Section A-Research paper

Assessment on Selected Behavioral Problems Among School Children and their Sociodemographic Correlates: A Cross Sectional Study in India

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CONFLICT OF INTEREST

The authors declare no potential conflict of interest.

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ABSTRACT:

Behavioral problems among school children are closely associated to their mental health and it significant concerns to parents and teachers. Behavioral problems can be of different types- both externalizing and internalizing. These are known to have both short term and long-term hostile implications. The research study aimed to determine the prevalence of selected behavioral problems among school children and find out the association between behavioral problems with selected sociodemographic variables among the school children. **Methods:** A descriptive, cross-sectional study was conducted in two different schools in Coimbatore, Tamil Nādu, India. A total of six hundred school children studying in 6^{th} to 9^{th} class were selected using a non-probability, convenience sampling technique. A Modified Youth self-report questionnaire was administered to the participants. Both descriptive and inferential statistics were used to analysis the data. **Results:** The findings indicated that 35.7 % of the school children had either mild (32.3%) or moderate level (3.4%) of behavioral problems whereas, none of the school children had severe level of behavioral problems. The prevalence of behavioral problems based on total percentage of mean score was 19.61. The study results also revealed that the Mean score of Internalizing problem is more than that of Externalizing problem. There was a significant association found between behavioral problems and some socio demographic variables of school children and data related to their family. **Conclusion:** The study findings highlight the significances of systematic screening of school children for inventing mental health services.

Keywords: School children, Behavioral problems, Emotional problems, Externalizing symptoms, Internalizing symptoms.

INTRODUCTION

Emotional and behavioral problems are one of the major mental health issues faced by school aged children. Behavioral problems are the utmost predominant ongoing health conditions of the children and adolescence and often have serious adverse consequences for a child's academic attainment and social development. Early negative experiences in homes, schools, or digital spaces, such as exposure to violence, the mental illness of a parent or other caregiver, bullying and poverty, increase the risk of mental illness. Worldwide, 10% of children and adolescents experience a mental disorder, but the majority of them do not seek help or receive care. (World Health Organization,2005).

Behavioral problems impact the children overall development, particularly an academic performance and social outcome as adulthood. A growing socio-economic and societal viewpoint is dynamic for identifications of behavioral deviations in children. The parents of adolescents were reported that a substantial proportion of adolescents need care for their mental health problems**.** (Jansen et al., 2013). The meta-analysis studies related to adolescents revealed that 23.3% of school children and 6.5% of community samples had a significant prevalence of emotional and behavioral issues. (Malhotra and Patra, 2014) 41 studies from 27 countries found that 13.4% of adolescents struggle with mental health issues (Polanczyk et al., 2015).

Adolescence is the old-fashioned of life with explicit health and developmental necessities and rights. This is also, the time to attain knowledge and innovative skills, learn to realize the emotional state and to the relationships and develop new characteristics and

capabilities that will be most vital for the adolescent years and transform to adulthood roles. (https://www.who.int/). Kumar, et al. (2016) reviewed the prevalence of aggression among adolescents in India, and the level of aggression was found to be high among the adolescents and it was ranged from 17.7% to 66.5%. Boys were found to be more physically aggressive while girls were more verbally aggressive.

In a research study the prevalence of mental health status among adolescent school children, the results showed that the prevalence rate based on the total difficulties score was found to be 17.2% at the abnormal level and 28.8% was at the borderline level. The study results also revealed that in adolescent population, emotional problem was present in 17.1%, hyperactivity in 16.1%, conduct problem in 15.2%, peer problem in 5.6%, and prosocial behavior in 5.1%. Recent evidence indicates that emotional and behavioral disorders frequently lead to poor school performance and to dropping out of school (Keyho, Gujar, Ali, 2019).

