BACKGROUND

Sensory experiences or environmental modifications can:¹
- Regulate behavior
- Improve sensory modulation
- Improve readiness for activities
- Improve focus for learning

Sensory-based interventions are used by 90% of school-based OTs²
- Sensory-based interventions are believed to
  - Prepare student for learning activities³
  - Quickly achieve regulated state⁴
  - Promote behavioral control⁵,⁶,⁷,⁸

Importance of paraeducator perception
- 87% of paraeducator provide behavioral support for students⁹
- Efficacy of approach affected by perception of those implementing¹⁰

METHODOLOGY

- Phenomenological study
- Convenience sample from suburban PA
  - Minimum 6 month experience
  - At least 1 student used sensory-based interventions
- 2 focus groups, 1 interview [recorded/transcribed]
- Validity established through
  - 3 research assistants
  - 1 member checking
- Content analysis process¹¹,¹²
  - Data immersion
  - Initial coding, develop code key
  - Group codes into categories
  - Develop final themes

PARTICIPANTS (n=11)

- Woman
- 35-60 years old
- White (82%), Hispanic (9%), African American (9%)
- Some post-secondary education (81%)
- Full time employment (82%)
- Experience:
  - Average 7.5 years as paraeducator
  - Average 2 years in current position

RESULTS

SENSORY-BASED INTERVENTIONS PARAEducATORS USE

- Fidget items
  - Stress balls
  - Play dough
  - Tactile toys
  - Bumble ball
  - Rubber bands
  - Strings
  - Hole puncher
  - Clicker chain

- Oral
  - Chewy tubes

- Proprioceptive
  - Touch/pressure
  - Weighted items
  - Stretch bands
  - Cocoon/tunnel
  - Between mats

- Music

- Vestibular
  - Therapy balls
  - Wiggle seats
  - Walk/ship
  - Swing
  - Scooters
  - Spin
  - Stationary bike

PARAEDUCATOR PERCEPTIONS OF USE

- Integrated into classroom
  - dynamic seating
  - proprioceptive equipment
  - fidget items
  - chewy tubes

- Built into schedule throughout school day
  - typically less than 5 minutes
  - break after academic work
  - student selected sensory break
  - student selected preferred activity

- Requested by student or directed by staff
  - verbal or nonverbal request
  - behaviors beginning to escalate
  - fidgety, difficulty focusing
  - transition after behavioral incident

EFFECTIVENESS OF SENSORY-BASED INTERVENTIONS

Prevention
- “I feel that a lot of times it prevents behaviors from occurring”

Improved behavioral control
- “I could just see him calm down with some pressure on his shoulders”
  “to help them calm down”
- “the sensory interventions seem to help student get more, be more on task, to calm and be able to focus”

Improved participation in learning
- “some of the students who have gotten fidgets will sit longer”
  “with the stress balls, they will actually sit and comply and listen during academic[s]”
  “they feel better and are able to do what’s expected”

PERCEIVED BARRIERS

Tangible
- lack of supplies
- space
- staffing

Non-Tangible
- student distraction
- work avoidance

CONCLUSIONS

- Paraeducators are implementing sensory-based interventions
  - Trial and error to find what works
  - Proprioceptive and fidget strategies most commonly used
  - Integrated into school routine

- Sensory-based equipment was
  - Varied and individualized
  - Both typical and non-traditional materials
  - Easily accessible

- Perceived benefits for students
  - Prevent behaviors
  - Improve behavioral control
  - Improve participation in learning

- Study Limitations include
  - Participants from one location
  - Participant experience limited to students with autism spectrum disorder and emotional disturbance
  - Not intervention study; did not attempt to show effectiveness of sensory based intervention not mentioned

CLINICAL IMPLICATIONS

- Interventions being used in manner referred to as sensory diet
  - Routinely offered throughout day
  - Facilitating behavioral control

- Barriers to address
  - Make equipment and materials readily available
  - Create sensory space in and out of classroom
  - Consider strategies not distracting to others
  - Plan to decrease work avoidance

- Aspect of sensory-based intervention not mentioned
  - Environmental adaptations

- Perceptions regarding support and training
  - Learned from participating in OT sessions
  - Appreciated support for ongoing planning and problem solving

REFERENCES

References provided separately