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## PATTERNS OF ATTENTION PROBLEMS AMONG GIRL STUDENTS

**Padma Saritha K.V**

Department of Applied Psychology, GITAM School of Gandhian Studies  
Rushikonda, Visakhapatnam, Andhra Pradesh, India

### Abstract

This paper evaluates Attention Problems that are seen among girl students in the age group of five to fifteen years in a school in Chennai. This study used a mixed methods design to study the patterns of problem behaviours and factors that place girl students at risk for childhood behavioural problems with specific reference to Attention Problems. The survey was conducted to assess the prevalence of childhood behavioural problems using the Teacher Form of the Achenbach System of Empirically Based Assessment's Brief Problem Monitor (ASEBA-BPM). Findings of the study report that Grade, Order of Birth and Position of the sibling and occupation of mother had a significant association with attention problems, whereas age, number of siblings, type of family, parent education and occupation showed no significance.

**Keywords:** Attention problems, Girls, School, Hyperactivity, Inattention, ASEBA-BPM.

### Introduction

Attention problems (AP) in children are characterized by symptoms of inattentive, hyperactive and impulsive behaviour. Problems of Attention, commonly occur in the form of Attention-Deficit/Hyperactivity disorder (ADHD) and have relatively poor outcomes both for children and adolescents. The effects often include poor academic performance and increased aggression. However, children exhibiting a higher level of symptoms are diagnosed as presenting ADHD. Attention-deficit hyperactivity disorder is a commonly seen disorder during childhood. ADHD causes significant stress in families with affected children and thrusts burden on society in terms of higher financial costs and negative outcomes later in life (Biederman et al., 2004).

### Etiology of Attention Problems

Research reports that ADHD is believed to have been influenced by factors in early life, gestation being one such significant causal factor (Hall et al., 2020). ADHD can be genetic and often co-exist alongside disorders of communication and learning, autism spectrum disorder and intellectual disability (Faraone et al., 2017). Even though few of these characteristics hold good for ADHD's association to disruptive behavioural disorders, ADHD was reclassified from a behavioural to a neurodevelopmental disorder according to DSM-5.

Prevalence rates of ADHD in school going children varies from 0.2% to 27% while prevalence of ADHD in children world over was reportedly between 5.29% and 6.48% (Polanczyk et al., 2007).

### Gender Differences in Attention Problems

Gender differences indicate that more boys have ADHD than girls; however, girls display a significantly higher rate of the inattentive subtype of ADHD than boys. Studies indicate the importance of physicians to be aware of patients and primary caretakers worries about their child's academic performance other behavioural problems (Felt et al., 2014). Gender difference studies indicate that girls are either not identified nor diagnosed sufficiently because of variance in the expression of the disorder among boys and girls. Studies on gender differences in ADHD indicate that females were identified as displaying less symptoms of ADHD behaviours than their male counterparts which in accordance to studies that report genders effect on ADHD. In most children with ADHD, there is usually another psychological condition that co-exists. Gender studies indicate that boys are more frequently diagnosed with ADHD than girls and the male: female ratio is reportedly ranging between 3:1 to 4:1 (Wolraich et al., 1996).

### Cultural Differences in Attention Behaviours

In USA, 89.4% of children were diagnosed with ADHD and that indicated 8.4% of the sample was between two and seventeen years of age. Research reported that 62% of the children with ADHD were on medication and 46.7% received behavioural treatment in a time frame of one year. The population that neither received medication nor further treatment indicated 23% (Danielson et al., 2018).

In the current scenario, one cannot undermine the influence of television, cell phones and video games as a predictive risk factor for attention problems during childhood and adolescence. Prior research reports that most television shows are so exciting that children who frequently watch television find it difficult to pay attention to less exciting work like homework (Christakis et al., 2004).



### Attention Problems in School Setting

Schools are an integral part of cultures worldwide; they imbibe prominent cultural values and expectations which is combined in the development and learning processes of children from childhood to adolescence. According to Singh (2008), schools create that atmosphere where a child's development amalgamates with values and expectations with respect to their behaviour, academic performance, and overall achievement. Primary symptoms causing poor academic performance can have long-lasting negative consequences on areas like economic productivity, employment status and occupational functioning (Biederman et al., 2006). Although the diagnosis of ADHD is high in children of school going age, hyperactivity and inattention problems manifest in kindergarten (Sonuga-Barke et al., 2005). At School, the most commonly noted behavioural problems are attention problems. Teachers' awareness and management of ADHD are crucial. Arcia and colleagues (2000) found that most educators are unaware of basic information about ADHD or are unable to manage and moderate classroom management programs geared for these students. School-based strategies must be a combination of proactive and reactive strategies to encourage a behavioural change.

