

ADHD Medication compared to Behavioral Therapy in Children's Test Scores and Behavior throughout a School Year



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Abstract

Objective: To compare the efficacy of ADHD medication to behavioral therapy in children, aged 6-10, through test scores and behavior throughout a school year.

Design: Quasi-experimental

Setting: Roosevelt Elementary School in Hays, KS

Participants: Children ages 6-10 diagnosed with ADHD

Methods: With the necessary consents, participants meeting the necessary criteria will undergo their fall semester with only behavioral therapy to manage their ADHD and then utilize medications their spring semester. The SNAP-IV survey will be utilized to measure the efficacy of the two treatment approaches based on teacher and parent perceptions. Test scores will offer a quantitative measurement.

Results/conclusion: Pending results and data collection.

Introduction

The first-line treatment for attention deficit hyperactivity disorder (ADHD) uses a multifactorial approach to help patients with their daily lives. There are several methods that can be used to control this condition such as medications, psychotherapy, and behavioral management (National Institute of Mental Health, 2023). The most common treatment used is pharmacological methods due to its proven effectiveness. Medicating a child's ADHD is deemed appropriate when it interferes with the child's emotional wellness, social and academic life (McCarthy, 2023). However, medication can be seen as a cure all without attempting to initiate behavioral therapy to help a child process and manage their ADHD. The goal of this study is to compare the outcomes of behavioral therapy combined with medication to behavioral therapy alone through test analysis of test scores and teacher surveys.

Purpose Statement

The purpose of this study is to analyze via test scores and teacher survey's how a behavioral therapy combined with medication for ADHD affects a child's behavior and academic performance throughout a school year compared to behavioral therapy alone.

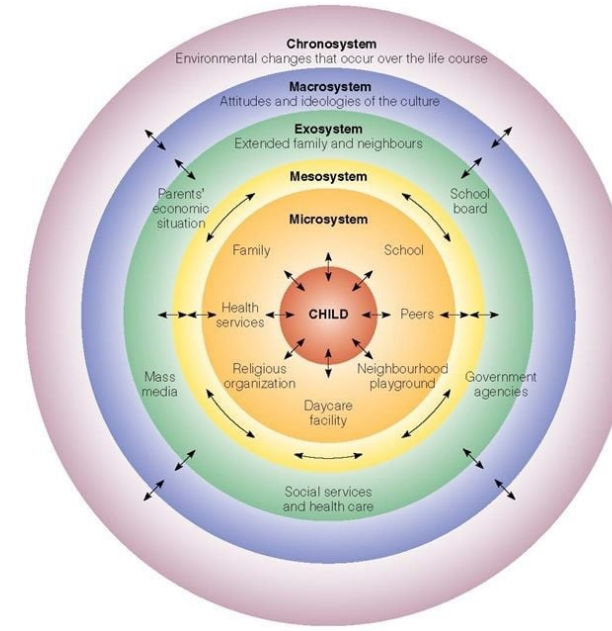
Key Terms

Attention Deficit/Hyperactivity Disorder (ADHD): A life-long condition that affects a child's daily life. It is often characterized by symptoms of impulsivity, short attention span, and hyperactivity (U.S. Department of Health and Human Services, 2023).

Behavioral Therapy: The goal of behavior therapy is to help children with ADHD manage their behaviors and how to increase their positive behaviors. For children this often entails their parents being involved in therapy as well and incorporating it with their home life (Centers for Disease Control and Prevention, 2023).

Framework

Bronfenbrenner ecological system theory describes the multisystem program that surrounds a child that directly affects them (Lopez et al., 2021). The model can evaluate the internal and external factors that contribute to a child and their development.



<https://www.simplypsychology.org/bronfenbrenner.html>

Methodology

Proposed RQ

In children with ADHD, how does behavioral therapy combined with medications compared to behavioral therapy alone affect a child's behavioral and academic performance throughout a school year?

Research Design/Interventions

IV: Multifactorial treatment approach (behavioral therapy and medication) or behavioral therapy alone

DV: Child's behavior (qualitative), Test performance (quantitative)

Literature Sources

In a meta-analysis by Knopf (2021) behavioral interventions reduced ADHD symptoms and behavioral problems in children. Behavioral therapy also prevents further progression of further ADHD symptoms. The Centers for Disease Control and Prevention (CDC) recommends that behavioral therapy encourages proper behavioral in and out of the classroom if therapy is continued at home (2023). They state that after the age of six years old, children can be started on medication if needed. For children under six years of age they support behavioral therapy as first line treatment. The CDC states that medicating children under the age of six is not recommended because they do not know the long-term side effects of ADHD medications and children tend to have more side effects from medications. They also go on to state that parental behavior training helps parents adapt to their child's needs, gives them tools to parent their child in an effective manner, and has shown to work equally effective as most ADHD medications on the market. According to the Mayo Foundation for Medical Education and Research, ADHD behavioral therapy is multifaceted and there are several avenues through which therapy can take place (2019). Forms of therapy include social skills training, parent skills training, psychotherapy and parent therapy. This multifaceted approach to therapy can also reduce other coexisting conditions a child with ADHD may struggle with including anxiety and depression.

SNAP-IV Teacher and Parent Rating Scale: https://www.ohsu.edu/sites/default/files/2022-01/SNAP_ADHD_Rating_Scale.pdf

Data Collection

N = 100; Children, aged 6-10, diagnosed with ADHD at Roosevelt Elementary School in Hays, KS.

n = 50 children undergoing behavioral therapy

n = 50 children undergoing behavioral therapy and pharmacological treatment

Ethical Considerations

Seeking full review from Roosevelt Elementary School, Department of Nursing, Fort Hays State University (FHSU), and Institutional Review Board.

Results/Findings

Projected Data Analysis Method

An independent T-test technique will be utilized to compare the efficacy of ADHD medication to behavioral therapy in children's test scores and behaviors.

Literature Findings

This meta-analysis looked at 62 randomized clinical trials, 2, 885 participants, and the mean age was 8.78 years old (Knopf, 2021). This meta-analysis also looked at control groups which did not utilize any medication to treat their ADHD. The meta-analysis was able to conclude that delaying behavioral interventions posed negative risks to the child, including an increase in negative behaviors that negatively impact academic and social well-being. The behavioral interventions had a positive impact on reduction of ADHD symptoms, behavioral problems and global impairment. The CDC states that changes in the classroom along with behavioral therapy creates a positive environment for children to learn, positive attitude towards school, and better academic performance (2023). According to the Mayo Foundation, the best treatment results occur when there is a team approach including the child, parent, teachers, therapists, and physicians (2021).



<https://www.cdc.gov/childrensmenalth/parent-behavior-therapy.html>

Discussion

Based on the pending results we would be able to gather further information on how to best treat ADHD in children. If the results show that behavioral therapy works, then there would be changes in practice to reflect the results. By implementing new behavioral tactics, health care professionals will be able to readdress behaviors during nursing cares. For this research study, the hope is to sustain long term beneficial treatment for adults if this treatment is implemented during the studies age range.

Conclusion

Pending review of the experiment and results of the SNAP-IV teacher and parent scale would determine the efficacy of the research. Research has shown how behavioral therapy and classroom modifications improve symptoms of ADHD in children.

Future research suggestions for management of ADHD would be a longer study period and earlier implementation to see long-term results. The major key point for future research would be consist treatment along with changes with the child as they grow and develop.

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