






# Sensory Processing and Mental Health

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student

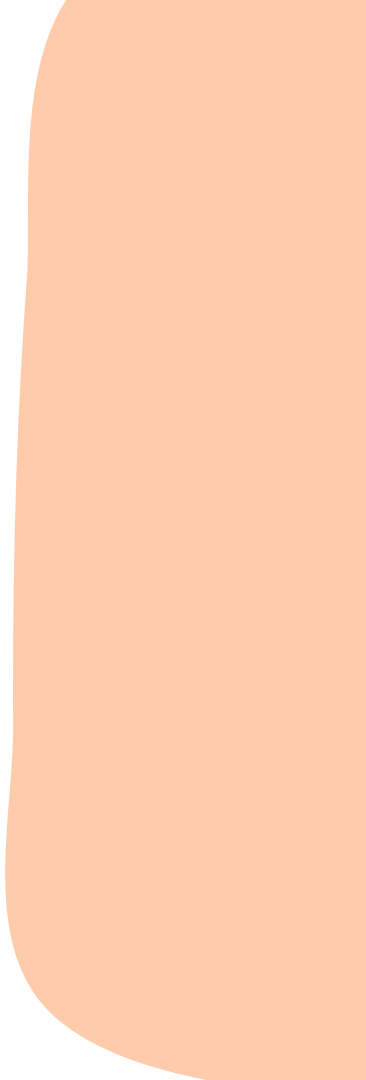



# Objectives

1. Participants able to identify how their sensory systems impact their mental health
  2. Participants able to explain the different sensory systems
  3. Participants possess a higher value for maintaining a supportive sensory environment for themselves and others
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**What does sensory  
processing mean  
to you?**