Mental health concerns among the school children and adolescents in various studies shows that 7.8% of them experiencing with mental health problems and 13.8% of them reported with emotional and behavioral problems (Harikrishnan U, Arif A, Sobhana H, (2017) and Ginige P,2014). In Assam, a cross sectional study results indicate the prevalence of various behavioral problems ranged from 7.90 to 16.78%. Anxiety problem was highest among school students. (Dutta M, Jahan M & Kumar R,2014) Similarly, in an Indian study, the prevalence of psychological morbidity on the basis of total difficulties score was found to be 9.75%. The prevalence of emotional, conduct problem, hyperactivity, peer problem, and

prosocial behavior with school children was 5.42%, 5.56%, 3.78%, 4.40%, and 4.26%, respectively. (Faizi et., 2016)

Globally, the consequences of bullying among the school children and youths have been accompanied with poor emotional health including overall mental health (Bradshaw, et al., 2017). In a descriptive study, the results showed that bullying and victimization experiences are related with worrying mental health outcomes such as low self-esteem, depression, anxiety, family problems, academic difficulties, delinquency, school violence, and suicidal thoughts/ attempts (Hinduja and Patchin, 2018).

Harikrishnan, Sailo and Grace (2021) conducted a cross-sectional study of 600 school-going adolescents between Class 8th to 12th from the rural and urban areas in Kollam district, Kerala. The findings indicated that the school- going adolescents undergo problems such as emotional problems (11.5%), conduct problems (9.7%), hyperactivity (8.5%), peer-related problems (6%), and abnormality while some were at the borderline.

Centers for Disease Control and Prevention (CDC, 2014–2018) study conducted in four different U.S. school districts, results showed that about 1 in 6 students had enough behavioral or emotional symptoms and impairment to be diagnosed with a childhood mental disorder**.** Anxiety disorders were the most commonly reported mental disorders, followed by oppositional defiant disorder (ODD)and attention-deficit/hyperactivity disorder. (Danielson, M. L.,2020).

Feiss, et al. (2019) conducted and published a systematic review and meta-analysis identifying and evaluating the efficiency of school-based programming and the impacts on reducing internalized mental health problems of adolescents. There are 31.9% of adolescents

aged between 13 and 18 that have been or are currently diagnosed with anxiety disorder and 31.5% that have experienced depressive symptoms. Study also indicated that anxiety and depression in the adolescent population is a reliable predictor of persistent stress symptoms later in life.

Childhood and Adolescence are the significant period in a person's life that allows for the development of behaviors that may indicate future disorders in adulthood. It is recognized that mental health unpredictability has an adverse impact on overall health in adults. Research shows that more than 50% of adult mental disorders begin before the age of 18 and are associated with many environmental stressors including emotional and physical abuse from authority figures, violence within societies, and unprecedented illnesses **(**Das et al., (2016), and Feiss et al. (2019)

The behavioral problems such as quarrelling, using abusive language, antisocial behavior is noticeable in school going children in common. A child may have more than one disorder ranging from mild to severe. In a pilot study survey on prevalence of behavioral problems among school children, the findings revealed that among school children 18% of them were had abnormal behavioral, while 12% had borderline behavioral problems. Highest number of students (26%) has conduct problems. (Nabanita Barman et al., in 2018).

Behavioral disorders in children and adolescents are increasingly coming into focus as serious treatable conditions and as precursor of adult psychopathology. School-based strength is a hateful and extensive problem which distresses the exists of a great number of school children in a school environment as both offenders and targets of victims (Bram et al., 2013). The current research aims to determine the prevalence of behavioral problems among school

children and find out the relationship between behavioral problems with socio-demographic variables of the school children.

METHODOLOGY

A cross-sectional study carried out on 600 school children from selected schools of Coimbatore, India. Permission was obtained from the Chief Educational Officer (CEO), Directorate of Education, school authority, school children and parental consent for conducting the research. One government and one government aided school were chosen within a 10 km ambit as per feasibility. A total of six hundred school children with equal distribution of each school were participated in the study. The study sample consisted of school children age between 11 to15 years studying in 6th to 9th standard of both genders. The study was undertaken with the approval of the Institutional ethics committee. The selected school children were identified and rapport was formed and the purpose of study was explained to them. Confidentiality of the data was assured and the doubts of the subjects were cleared.

