



EARLY DETECTION OF INTERNALIZING AND EXTERNALIZING PROBLEM IN CHILDREN ACCORDING TO THEIR PARENTS- A CROSS SECTIONAL STUDY

Pediatrics

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ABSTRACT

INTRODUCTION: Children Emotional behavioural problems can also define as either “internalizing” (emotional disorders such as depression and anxiety, obsessive-compulsive disorder (OCD), and thought problems) or “externalizing” (disruptive behaviours such as ADHD – Inattention/ Hyperactivity, Conduct disorder, and oppositional defiant problem).

AIM: The purpose of this Study is to early detection of internalizing and externalizing problem in children according to their parents.

METHODS: This was a Questionnaire Based cross-sectional study conducted from November 2018 to March 2020. The study was conducted in Rama Medical College Hospital & Research Centre, Ghaziabad, Uttar Pradesh. Used structured test – Binet-Kamat Intelligence Test, Adaptive Behavior Rating Scale (ABRS-II). The randomly selected children (Age 6 years to 10 Years) from different schools referred by doctors, teachers, tuition teacher, and parents for psychological evaluation and management for (Behaviour Issues, and Educational Difficulties). Total n 182). Used IBM- SPSS-25 software to analyzed Average, percentile, mean, variance, frequency, and paired t-test.

RESULTS- The current study found statistically significant that children have a better rate of Externalizing (ADHD Inattention t- value -3.094, Conduct disorder t- value 4.104, and Oppositional defiant problem t- value 4.782) and internalizing problems (Anxiety Problem t- value 3.065, Obsessive-Compulsive Problems t- value 3.953, and thought disorder t- value 4.539).

CONCLUSION: The current study found the positive and importance of early preventive psychological interventions and parenting focus to deal with early children's behaviour problems, and found positive correlation between externalizing and internalizing behaviour problem and intelligence. Early psychological intervention must be implemented early and consistently to assure the simplest opportunity for fulfilment in academics also as social interactions. Parents, teachers, Professionals like psychologists, school counsellors personnel providing additional support and directions for the remedial activities to enhance children's cognitive development, and behaviour problems. Increase parental resolve and teach parents about the shortcomings of previous strategies of avoidance and acquiescence. Children with psychological difficulties had better outcomes after positive counselling, remedial educational training, positive parenting and support, social support like group games, practical hobbies, and counselling to reduce behaviour problems and to supply increased opportunities for positive functioning and developments

KEYWORDS

Binet- Kamat Intelligence Test, Adaptive Behaviour Rating Scale (ABRS-II), Behaviour therapy, and positive Parenting counselling.

INTRODUCTION –

School going Children's behaviour in the age group of 6 to 12 years keeps changing as they start going to school. Children are already learning at birth, and they develop and learn at a rapid pace in their early years. Provides a critical foundation for lifelong progress, and the parents who provide for the care and education of children from birth through age 10 years have a great responsibility for their emotional, adjustment, cognition development, judgments, physical health, and education.

Psychological Mental health is very common in childhood and they include Somatic Issues , obsessive-compulsive disorder (OCD), anxiety, depression, disruptive (oppositional defiance disorder (ODD), conduct disorder (CD), attention deficit hyperactive disorder (ADHD) or developmental (speech/language delay, intellectual disability) disorders or pervasive (autistic spectrum) disorders [1].

School going children Emotional behavioural problems can also define as either “internalizing” (emotional disorders such as depression and anxiety, obsessive-compulsive disorder (OCD), and thought problems) or “externalizing” (disruptive behaviours such as ADHD – Inattention/ Hyperactivity, Conduct disorder, and oppositional defiant problem).

In this age of momentous change and stiffer competitions, many parents send their children to schools. These schools act as supporting services to parents in fulfilling their roles as providers, protectors, nurturers, disciplinarian, and interpreters of social and cultural heritage. In learning to adjust to the world in which the child is growing up, they develop certain kinds of behaviours that are annoying or embarrassing to the parents with whom they come in contact. Most of the Parents, teachers frequently label such behaviours as problem behaviours.

