

Assessment of Behaviour problems among Non-ADHD and ADHD Children in Relation to Child Variables

Research Scholar T. Deepa Reddy, Professor K.Anuradha

Department of Homescience
Sri Venkateshwara University Tirupati

Abstract- Attention Deficit Hyperactive Disorder (ADHD) is a common neurodevelopmental disorder characterized persistent patterns of inattention, hyperactivity and impulsivity. Children with ADHD may also experience significant behavioral difficulties that can affect their academic performance, social relationships and family functioning. Comparing behavioural problems among children Non-ADHD and ADHD children can help identify areas early intervention. In the present study behavioural problems were assessed by using a standardized behaviour scale. The findings indicated a significant difference in overall behavioural scores between the ADHD and Non-ADHD groups.

Keywords— ADHD, Non-ADHD Children, Behaviour Problems, Child Variables, Attention-Deficit/Hyperactivity Disorder, Childhood Behaviour, Emotional and Social Behaviour, Hyperactivity, Inattention, Impulsivity, Child Development, Behavioural Assessment, Psychological Adjustment, Comparative Study.

I. INTRODUCTION

Childhood is an important period of physical, cognitive, emotional and social development. During this period, children develop behavioural patterns that influence their academic performance, relationships, and ability to adapt to different environments. Although occasional behavioural difficulties are common in childhood, persistent and severe behavioural problems may interfere with normal development and functioning.

Attention -Deficit/ Hyperactivity Disorder (ADHD) is one of the most commonly recognized neurodevelopmental disorders of childhood. It is characterized by developmentally inappropriate levels of inattention and / or hyperactivity and impulsivity. Symptoms may be expressed differently among individual children and may affect their performance at school, interactions with peers, relationships with parents and participation in daily activities.

Children with ADHD may have difficulty sustaining attention, following instructions, organizing activities, controlling impulses. These difficulties may

contribute to secondary behavioural problems such as oppositional behaviour, aggression, emotional instability, poor social adjustment and academic difficulties.

Behaviour problems are important to assess because they may be overlooked when attention is focused primarily on the core symptoms of ADHD. Understanding the differences between children with ADHD and without ADHD can help parents, teachers and professionals recognize children who require additional support and guidance.

II. METHODOLOGY

Sample: The sample children for Non-ADHD and ADHD children were selected

Tools for the Data

For the assessment of children's Behaviour problems, the Behaviour problems Checklist (BPCL) developed by Bharathi and Anuradha (2004) was used. As per the authors, the scale was categorized into 5 aspects Home, Health, Emotional, School and Social aspects. The intensity of scores for each area was counted by adding all the points given for each

area was counted by adding all the points given for each item on a response category ranging from 1 to 3.

At, school teachers were asked to rate the behaviour problems of identified children in the aspects of school, social and emotional areas.

The house addresses of the children were collected from the schools and the investigator personally visited the homes of the children. Mothers were collected from some mothers who visited the school to picking up the child and 10 minutes for mothers to rate the Behaviour Problems Checklist.

Inclusion Criteria:

- Those whose parents have given consent data
- Children with borderline ADHD, and those whose who were attending normal school with average IQ.

Exclusion Criteria

- Children who did not return consent forms and those suffering from chronic illness or neurological problems like epiplesy, cerebral palsy, autism and movement disorders using medicines, severe ADHD had below average IQ were excluded.

Table 1: Distribution of Sample children According to Child Variables.