Tools of data collection

Self-reported questionnaire was used. It consists of two sections. Section I: which consists of Socio-demographic variables of school children, parents and personal data. Section II which is Modified Youth self-report Questionnaire developed by Achenbach and Rescorla (2001) was administered to measuring behavioral problems among children. This scale consists of 90 problem items and each item was graded on a three-point scale (0–2). The item was graded as “0” if the item is not true, “1” if the item is somewhat or sometimes true, and “2” if the item is very true or often true. It comprises eight syndrome subscales including,

Anxious/Depressed(19items), withdrawn/Depressed (8 items), Somatic Complaints (9 items), Social Problems (9 items), Thought Problems (18 items), Attention Problems (9 items), Rule-Breaking Behavior (12 items), and Aggressive Behavior (12 items), The total score was 180. the level of selected behavioral problems was categorized based on the total score, as no behavioral problems (0 score), Mild (1-90), Moderate (91-135) and Severe behavioral problems (136-180). Also, it further grouped under two broader scales namely: Internalizing behavioral problems (36 items) and externalizing behavioral problems (24 items). A panel of experts in Nursing, Psychology and Psychological medicine was validated the questionnaire. Final corrections and suggestions from the experts were incorporated before the reproduction of the final copy. The Cronbach's Alpha test was done to check the reliability of the questionnaire and the alpha coefficient for the items is .813.

Statistical analysis

Statistical analysis was done by using SPSS version 21 software. Descriptive statistics were used to calculate frequencies, percentage and mean value ± standard deviation of the socio-demographic variables, and prevalence of behavioral problems. Inferential statistics such as chi-square test used to associate the behavioral problems with socio demographic data.

RESULTS

Demographical characteristics

Frequency and Percentage Distribution of Socio Demographic variables of the School Children

In the present study, out of 600 school children, majority 27.50% of them were aged 13 years, consisting of almost equal numbers of males (57.17%) and females (42.83%)

were participated in the study. Majority 87.17% of were belonged to Hindu religion remaining were from Christian and Muslims. In regards with type of school, equal numbers 50% of school children were studying from government and 50% of them were from government aided school. Majority 25.83% were studying in 8th grade and 43.17% of them showed above average academic performance and 47.00% of them were from rural area. **(Fig 1)**

Frequency and Percentage Distribution of Socio Demographic Variables of Parents of the School Children.

The socio demographic variables of parents of school children, majority of parents including father (39.67%) and mother (34.17%) had completed their secondary level of school education, while illiteracy was more among mother 9.33%. In relation to parents' occupational status, majority of parents including father (55.84%) and mother (39.67%) were collie worker. 87.67% of parents of school children were living together and 39.33% of them belong to the family income less than 5000 rupees per month. 67.67% of school children were from nuclear family and 32.33% were from joint family. Majority 59.17% of school children had one sibling. **(Fig 2)**

Frequency and Percentage Distribution of personal Variables of School children:

In relation with personal variables of the school children, the usage of cell phone majority 71.33% were using cell phone and 44.67% of them were using less than one hour. With respect to usage of computer, 29.50% of them were using computer and 61.67% were not using social media and 38.33% were only using social mass media account. In relation to awareness about bullying behavior, majority 53.17% were unaware about bullying behavior, and 21.67% were received information through their friends. 62% of them involved in extra-curricular activities, among them 32.83% were practicing in sports as an extra-curricular

activity. **(Fig 3)**

Table 1 presents the frequency and percentage distribution of level of selected behavioral problems among school children. Out of 600 school children, 64.3% of them had no behavioral problems, 32.3% had mild level of behavioral problems, 3.4% of them had moderate level and none of them had severe level of behavioral problems. Overall, 35.7% school children had either mild or moderate level of behavioral problems.