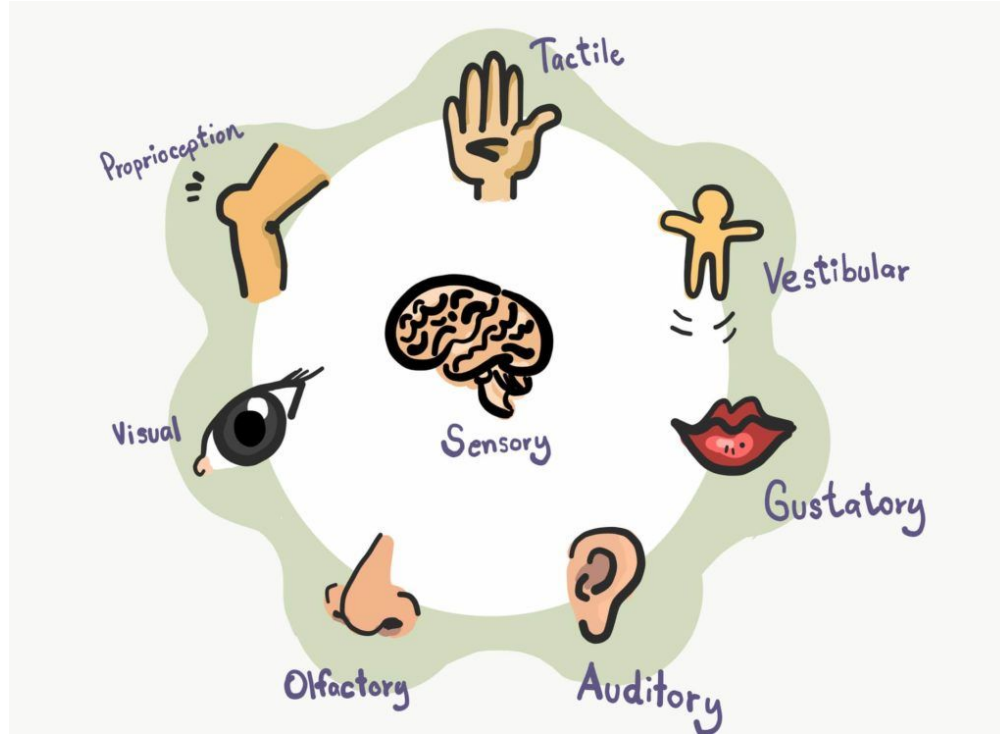


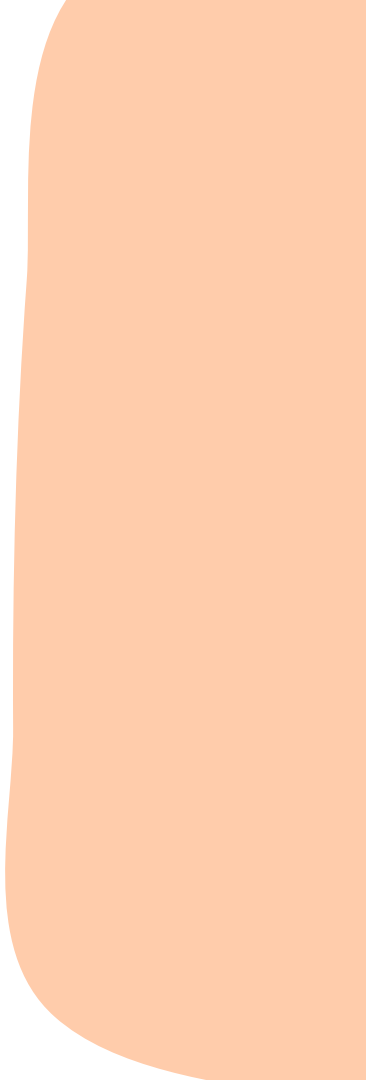




# What is sensory processing?

- Sensory processing is our ability to intake and process sensory stimuli in our internal and external environment
    - External may be things like sound, light, etc.
    - Internal may be understanding our bodies point in space
  - The ability to process our sensory environment impact many daily occupations
    - Food preferences
    - Ability to socialize
    - Hobbies/exercise
  - Sensory processing is done subconsciously
    - Many people take this response for granted
      - Awareness of our bodies sensory processing allows us to be more in touch with our self and our feelings
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# Our seven senses





**How does your sensory  
environment impact  
your mental health?**

# Sensory Processing and Mental Health

- Being in touch with our personal sensory profile allows us to understand how different environments make us feel
  - We may be over or under responsive to certain stimuli
    - Do bright lights make you feel overwhelmed?
    - Are strong smells distracting?
- Being in an ideal sensory environment leads us to feeling internally regulated
  - When feeling regulated we are able to better function cognitively and our mood will feel more stable

# Regulation



## Regulation

- Relaxed muscles
- Relaxed breathing rate
- Alert, aware
- Engaged with environment
- Higher ability to focus

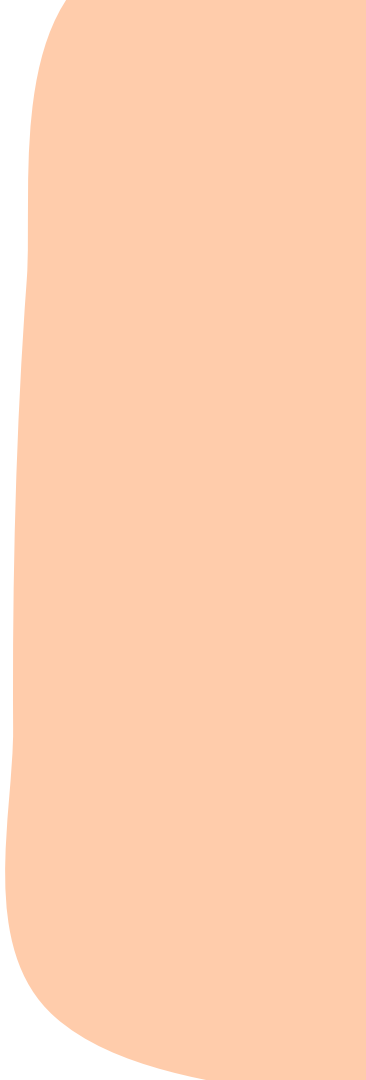
## Dysregulation

- Muscles are tense or limp
- Shallow breathing
- Distracted
- Disengaged
- Difficulty socializing





