Spring 2019

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Sensory Integration Therapy On Students With Autism Spectrum Disorder

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Abstract

The use of sensory integration techniques in classrooms that have students with special needs, especially students with autism spectrum disorder have been increasing in recent years. Different kinds of sensory stimulation can be beneficial for students who have autism spectrum disorder. Students who have autism may struggle with noise, tactile, taste, or visual sensory sensitivities. We believe that having sensory integration therapy techniques implemented in the classroom would help students with disabilities by improving their focus and reduce stemming in the classroom. We intend to review and analyze published research articles in the field and based on our findings, we intend to gain a deeper understanding on how to implement this therapy technique in the classroom to have maximum student success.

Background

- Autism Spectrum Disorder is “a developmental disorder characterized by abnormal or impaired development in social interaction and communication and markedly restricted repertoire of activity and interest” (Gargiulo and Bouck, 2018, p. 690).
- Many children with autism spectrum disorders have also strong reactions, positive or negative, to sensations such as smell, touch, sight, or sound (Çiçek, Tanidir, Mukaddes, and Ünal, 2006, p.12).
- According to Judy Ramirez from Lehman College, “children with sensory integration dysfunction cannot rely on other senses to compensate for the area that is inadequate” (1998, p.7). Due to this they cannot organize the information they are receiving nor can they tolerate how the information is being received. Therefore, they become more sensitive to sensations such as noise, taste, smell, and textures.

Method

As teachers how can we use Sensory Integration Therapy to help students with Autism Spectrum Disorder

- We believe that Sensory integration therapy that involves the use of joint compression activities is best suited for students with Autism Spectrum Disorder because it provides students who lack sensory awareness the chance to refine their attention.
- After research we find this therapy to be mostly ineffective as shown by the studies used.
- The study conducted by Losinski, Cook, Hirsch, and Sanders showed that the use of weighted blankets as a deep pressure therapy did not show any real improvement consistently within their program participants.
- The 2006 article by Çiçek, Tanidir, Mukaddes, and Ünal also shows that there is no major correlation between tactile therapy and behavior change. This study took place in Turkey.
- The study conducted by Pendopo Wong Bonggot and Laura J. Hall, from San Diego State University in 2010, indicated that the proprioceptive sensory integration therapy had no effect on the student’s ability to remain on task and reduce the amount of distractions.
- In a review of four different studies, Yunus, Liu, Bissett, and Penkala (2015) came to the conclusion that out of these 4 studies, only one was found effective in helping to control unwanted behaviors and to help the child refocus via the use of a weighted blanket.

Survey of Programs of Proprioceptive Sensory Integration

- Based on the research conducted we have come to the conclusion that the proprioceptive integration therapy interventions are largely not supported by data to be effective in changing student behavior.

Results

Discussion

- We found that all four studies we analyzed had one major commonality. They all show that the use of proprioceptive therapy is not proven to be an effective form of intervention for students with Autism Spectrum Disorder. The intervention did not have any significant change to the student’s behaviors.
- According to the study by Çiçek, Tanidir, Mukaddes, and Ünal “the most important result in this study is that no relationship could be found between psychophysical threshold and qualitative reports of sensory problems by the subjects and subjects’ parents. This result was further supported by the lack of statistical difference between the thresholds of normal and autistic children” (1998, p.30).
- Applying proprioceptive stimulations alone, as an intervention to reduce behavior problems in children, may be ineffective and not address all the sensory needs of the child” (Yunus, Liu, Bissett, and Penkala, 2015, p.137).

Recommendations & Future Directions

After research on compression therapy and other types of proprioceptive interventions we have come to the conclusion that one initial hypothesis was incorrect. Proprioceptive intervention such as weighted blankets and compression vests do not appear to have a consistent effect student behavior.

In the future we would be inclined to delve further into other types of Sensory Integration Therapy Interventions to see if the results are similar or if one type of therapy stands out amongst the crowd.

References


