

# Sensory Solutions for Stressful Soccer Situations

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# Today's Discussion

- Background on sensory systems, sensory processing disorders
- Potentially 'stressful' situations
  - Environment, issue, problem solution
- Strategies for success

# “No one told me how to handle THIS!”

- Covering ears
- Kicking
- Biting
- Yelling
- Refusing to play
- Swearing
- Shaking of the hands

Maybe the causes are **SENSORY!**



# Learning objectives

- Understand senses, sensory systems, sensory processing disorders (SPD)
- Identify triggers for sensory problems
- Develop strategies to address problems
- Establish longer-term plan to incorporate preventive measures

# What are the 5 Basic Sensory Systems?

- Visual (sight)
- Auditory (hearing)
- Olfactory (smell)
- Tactile (touch)
- Gustatory (taste)



# 3 Additional Sensory Systems (You Likely Have Not Heard Of):

- Vestibular
  - Knowing where your body is space, relative to gravity (input from inner ear canals to brain) – as you get older, more prone to motion sickness on rides
- *Proprioceptive*
  - *Knowing where your body is relative to other body parts (arms up or down, finger to nose eyes closed) – not thinking where you are as you move (gymnasts)*
- Interoception (only recently defined, added)
  - Recognizing the physiological/body condition (knowing you have to poop, pee, your emotional state)

# Proprioceptive

- System: This sensory system allows us to feel changes in the length of our muscles and the position of our joints. Gives us information about our position in space. Gives information to the brain about where body parts are and what they are doing
- Examples: deep pressure seeking, clumsy, bumping into people
- Solution: heavy work, jumping, chewing gum, animal walks, wheelbarrow



# What is Sensory Processing?

- Term that refers to the way the nervous system receives sensory messages and turns them into responses
- We all manage sensory messages everyday
- We take in all this information and organize them without much effort at all (usually)



# What is Sensory Processing Disorder (SPD)?

- SPD exists when sensory signals don't get organized into appropriate responses
- If not treated, these may occur:
  - motor coordination problems, behavioral problems, anxiety, depression
- Typically a combination of many if not all of your sensory systems
  - Empty coffee cup at beginning of the day; at the end of the day, when it overflows, you lose your stuff!

# What is Sensory Modulation disorder?

- Problem turning sensory information into behaviors that match the nature and intensity of the sensory information
- Over-responsivity: exaggerated response to input (fussy babies, picky eaters, clothing issues)
- Under-responsivity: lack of response to input (babies slow to respond, may not notice messy face, poor fine motor skills)
- Sensory-seeking: nervous system of the sensory seeker needs intense input in order for the sensation to register in the brain (as babies may love movement, plays rough, difficulty sitting still, poor attention span)



# Examples of SPD

Problems turning sensory information into behaviors that match the nature and intensity of the sensory information

- Sensory-seeking: Needs intense input to register (love movement, plays rough, difficulty sitting still)
- Over-responsivity: Shows exaggerated response to input (picky eaters, clothing issues)
- Under-responsivity: Shows lack of response to input (may not notice messy face, poor fine motor skills) – Aidan, bushes, scratches



# Video descriptions of SPD

- WSJ:  
<https://www.youtube.com/watch?v=kZuu0kInwp8>
- Local CBS affiliate in MN:  
[https://www.youtube.com/watch?v=p3QDy\\_JsvVg](https://www.youtube.com/watch?v=p3QDy_JsvVg)

# Situation: Before Practice

- Environment:
    - Getting out of the car, parking lot, sidelines
  - Issue:
    - Player refuses to put on shin guards, cleats, and uniform is bothering them/ itchy
  - Sensory Problem:
    - Tactile defensiveness
  - Sensory Solution:
    - Honor their nervous system!
    - Ask the parent what their treatment approach is (weighted vest, brushing)
    - Have the player hop to the field (helps with proprioception which supports tactile system)
- Preventive approach:
- Social story (prepares for what to expect about uniform)
  - Don't stress over equipment and wear shin guard outside of socks

# Situation: During Practice

- Environment:
    - Indoor gym facility , lots of people
    - Extremely loud, bright lights
  - Issue:
    - Player has their hands on ears, flinches, does not move, hums, rocking
  - Sensory Problem:
    - Auditory over-stimulation
  - Sensory Solution:
    - Remove from loud area
    - Talk to parent about calming strategies (deep pressure, breathing, etc.)
- Preventive approach:
- Social story (prepares for what to expect about noise)
  - Consider noise reduction headphones (WalMart), sunglasses

# Situation: During Practice

- Environment:
    - Outside field space
    - Large group practice and lots of standing in lines waiting their turn to ...
  - Issue:
    - Player is constantly moving, poking other players, bumping into them, distracted, not following rules
  - Sensory Problem:
    - Vestibular hypo-responsive (need to constantly move) -
  - Sensory Solution:
    - Provide opportunities to move on a more frequent basis (demonstrate activities, lead calisthenics, shag balls, pick up cones)
    - Proprioceptive activities such as heavy work (ball bag, water jug carrier, parachute)
- Preventive approach:
- Plan in advance!
  - Ask player to get there early and help with field setup

# Proprioceptive Activities

- Carrying heavy objects
- Animal walks
- Wheelbarrow walk
- Jumping on a trampoline



# Applying this Knowledge Within TOPSoccer

- Prepare in advance
  - ASK parents about sensory processing issues
  - Allow for accommodations
- Control the environment
  - Establish a perimeter
  - Minimize visual and auditory distractions
- Adjust on the Fly
  - Change Buddies if it appears one is 'over-matched'



# Applying this Knowledge Within TOPSoccer (cont.)

- Escalate Appropriately
  - If behavior problems persist, address 1:1 with parent, and assess fit for the program
- Learn to Laugh
  - Don't take anything personally, or too seriously!  
You are not being judged!

# Additional Resources

- [www.spdfoundation.net](http://www.spdfoundation.net)
- [www.sensory-processing-disorder.com](http://www.sensory-processing-disorder.com)
- Special thanks to my wife, Samantha Robinson OTR/L, for her input (and patience with me)!