**What is your ideal  
sensory  
environment?**



# Activity

**Abridged sensory profile:**

<https://sensooli.com/sensory-profile/>



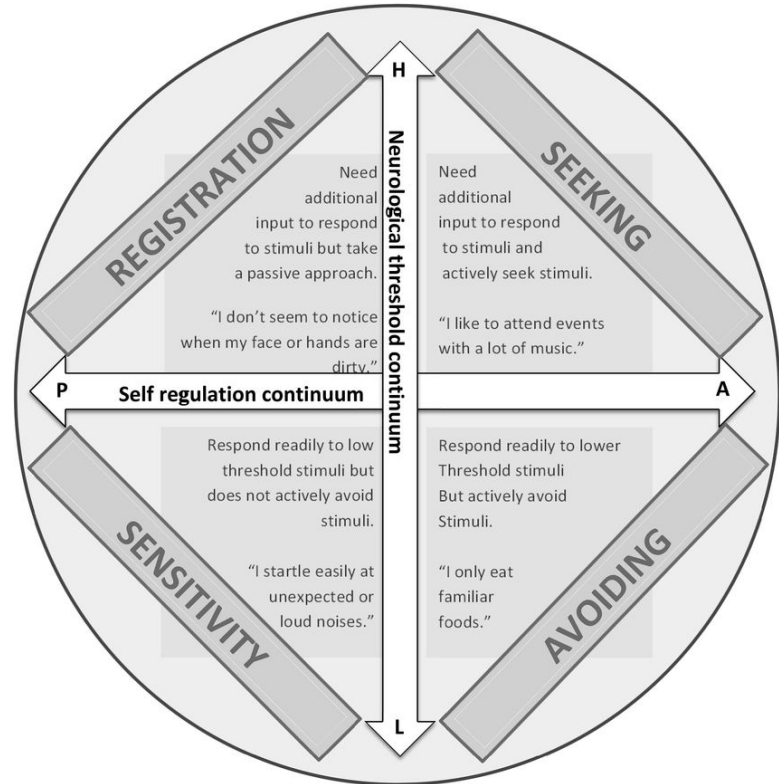
# Adjusting your sensory environment

**Sensory seeking:** Actively seek stimuli

**Sensory avoiding:** Actively avoid stimuli

**Low-registration:** Need additional sensory input to register it


**Sensory sensitive:** Higher response to low sensory input



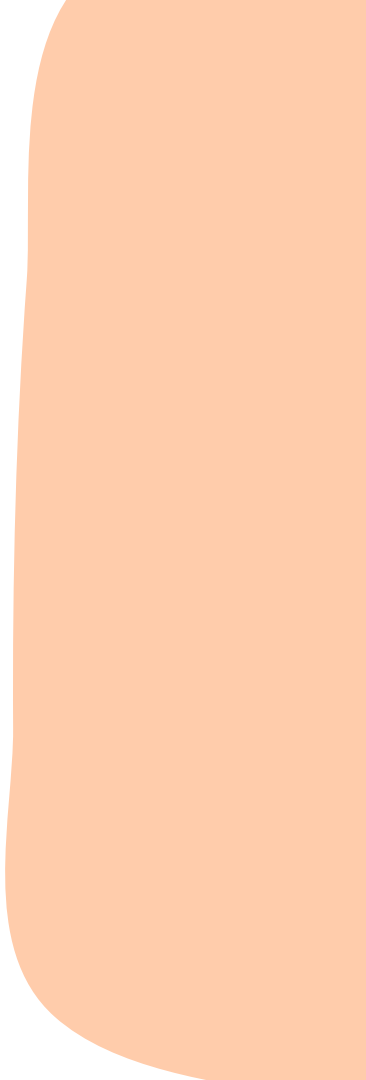



# Adjusting your sensory environment

- Sensory avoidance or seeking may be in relation to certain senses
  - For example, for visual over-responsivity bright lights or clutter may be dysregulating
- Adjusting your environment in accordance to your sensory profile can improve mental health and ability to complete daily occupations
  - Examples:
    - Dim lights in an office if you are visually overwhelmed
    - Light a candle if you are a sensory seeker
    - Use flavorful hot sauces on your food if you are low registration
    - Find hobbies that fit your specific profile




