



Low-Tech Sensory Integration in Children’s Participation in Daily Activities

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ADVANCED THERAPY CENTERS

ATC offers pediatric occupational therapy which addresses challenges that impact meaningful engagement and participation in everyday activities with children.

Mission & Statement: “We provide high level, evidence-based occupational therapy services for children and their families. We believe our children deserve individualized care to help them engage in play, learning, and self-care.”

SUMMARY OF NEEDS ASSESSMENT

- #1. Lack of activities or strategies for vestibular input
- #2. Increased need for parent education on sensory integration resources
- #3. Need for student manual on sensory integration & sensory processing disorders

LITERATURE REVIEW

- Benefits of Movement Activities in Sensory Integration**
- Engagement in structured physical activities enhances their inner motivation, self-efficacy
 - Overall increased participation in daily activities
 - A low-cost and accessible treatment by integrating videos of movement sequences in clinic and home
 - Improvements in postural-ocular movement, bilateral integration, and motor coordination

- Sensory Integration Programs for Caregivers**
- Caregivers expressed their lack of knowledge and understanding of their child’s sensory needs & needs for additional training
 - Participation in coaching interventions increased their understanding of their child’s sensory needs

- Limitations in Usage of Sensory Integration**
- Lack of robust empirical support for SI approaches
 - Small sample size and non-standardized, which leads to inconsistency of effectiveness

STUDENT LEARNING OBJECTIVES

OBJECTIVE ONE By end of week seven, the capstone student will demonstrate comprehensive knowledge of SI through the development of low-tech SI activities program	OBJECTIVE TWO By end of week 14, the capstone student will implement & evaluate a low-tech SI activities program for children with sensory processing difficulties	OBJECTIVE THREE By end of week 14, the capstone student will assess & educate caregivers on low-tech SI activities to support their child’s sensory needs	OBJECTIVE FOUR By end of week 14, the capstone student will gain advanced treatment skills in pediatric outpatient setting
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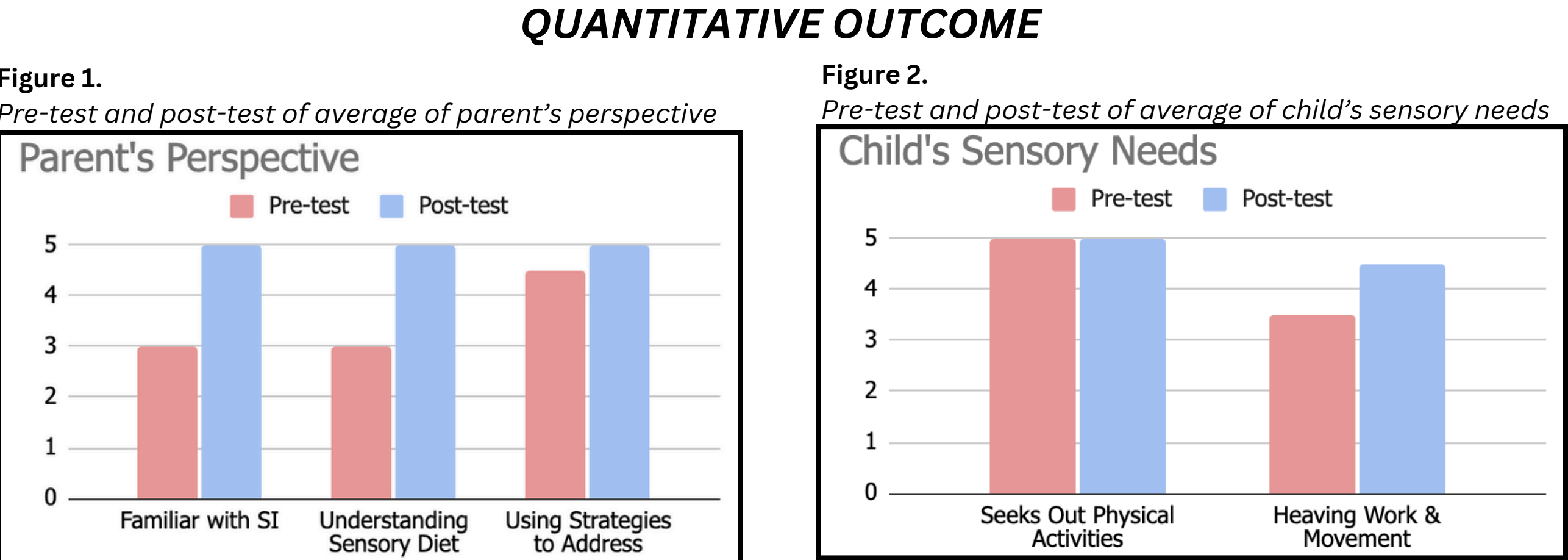
PROJECT DESCRIPTION & IMPLEMENTATION

- Primary Focus Area:** Program Development
- Purpose:** Implementing and educate accessible strategies of providing SI with limited resources of sensory equipments
- Six-week pilot program protocol of low-tech SI activities**
 - Sensory-based motor activities
 - Vestibular, proprioceptive, and tactile input
 - Seven caregiver education hand outs weekly**
 - A Guide Manual on SI for therapists and fieldwork students**
 - Introductory of what sensory integration is and additional activities provided tailored to ATC

PROGRAM EVALUATION

- A Mixed-Method Approach**
- Quantitative Data:**
- Pre-test and post-test surveys
 - Consists of five questions using the Likert Scale
 - Obtained caregiver’s knowledge and understanding in SI
 - Their child’s sensory needs and natural environment
- Qualitative Data: Inter-rater reliability**
- Caregiver’s feedback and direct observation weekly
 - Obtained child’s adaptive response and performance level weekly
 - Gathered caregiver’s receptiveness and confidence level weekly

PROGRAM OUTCOMES



Increased praxis and balance

“I can tell she’s made an improvement because she used to be just “go go go”, now she’s problem solving on how to navigate” - **Caregiver A**

“I definitely see his movements are more slower and I can tell that he’s more aware of where his body is” - **Caregiver B**

Caregiver’s receptiveness and boost in confidence

“Seeing her in session and how she performs, I’m able to incorporate it better at home” - **Caregiver A**

“These activities are really helpful for him, especially since he can’t always have his sports practice” - **Caregiver B**

Expanded knowledge and understanding of SI

“I now understand what she needs, because before she didn’t want to do any movements that were hard for her” - **Caregiver A**

“It was tough figuring out what he can do at home since it’s small, but now I know these strategies are more convenient than expected” - **Caregiver B**

LIMITATIONS

- Small sample size - *two participants*
- Short duration of program implementation
- Limited schedule availability or cancellations
- Environmental constraints
- Lack of SI trainings

OT IMPLICATIONS

- Promoted adaptability and accessibility resources of SI into clinic-based pediatric setting
- Reinforced client-centeredness with creativity and supports occupational performance
- Encouraged collaboration process with caregivers to empower their child with daily activities participation

SCHORALY DELIVERABLES



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REFERENCES