According to Campbell, 1995 study shown that serious problems with aggression and impulse control that are apparent by the school years are relatively stable and often persist to high school entry and beyond. [2] Not all children with early-appearing problems still have difficulties. But, a maximum number of youngsters identified with problems by school age will continue on a path toward externalizing problems or Internalising Problems. a minimum of 8% to 10% of children younger than 5 years' experience clinically significant and impairing condition problems, which include emotional, behavioural, and social relationship problems. [3]. Emotional, behavioural, and relationship disorders rarely are transient and sometimes have lasting effects, including measurable differences in brain functioning in school-aged children and a high risk of later psychological state problems. [4,5] Others have difficulties that either stabilize or worsen with development; still, other children don't show problems within the school period but develop problems by school entry, middle childhood, or even early adolescence.

MATERIAL & METHODS:

AIM and Objective

The purpose of this Study is to early detection of internalizing and externalizing problem in children according to their parents.

STUDY DESIGN

A Questionnaire Based cross-sectional study was conducted from November 2018 to March 2020. The study was conducted in Rama Medical College Hospital & Research Centre, Ghaziabad, Uttar Pradesh. A sample of 182 Pre- School going children from 3 to 7 years old. The moral review board initially approved Rama Medical College Hospital & Research Centre, Ghaziabad, Uttar Pradesh. Written consent was for each participant who volunteered and fulfilled the inclusion criteria- Inclusion Category- (1). Children (boys and girls) from 9 to 10 years old and (2). School going Children from different schools referred by doctors, teachers, tuition teacher, and parents for

psychological evaluation and management for (Behaviour Issues, and Educational Difficulties). Exclusion category No identifiable neurological, sensory, or physical impairment and people who were unable to talk /hear or intellectually disabled children had not been excluded from the study.

TOOL USED

Data was collected using a structured self-administered questionnaire having in one setting. It contained all socio-demographic characteristics. The second-conduct starchier standardizes assessment Adaptive Behavior Rating Scale (ABRS-II)- Internalizing, Externalizing disorder, Hypothesized Functions of behaviour-Attention Seeking, Social Status, Escape/Avoidance, Anxiety, Self-Indulgence, Defensive Reaction, Power/Control, and Revenge, and Mental Health Screening- ADHD Inattentive, ADHD Hyperactive, Conduct Disorder, Oppositional Defiant, Depression, Anxiety Disorder, OCD, Thought Disorder, and Autism Spectrum.

DATA COLLECTION PROCEDURES

First of all, a checklist of trials was administered on the subjects to induce their original viewpoint. The randomly selected children from different schools referred by doctors, teachers, tuition teacher, and parents for psychological evaluation and management for (Behaviour Issues, and Educational Difficulties) to Rama Medical College Hospital & Research Centre, Ghaziabad, Uttar Pradesh. The investigator was personally briefed about the purpose of the study, general instruction followed by the parents to fill in the questionnaire, and the confidentiality of the information. Each subject took about 60 minutes to respond to the above tools (Adaptive Behavior Rating Scale (ABRS-II), clinical interview, and counselling. Scoring was done consistently with the instructions given within the manual—parenting counselling and guidance to understand children's behavior, reward therapy, token technique, and management. 182 subjects have been selected randomly from different schools which consist 92 Boys and 90 Girls. A period of two years four months was devoted to the data collection.

ETHICAL STATEMENT

Ethical clearance was obtained from an ethical review board Rama

Medical College Hospital & Research Centre, Ghaziabad, Uttar Pradesh. The case file information was de-identified during data collection and was coded.

STATISTICAL TECHNIQUES USED:

The obtained data will be statistically analyzed by applying descriptive (Average, percentile, mean, standard deviation, and paired t-test) of the significance of mean differences in terms of various variables. We will enter all data and further Statistical Analysis will be done with the help of IBM- SPSS-25 software.