**What sensations do  
we experience when  
climbing?**





# Sensory Processing while climbing

- Climbing is an experience that provides many sensory inputs and benefits to our sensory system
    - Tactile input of holds
    - Visual input of different routes and colors
    - Auditory input from sounds of nature or music
    - Vestibular input from the weightlessness of falling or being lowered
  - Take the time next time you climb to reflect on all the various sensory inputs while climbing and how they relate to your sensory profile!
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# Survey





# Group Sign ups

Thank you for your interest in The Spot's mindfulness series! If you want to learn more consider using the links below to sign up for one or more mental health groups led by Logan Sherrer, a Doctorate of Occupational therapy student.

[Denver](#)

[Golden](#)

[Louisville](#)

[Thornton](#)







**Additional readings:  
Current research on  
the impacts of  
climbing and sensory  
processing for mental  
health**





## Evidence to support sensory processing's impact on mental health

- A strong connection has been found between between sensory processing disorders and many mental health conditions, including anxiety
- Researchers propose that sensory systems should be examined and discussed when treating and assessing any mental health patients
  - Current diagnostic material focuses more on the physical and psychological symptoms
  - Sensory processing directly interacts with both physical and physiological systems
  -



### Information from:

Harrison, L. A., Kats, A., Williams, M. E., & Aziz-Zadeh, L. (2019). The Importance of Sensory Processing in Mental Health: A Proposed Addition to the Research Domain Criteria (RDoC) and Suggestions for RDoC 2.0. *Frontiers in psychology*, 10, 103. <https://doi.org/10.3389/fpsyg.2019.00103>



# Evidence to support therapeutic benefits of rock climbing

- Exercise alone has long time been a proven way to reduce anxiety (Karg et al., 2020)
  - Exercise causes our body to increase heart rate and respiration to trick the mind into responding to a fear response even if something is not actually there
- Climbing as a form of exercise or recreation is found to be even more effective than traditional exercise alone (Karg et al., 2020)
  - Outlet for adrenaline
  - Clears the mind
  - Community engagement and support

Information from:

Karg, N., Dorscht, L., Kornhuber, J., & Luttenberger, K. (2020). Bouldering psychotherapy is more effective in the treatment of depression than physical exercise alone: Results of a multicentre randomised controlled intervention study. *BMC Psychiatry*, 20(116), 1–13.

<https://doi.org/10.1186/s12888-020-02518-y>




# Cultural Considerations

- Evidence suggests that community-based exercise is an effective means to provide mental health support to marginalized and lower-socioeconomic communities (Lamb et al., 2015)
  - These individuals may not have as easy or comfortable access to traditional mental health services
- Community engagement and exercise reduce symptoms of anxiety and depression
  - Climbers should continue to provide a welcoming and culturally sensitive community (Lamb et al., 2015)
  - Supportive communities help to reduce external stressors



Information from:

Lamb, Dowrick, C., Burroughs, H., Beatty, S., Edwards, S., Bristow, K., Clarke, P., Hammond, J., Waheed, W., Gabbay, M., & Gask, L. (2015). Community Engagement in a complex intervention to improve access to primary mental health care for hard-to-reach groups. *Health Expectations : an International Journal of Public Participation in Health Care and Health Policy*, 18(6), 2865–2879. <https://doi.org/10.1111/hex.12272>



# References

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<https://sensoryhealth.org/basic/understanding-sensory-integration-process>

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