Table 2 indicates the prevalence of selected behavioral problems among the school children in terms of mean, standard deviation, and percentage of mean score in domain wise. The total percentage of mean score of behavioral problems was 19.61 and total mean score was 35.31 with SD of 25.12. The highest rate of recorded behavioral problems scores was for Somatic complaints (28.1%) among all other domains of Modified Youth Self Report (YSR) scale, followed by social problems (24.8%), Attention problems (23.0%), and Thought problems (21.1%) Anxious/Depressed (20.0%) Withdrawn/ Depressed (18.1%) Aggressive behavior (15.3%) and least rate for Rule- Breaking behavior problem (10.9%).

Table 3 shows the pattern of Internalizing Behavioral Problems (Emotional Symptoms) among the school children. The overall Internalizing behavioral problems with the mean score was 14.66 with SD 11.50 and percentage of mean score was 21.6. The findings revealed that majority of the school children had Internalizing behavioral problems as Somatic Complaints (28.6%) which compared with the Anxious/Depressed (20%) and Withdrawn/Depressed problem (18.1%).

Table 4 represents the pattern of Externalizing Behavioral Problems (Behavioral symptoms)

among the school children. The results revealed that the percentage of mean score of aggressive behavior was 15.4 which is distinguished as higher prevalent than the Rule-breaking behavior 10.9 as externalizing behavioral problems among the school children. The overall externalizing behavioral problems mean score was 6.31 with SD 6.86 and percentage of mean score was 13.2. The findings revealed that majority of the school children had more externalizing behavioral problems as Aggressive behavior than the Rule-breaking behavior problem.

Table 5 shows the association between the level of selected behavioral problems and socio-demographic variables of the school children. It shows the significant association between the behavioral problems of the school children and their age (x^2=21.78, P=0.001, df=6), type of school studying (x^2=18.25 P=0.001) and studying class (x^2=19.69 P=0.01, df=2) and behavioral problems. The younger the age group, studying in Government aided school and studying in 7th - 8th grades had greater the score for behavioral problems than others. However, there was no significant association of behavioral problems was found with the school children's gender, religion, academic performance, and place of living with their behavioral problems.

Table 6 shows the association between the selected behavioral problems and the selected socio demographic variables of the parents of the school children. It reveals significant association between the behavioral problems of the school children, and family income (x^2=21.07, P=0.001, df=8), and type of family (x^2=23.06, P=0.001, df=2). However, there was no association found between the behavioral problems of school children's and parents' educational status and occupational status, parents' living status and number of siblings.

Table 7 shows the association between the selected behavioral problems and the personal variables of the school children. It shows significant association between the behavioral problems of the school children and use of cell phone (x^2=16.20 P=0.001, df=2), spent time in usage of cell phone (x^2=16.27 P=0.05, df=8) and involvement in extracurricular activities (x^2=14.68, P=0.01, df=2). However, school children personal variables such as usage of computer, usage of social media, awareness about bullying behavior, sources of information and type of extracurricular activities were not found to be significantly associated with the behavioral problems among the school children.

DISCUSSION

In the present study, the prevalence of selected behavioral problems among school children was obtained by the modified youth self-report questionnaire. Among 600 participants about one third 35.7% of them were reported with any form of behavioral problems. In regards with level of selected behavioral problems among school children, majority 64.3% of them were had No behavioral problems, 32.3% were had mild level of behavioral problems, 3.4 % had moderate level, and none of them had severe level of behavioral problems. These findings supported by Sushma B, et al. (2013) study findings showed majority fall under ‘mild’ (N: 374; 33.24 %) and/or ‘moderate’ (N: 47; 4.18 %) levels of behavior problems. In a study by Gujar, NM., and Ali, A. (2019) the findings, revealed that the prevalence of mental health status among school children, 21.6% of them had at the abnormal level, whereas 31.4% was had at the borderline level. Similarly, another study conducted by Nabanita Barman et al., (2018) on school going children of the North India, findings revealed that 18% of the school children had abnormal behavioral problems and 12% had borderline behavioral problems. Prevalence reported in various other studies range from

17-37%. (Keyho K et al., 2019; Kumar P., et al., 2016; Agrawal N and Bhola, 2016; Harikrishnan ,2017) which is almost like the present study findings.