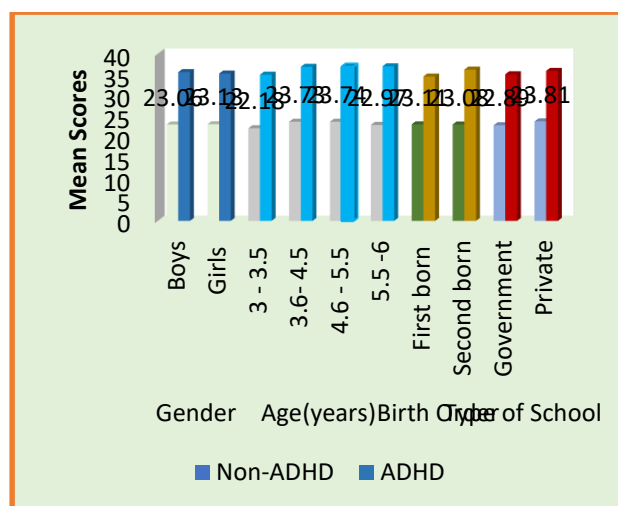
Student Variables		Group					
		NON- ADHD (n=300)		ADHD (n=100)		Total (N=400)	
		Frequency	Percent	Frequency	Percent	Frequency	Percent
Type of School	Government	150	50.0	62	62.0	212	53.0
	Private	150	50.0	38	38.0	188	47.0
	Total	300	100.0	100	100.0	400	100.0
Gender	Boys	145	48.3	44	44.0	189	47.3
	Girls	155	51.7	56	56.0	211	52.8
	Total	300	100.0	100	100.0	400	100.0
Age (years)	< 3.5	75	25.0	30	30.0	105	26.3
	3.6–4.5	79	26.3	35	35.0	114	28.5
	4.6–5.5	100	33.3	25	25.0	125	31.3
	> 5.5	46	15.3	10	10.0	56	14.0
	Total	300	100.0	100	100.0	400	100.0
	Mean Age	4.56 ± 1.01		4.32 ± 0.97		4.50 ± 1.01	
Birth Order	First born	168	56.0	48	48.0	216	54.0
	Second born	132	44.0	52	52.0	184	46.0
	Total	300	100.0	100	100.0	400	100.0

Table no 2. Mean Behaviour Problems of Non-ADHD and ADHD Children According to Child variables.

Table 2 Mean Behaviour Problems Scores of NON-ADHD and ADHD Children According to Child Variables.

Child variables		Behaviour problems scores (Mean ±S.D)				
		Non-ADHD (n=300)		ADHD (n=100)		t-value (p-value)
		N	Mean ± S.D	N	Mean ± S.D	
Gender	Male	150	23.06 ± 2.06	44	35.61±3.03	31.64** (0.000)
	Female	150	23.13 ± 2.17	56	35.27 ± 2.26	35.32** (0.000)

Age (years)	< 3.5 Years	75	22.18 ± 2.16	30	35.00 ± 1.94	28.25** (0.000)
	3.6- 4.5 Years	79	23.73±1.83	35	36.88 ± 2.11	33.74** (0.000)
	4.6 - 5.5 Years	100	23.74 ± 2.34	25	36.88 ± 1.94	25.91** (0.000)
	>5.5 years	46	22.97 ± 2.13	10	37.00± 4.47	15.07** (0.000)
Birth Order	First Order	168	23.11 ± 2.15	48	34.56 ± 2.06	32.83** (0.000)
	Second Order	132	23.08 ± 2.08	52	36.21 ± 2.84	34.59** (0.000)
Type of School	Government	150	22.89 ± 1.99	62	35.11 ± 2.31	38.76** (0.000)
	Private	150	23.81 ± 2.22	38	35.92 ± 3.03	27.749** (0.000)



0.001) and $r > 5.5$ years 15.07, $p < 0.001$). As age increased, the behaviour problems scores also increased among ADHD children.

The behaviour problems scores according to birth order of children showed that there was significant difference between first born children of both Non-ADHD category ($t = 32.83$, $p < 0.001$) and ADHD category. The difference between Non-ADHD and ADHD groups of second born children are also significant and the t -values were 34.593 ($p < 0.001$). Thus, comparatively second born children had more behaviour problems scores than first born of ADHD children.

From table 2, that there was significant difference in the problems refer to a category of problems that occur among children in different stages of development. Behaviour problems refer to those behaviours that cause trouble to children themselves or parents and significant others.

Table 2 and fig 2, that there was significant difference in the mean behaviour problems scores of Non-ADHD and ADHD children. The t -values were significant. However, when data was observed between behaviour problems scores of Non-ADHD boys and ADHD boys the t -value was 31.64 ($p < 0.001$) and for Non-ADHD girls and ADHD girls the t -value was 35.32 which were significant at 0.001 level. Comparatively the behaviour problems scores were more for boys and girls of ADHD group.

Age wise data of behaviour scores also showed similar trend that is comparatively ADHD children had more behaviour problems scores than Non-ADHD children. The t -values were significant for < 3.5 years age group ($t = 28.25$, $p < 0.001$) 3.6-4.5 years (33.74, $p < 0.001$), 4.6- 5.5 years (25.91 , $p <$

When the data is observed according to type of school, the behaviour problems scores of children showed that there was significant difference between children studying in government sector between in Non-ADHD and ADHD category ($t = 38.76$, $p < 0.001$). In second born children of both Non-ADHD and ADHD group that there was significant differences Non-ADHD and ADHD category in private sector ($t = 27.47$, $p < 0.001$). Thus, comparatively against government and private. Thus, comparatively private schools children had more behaviour problems scores than government school in ADHD children.

