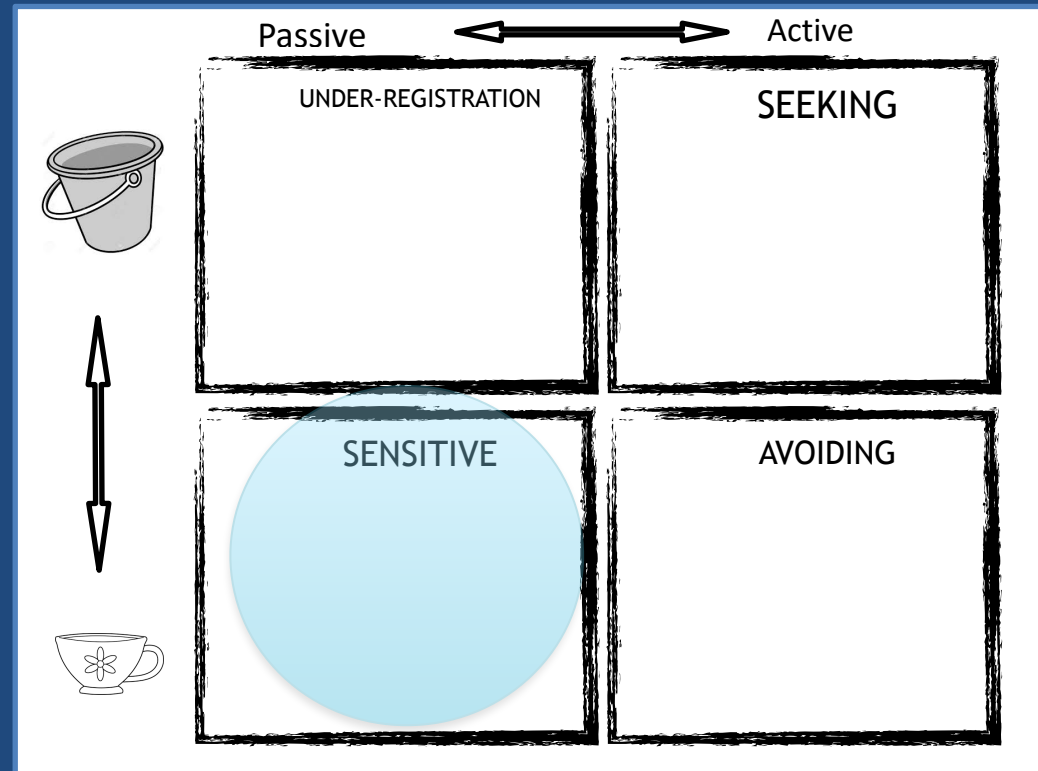


3) Sensitive

What it might look like:



- A little goes a long way
- “Zero to 60”-emotional responses
- BIG responses but sometimes unclear reason
 - Ex. being touched by others
 - getting dirty
 - sensitive to sounds
- Often in high alert state and “Freeze” response
- Appears anxious
- Fearful of trying new things
- Observant and watching others closely



