The Effects of Music on Cognitive Performance in Attention Deficit Hyperactive Disorder (ADHD) Children: A Systematic Review

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ABSTRACT

Aim:
Attention Deficit Hyperactivity Disorder is a neurological disorder that is characterized by cognitive deficits. There are many studies that support the health benefits of music across the lifespan. Music has been reported to improve symptoms of psychiatric conditions such as dementia, autism, and ADHD. The aim of this study is to systematically review the effect of music on cognitive performance in Attention Deficit Hyperactivity Disorder (ADHD).

Methods:
A systematic review was designed and conducted using PRISMA guideline. Electronic databases of PUBMED, MEDLINE, CINAHL, EMBASE as well as hand searching, were used to identify the records. The search was refined by search strategy (for electronic databases) and predefined inclusion and exclusion criteria. The search was limited to human studies and peer-reviewed articles. Three articles were found to meet the criteria. Two studies showed significant effects of music toward cognitive functions. Another study showed no significant differences.

Results:
A total of 601 abstracts were initially identified. 444 abstracts were removed after duplication. The remaining of 157 abstracts were reviewed by looking at the titles, abstracts and full papers using pre-determined inclusion and exclusion criteria. Three articles were found to meet the criteria. Two studies showed significant effects of music toward cognitive functions. Another study showed no significant differences.

Conclusion:
The studies conducted have shown that music may have a positive effect on cognitive function in ADHD. Therefore, more studies should be carried out to understand the relationship between music and cognition in ADHD.