Music Intervention

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Abstract

This research study will focus on children who have been placed in a separate classroom for children diagnosed with Autism Spectrum Disorder (ASD). This study intended to show the effects of integrating music and its impact on a student's ability to attend to a task during a fifteen-minute work center.

Supporting Summary

Children with Autism Spectrum Disorder (ASD) often have difficulty with attending skills, particularly during independent or non-preferred work activities. The ability to attend to an assigned task for a specific period of time is a primary pre-academic skill that students need to master. The inability to acquire this skill may impede future academic learning, progress and success. The ability to sit and attend to an assigned task for a set amount of time may also impact future communication and social interactions as well as functional participation in the social world. (Hodgdon, 2007).

A common characteristic of children with ASD is their struggle to prioritize and interpret the numerous (internal and external) stimuli occurring in the classroom environment. (Hodgdon, 2007). Consequently, this affects their selective and sustained attention on a particular activity. A student's difficulty with attending to a specific, non-preferred task is often intensified by their distraction by unrelated aspects or irrelevant objects.

The *purpose* of this study is to describe the effects of integrating different styles of background music and its impact on a student's ability to sit, attend to and complete a task during their fifteen-minute independent work center.

Lanovaz and Sladeczek (2010) maintain that music helps to decrease vocal stereotypy for students with ASD. The term "vocal stereotypy" is used to refer to repetitive vocalizations. In this study, these authors used a reversal design to examine the effects of audio stimulation (music) on the vocal stereotypy of five students. The results show that three of the five participants decreased vocal stereotypy behavior during the music intervention phase.

Music therapy has been used to increase social interaction and play skills in children with ASD. Kim, Wigram, and Gold (2008) studied the effects of improvisational music therapy on pre-school children with ASD. The study was a randomized controlled, single subject comparison design. The researchers used two different conditions: a play session with toys and a music therapy session. The results show that the session utilizing music therapy was a more effective intervention, as there were increases in the children taking turns during the improvisational session.

Kern, Wolery, and Aldridge (2006) focused on the independent skills of two children. The students' with ASD were placed in an inclusive setting and were struggling with independent functioning skills during the morning routine. The results show, after the music intervention, there was an increase in independent functioning and participation in daily greetings from the students during the morning routine.

The action research design is in a mixed grade level, separate classroom room for students diagnosed with Autism Spectrum Disorders (ASD). The classroom consists of twelve students, all of whom have been identified as having a primary exceptionality of ASD. Four of these students are involved in the research study: three males, one female. The primary teacher is responsible for implementing the intervention as well as collecting and analyzing the data. The

data collected is of observation of the student behavior (frequency and duration) and student work samples.

At the beginning of each student's independent work center, they are given a single set of headphones that are connected to an iPad. The music played during this study consists of four different styles of music, on pre-determined music channels, including: "classical for studying," "smooth jazz," "spa suite" and "nature sounds." Only one style of music is played daily during the work centers for a period of one week. During the frequency observations, the observer tallies how many times the student gets out of their chair. During duration observation, the observer documents the moment the student sits down until the first movement from their chair. Student work samples are collected to analyze the quantity of work that is completed during the work center.

The anticipated result of the study is that during a fifteen-minute interval, incorporating different styles of background music will positively affect the productivity of a kindergarten with autism spectrum disorder. A goal of the study is the have the students remain in their chair for the duration of the fifteen-minute independent work center. It is predicted that the amount of time the students are out of their chair will decrease as the study progresses. A third anticipated result is that students will consistently increase the number of activities they independently complete during each work session. The study begins with collecting baseline data the week of January 13th – January 16th, 2014. Each week data will be collected for the four different music stations. Data collected throughout the study will be analyzed during the week of February 17th – February 21st, 2014.

The results of this study could be useful for future research, teaching, policy and practice because of the probability that music will positively affect the productivity of a kindergarten with

autism spectrum disorder. It is possible for professionals to use music as an intervention in order to address different needs of people of all ages and abilities. Music can be utilized in a variety of ways and in many different settings. The anticipated findings of this study will show music can be an effective intervention for addressing impairments in areas as communication, behavioral and cognitive functioning while working with children with ASD.

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