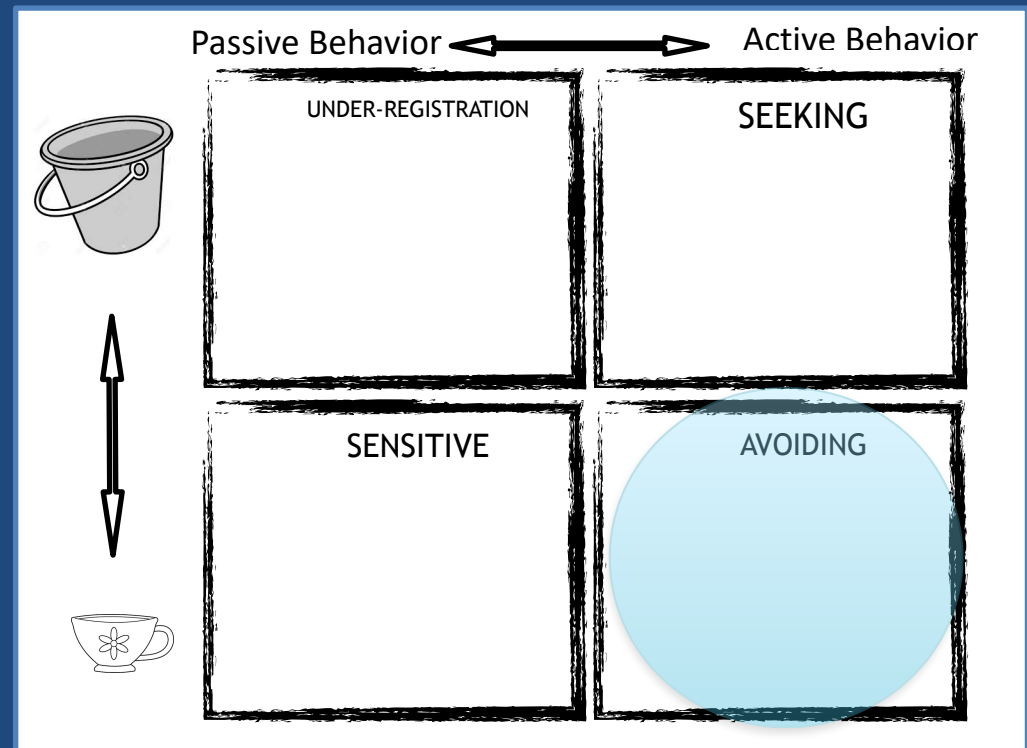


4) Avoiding

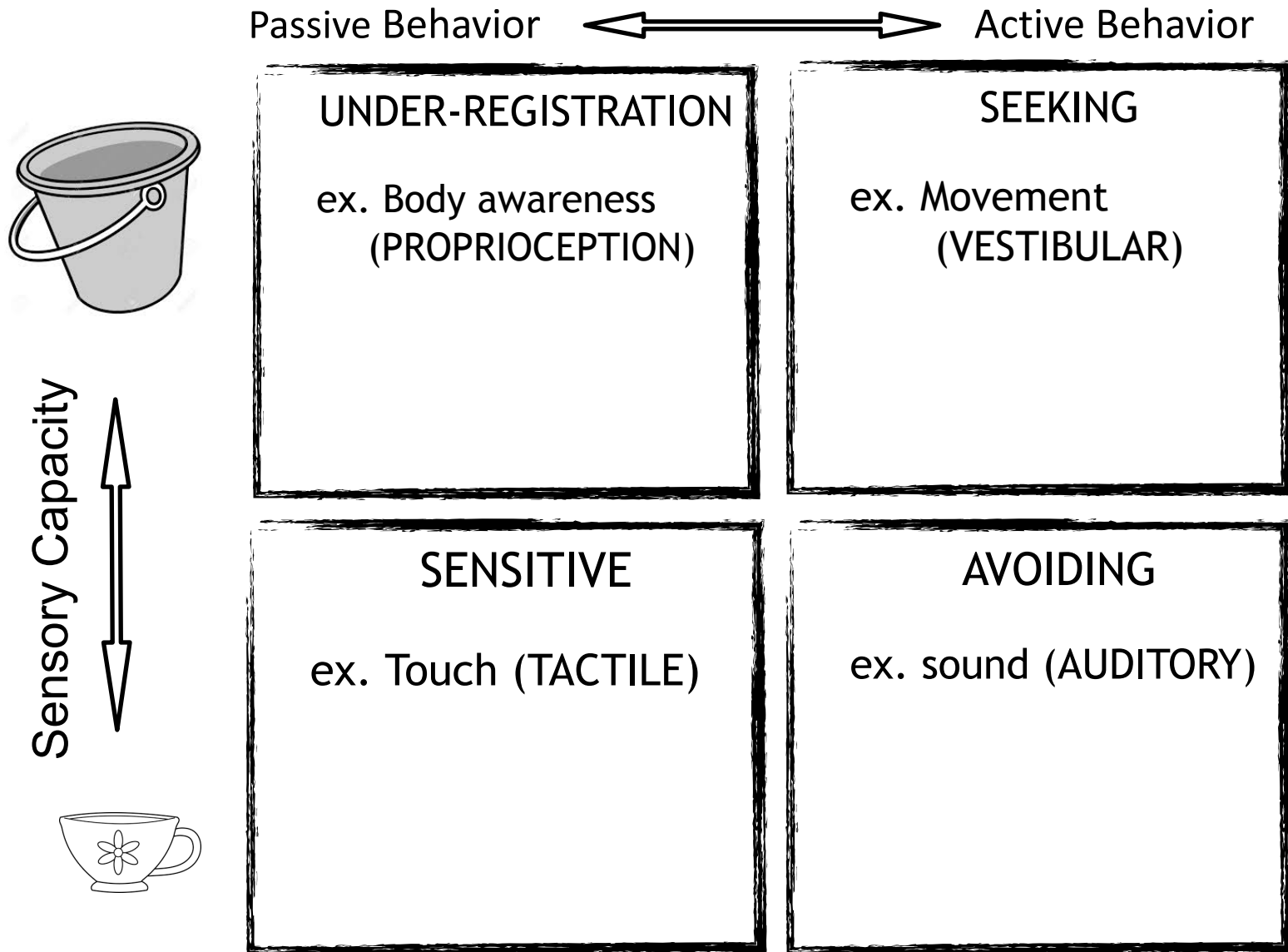
What it might look like:



