



Impact of ADHD on Academic Performance and Social Behaviour: A Multi-Informant Survey of Parents, Teachers, Caregivers and Counsellors

Dr. Sarita Tripathy

M.Sc Psychology, Jain University, India

Abstract: Attention-deficit/hyperactivity disorder (ADHD) is a chronic neurodevelopmental condition known to affect academic achievement, interpersonal relationships and daily social functioning. This exploratory cross-sectional survey examined how ADHD symptom severity relates to academic and social difficulty in school-age children, whether difficulties differ by gender and ADHD presentation, and what improvement was reported after therapy. Information on 100 children with ADHD (62 boys, 38 girls; 45 combined, 30 inattentive and 25 hyperactive-impulsive presentations) was provided by 100 respondents (40 parents, 25 teachers, 20 caregivers and 15 counsellors) using a project-developed questionnaire and the Vanderbilt ADHD Diagnostic Rating Scale. Scale reliability was acceptable to good ($\alpha = .75-.85$). Academic difficulty ($M = 3.7$, $SD = 0.6$; scale 1–5) and social difficulty ($M = 3.4$, $SD = 0.6$) were both elevated. Symptom severity correlated positively with academic difficulty ($r \approx .35$) and social difficulty ($r \approx .45$), and the two difficulty domains correlated with each other ($r \approx .40$); all $p < .001$. Boys showed slightly higher severity than girls, but the difference was not statistically significant ($p \approx .08$). The inattentive presentation showed the highest academic difficulty and the combined presentation the highest social difficulty. Of the 70% of children who had received therapy (mostly CBT), about 75% were reported to have improved academically and about 45% socially. The convenience sample and informant-reported data do not support generalisation or causal conclusions. Findings point to the need for early, integrated academic and social support.

Keywords: ADHD; academic performance; social behaviour; inattention; impulsivity; cognitive behavioural therapy

1. Introduction

1.1 What is ADHD?

Attention-deficit/hyperactivity disorder (ADHD) is a common behavioural/developmental disorder characterised by inattention, hyperactivity and impulsivity. It is considered chronic and is known to affect many aspects of an individual's life, including academic and professional achievement, interpersonal relationships and daily social functioning.

1.2 Prevalence

ADHD is commonly identified in children of primary school age, when it leads to classroom disruption or problems with schoolwork. It is more often diagnosed in boys than in girls. Symptoms typically first appear between the ages of 3 and 6 years and, if not managed properly, may persist into adolescence and adulthood.

1.3 Types and symptoms

There are three main presentations. The **predominantly inattentive** presentation involves careless mistakes, difficulty staying focused, seeming not to listen, not following through on instructions, poor organisation, avoidance of tasks needing sustained mental effort, losing things and distractibility. The **predominantly hyperactive/impulsive** presentation involves fidgeting, difficulty staying seated, running or climbing where inappropriate, being unable to play quietly, talkativeness, difficulty waiting for a turn and interrupting others. The **combined** presentation is diagnosed when the criteria for both are met.

1.4 Causes

ADHD is understood as a neurodevelopmental condition. Evidence for a genetic contribution is growing and several genes have been linked to the disorder, but no single gene or

combination of genes has been identified as its cause, and environmental factors also contribute.

1.5 Need and significance of the study

Research on the impact of ADHD on academic performance and social behaviour addresses challenges faced by children with ADHD, their families, educators and society. It clarifies how inattention, impulsivity and hyperactivity affect grades, task completion and social skills such as communication and conflict resolution; guides classroom accommodations, social skills training and counselling; supports earlier identification and intervention; helps reduce risks such as low self-esteem and school dropout; gives families better tools and reduces stigma; and, in the long term, supports better career prospects, relationships and quality of life.

2. Review of Literature

This review considers the impact of ADHD on academic performance and social behaviour, with emphasis on international findings and recent Indian doctoral research available in the Shodhganga repository.

2.1 International evidence

Longitudinal evidence shows that children with hyperactivity/ADHD attain less education and lower grades than controls, with poorer adaptive functioning continuing into young adulthood [1]. Academic impairment is linked to deficits in executive functioning, attention span and task management [2]. Socially, children with ADHD experience difficulties in peer interaction, emotional regulation and conflict resolution [3,4]. These difficulties often persist into adulthood and affect career, relationships and mental health.

2.2 Indian evidence from Shodhganga

Singh [5] examined cooperative learning among adolescents with ADHD and reported improved classroom engagement and self-monitoring, with structured group tasks and peer feedback especially useful for academic behaviour. Gani [6] studied the social skills of children with ADHD in Kashmir and described empathy deficits, impulsivity and emotional-regulation problems, along with a cycle in which social rejection strengthens negative self-concepts and, in turn, maladaptive behaviour. Venkareddy [7] assessed behavioural problems in children showing ADHD symptoms and found that common disciplinary measures such as detention and isolation reduced instructional time and further harmed academic performance. Neeraj [8] studied resilience training for children with ADHD and reported improved stress coping and classroom engagement after the intervention.

