

SENSORY-BASED INTERVENTIONS IN THE SCHOOL SETTING: PERSPECTIVES OF PARAEDUCATORS

Lyn Carvell MS, OTR/L, OTD Candidate & Marie-Christine Potvin, PhD OTR/L,
Philadelphia University

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 $\ensuremath{\mathsf{OTs^2}}$

- · Sensory-based interventions are believed to
 - · Prepare student for learning activities3
 - · Ouickly achieve regulated state4
 - Promote behavioral control^{5,6,7,8,9}

Importance of paraeducator perception

- 87% of paraeducator provide behavioral support for students¹⁰
- Efficacy of approach affected by perception of those implementing¹¹

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 process¹²
 - · Data immersion
 - Initial coding, develop code key
 - · Group codes into categories
 - · Develop final themes

PARTICIPANTS (n=11)

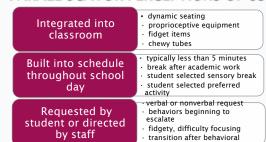
- Woman
- 35-60 years old
- White (82%), Hispanic (9%), African American (9%)
- · Some post-secondary education (81%)
- Full time employment (82%)
- Experience:
 - Average 7.5 years as paraeducator
 - · Average 2 years in current position

RESULTS

SENSORY-BASED INTERVENTIONS PARAEDUCATORS USE

Oral Music Fidget items Chewy tubes Vestibular · Stress balls **Proprioceptive** · Therapy balls · Play dough · Wiggle seats · Tactile toys · Touch/pressure Walk/skip · Bumble ball · Weighted items • Swina · Rubber bands Stretch bands Scooters Strings · Cocoon/tunnel Spin Hole puncher · Between mats Stationary bike Clicker chain

PARAEDUCATOR PERCEPTIONS OF USE



EFFICACY 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
academics"

"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

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