RESULT –

Table No.1- Distribution Of School Going Children Age And Socio-demographic Characteristics

Range	Boys (n92)	Girls (n90)	Total (n182)
Gender	92	90	182
AGE WISE			
6 Years Old	32 (34.78%)	16 (17.77%)	48 (26.37%)
7 Years Old	24 (26.08%)	7 (7.77%)	31 (17.03%)
8 Years Old	12 (13.04%)	37 (41.11%)	49 (26.92%)
9 Years Old	18 (19.56%)	17 (18.88%)	35 (19.23%)
10 Years Old	6 (6.52%)	13 (14.44%)	19 (10.43%)
SOCIOECONOMIC STANDARD (SES)			
Average economic status	73 (79.34%)	51 (56.66%)	124 (68.13%)
low economic status	19 (20.65%)	39 (43.33%)	58 (31.86%)

A total no of children is 206 enclosed in the study, seven parents did not fill the entire questionnaire properly, remaining seventeen parents did not return the questionnaire or they returned back questionnaire without responding to questionnaire. Finally, 182 parent's responses are enclosed in study around 92 boys and 90 girls. Of these 48 (26.37%) children from 6 years old, 31 (17.03%) children from 7 years, 49 (26.92%) children from 8 years, 35 (19.23%) children from 9 years and 19 (10.43%) children from 10 years old. All participants are lived in an urban area. Regarding socioeconomic standard (SES) 124 (68.13%) are from average economic status, and 58 (31.86%) are from low economic status. Descriptive statistic for all questionnaire measures is presented in Table. 1.

Table No. 2- Shows Mean, Std. Deviation, Paired T-value And P-value Of Behaviour Difficulties In Children

	Paired Samples Statistics			Paired Samples Test						
	Paired Samples Statistics			Paired Differences						
	Gender	Mean	Std. Deviation	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	Sig. (2-tailed)
							Lower	Upper		
Pair 1 Inattentive	Boys	56.77	12.851	-4.889	14.991	1.580	-8.029	-1.749	-3.094	.003
	Girls	61.66	8.695							
Pair 2 Hyperactive	Boys	55.96	12.456	1.522	14.063	1.482	-1.423	4.468	1.027	.307
	Girls	54.43	12.314							
Pair 3 Conduct	Boys	59.23	10.775	9.033	20.882	2.201	4.660	13.407	4.104	.000
	Girls	50.20	15.940							
Pair 4 Oppositional	Boys	57.22	11.148	9.322	18.495	1.950	5.449	13.196	4.782	.000
	Girls	47.90	15.019							
Pair 5 Depression	Boys	58.79	9.885	1.333	15.731	1.658	-1.961	4.628	.804	.423
	Girls	57.46	12.351							
Pair 6 Anxiety	Boys	61.90	9.967	5.200	16.095	1.697	1.829	8.571	3.065	.003
	Girls	56.70	11.704							
Pair 7 Obsessive-compulsive disorder (OCD)	Boys	59.10	11.841	7.589	18.212	1.920	3.775	11.403	3.953	.000
	Girls	51.51	14.689							
Pair 8 Thought	Boys	58.76	12.926	8.256	17.255	1.819	4.642	11.869	4.539	.000
	Girls	50.50	13.860							

As shown in the table. 2 the overall rate of externalizing problem, The paired t-test outcomes obtained from Pair 1 (ADHD Inattention) revealed the mean difference in level of ADHD Inattention problem was -4.889 (t -3.094, statistically significant at $p < 0.05$ level). Children experienced ADHD Inattention 42 (23.07%) of whom was included in clinical range, 11 (6.04%) are from risk range, and 38 (20.87%) are from the normal range. Based on previous research with children with ADHD [6,7,8,9], would show less cognitive and affective empathy than healthy developing children. Some studies have shown that children with ADHD show more dysfunctional social behavior than typically developing children of the same age [10,11].

