

## SITE DESCRIPTION

#### **JABBERGYM:**

- Founded in 2005
- Services: early intervention, clinic-based, and school-based
- Mission: "to successfully promote growth and development by addressing the needs of the whole-child" (Jabbergym, 2021)

#### **POINT QUEST EDUCATION (PQE):**

- Founded in 2008
- California Department of Education certified non-public school
- Grades: Kindergarten 12+ grade
- Philosophy: is to "provide each student with the tools, strategies, and resources needed to be successful in a less restrictive environment" (PQE, 2014)
- Diagnoses: Autism spectrum disorder (ASD), emotional disturbance, intellectual disabilities, specific learning disabilities, and other health impairments (PQE, 2021)
- Services: occupational therapy, mental health, speech and language, and behavior
- PQE and JABBERGYM merged in 2022
- Jabbergym is now a member of the Point Quest Group

Independent Living Skills Lab (images 1 & 2) and OT Room (image 3)



## SUMMARY OF NEEDS ASSESSMENT

- Semi-structured interview with community site mentor via Zoom
- Online Survey (via google forms) sent to Jabbergym and PQE staff

#### Identified needs:

- Program evaluation of effective sensory-based interventions (SBIs) and strategies to decrease/prevent interfering behaviors
- Sensory-based in-service training to school staff (related services, teachers, and paraeducators)
- Resources and handouts on sensory-regulation strategies

# **Effectiveness of Sensory-Based Strategies in Reducing Interfering Behaviors in a Non-Public School**

## Site Mentor: Kristin Mai, OTR/L; Faculty Mentor: Dr. Aaron Picus, OTD, OTR/L West Coast University – Center for Graduate Studies

## **KEY POINTS OF LITERATURE REVIEW**

#### Prevalence of children with Sensory Processing Disorder (SPD):

- 5% to 55% of children (Critz et al., 2015; Owen et al., 2013)
- 40% to 88% of children with disabilities (Watling et al., 2018)
- 69% to 95% of children with ASD (Galiana-Simal et al., 2020; Hazen et al., 2014)
- Emotional Disturbance often co-occurs (Barnes et al., 2008)
- Addressing sensory needs using a sensory-based approach allows children to access their curriculum successfully (AOTA, 2015)
- Approaches that utilize sensory-rich experiences help to create change and build connections in the brain, which has been shown to have behavioral enhancements in learning (Watling et al., 2018)

## **LEARNING OBJECTIVES**

**Primary Focus Area:** Clinical Practice Skills

- Developed clinical practice skills in a special education school setting by treating a portion of site mentor's caseload and provide sensory-based interventions and recommendations
- Provided in-service training to educate school staff on sensory processing
- Developed program evaluation skills by conducting a survey of in-service training program to determine its effectiveness

### **PROJECT DESCRIPTION & IMPLEMENTATION**

#### **Student Caseload:**

- 20 direct & 5 consult
- 22 males & 3 females
- Ages: 5 20 years old
- Population: ASD, SPD, dyspraxia, non-verbal
- Sessions: duration 30-minutes, frequency 1 to 2 times per week
- Skill areas addressed: sensory & self-regulation strategies, handwriting, scissor skills, body awareness, bilateral coordination, motor planning

#### Additional training:

- Online sensory processing course (3 certifications)
- Crisis Prevention Institute training

#### **In-Service Training:**

 Created and implemented 48-minute training on sensory processing and sensory-regulation strategies