2.3 Synthesis and research gap

These studies point to the value of culturally tailored educational and emotional support, and to the promise of cooperative learning, resilience building and social skills training. However, they generally examine academic or social outcomes separately and rely largely on a single type of informant. Few relate symptom severity and ADHD presentation to both academic and social difficulty using reports from several adult groups who work with the child, together with reported therapy outcomes. The present study addresses this gap.

3. Aim, Objectives and Research Questions

3.1 Aim

To examine the impact of ADHD on the academic performance and social behaviour of school-age children, as reported by parents, teachers, caregivers and counsellors.

3.2 Objectives

- 1) Describe levels of inattention, hyperactivity-impulsivity, academic difficulty and social difficulty.
- 2) Examine how symptom severity relates to academic and social difficulty.
- 3) Examine the relationship between academic and social difficulty.
- 4) Compare difficulties by child gender and ADHD presentation.
- 5) Describe therapy received and the improvement reported.

3.3 Research questions

- 1) To what extent is symptom severity associated with academic difficulty?
- 2) To what extent is symptom severity associated with social difficulty?
- 3) Are academic and social difficulty related?
- 4) Do severity and difficulties differ by gender and ADHD presentation?
- 5) What improvement in academic and social functioning is reported after therapy?

Subject-specific learning (Mathematics, Science, Art) and detailed conversational behaviours (listening, conflict resolution, interpretation of social cues, staying on topic) were not analysed separately in this dataset and are addressed under future research.

3.4 Hypotheses

H1: Symptom severity will be positively related to academic difficulty.

H2: Symptom severity will be positively related to social difficulty.

H3: Academic difficulty will be positively related to social difficulty.

H4: Severity will differ between boys and girls.

H5: Academic and social difficulty will differ across ADHD presentations.

4. Methodology

4.1 Research design

The study used a cross-sectional, correlational survey with a non-random convenience sample. Each respondent rated one child. Hypotheses were tested at the 95% confidence level ($\alpha = .05$).

4.2 Participants and data collection

The study included 100 respondents who completed an online questionnaire administered through Google Forms and WhatsApp groups with the help of school counsellors, teachers and parents: 40 parents, 25 teachers, 20 caregivers and 15 counsellors. Each reported on one school-age child [state age range] previously identified with ADHD by a qualified professional. The children were 62 boys and 38 girls, with 45 combined, 30 inattentive and 25 hyperactive-impulsive presentations (Table 1). The findings are exploratory and should not be interpreted as representative of a wider population.

Table 1: Sample characteristics (N = 100)

Characteristic	Category	n	%
Respondent	Parents	40	40
	Teachers	25	25
	Caregivers	20	20
	Counsellors	15	15
Child gender	Boys	62	62
	Girls	38	38
Presentation	Combined	45	45
	Inattentive	30	30
	Hyperactive-impulsive	25	25
Therapy	Received (mostly CBT)	70	70

Inclusion criteria: (1) the child was school-aged with a professional diagnosis of ADHD; (2) the respondent knew the child well (parent, teacher, caregiver or counsellor); (3) informed consent was given, with parental consent for child-related information; (4) the questionnaire was completed in full. **Exclusion criteria:** (1) no consent; (2) incomplete responses; (3) respondents unable to rate the child from direct knowledge.

4.3 Research instruments

The **study questionnaire** (Impact of ADHD on Academic Performance and Social Behaviour) is a structured Likert-based instrument covering academic performance (task completion, attention span, classroom behaviour) and social behaviour (peer interaction, emotional control, conflict resolution). Academic and social difficulty were scored from 1 to 5, with higher scores indicating greater difficulty. The **Vanderbilt ADHD Diagnostic Rating Scale** [9] was used to rate inattention and hyperactivity-impulsivity; subscale scores were expressed on a 1–4 scale, with higher scores indicating more frequent symptoms. Symptom severity was taken as the combined inattention and hyperactivity-impulsivity score.

4.4 Pilot study

A pilot study with 10 respondents (parents/guardians and teachers of children aged 10–16 years previously identified with ADHD) tested item clarity, completion time and internal consistency. Feedback led to simplification or removal of complex or redundant items. Cronbach's alpha was 0.78 for the academic performance section and 0.81 for the social behaviour section, and the questionnaire was approved for full data collection. Each respondent completed it in about 15–20 minutes, and data were screened for completeness and accuracy before analysis.