pair 2 (ADHD Hyperactive) revealed the mean difference in level of

ADHD Hyperactive problem was 1.522 (t 1.027, statistically not significant at $p > 0.05$ level). Experienced ADHD Hyperactive 38 (20.87%) of whom was included in the clinical range, 26 (14.28%) are from risk range, and 14 (7.69%) are from the normal range. Pair 3 (Conduct disorder) revealed the mean difference in level of Conduct disorder problem was 9.033 (t 4.104, statistically significant at $p < 0.05$ level). The paired t-test outcomes obtained from Conduct disorder 35 (19.23%) of whom was included in the clinical range, 18 (9.89%) are from risk range, and 21 (11.53%) are from the normal range, and The paired t-test outcomes obtained from pair 4 (Oppositional defiant problem) revealed the mean difference in level of Oppositional defiant problem was 9.322 (t 4.782, statistically significant at $p < 0.05$ level). The paired t-test outcomes obtained from and Oppositional defiant

problem 44 (24.17%) of whom was included in clinical range, 21 (11.53%) are from risk range, and 29 (15.93%) are from the normal range. [12]

Table No. 3- As Shown Overall Rate Of Externalizing Problem.

Externalizing problem			
	Clinical Range (n182)	Risk Range (n182)	Low or Normal Range(n182)
Inattention	42 (23.07%)	11 (6.04%)	38 (20.87%)
Hyperactive	38 (20.87%)	26 (14.28%)	14 (7.69%)
Conduct Problem	35 (19.23%)	18 (9.89%)	21 (11.53%)
Oppositional Defiant problem	44 (24.17%)	21 (11.53%)	29 (15.93%)

The paired t-test outcomes obtained from pair 5 (Depression) revealed the mean difference in level of depression problem was 1.333 (t .804, statistically not significant at $p > 0.05$ level. According to present study result children experienced depression 32 (17.58%) of whom was included in clinical range, 16 (8.79%) are from risk range, and 36 (19.78%) are from the normal range.

The paired t-test outcomes obtained from pair 6 (Anxiety) revealed the mean difference in level of Anxiety problem was 5.200 (t 3.065, statistically significant at $p < 0.05$ level. Anxiety 48 (26.37%) of whom was included in the clinical range, 28 (15.38%) are from risk range, and 18 (9.89%) are from the normal range. Many early longitudinal studies have demonstrated that it is not uncommon for scholars to have fears in general, but most notably, fears of the dark and fears of animals. [13,14,15]. Fears of physical injury are also prominent among school children. [16] Although some fears are normative and transient in development, it is now known that other anxiety patterns can be distressing and impairing to scholars and their families, persist, worsen in severity, and are associated with additional comorbidities in later childhood.[17]

The paired t-test outcomes obtained from pair 7 (Obsessive-Compulsive Problems) revealed the mean difference in level of Obsessive-Compulsive Problems problem was 7.589 (t 3.953, statistically significant $p < 0.05$ level. Obsessive-Compulsive Problems 34 (18.68%) of whom was included in the clinical range, 9 (4.94%) are from risk range, and 32 (17.58%) are from the normal range. and from pair 8 (thought disorder) revealed the mean difference in level of thought disorder problem was 8.256 (t 4.539, statistically significant $p < 0.05$ level). thought disorder 22 (12.08%) of whom was included in the clinical range, 16 (8.79%) are from risk range, and 41 (22.52%) are from the normal range. The present study shows boys also exhibit at a risk level of internalizing problem. But most of the studies show boys exhibit a lower rate of internalizing problem. According to DSM categorizes anxiety disorders into multiple discrete categories, including separation anxiety disorder (SAD), obsessive-compulsive disorder (OCD), and generalized anxiety disorder (GAD). Somatic disorder is thought to occur more commonly in older children, and, therefore, is rarely observed in early childhood. [18,19] There are no age differences in the incidence of internalizing problems in scholars. [20]

Table No. 4- As Shown Overall Rate Of Internalizing Problem.