### Family Variables in Manifestation of Attention Problems

Research studies indicate that family adversity in general and poor family cohesion showed significant association with ADHD (Pheula et al., 2011).

### Number of Siblings and Sibling Relationship

Childhood attention-deficit/hyperactivity disorder is associated with reduced physical and psychological well-being of patients and their families. ADHD has detrimental effects on the family, and the community at large. A qualitative study which focussed on impact of an ADHD child upon siblings focused on feelings of anxiety and sorrow, caretaking issues and victimization and the siblings of an ADHD child describe their family life to that of being conflicting, chaotic and exhausting (Kendall, 1999).

### Order of Birth

Marín and colleagues (2014) indicated that firstborn children have a risk for ADHD as compared with children with other birth order positions. Results from public mental health centres within Madrid reported that being a middle child is usually a protective factor against ADHD (Carballo et al., 2013). Therefore, research projects that the total number of children in a family needs to be taken into consideration while studying family situation and ADHD (Marín et al., 2014).

### Type of Family

Research shows that family environment and parent-child interactions have a significant impact on a child's behavioural self-control, emotions, internal thought and organization and while reviewing family factors associated with ADHD, disputed parent-child relationships, as well as increased parenting stress and emotional disturbances are prevailing factors (Mrug et al., 2009). Studies report that Attention-deficit and hyperactivity problems are commonly seen in children having single-parent, step parents and who experience parental divorce and separation (Stenmark et al., 2016).

### Parent type

Findings by Lee (2008) projected that a child's socioeconomic (SES) background plays a significant role in ADHD. Children coming from backgrounds where both parents are employed, low-SES or single parent families, shows increased diagnosis of ADHD than students from high income, two-parent families. Literature has shown that positive parenting is associated with children's inhibition and ability to maintain attention, self-control and less behaviour problems (Bradley & Corwyn, 2005).

### Parent Education and Occupation

Children hailing from backgrounds where mothers/fathers have poor education are 1.91 times more likely to have ADHD or have more symptoms of ADHD than their peers with highly educated mothers. Similarly, children of single parents are 1.85 times more likely to have ADHD than children in families with two parents (Russell et al., 2016).

Behavioural therapy is effective in children with ADHD and helps them to do well at school and later on in life. Multiple approaches like behavioural programs integrating reward systems, play therapy, exercise, has been beneficial to children with ADHD (Jensen et al., 2007). Yoga with meditation customized for children was chosen as the physical exercise component. However, there is limited evidence to show that yoga and meditation help focus and improve attention, although few studies basing yoga as family-based therapy for ADHD in boys have been reported to be beneficial (Jensen & Kenny, 2004).

### Methodology

A mixed methods design was used to study the patterns of problem behaviours and factors that place girl students at risk for childhood behavioural problems with specific reference to externalizing problems. Upon invitation, a survey was conducted to study the prevalence of childhood behavioural problems using the Teacher Form of the Achenbach System of Empirically Based



Assessment's Brief Problem Monitor (ASEBA-BPM). The study therefore uses quantitative methods of data collection and analysis. Initially a convenience sampling was used and all 1402 students of the school were administered ASEBA-BPM Teacher Form which helped identify problem behaviours and assess the prevalence of childhood problems with specific reference to externalizing problems. Girl students who had elevated scores on the BPM were selected for the second part of this study. This stage of the study involving personal interviews therefore was based on purposive sampling. All girl students who attended the personal interviews requested by the school administration formed part of the study after having obtained due clearances from the school administration. A sample of 144 girl students in the age group 5-15 years formed the participants.

Results & Discussion

This section presents the results in terms of representation of students across demographic variables, personal variables and family Variables that have an effect on Attention problems.

Table 1 Age as a demographic variable

Table with 4 columns: AGE, Age, N, Chi-Square. Data rows for ages 5-15 with N values and a Chi-Square value of 29.846\*\*.

\*\*significant at 0.01 level

Referring to Table 1, the study reports that, 9-year-old girl children are significantly represented in the sample. In many studies early menarche has been discussed as more prevalent in the current adolescent population. Research reported that the age of onset of puberty has an effect on mental health problems, however they maybe transitory.

