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Educating on the Impact of Gravitational Insecurity in Children with Sensory Processing Disorder

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Educating on the Impact of Gravitational Insecurity in Children with Sensory **Processing Disorder**

BACKGROUND

Gravitational insecurity impacts around 15-21% of children with sensory processing disorder (SPD) (May-Benson et al., 2020). Gravitational insecurity is defined as a fear of movement and can cause a decrease in a child's social participation and play if not addressed (May-Benson et al., 2016; Potegal et al., 2022).

PROBLEM

There is a lack of research available on gravitational insecurity and a lack of intervention strategies available when addressing gravitational insecurity in children with SPD.

PURPOSE

To develop a program educating parents, caregivers, therapists, and occupational therapy students on gravitational insecurity in children with SPD.

Outcome objectives:

- (a) Create a detailed proposal
- (b) Program Development
- (c) Program Implementation
- (d) Data Analysis and Results

METHODS

- 5 participants recruited
- 5 participant's total
- 3 occupational therapists
- 2 occupational therapy students
- 3 workshop sessions 35-45mins

Measures:

- Needs Assessment
- Pre-and Post Workshop Surveys
- **Pre-workshop survey:** Participants answered a total of 8 questions. Two short answer questions assessed utilizing qualitative analysis and the other six questions based on Likert scale (strongly agree to strongly disagree) and descriptive statistics.

Topics covered:

- Program purpose and expectations
- What is gravitational insecurity 2.
- 3. Gravitational Insecurity Assessment for Children
- 4. OT intervention strategies for addressing gravitational insecurity
- How to educate parents/caregivers on gravitational insecurity in children with SPD
- Creating educational videos for 6. parents/caregivers to access.
- 7. OT's role in addressing gravitational insecurity in children with SPD.
- **Post-workshop survey:** Participants answered the same questions from the pre-workshop survey to analyze how their knowledge had changed after the workshop sessions. Also answered additional questions to get their perspective of the program overall.

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Doctor of Occupational Therapy Program

Amber Pierce; Lisa Griggs-Stapleton, PhD, OTR; Elizabeth McBride, OTR

PROGRAM

Program Summary:

- 14 weeks long program •
- 3 workshop sessions
- **Social Media Page Creation** •
- **Pre/Post Workshop Surveys**

Theoretical Framework:

1. Ayres Sensory Integration (ASI) Model



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Session 1: Purpose and Education

- Purpose of the program and expectations.
- being addressed.

Session 2: Gravitational Insecurity **Assessment and Intervention Strategies**

- and demonstration of assessment.

Session 3: Educating Parents/Caregivers and Creating Educational Videos

- Education on how to define and educate
- to.

Conclusions / Future Directions

Key Finding: Creating an educational program to educate therapists and students on gravitational insecurity in children with SPD can allow for better education for parents and caregivers based on the results of the program. The creation of a social media page that anyone can access also proved beneficial to therapists, students, parents, caregivers, and anyone else interested in the topic because it allows them to access the information provided throughout the program at any time.

Strengths and Weaknesses: Clinic utilized a sensory integrative approach and small number of therapists at the pediatric clinic.

Limitations: Lack of research available and small number of participants overall due to small pediatric clinic where program was implemented.

References May-Benson, T. A., Lopes de Mello Gentil, J., & Teasdale, A. (2020). Characteristics and prevalence of gravitational insecurity in children with sensory processing dysfunction. Research in Developmental Disabilities, p. 101. https://doi.org/10.1016/j.ridd.2020.103640 May-Benson, T. A., Teasdale, A., & Lopez De Mello Gentil, J. (2016). Gravitational insecurity in children with sensory integration and processing problems. American Journal of Occupational

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Potegal, M., May-Benson, T. A., Oxborough, S., Hall, A., & McKnight, S. (2022). Reduced gain and shortened time constant of vestibular velocity storage as a source of balance and movement sensitivities in gravitational insecurity. Occupational Therapy International, pp. 1–9. https://doi.org/10.1155/2022/5240907

Workshop Sessions

- What is gravitational insecurity and why is it

- Education on the assessment, what to look for,

- Discussed intervention strategies that can be utilized to address gravitational insecurity

parents/caregivers on what gravitational insecurity is and how it impacts their children. - Brainstorming ideas for educational videos and creating videos for others to have access