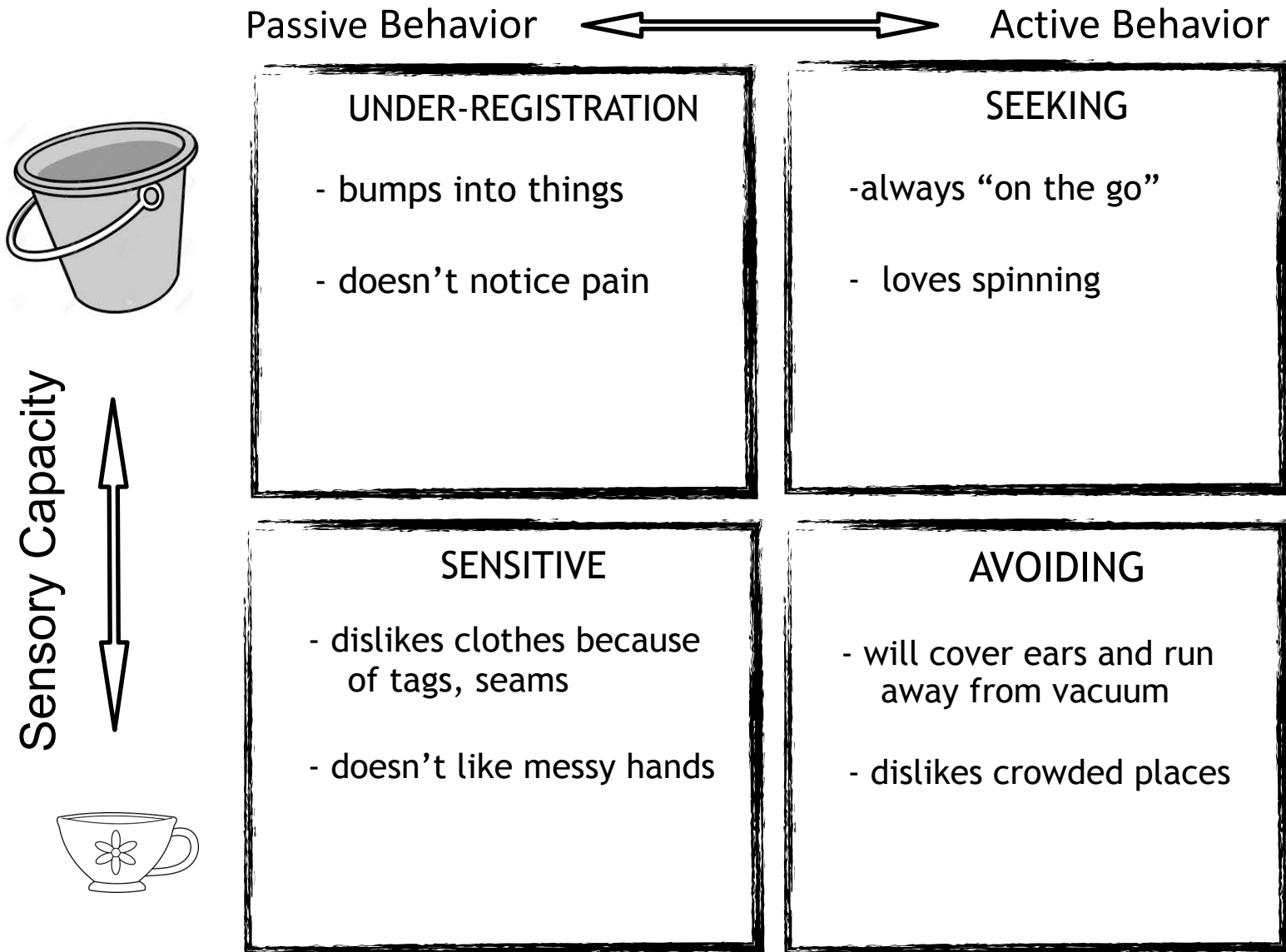
- Similar to “sensitive” but *active behavior*
- “Zero to 60” reactions
- BIG and expressive responses and clear about what’s upsetting
- High alert state and active response:
 - “Fight or Flight”
- Active refusal to try new things

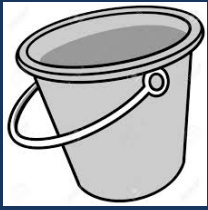


Where are your 7 senses?