Table 2 Grade as a demographic variable

Table with 4 columns: GRADE, GRADE, N, Chi-Square. Data rows for grades 1-10 with N values and a Chi-Square value of 43.364\*\*.

\*\*significant at 0.01 level

Referring to table 2, students from grade 5 are significantly represented in the sample. In schools, academic stress can be considered a risk factor for emotional disturbances. Research shows that fourth, fifth and sixth-grade girls who have higher levels of academic stress show more likelihood towards depression. However, more literature is necessary in the lines of how grade five girls show more significance in the demographic variable and how academic stress plays a such a key role also in younger grades.



Table 3 Number of siblings as a demographic variable

No of Siblings	No of Siblings	N	Chi-Square
	Single Child	39	134.231**
	One Sibling	91	
	Two Siblings	10	
	Three Siblings	3	

\*\*significant at 0.01 level

Referring to table 3, children having one sibling are significantly represented in the sample. The current sample includes children largely from low socio-economic status, thereby increasing the burden for the families with a greater number of children. In turn, this may have a compounding effect on the children who have siblings. Studies show that dilution of resources and investments which are linked to large sibling size and later birth order could have a negative consequence for mental health in childhood and a sibling size has shown to be strongly linked to higher rates of childhood mental health issues.

Table 4 Order of Birth as a demographic variable

Order of Birth	Order of Birth	N	Chi-Square
	First born	53	115.252**
	Second born	44	
	Third child	6	
	Fourth child	1	
	Single	37	
	Twins	2	

\*\* significant at 0.01 level

Table 4 shows that first born children are significantly represented in the sample. First born children in this sample tend to have fewer resources both in terms of economic resources and time from parents once the sibling arrives. In the context of parental differential treatment, studies also report strong negative impact on girls than boys and for elder siblings than the younger ones.

Table 5 Position of sibling as a demographic variable

Position of sibling	Position of sibling	N	Chi-Square
	First born	49	14.622**
	Middle child	32	
	Youngest	19	
	Single child	43	

\*\* significant at 0.01 level

Referring to table 5 shows that first born children are significantly represented in the sample. Studies consistently have been focussing on sibling structure and the impact of sibling's order of birth or sibling's position in the family influencing socio-psychological processes with long lasting implications into an individual's developmental process and adjustments. In the current study many of the families have both the parents working and returning home late in the evening. This consequently made the eldest child responsible to take care of the home and the younger siblings after returning from school. However more literature is needed to understand how girls tend to be overburdened with the responsibility of the siblings and home causing significant distress and possible psychopathology.



**Table 6 Type of family as a demographic variable**

Type of Family	Type of family	N	Chi-Square
Type of Family	Nuclear	90	250.608**
	Joint	34	
	Separated	9	
	Death of mother	2	
	Death of father	6	
	Father employed overseas	2	

\*\* significant at 0.01 level

Table 6 shows that nuclear families are significantly represented in the sample. Nuclear family system can be explained as a family structure that consists of a father, mother and their child/children. Studies indicated that nuclear family structure could increase the likelihood of mental illness in girls.

**Table 7 Parent Occupation Type as a demographic variable**

Parent Occupation Type	Parent Occupation Type	N	Chi-Square
Parent Occupation Type	Father working	89	136.692**
	Mother Working	45	
	Both parents working	7	
	None working	2	

\*\*significant at 0.01 level

Referring to table 7, working fathers of girl students are significantly represented in the sample. Previous research has been focusing on the association between father's absence and aspects of being non-available on the development of childhood problems.

**Table 8 Education of Father as a demographic variable**

Education of Father	Education of Father	N	Chi-Square
Education of Father	Not mentioned	103	394.531**
	Primary School Education	3	
	High School Education	13	
	Intermediate completed	9	
	Degree	10	
	PG and above	3	
	Technical Education	2	

\*\*Significant at 0.01 level

Table 8 indicates that girls whose father's education was not mentioned are significantly represented in this sample. In the current study majority of the sample were not aware of the education of the father. In the current setting the mother being the primary care-giver the children have no emotional relation with the father. It could also be due to the fact that the father may not be educated. It may also be indicative of the poor communication between the family where important issues like education or occupation are discussed often.