4.5 Data analysis

Descriptive statistics (mean, SD and frequencies) summarised the sample. Pearson's correlation (r) tested relationships among severity, academic difficulty and social difficulty. An independent-samples t -test compared boys and girls, with Cohen's d as the effect size, and one-way ANOVA compared the three ADHD presentations. Results were considered significant at $p < .05$.

4.6 Ethical considerations

Informed consent was obtained at the start, and parental consent was obtained for child-related information. Respondents could withdraw at any point, responses were kept confidential and reported in aggregate, and results were shared with respondents who requested them.

5. Results

5.1 Reliability

Internal consistency was acceptable to good: Cronbach's alpha was .78 (academic section) and .81 (social section) in the pilot, and ranged from .75 to .85 across the scales in the main sample.

5.2 Descriptive statistics

Inattention scores ($M = 2.9$, $SD = 0.6$) were somewhat higher than hyperactivity-impulsivity scores ($M = 2.6$, $SD = 0.6$). Academic difficulty ($M = 3.7$, $SD = 0.6$) was above the scale midpoint of 3 and higher than social difficulty ($M = 3.4$, $SD = 0.6$), which was also above the midpoint (Table 2).

Table 2: Descriptive statistics ($N = 100$)

Variable	Scale	M	SD
Inattention	1–4	2.9	0.6
Hyperactivity-impulsivity	1–4	2.6	0.6
Academic difficulty	1–5	3.7	0.6
Social difficulty	1–5	3.4	0.6

Note: Higher scores indicate greater symptom frequency or difficulty.

5.3 Relationships among severity, academic and social difficulty

All three correlations were positive and statistically significant (Table 3). Greater severity was associated with greater academic difficulty ($r \approx .35$, $p < .001$) and with greater social difficulty ($r \approx .45$, $p < .001$). Academic and social difficulty were also related ($r \approx .40$, $p < .001$). Severity thus shared roughly 12% of its variance with academic difficulty and 20% with social difficulty, and the two difficulty domains shared 16%. H1, H2 and H3 were supported.

Table 3: Pearson correlations ($N = 100$)

Relationship	r	p
Severity – academic difficulty	$\approx .35$	$< .001$
Severity – social difficulty	$\approx .45$	$< .001$
Academic – social difficulty	$\approx .40$	$< .001$

Note: Correlations are of small to moderate size.

5.4 Differences by gender and ADHD presentation

Boys had slightly higher severity than girls, a small effect ($d \approx 0.36$), but the difference was not statistically significant ($t(98) \approx 1.76$, $p \approx .08$); H4 was therefore not supported at the .05 level. With 62 boys and 38 girls, power for an effect of this size was limited.

Children with the inattentive presentation showed the highest academic difficulty, and children with the combined presentation the highest social difficulty (Table 4), the pattern expected under H5. [Group means and SDs, omnibus ANOVA statistics (F , df , p) and post hoc results to be inserted from the dataset.]

Table 4: Summary of group comparisons

Comparison	Finding
Severity: boys vs girls	Boys slightly higher; $d \approx 0.36$; $p \approx .08$ (n.s.)
Academic difficulty by presentation	Highest in inattentive
Social difficulty by presentation	Highest in combined

Note: n.s. = not significant.

5.5 Therapy and reported outcomes

Seventy percent of children had received therapy, mostly cognitive behavioural therapy (CBT). Among these children, about 75% were reported to have improved academically and about 45% socially (Table 5). These are respondents' impressions rather than measured change, and there was no comparison group.

Table 5: Therapy and reported improvement

Indicator	Value
Received therapy	70% (mostly CBT)
Reported academic improvement	About 75%
Reported social improvement	About 45%

Note: Improvement percentages refer to children who received therapy.

6. Discussion

This survey found that children with ADHD were rated as having considerable academic and social difficulty, and that both were linked to symptom severity. Academic difficulty was rated higher than social difficulty, consistent with the role of attention and task management in schoolwork [1,2].

6.1 Severity, academic and social difficulty

The link between severity and social difficulty ($r \approx .45$) was stronger than with academic difficulty ($r \approx .35$). This fits accounts of impulsivity, emotional dysregulation and peer difficulties [3,4] and the Indian findings on empathy deficits and impulsivity [6]. Academic and social difficulty tended to occur together ($r \approx .40$). A possible explanation, not tested here, is a reinforcing cycle in which social rejection lowers self-concept and aggravates maladaptive behaviour [6], while disciplinary responses such as detention and isolation reduce learning time [7]. Because the design is cross-sectional, the direction of these relationships cannot be determined.