## Natalie Regan, OTD/S

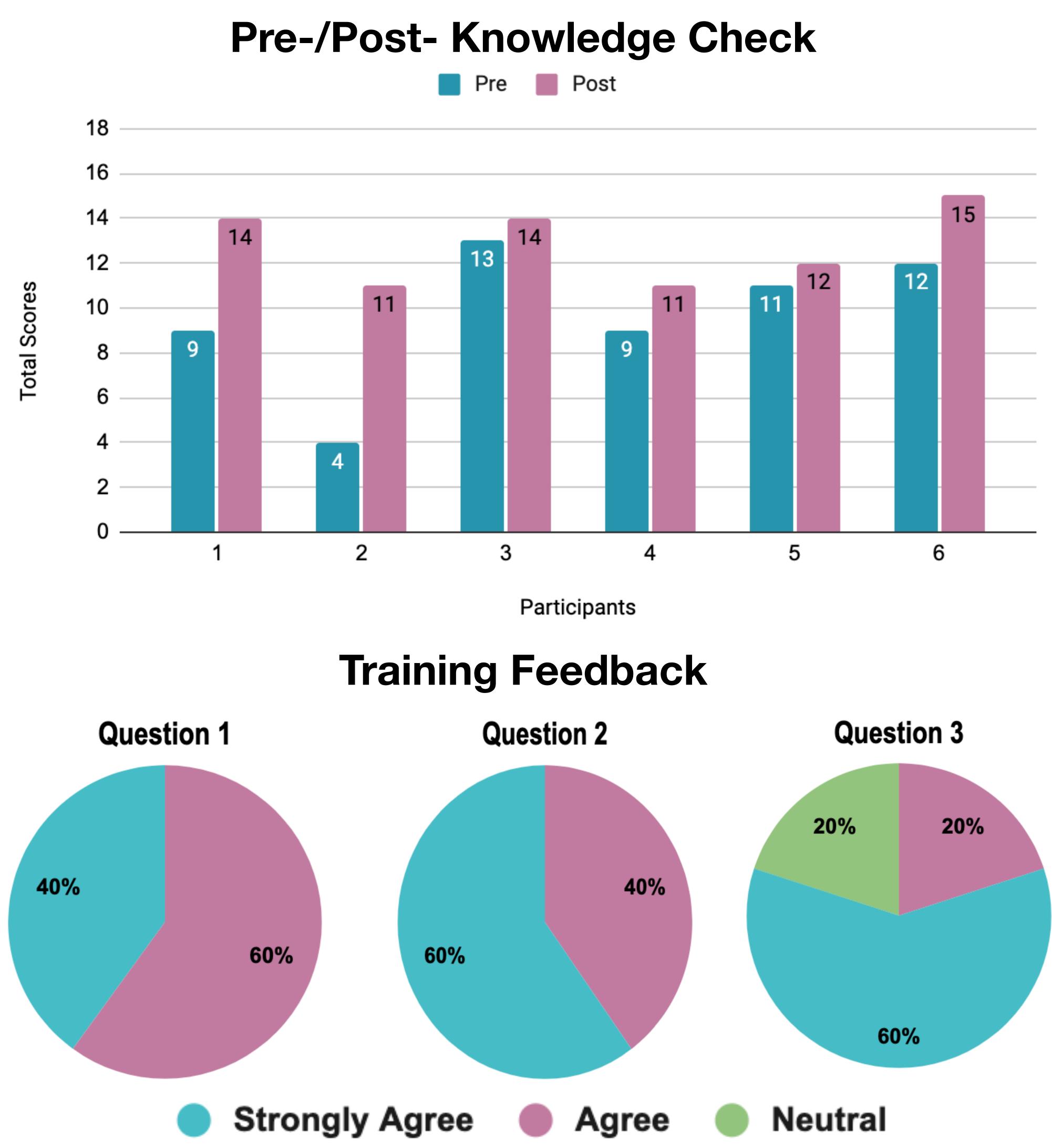
## **EVALUATION & PROJECT OUTCOMES**

#### **OT School-Based Clinical Skills**

- OT school-based competency checklist (AOTA, 2013) performance evaluation by site mentor
- Ratings on standards (developing, proficient, accomplished, distinguished, not demonstrated)
- Results: Distinguished for all five standards

#### Sensory Training

- Pre-knowledge and post-knowledge check scores of changes in knowledge before and after training
- Training feedback



- •Q1: Training improved my knowledge on sensory processing & strategies
- •Q2: The sensory training provided useful information
- •Q3: I will utilize the sensory strategies I learned from the training





#### SCHOLARLY DELIVERABLES •Online folder: Movement breaks, adapted PE, and Crabwalk Duck Walk \_\_\_\_\_ Bicep Curls Make a T transition ideas • Images 1 & 2 \_\_\_\_\_ Pull Ups Bearwalk wheelbarrow Up & Down Sensory training presentation • Images 3, 4, & 5 t Ankle Pumps Pre-Training and Post-Training survey Lunges Frog Jump Sensory handouts and resources •OT class folders for students on caseload Sensory Processing Access to Curriculu

## **DISCUSSION & IMPLICATIONS**

- The high number of students with SPD and ASD creates a significant impact on the rate of students unsuccessfully accessing their curriculum due to sensory needs not being met, which is why there was a considerable need for staff to complete training on sensory processing, SPD, and sensory-regulation strategies
- Advocates for the shift from caseload to workload model for school-based OT practitioners

## **FUTURE DIRECTIONS**

- Follow-up to measure long-term improvements from sensory training
- Attain data on the effectiveness of sensory strategies and utilization
- Expand sensory strategies to outside the school environment: staff (transportation drivers) and offer training for parents/caregivers

## ACKNOWLEDGEMENTS

Thank you to my site mentor, Kristin Mai, for providing me the opportunity to expand my school-based OT skills, and my deepest gratitude for all your incredible support, guidance, and collaboration. I would also like to thank my faculty mentor, Dr. Aaron Picus, for his knowledgeable feedback and continuous support throughout the capstone process.

## **REFERENCES** (Available Upon Request)