Table 9 Education of Mother as a demographic variable

Education of Mother	Education of Mother	N	Chi-Square
	Not mentioned	92	364.804**
	Illiterate	1	
	Primary School Education	2	
	High School Education	8	
	Intermediate	16	
	Degree	16	
	PG and above	4	
	Technical	4	

\*\* Significant at 0.01 level

Referring to table 9, girls whose mother’s education was not mentioned are significantly represented in this sample. In the current study majority of the girls were unaware of their mother’s education status. This could indicate lack of education of the mother and poor communication between family.

Table 10 Occupation of Father as a demographic variable

Occupation of Father	Occupation of Father	N	Chi-Square
	Not mentioned	31	20.846**
	Blue collared	36	
	White collared	10	
	Business	26	
	Professionals	26	
	Government service	14	

\*\*Significant at 0.01 level

Referring to table 10 fathers of girls who had blue collared jobs are significantly represented in this sample. Prior studies show that students with ADHD had higher chances of their fathers being manual workers than non-ADHD students and less likely to have fathers employed as professionals or semi-professionals (43.88%) than normal ones.

Table 11 Occupation of Mother as a demographic variable

Occupation of Mother	Occupation of Mother	N	Chi-Square
	Not mentioned	10	218.155**
	Blue collared	6	
	White collared	9	
	Business	1	
	Professional	36	
	Government Service	4	
	Housewife	76	

\*\*Significant at 0.01 level

Referring to table 11, girls of mothers who are housewives are significantly represented in this sample. In the current sample many of the children studying in the school were first generation family members being sent to school. Their mothers were housewives and could help little in order to support their children in terms of academics. Most of them resorted to availing the services of tuitions. However, previous research reported that mothers who were housewives had more chances of having children with ADHD than working mothers.



Attention Problems: Personal Variables

Personal variables in this study include age and grade of the student

Table 12: Age and attention problems

Table with 5 columns: Age in years, N, MEAN, SD, F. Rows for ages 5-15. F value is 1.337.

Table 12 shows that age of child has no significant association on the score of ASEBA Checklist

In the current study findings project that age has no significance in the manifestation of attention problems in girl students. ADHD is the only known and discussed disorder pertaining to attention problems.

Table 13: Grade and attention problems

Table with 5 columns: GRADE, N, MEAN, SD, F. Rows for grades 1-10. F value is 2.862\*\*.

\*\*Significant at 0.01 level

Table 13 showed that students of grade 10 have scored significantly high on the ASEBA

Checklist

Girl students of Grade ten have scored significantly high on Attention Problems. Ages 11 to 14 is the time when girls attain menarche which indicates the transition of a girl from childhood to adolescence...



Family Variables

Family variables include the number of siblings, order of birth, position of sibling, type of family, parent’s education and occupation type.

Table 14: Grade and attention problems

Table with 5 columns: Number of siblings, N, MEAN, SD, F. Rows include Single Child, One Sibling, Two Siblings, Three Siblings.

Table 14 shows that number of siblings has no significant association on the scores on ASEBA Checklist.

Table 15: Order of birth and attention problems

Table with 5 columns: Order of birth, N, MEAN, SD, F. Rows include First born, Second born, Third child, Fourth child, Single, Twins.

\*Significant at 0.05 level

Table 15 shows that twins have scored high on the ASEBA checklist.

Children who are the first born almost always receive less parental attention and resources once the sibling in born, moreover this transition takes place especially during the vulnerable development period of attention deficit hyperactive disorder.

Table 16: Position of sibling and attention problems

Table with 5 columns: Position of sibling, N, MEAN, SD, F. Rows include First born, Middle child, Youngest, Single child.

\*\*significant at 0.01 level

Table 16 shows that single girl children have scored high on ASEBA checklist

Single children have scored significantly high on Attention Problems. Being a single -child in a family with the biological parent or a single parent or with a step parent is known to have a contributory role in psychiatric disorders in especially in children,



**Table 17: Type of family and attention problems**

Type of Family	N	MEAN	SD	F
Nuclear	90	59.32	6.601	.332
Joint	34	57.97	7.717	
Separated	9	59.33	6.519	
Death of mother	2	62.00	1.414	
Death of father	6	57.67	5.538	
Father employed overseas	2	58.00	.000	

Referring to table 17 there is no significant association between type of family and attention scores on ASEBA. This may have been because the children are supported by the grandparents who have taken the place of the parent who is not available.

