Introduction

The attention span of school-aged children has affected performance in the classroom due to ongoing technological advances. (Lai & Chang, 2020). Multi-sensory Environments (MSEs) are commonly incorporated in special-needs classrooms in schools to give the students a sense of control with the stimuli in their environment to increase their attention span (Unwin et al., 2021). Sensory strategies are used in children to influence learning and adaptive behaviors by incorporating auditory, vestibular, proprioceptive, tactile, and visual systems (Schaaf et al., 2010). By using these strategies effectively, distractions are minimized and the child’s ability to learn is enhanced (Roley et al., 2015). Occupational therapists use sensory strategies in school settings to increase educational participation and task performance. The purpose of this study is to determine if providing sensory strategies in a typical classroom will positively affect focus and success in school-age students compared to students with no sensory equipment available during class. This project takes place at Woodland Pines Elementary School in MacKenzie Saunders’ second-grade classroom.

Methods

- Implementing three pieces of sensory equipment into a second-grade classroom for 5 weeks for the students to use with collection of data through an in-person interview with the teacher at the end of each week.
- 15 participants: 7-8 years of age
- Data Collection:
  - 5 in-person interviews pre-sensory equipment implementation with Mrs. Saunders
  - 5 in-person interviews during sensory equipment implementation with Mrs. Saunders
  - 1 in-person interview post-sensory equipment implementation with Mrs. Saunders
- Equipment used:
  - Move ‘N Sit cushion
  - Clip with rough/soft Velcro pieces attached
  - TheraBand foot swing

Results

- Before the use of sensory equipment:
  - Students participated 60% of the time during class without needing redirection
  - Direction needed 7-9 times daily
- During the use of sensory equipment:
  - Students participated 69% of the time during class without needing redirection
  - Direction needed 4-6 times daily after week one of sensory implementation

Discussion

- Direction needed during class decreased with use of sensory equipment.
- It took one week for the students to use the sensory equipment correctly and for it to not be distracting.
- The Move ‘N Sit cushion was found most beneficial with students.
- The clip with Velcro was found to be least beneficial and not used for intended purpose.

LIMITATIONS & AREA FOR IMPROVEMENT:

- Small sample size
- Weeks shortened due to Thanksgiving break
- Not all children in class participated in study

Conclusion

IMPLICATIONS

- Data implies sensory equipment use during class can increase focus with students
- Utilizing data within other schools/classrooms

FUTURE RESEARCH

- Increase sample size and longer duration to increase reliable data
- Study the effects of sensory equipment on health and wellness and academic grades in students
- Further explore benefits of the Move ‘N Sit cushion

References


Acknowledgement & Contact information

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