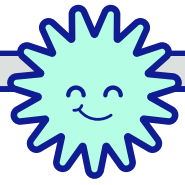


THE IMPACT OF MUSIC THERAPY ON FOCUSSED AND SUSTAINED ATTENTION



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Introduction

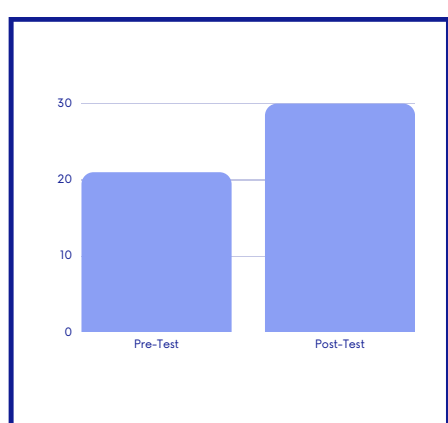
According to the World Center for Creative Learning Foundation (WCCLF), Clinical Musicianship (2018) is the clinical & evidence-based use of music interventions to accomplish individualised goals within a therapeutic relationship by a credentialed professional who has completed an approved certificate clinical musicianship program. The interventions can address a variety of healthcare & educational goals: promote wellness; enhance focus, attention and Memory; improve communication and more. There are many similarities between Maths and Music. The cognitive requirements for both include understanding sequences, recognising patterns, short term memory, focused/sustained/selective attention skills to name a few. Several studies have explored the positive effects of music on children's achievement in mathematics (Johnson, 2003). Music has a positive impact on attention. Research in clinical music therapy and on music enrichment also shows that music affects attention and learning in the early childhood classroom (Kamile Geist, 2012) Music therapy is significantly effective in enhancing attention for children with intellectual disability regardless of their sex or level of severity. Therefore, Music therapy was recommended for use in the school with adequate teacher training. (Akintunde Oluseyi Dada, August 2021).

Objective

The goal for the sessions was to see an improvement in the focused and sustained attention for the student after music therapy strategies are used in the math remedial sessions.

Results

The pre and post-test results were as follows:
S Her scores reduced in the attention checklist and were all below the cut-off for ADHD.
S Her raw score in coding improved from 21 to 30. It was noticed that the student not only was more interested to attend her maths remedial sessions but also developed a positive attitude towards the subject. The use of call and response to move to the next activity proved effective as she was more alert and mentally prepared for what was expected next. She was able to sustain her attention for a longer period of time and was focussed on the task at hand during that period. There was an increase in her post test scores.

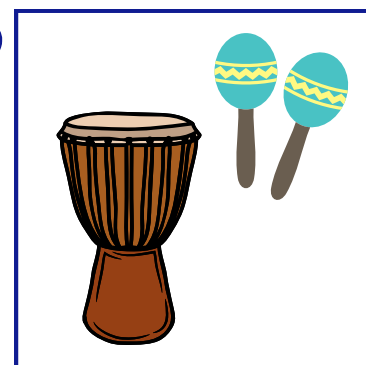


Methodology

A case study method was followed to see the effects of music therapy on a student who was in 7th grade during their one-on-one sessions for Math Remediation. These were conducted twice a week. Attention checklists and subtest of coding from WISC were used as pre and post-tests.

Techniques that were used in the sessions:

- call and response; pulse patterns;
- stop and start;
- maintaining the pulse while listening to the metronome, or a song;
- playing a rhythm while following the notes/saying the counts/singing the song, for the given time frame (which was gradually extended), and with a change in tempo and volume.



Musical Instruments used:

- Djembe,
- shaker and
- found sounds

Conclusion

From this case study we can see the effects of music therapy strategies to improve focussed and sustained attention. These strategies can be used in a whole class setup as well. A study by Sivakumar B (2013) has confirmed the influence of music in enhancing Memory and Attention so essential for Academic Achievement. Further to this, research can be conducted in the mainstream classroom, where students learn maths with musical strategies using found sounds. This can be applied by all subject teachers and then generalised in all other settings as well.

Related Literature

Akintunde Oluseyi Dada, O. P. (August 2021). Music Therapy in Enhancing Learning Attention of Children with Intellectual Disability. *Journal of Intellectual Disability - Diagnosis and Treatment* 9(4), 363-367. doi:10.6000/2292-2598.2021.09.04.2
David E Wolfe, L. K. (February 2009). The Use of Music with Young Children to Improve Sustained Attention during a Vigilance Task in the Presence of Auditory Distractions. *Laura K Noguchi*, 69-82. doi:10.1093/jmt/46.1.69
Hughes, E. (2021, October 29). 7 Ways That Music and Mathematics Relate. Retrieved from Musical Mum: <https://www.musicalmum.com/music-and-mathematics/>
Johnson, G. L. (2003). Integrating Music and Mathematics in the Elementary, Classroom. *Teaching Children Mathematics*, 9(8), 474-479. <http://www.jstor.org/stable/41198218>.
Kamile Geist, E. A. (2012). Bridging Music Neuroscience Evidence to Music Therapy Best Practice in the Early Childhood Classroom: Implications for Using Rhythm to Increase Attention and Learning. *Music Therapy Perspectives*, Volume 30, Issue 2,, Pages 141-144., doi:https://doi.org/10.1093/mtp/30.2.141
Yuka Kasuya-Ueba, S. Z. (2020). The Effect of Music Intervention on Attention in Children: Experimental Evidence. *Frontiers in Neuroscience*, <https://doi.org/10.3389/fnins.2020.00757>. doi:https://doi.org/10.3389/fnins.2020.00757