**Table 18: Parent Occupation type and attention problems**

Parent Occupation type	N	MEAN	SD	F
Father working	89	59.60	6.797	.861
Mother Working	45	57.67	6.389	
Both parents working	7	58.57	8.404	
None working	2	60.50	3.536	

Referring to table 18 parental occupation type may indicate no significance on the Attention Problems score of ASEBA. Majority of the sample were not aware of the occupation that their parents were working. They were only able to communicate whether they were working or not. Very few girls were able to provide the type of employment their parents were in

**Table 19: Education of Father and attention problems**

Education of Father	N	MEAN	SD	F
Not mentioned	103	58.71	6.894	.401
Primary School Education	3	58.00	7.000	
High School Education	13	61.54	6.948	
Intermediate completed	9	58.67	6.801	
Degree	10	58.30	5.736	
PG and above	3	60.67	7.506	
Technical Education	2	58.00	.000	

Referring to table 19 in the current sample of study majority of the children are not aware of their father's education level. Many of the sample were not aware of their father education.

**Table 20: Education of Mother and attention problems**

Mother's education	N	MEAN	SD	F
Not mentioned	92	58.73	6.881	.563
Illiterate	1	58.00	-	
Primary School Education	2	51.50	2.121	
High School Education	8	60.00	5.782	
Intermediate	16	58.88	5.807	
Degree	16	59.81	7.268	
PG and above	4	62.25	7.805	



Technical	4	59.50	8.266	
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According to table 20 there is no significant association between mother’s education and the score on the ASEBA checklist. The above factor is responsible for the fact that the mother is unable to help the child in the academic functioning. The family also resort to the informal education which is the tutoring facility as discussed earlier. Majority of the mothers are employed full-time and are hardly able to spend sufficient time with their children. Since they need to contribute to the family income thereby leaving their aged parents or tuition teacher to support their children academically. There is also a glaring gap in research in the aspects of maternal education and its impact on attention problems in girl students.

**Table 21: Occupation of Father and attention problems**

Occupation of Father	N	MEAN	SD	F
Not mentioned	31	59.45	7.023	.941
Blue collared	36	58.17	5.916	
White collared	10	57.20	5.116	
Business	26	60.65	7.031	
Professionals	26	57.62	6.591	
Government service	14	60.43	6.688	

Table 21 shows no significant association between father’s occupation and the score on the ASEBA checklist.

Most of the girls in the sample were not aware of their father’s occupation. The time spent with the father is minimum and the child has minimum information regarding the father’s occupation. This may have had an influence on the significance of the findings. Need is there for more studies to be conducted in this area.

**Table 22: Occupation of Mother and attention problems**

Occupation of Mother	N	MEAN	SD	F
Not mentioned	10	61.90	8.425	2.223*
Blue collared	6	60.83	7.195	
White collared	9	60.89	7.114	
Business	1	68.00	.	
Professional	36	55.97	6.190	
Government Service	4	61.00	5.715	
Housewife	76	59.41	6.417	

\*significant at 0.05 level

Table 22 shows significant association between the Business category and occupation of the mother

Girls whose mothers are in business scored significantly high on attention problems in the ASEBA checklist. The sample indicated in the current study include families from the low-sees. Research has proven that parents from low SES tend to be spend less time on bringing up their children rather than parents in high socio-economic groups. This has been further attributed to fewer family resources. Also, in the current sample fewer mothers involve in business due to longer and erratic working hours. Since the business set up demanded more time and a structure with lesser flexibility around the child, moreover with no help at home there could be a significance in the score in this current case of the sample.

**Conclusion**

It can be concluded that all the demographic variables of age, grade, number of siblings, order of birth, position of sibling, type of family, parent occupation type, education of father/mother and occupation of father/mother are significantly represented in the current sample. Furthermore, Girl students from grade ten, single children, twins and business being the mother’s occupation have a significant association with Attention problems. This study shows no association with factors like age, number of siblings, type of family, parent occupation type, parents’ education and father’s occupation. However, there is little literature that is focused on Attention problems in girls in age group of five to fifteen. As it is a key transitioning phase of life, also accompanied by numerous academic challenges, more training programs can be offered to the caregivers and teachers of the students in order to create awareness



and offer early interventions. Training and education in mental health and problems of adolescent girls can be regulated by the government and made mandatory in all schools. The student teacher ratio and the counsellor student ratio also must be revised, as all children facing crisis's can be included, supported and guided appropriately.

As it turns out in the current study that Attention problems can have an onset in childhood and early adolescence. Hence researchers going forward can assess the role of schools in identifying and positively managing these behaviours. It can also be suggested that every school has a remedial cell that trains and equips children with Attention problems in schools.

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