Internalizing problem			
	Clinical Range (n182)	Risk Range (n182)	Low or Normal Range(n182)
Depression Problem	32 (17.58%)	16 (8.79%)	36 (19.78%)
Anxiety Problem	48 (26.37%)	28 (15.38%)	18 (9.89%)
Obsessive-compulsive disorder (OCD)	34 (18.68%)	9 (4.94%)	32 (17.58%)
Thought Problem	22 (12.08%)	16 (8.79%)	41 (22.52%)

CONCLUSION

School going children as they begin the developmental journey to accumulate the skills and subsets they need to realize -schooling and thus the environment plays an important part of the training scope and sequence providing both the stimulation and reinforcement needed to start out to gather information and knowledge. the current study found statistically significant that school going children have a better rate of Externalizing (ADHD Inattention, Conduct disorder, and Oppositional defiant problem) and internalizing problems (Anxiety Problem, Obsessive-Compulsive Problems, and thought disorder), the pervasiveness of behavior problems at school , home and even in

academic. -school is highlighted as an environment during which children's intellectual /Emotional problems are often identified and where an honest psychological state is usually promoted. [21] The current study noted school children with low social interaction and lack of parenting skills or combination with behavioral difficulties have high-risk indicators. Even Ogundele 2018, found genes and environmental factors protective and risk factors affected protective and risk factors of a behavior problem.[22]

The current study found the positive and importance of early preventive psychological interventions and parenting focus to deal with early -school children's behavior problems, and found positive correlation between externalizing and internalizing behaviour problem and intelligence. Early psychological intervention must be implemented early and consistently to assure the simplest opportunity for fulfilment in academics also as social interactions. Parents, teachers, Professionals like psychologists, school counsellors personnel providing additional support and directions for the remedial activities to enhance children's cognitive development, and behaviour problems. Increase parental resolve and teach parents about the shortcomings of previous strategies of avoidance and acquiescence. AAP (American Academy of Paediatrics) guideline for ADHD treatment to emphasize that first-line treatment of scholars with well-established ADHD should be family-focused psycho-therapy.[23] Children with psychological difficulties had better outcomes after positive counselling, remedial educational training, positive parenting and support, social support like group games, practical hobbies, and counselling to reduce behavior problems and to supply increased opportunities for positive functioning and developments.

AUTHOR'S CONTRIBUTIONS

Dr. Amit Kumar Modi distributed the manuscript from its conception, analysis, scoring and interpretation of data and wrote the manuscript, Dr. Bhawna Kohli interpretation of data and commented on and wrote the manuscript for publication, and Dr. Mala Chaurasia Modi participated in data collection and analysis. All authors approved the final manuscript.

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LIMITATIONS OF THE STUDY

The Current Study has some necessary limitations that though to be unbroken in mind once decoding the results, first area based study, and second limited sample size. Suggested longitudinal studies are necessary to establish the importance of early preventive psychological interventions and parenting-focus to address early childhood behaviour problems.

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Conflict of Interest- The authors declare that they have no conflict of interest.

REFERENCES

1. Parry TS. Assessment of developmental learning and behavioural problems in children and young people. *Med J Aust*. 2005;183:43-48.
2. Campbell SB. Behavior problems in preschool children: a review of recent research. *Journal of Child Psychology Psychiatry, and allied disciplines*. 1995 Jan; 36(1):113-49.
3. Egger HL, Angold A. Common emotional and behavioral disorders in preschool children: presentation, nosology, and epidemiology. *J Child Psychol Psychiatry*. 2006;47(3-4):313-337
4. Luby JL, Belden AC, Pautsch J, Si X, Spitznagel E. The clinical significance of preschool depression: impairment in functioning and clinical markers of the disorder. *J Affect Disord*. 2009;112(1-3):111-119
5. Scheeringa MS. Post-Traumatic Stress Disorder. In: DelCarmen-Wiggins R, Carter A, eds. *Handbook of Infant, Toddler, and Preschool Mental Health Assessment USA*. Oxford, United Kingdom: Oxford University Press; 2004:377-397
6. Braaten, E. B., & Rosen, L. A. (2000). Self-regulation of affect in attention deficit/hyperactivity disorder (ADHD) and non-ADHD boys: Differences in empathic responding. *Journal of Consulting and Clinical Psychology*, 68, 313- 321. doi:10.1037/0022-006X.68.2.313.
7. Clark, T., Feehan, C., Tinline, C., & Vostanis, P. (1999). Autistic symptoms in children with attention deficit- hyperactivity disorder. *European Child and Adolescent Psychiatry*, 8, 50-55. doi: 10.1007/s007870050083.
8. Cordier, R., Bundy, A., Hocking, C., & Einfeld, S. (2009). A model for play-based intervention for children with ADHD. *Australian Occupational Therapy Journal*, 56, 332-340. doi: 10.1111/j.1440-1630.2011.00928.x.

