

Received: 17 July 2024, Accepted: 28 August 2024  
DOI: <https://doi.org/10.33282/rr.vx9i2.157>

## **Understanding Attention Deficit Hyperactivity Disorder (ADHD): A Comprehensive Case Study of Diagnosis, Management, and Societal Impact**

### **Authors:**

Ms. Aqsa Ijaz (MPhil Student, Department of Applied Psychology, NUML RWP)

Dr. Anila Sadaf (Head/Assistant Professor, Department of Applied Psychology, NUML RWP)

Ms. Rida Kainaat (Lecturer, Department of Applied Psychology, NUML RWP) (03345055566 & [rida.kainaat@numl.edu.pk](mailto:rida.kainaat@numl.edu.pk))

### **ABSTRACT**

This case report studies the assessment and intervention for a 14-year-old male with Attention Deficit Hyperactivity Disorder (ADHD). The child existing with symptoms including difficulty completing daily tasks, inattention, hyperactivity, impulsivity, and challenges in social communication. Formal assessments such as the Conner's Teacher and Parent Rating Scales and Colored Progressive Matrices (CPM), along with informal behavioral observations and intake interviews, maintained an initial ADHD diagnosis according to DSM-5-TR criteria. Treatment plans focused on multi-modal interventions, including medication management with potential stimulant or non-stimulant options, Applied Behavior Analysis (ABA) for behavioral modification, and social skills training to enhance communication and conflict determination abilities. Additional therapies, such as play therapy and parent education, were also recommended to temporary emotional regulation and create a supportive home environment. This integrative approach, talking both cognitive and behavioral dimensions, aimed to improve the child's focus, reduce impulsivity, and increase social functioning.

---

**Keywords:** ADHD, social skills training, behavior therapy, cognitive development, ABA

## INTRODUCTION

Attention Deficit Hyperactivity Disorder (ADHD) is a predominant neurodevelopmental disorder manifest by symptoms of inattention, hyperactivity, and impulsivity. These symptoms can significantly restrict with many features of a child's life, including academic performance, peer relationships, and family dynamics. ADHD affects approximately 5-10% of school-aged children worldwide, with symptoms frequently continuing into adolescence and adulthood (American Psychiatric Association, 2013). The roots of ADHD are complicated, with genetic, neurological, and environmental factors all donating to its development. Earlier studies have highlighted that early diagnosis and intervention are vital in mitigating the adverse effects of ADHD on cognitive, behavioral, and social development (Barkley, 2015).

Research on ADHD has discovered various factors contributing to its appearance. For example, a study by Faraone et al. (2005) underlined the strong genetic link in ADHD, suggesting that children with a family history of the disorder are at higher risk. Additionally, environmental influences, such as prenatal experience to toxins, have been identified as potential risk factors (Banerjee et al., 2007). Neuroimaging studies have also exposed structural differences in the prefrontal cortex and basal ganglia of individuals with ADHD, areas related with attention regulation and impulse control (Shaw et al., 2007). These findings underline the complexity of ADHD and the need for an inclusive assessment and intervention method.

Behavioural therapies have constantly established effectiveness in managing ADHD symptoms. Techniques such as Applied Behaviour Analysis (ABA) and Cognitive

Behavioural Therapy (CBT) have revealed promise in reducing hyperactivity and impulsivity while successful attention and social skills (Pelham & Fabiano, 2008). Studies by Hinshaw et al. (2002) and Fabiano et al. (2009) create that relating behavioural interventions with parent training and social skills training results in more favourable outcomes than separate treatments. These therapies purpose to address the core symptoms of ADHD, maintenance academic performance, and foster better peer relationships.

This case study pursues to increase on the current body of research by presenting an in-depth assessment and intervention plan for a 14-year-old diagnosed with

ADHD. It discovers a multi-modal approach, integrating behavioural therapy, social skills training, parental support, and play therapy. This organized intervention aims to address the cognitive, behavioural, and social challenges associated with ADHD, eventually improving the child's overall functioning and quality of life.

## Objectives of Study

The main objectives of this study are to measure the behavioral, cognitive, and social challenges associated with ADHD in a 14-year-old adolescent. To implement evidence-based interventions to talk ADHD symptoms and improve academic, behavioural, and social outcomes. To evaluate the effectiveness of various therapeutic approaches, including behavioral therapy, social skills training, and family education, in managing ADHD symptoms.

## Hypothesis of Study

The study hypothesizes that a mixture of behavioral therapy, social skills training, and parental support will meaningfully decrease ADHD symptoms in the adolescent, prominent to improved focus, impulse control, and social interactions.

## METHOD

### Research Design

This study develops a single-case, observational design to articulate the assessment and intervention process for ADHD in a clinical setting. Both quantitative and qualitative data were collected through formal assessments, behavioral observations, and parental feedback.

### Participant's

The participant in this study is a 14-year-old male student referred to a clinical psychologist due to worries about his academic performance, behavioral issues, and difficulties with peer relationships. The participant was diagnosed with ADHD following a detailed assessment.

### Illness Recount and Family History

Child parents described that he struggled with maintaining attention, sitting still, and avoiding careless mistakes in his schoolwork. His impulsive behavior and excessive physical movement were noted both at home and in the classroom, impacting his academic performance and social relationships. Child comes from a nuclear family where both parents are employed full-time. His family history includes a sibling previously diagnosed with ADHD, suggesting a possible genetic predisposition.