What does it *look like* in everyday life?





What can YOU do?

UNDER/LOW-REGISTRATION

Intensify activities so child will notice/respond. Help them FILL THE BUCKET

WAKE UP the body: "wake up mouth/hands/feet/eyes" etc.

Make activities a **multi-sensory** experience

Examples:

Movement breaks and "heavy work" activities:

Swinging, spinning, jumping, pushing, bouncing on the ball, obstacle course, tug-of-war, animal walks

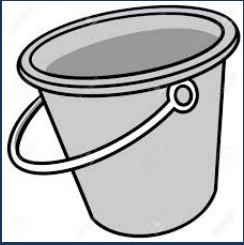
Strong flavors (ex. sour, spicy)

Sensory bins-interesting textures

Brighter lights, next to window

Be animated, enthusiastic; use gestures;
Generate high energy.





What can YOU do?

SEEKING

Incorporate efficient sensory activities into the child's routine so thresholds can be met **WITHIN** activities. Help them know WHAT to FILL THEIR BUCKETS with:

Frequent movement breaks or "jobs" (heavy work is best)

High movement transitions: obstacle course, jumping, bouncing, animal walks

Oral input: chews, sucking thick liquid (yogurt, applesauce) through a straw at snack time, blowing bubbles, "chewelry" etc.

Tactile: fidgets, texture centers, fidget pens

Olfactory: scented bracelets, alerting scents (citrus, rosemary, pine)





What can YOU do?

SENSITIVE

Provide **predictable, calming** activities **before and within** daily routines:

Oral: Chewy tubes, sucking thick liquid through a straw, blowing bubbles, breathing

Deep pressure and massage (*avoid light touch)

Weighted blanket/lap pad/weighted animals
(*consult with OT)

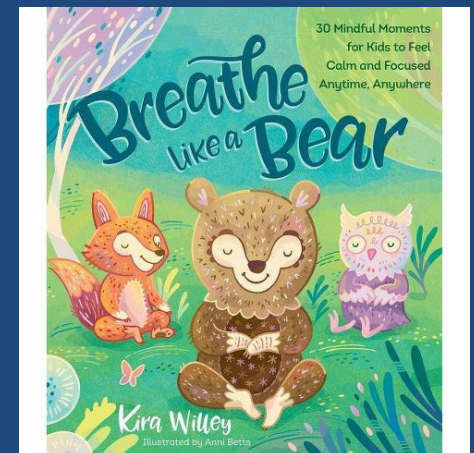
Deep proprioceptive input: heavy work, weights, resistance (see list of heavy work activities)

Rocking, swinging (predictable linear movement, but use with caution) *good to pair with compression

Calming touch with "stress balls" or soft objects/stuffed animals

Calming smells (lavender, chamomile etc)

Begin teaching self-regulatory strategies





What can YOU do?

AVOIDING

Provide **predictable, calming** activities **prior to and within** routines.

Modify environment:

Natural lighting or incandescent lamps

Reduce visual clutter and activity

"Cozy corner" to take breaks

Self-monitoring/regulation-Body Talk

"What does my body need?"

Build "tool box" for calming

"Prime" the body by doing calming activities *prior to* more challenges ones

Visual schedule and advanced warnings for transitions or changes

See "Sensory Sensitive" list



Putting it all together: Building a sensory regulation “toolkit”

Body “toolkit”

- Mouth
 - breathe, chew, drink
- Muscle
 - push, pull, lift
- Movement
 - walk, run, swing, dance
- Hand
 - Sensory bins, soft lovies
- Eye
 - lava lamp, bright/dim lights
- Ear
 - music, percussion, white noise

What does my body need?