9. Dyck, M. J., Ferguson, K., & Shochet, I. M. (2001). Do autism spectrum disorders differ from each other and from non-spectrum disorders on emotion recognition tests? *European Child and Adolescent Psychiatry*, 10, 105-116. doi: 10.1007/s007870170033.
10. Leopold, E. E., & Bundy, A. (2000). Playfulness in children with attention deficit hyperactivity disorder. *Occupational Therapy Journal of Research*, 20(1), 61-82.
11. Melnick, S., & Hinshaw, S. (1996). What they want and what they get: The social goals of boys with ADHD and comparison boys. *Journal of Abnormal Child Psychology*, 24, 169-185. doi: 10.1007/BF01441483.
12. Egger HL, Angold A. Anxiety disorders. In: Luby JL, editor. *Handbook of preschool mental health*. New York, London: Guilford Press; 2006. pp. 137-164.
13. Earls F. Prevalence of behavior problems in 3-year-old children: A cross-national replication. *Arch Gen Psychiatry*. 1980;37(10):1153-1157.
14. Macfarlane JW, Allen L, Honzik MP. A developmental study of the behavior problems of normal children between twenty-one months and fourteen years. *Publ Child Dev Univ Calif*. 1954;2:1-222.
15. Richman N, Stevenson J, Graham P. *Preschool to school: a behavioural study*. London: Academic Press; 1982.
16. Spence SH, Rapee R, McDonald C, et al. The structure of anxiety symptoms among preschoolers. *Behav Res Ther*. 2001;39(11):1293-1316.
17. Warren S. Diagnosis of anxiety disorders in infants, toddlers, and preschool children. In: Narrow W, First M, Sirovatka P, et al., editors. *Age and gender considerations in psychiatric diagnosis: a research agenda for DSM-V*. Arlington (VA): American Psychological Association; 2007. pp. 201-214.
18. Costello EJ, Egger HL, Angold A. The developmental epidemiology of anxiety disorders: phenomenology, prevalence, and comorbidity. *Child Adolesc Psychiatr Clin N Am*. 2005;14(4):631-648.
19. Birmaher B, Ollendick TH. Childhood-onset panic disorder. In: Ollendick TH, March JS, editors. *Phobic and anxiety disorders in children & adolescents: a clinician's guide to effective psychosocial and pharmacological interventions*. New York: Oxford University Press; 2004. pp. 303-333.
20. Manolitsis, G., & Tafa, E. (2005). Checklist for screening behavioural problems in preschool children. *Psychology: The Journal of the Hellenic Psychological Society*, 12 (2), 153-178 [in Greek].
21. Almqvist, L. (2006). Patterns of engagement in young children with and without developmental delay. *Journal of Policy and Practice in Intellectual Disabilities*, 3(1), 65-75.
22. Ogundele, M. O. (2018). Behavioural and emotional disorders in childhood: A brief overview for paediatricians. *World Journal of Clinical Pediatrics*, 7(1), 9.
23. Wolraich M, Brown L, Brown RT, et al; Subcommittee on Attention-Deficit/Hyperactivity Disorder; Steering Committee on Quality Improvement and Management. ADHD: clinical practice guideline for the diagnosis, evaluation, and treatment of attention-deficit/hyperactivity disorder in children and adolescents. *Pediatrics*. 2011;128(5):1007-1022pmid:22003063