### Background Information

Child was born full-term, with no important medical complications during infancy and primary childhood. Developmental milestones were normally on track; however, difficulties with attention and behavior became obvious once he entered formal schooling at the age of six. Teachers expressed worries about his ability to follow instructions and stay focused, while his parents observed increased impulsivity and hyperactive behavior at home.

### Assessment

#### Informal assessment

The child disorder was observed through behavioral observation and a clinical interview with his mother. Observations in various settings provided context-specific data on child attention span, impulse control, and social interactions.

### Formal assessment

#### Conner's Teacher and Parent Rating Scales:

These scales provided quantitative understandings into child symptoms of inattention, hyperactivity, and oppositional behavior. Results designated significant ADHD markers, supporting the diagnosis.

#### Colored Progressive Matrices (CPM):

This nonverbal test measured child cognitive abilities, mostly focusing on fluid intelligence, which helped rule out intellectual impairment.

### Intervention

The intervention for child included a multi-modal approach to address the various measurements of ADHD:

#### Medication Management:

Association with a psychiatrist was started to consider medication options, including stimulants (e.g., methylphenidate) and non-stimulants (e.g., atomoxetine) to accomplish symptoms of inattention and hyperactivity.

#### Behavioral Therapy:

Applied Behavior Analysis (ABA) was used to help child study impulse control and encourage positive behaviors. A token economy system satisfied completion of tasks and appropriate behavior.

#### Social Skills Training:

Individual sessions were conducted to develop child communication, conflict resolution, and peer interaction skills, essential for development better social relationships.

#### Play Therapy:

Play therapy techniques, such as storytelling and role-playing, acceptable child to express emotions and build coping strategies in a non-threatening way.

#### Parental Education and Support:

Psychoeducation sessions were held with child parents to help them understand ADHD, implement structured routines, and provide reliable behavioral support at home.

Each component of the intervention was personalized to target specific areas of difficulty identified in child assessment, with a goal to improve his overall functioning and quality of life. This structured approach required to improve attention child, reduce impulsive behavior, and foster a supportive home environment.

## Results and Conclusion

**Table 1.1**

*Representing teachers rating on Conner's*

Areas	Score	T Score	Percentile	Category
Oppositional	7	62	86	Mildly atypical
Inattention	7	64	92	Mildly atypical
Hyperactivity	11	89	98	Markedly atypical
ADHD Index	17	71	54	Average typical score

**Table 1.2**

*Representing parents rating on Conner's*

Areas	Score	T Score	Percentile	Category
Oppositional	12	78	98	Mildly atypical
Inattention	13	81	96	Mildly atypical
Hyperactivity	12	89	92	Markedly atypical
ADHD index	20	76	93	Average typical score

## Conclusion

In conclusion, the inclusive psychological assessment of the client, mentioned to as client, exposes a complex profile marked by ADHD challenges. The addition of data from intake interviews, developmental assessments, behavioral checklists, and formal assessment paints a detailed picture of client needs and areas for intervention.

## Discussion

Subsequent a thorough assessment of client case, it is manifest that he is facing significant challenges associated with Attention-Deficit/Hyperactivity Disorder (ADHD). The interviews with the family, observations, and assessments have provided appreciated insights into client academic struggles, behavioral difficulties, and social challenges. Additionally, the family history of ADHD, including a sibling with a similar diagnosis, proposes a genetic predisposition, highlighting the importance of a comprehensive approach to intervention. Client parents have expressed worries about the impact of his symptoms on academic performance and family dynamics. They reminder the difficulty in providing undivided attention due to their busy schedules, which may contribute to client attention-seeking behaviors. The cooperative effort between parents, educators, and mental health professionals is crucial in addressing the complicated nature of ADHD and promoting client overall well-being.

**Table 1.3**

*Representing colors progressive matrices (CPM)*

Total score	30
Percentile	45%
Grade	III
Time taken	25minutes

**References**

- 1) American Psychiatric Association (2013) Diagnostic and statistical manual of mental disorders, 5th (edn.), US.
- 2) American Psychiatric Association (2013) Diagnostic and Statistical Manual of Mental Disorders. 5th ed. American Psychiatric Association; Washington, DC, USA.
- 3) Mirsky A.F. Disorders of attention (1996) a neuropsychological perspective. In: Lyon R.G., Kranesgor N.A., editors. Attention, Memory and Executive Function. Paul, H. Brookes; Baltimore, MD, USA.
- 4) Banerjee, T. D., Middleton, F., & Faraone, S. V. (2007). Environmental risk factors for attention-deficit hyperactivity disorder. *Acta Paediatrica*, 96(9), 1269-1274. <https://doi.org/10.1111/j.1651-2227.2007.00430.x>
- 5) Shaw, P., Eckstrand, K., Sharp, W., Blumenthal, J., Lerch, J. P., Greenstein, D., & Rapoport, J. L. (2007). Attention-deficit/hyperactivity disorder is characterized by a delay in cortical maturation. *Proceedings of the National Academy of Sciences*, 104(49), 19649-19654. <https://doi.org/10.1073/pnas.0707741>