Implications of the study

The findings of the study decrease behaviour problems. It can be carried out in mother's meet at anganwadis and Parent -Teacher Association (PTA) meetings in private sectors.

As the problem of ADHD has been increasing globally and in our country also, knowing about significant determinants will help to plan preventive

programmes to reduce the prevalence of ADHD among young children.

III. CONCLUSION

- Comparatively children studying in private schools had more behavior problems than children who were studying in government schools.
- The prevalence of behaviour problems was significantly higher among ADHD children compared to Non-ADHD children.
- Externalizing behaviour problems such as aggression, hyperactivity, and conduct problems were common in ADHD children.
- Internalizing problems like anxiety and withdrawal were observed in both groups but more in ADHD children.
- Early identification and behavioural intervention are essential to reduce behaviour problems and improve social adaptability among ADHD children.
- Parental counselling and teacher training play vital role in management of behaviour problems.
- Significant association was found between behaviour problems and socio-demographic variables like age, gender, birth order.

REFERENCES

1. Berge JM, Tate AD, Trofholz A, Conger K, Neumark-Sztainer D. Sibling eating behaviours and parental feeding practices with siblings: similar or different? *Public Health Nutr.* 2016 Sep;19(13):2415-23. doi: 10.1017/S1368980016000860. Epub 2016 Apr 28. PMID: 27122059; PMCID: PMC5940331.
2. Bheema Raghu Nadhan Reddy, J.M Pawar, C. P Anadhakar, Lekha Mishra, Pankaj Goyal (2016) study of behavior problems in preschool children *Journal of Medical science and Clinical Research* vol 4 (12), pg. no. 14641-14649.
3. Datta P, Ganguly S, Roy BN. The prevalence of behavioral disorders among children under parental care and out of parental care: A comparative study in India. *Int J Pediatr Adolesc Med.* 2018 Dec;5(4):145-151. doi: 10.1016/j.ijpam.2018.12.001. Epub 2018 Dec 10. PMID: 30805551; PMCID: PMC6363262.
4. Dubois L, Farmer A, Girard M, Peterson K, Tatone-Tokuda F. Problem eating behaviors related to social factors and body weight in preschool children: A longitudinal study. *Int J Behav Nutr Phys Act.* 2007 Apr 4;4:9. doi: 10.1186/1479-5868-4-9. PMID: 17408478; PMCID: PMC1855064.
5. Gustafsson BM, Proczkowska-Björklund M, Gustafsson PA. Emotional and behavioural problems in Swedish preschool children rated by preschool teachers with the Strengths and Difficulties Questionnaire (SDQ). *BMC Pediatr.* 2017 Apr 21;17(1):110. doi: 10.1186/s12887-017-0864-2. PMID: 28431506; PMCID: PMC5401349.
6. Jyoti Prakash, A.K. Mitra, H.R.A. Prabhu Child and Behaviour: A School Based Study *Delhi Psychiatry Journal* 2008; 11:(1) © Delhi Psychiatric Society
7. Philip Jansen, Polderman, Bolhuis, Jaddoe, anderhulst, (2017), Philip, R., Jansen, T. and Polderman, J.C. (2018). Polygenic scores for schizophrenia and educational attainment are associated with behavioral problems in early childhood in the general population. 59(1), 39–47. Retrived from <https://doi.org/10.1016/j.humov.2017.12.002>.
8. Ramesh P. Adhikari, Nawaraj Upadhaya , Dristy Gurung , Nagendra P. Luitel, Matthew D. Burkey , Brandon A. Kohrt and Mark J.D. Jordans Perceived behavioral problems of school aged children in rural Nepal: a qualitative study . *Child and Adolescent Psychiatry and Mental Health* (2015) 9:25 DOI 10.1186/s13034-015-0061-8
9. Robert H. Bradley, Robert Corwyn Socioeconomic Status and Child Development February 2002 February 2002 *Annual Review of Psychology* 53(1):371-99 DOI:10.1146/annurev.psych.53.100901.135233.
10. Santos LM, Queirós FC, Barreto ML, Santos DN. Prevalence of behavior problems and associated factors in preschool children from the city of Salvador, state of Bahia, Brazil. *Braz J Psychiatry.* 2016 Mar;38(1):46-52. doi: 10.1590/1516-4446-2014-1596. Epub 2015 Sep 15. PMID: 26375917; PMCID: PMC7115462.