6.2 Presentation and gender

That the inattentive presentation had the highest academic difficulty and the combined presentation the highest social difficulty suggests that support may need to match presentation: organisation and task-focus support for inattentive children, and impulse control and social skills support for combined presentation. This should be confirmed with the full ANOVA results. Boys showed slightly higher severity, in line with their higher diagnosis rates, but the difference was not significant.

Because ADHD in girls is often subtler and under-identified, the girls in this sample may be a selected group.

6.3 Therapy outcomes

About 75% of children who had received therapy were reported to have improved academically, compared with about 45% socially, in line with the benefits reported for cooperative learning [5] and resilience training [8]. A possible reason for the smaller social gain is that social skills must generalise to peer settings and may need longer or more targeted work; this was not examined. Because therapy was not randomised and outcomes were reported by respondents, these figures cannot show that therapy caused improvement.

7. Implications for Educational Practice

The findings and reviewed literature suggest the following practices for educators, families and counsellors to consider and evaluate. They were not tested in this study.

- Address academic and social needs together, since the two were related.
- Screen early for social difficulty in children with higher severity, with extra attention to the combined presentation.
- Provide organisation, task-structuring and attention supports for children with the inattentive presentation.
- Use structured group tasks and peer feedback to improve engagement and self-monitoring [5].
- Offer CBT-based, social skills and resilience programmes [6,8], with explicit work on social outcomes.
- Review disciplinary practices such as detention and isolation that reduce learning time [7].
- Train teachers in early identification and support, and offer structured, culturally adaptable parent training.

8. Limitations and Future Research

The study included 100 respondents from a convenience sample and may not represent a wider population. Data are informant ratings: parents, teachers, caregivers and counsellors see the child in different settings, and each child was rated by one informant, so informant effects could not be separated from child effects. The cross-sectional design prevents causal conclusions. Therapy outcomes were respondent-reported, without baseline measures or a control group, and children who received therapy may differ from those who did not. The gender split was unequal, presentation groups were small, correlations were small to moderate, and multiple tests were run without correction. Subject-specific learning, listening, conflict resolution, social cues and topic drift were not analysed separately.

Future research could use larger, more representative samples, direct and multi-informant measures, and controlled or longitudinal designs. Priorities include:

- 1) **Longitudinal studies in India:** follow-up into adolescence and adulthood, covering academic progression, social adaptation, employment, relationships, substance use risk and comorbidity.
- 2) **Culturally responsive interventions:** low-cost, India-specific classroom strategies, including evaluation of yoga, mindfulness and Ayurveda-based approaches.
- 3) **Teacher training and awareness:** evaluating training programmes and examining bias in diagnosis and discipline.
- 4) **Gender and diagnosis:** gender-sensitive tools and study of social masking and academic self-perception in girls with undiagnosed ADHD.

- 5) **Family dynamics and parent training:** structured, culturally adaptable models, especially in low-literacy and rural settings.
- 6) **Inclusive education policy:** evaluation of readiness, infrastructure and individualised education plans (IEPs) under the RTE Act.
- 7) **Fine-grained outcomes:** subject-specific learning, listening, conflict resolution, social cue interpretation and topic drift, and controlled evaluation of CBT, mindfulness and behavioural programmes.

9. Conclusion

In this sample of 100 children with ADHD rated by parents, teachers, caregivers and counsellors, academic difficulty ($M = 3.7$) and social difficulty ($M = 3.4$) were elevated. Greater symptom severity was associated with more academic difficulty ($r \approx .35$) and, more strongly, more social difficulty ($r \approx .45$), and the two were related ($r \approx .40$). Boys were slightly higher in severity, though not significantly. Inattentive children showed the greatest academic difficulty and children with the combined presentation the greatest social difficulty. Respondents reported improvement after therapy more often academically (about 75%) than socially (about 45%). The findings are exploratory and do not establish causes. They support early, integrated academic and social support matched to the child's presentation, and further research with representative samples, direct measures and controlled designs.

Author Declarations

Ethics Approval: This study was conducted as part of the author's M.Sc. research at Jain University under the academic guidance of Dr. Mekhala Venkatesh. [Ethics approval or exemption status to be stated as per the university's requirements.]

Informed Consent: Informed consent was obtained from all respondents at the start of data collection, and parental consent was obtained for child-related information. Participants were informed of the purpose of the study and of their right to withdraw at any point.

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Data Availability: Aggregate findings are presented in this article. Individual participant responses are not publicly available, to protect participant confidentiality. Access to anonymised data may be considered for legitimate academic purposes, subject to confidentiality commitments and institutional requirements.

Author Contributions

Sarita Tripathy conceptualised the study, conducted the research, collected and analysed the data, interpreted the findings and prepared the manuscript.

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