Sensory Regulation Strategies

MOVEMENT

- Stretch or do yoga
- Go for a walk
- Carry something heavy
- Rock in a chair
- Jump on a trampoline
- Doodle or scribble

TOUCH AND TEMPERATURE

- Lie under a weighted blanket
- Hold ice or put ice on your face
- Take a warm shower or bath
- Squeeze a stress ball or fidget toy
- Twirl your hair
- Rub a soft blanket
- Wear tight leggings
- Drink cold water
- Get a hug
- Pet a cat
- Mindfully rub lotion into your hands
- Hold a rock
- Pop bubble wrap
- Put peppermint oil on your skin

LISTENING

- Enjoy the silence
- Hum
- Wear ear plugs
- Use noise cancelling headphones
- Listen to a cat purring
- Talk to someone with a calm voice
- Do a meditation or relaxation exercise
- Listen to the rain or ocean sounds
- Listen to calm or classical music
- Go outside, notice the sounds

SMELL

- Burn a scented candle
- Smell a flower
- Smell your pet
- Enjoy the smell of your shampoo
- Burn incense or essential oils
- Use a scented lotion or cream
- Drink herbal tea
- Lavender essential oil for calming
- Peppermint essential oil for energy

SIGHT

- Observe the clouds or the sunset
- Watch a visual timer or lava lamp
- Look at the stars
- Watch the rain or snow falling
- Color
- Sit in the dark
- Wear sunglasses
- Watch fish swimming in a tank

TASTE

- Chew gum or sour candy
- Blow bubbles
- Bite into a lemon or lime
- Drink warm tea
- Suck a milkshake through a straw

DBT Printables

Putting it all together: Daily Schedule

*Daily routines reflection questions:

- *What activities/times of day are easiest?*
- *What activities/times of day are most challenging?*

*Incorporate body “Tools” into daily schedule:

- Also referred to as a “Sensory Diet”=what we *feed* our nervous systems throughout the day
- Sensory “snacks” every few hours



Putting it all together:

Things to consider

3 Most Powerful Senses

****Think “womb like”****

1. Proprioception

- Deep pressure
- Boundaries/pushing against resistance
- Positioning-physiological flexion with arms and legs tucked

2. Vestibular

- constant sway/rocking type movement
- various positions (upside-down, sideways etc.)
- *use cautiously as it can be too much for some systems

3. Oral

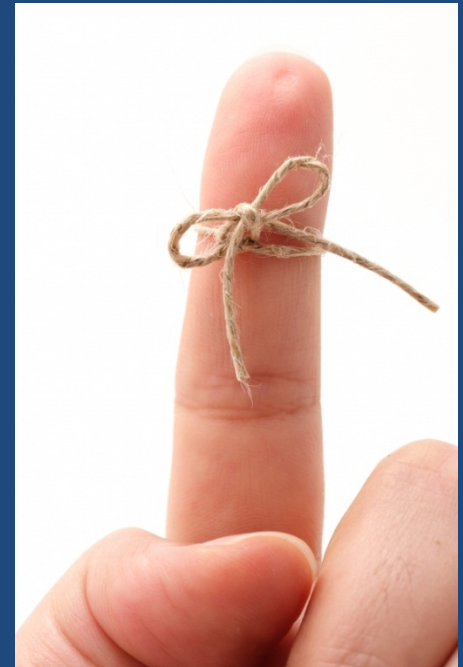
- sucking
- hands to and around mouth



Putting it all together:

Things to consider

- Sensory activities are great for ALL children (and adults!)!
- When in doubt, use muscle tools (exercise!).
- Use vestibular with caution
- Don't try to add too many sensory activities to your schedule; incorporate sensory activities into existing daily activities and routines.
- "10a & 2p"
- Individualize! Be fun and creative
- Consult with an OT for questions



Putting it all together: Resources

- Online resources:
 - Description of sensory video: <http://youtu.be/D1G5ssZIVUw>
 - Sensory Symptoms Checklist (*there are many)
 - sensationalbrain.com
 - www.handsonaswegrow.com
 - www.yourkidstable.com
 - www.sensorysmarts.com
 - Lists of Heavy Work activities:
 - <https://www.andnextcomesl.com/2017/04/heavy-work-activities-for-home.html>
 - <https://yourkidstable.com/heavy-work-activities/>
- Books
 - "Sensory 101"- Dayna Abraham
 - "Sensational Kids"- Lucy Miller
 - "Raising a Sensory Smart Child"-Lindsey Biel
 - "The Out-of-sinc-Child"-Carol Stock Kranowitz



Neala Harper, MS, OTR/L
Babybird OT
nealabird@gmail.com
c-303.886.5909