In the present study, in domin wise, the total percentage of mean score of behavioral problems among school children was 19.61 and mean score was 35.31 with the SD of 25.12. Similar study conducted by Nair S, Ganjiwale J., the study results showed that the prevalence of behavioral problems among children was observed as 15.This study findings shows the highest rate of documented behavioral problems scores was the Somatic complaints (28.1%), among all other domains of modified Youth Self Report (YSR) scale, followed by social problems Attention problems and Thought problems Anxious/Depressed, Withdrawn / Depressed ,Aggressive behavior and lowest rate for Rule-Breaking behavior problem (10.9%). This study findings are supported by a study from Tamil Nadu, the most common high risk clinically significant mental health abnormality observed was in emotional subscale which was observed in 21% of the participants. (Aishwarya et al., 2021).

Regarding internalizing behavioral problems (emotional symptoms) the overall problems score was reported as 21.6 % and the mean score was 14.66 with the SD 11.50. Regarding externalizing behavioral problems (behavioral symptoms), were 13.2% and the mean score was 6.31 and SD 6.86. The present study finding is supported by in a study conducted by Panchali Datta et al., (2018), results revealed that internalizing behavioral problems was (33.70%) scored higher than externalizing behavioral problems among school children. Another study by O'Connell et al., (2009), results showed about total of 17% of adolescents experienced with behavioral problems, while 13% of them reported emotional

symptoms as internalizing behavioral problems and 11% of them were experienced behavioral symptoms as externalizing behavior problems being the most common at a prevalence among adolescents.

In present study, findings revealed that the significant association between school children age group, type of school and studying grades, and personal variables such as use of cell phone, spent time in usage of cell phone and involvement in extracurricular activities with behavioral problems among the school children. It reveals that the younger age children, children studying in Government aided school and children studying in 7th – 8th grades had more behavioral problems than others. This study findings in supported by Monika S et al., (2017) in India. Results showed that the behavioral problems were more prevalent in the age group of 12-13 years and 13-14 years and same study contrast with that the prevalence of behavioral problems was higher among students studying in 9th standard. In a study conducted in Vishakhapatnam, a greater number of schools going children in adolescents age (20.77%) had emotional and behavioral problems than the younger children (10.09%), which correspond to the results obtained in the present study. This indicates that behavioral problems tend to increase with increasing age of the children. Also, this current study findings supported by another study findings that the behavioral problems score was significantly associated with time spent in hobbies, and having no close friends. (Panchali Datta et al., 2018).

In relation to the parents socio demographic variables a significant association was found between the type of family, family monthly income and the behavioral problems among school children according to total score of modified youth self-report questionnaire, as the

prevalence was found to be more in the study subjects who belongs to nuclear families compared to the joint families, it can be due to lack of social assets like co-operation, consideration, loss, warmth, obedience and broadmindedness and other advantage of joint family like social control. However, children with high income group were more likely associated with decreased behavior problems. This study findings in supported by Monika S et al., (2017) results showed there is association between behavioral problems and family socioeconomic status among school children. Similarly, another study by Sushma, B., et al. (2013) report that trend is similar across several child variables such as, socio-economic status (low/middle/high), type of family (Nuclear/Non-Nuclear) and/or school (Government/Non-Government) (p: >0.05) paternal education emerges as significant variable in influencing problem behavior scores in the school.

CONCLUSIONS

In this present study, findings showed the prevalence of behavioral problem among school children 35.7 % of them had either mild or moderate level of behavioral problems. Based on total percentage of mean score of behavioral problem was 19.61. Regarding the internalizing behavioral problems (Emotional symptoms), it was 21.6% whereas, the Externalizing behavioral problem (Behavioral symptoms), was 13.2%. It indicated that there was an increasing number of behavioral problems in this special period for school children. It suggested that the health care professionals should pay more attention to this vulnerable population during a public health crisis in the future, and more detailed implements for mental health management for this vulnerable population were needed.

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Figure 1

Frequency and Percentage Distribution of Socio Demographic Variables of School Children

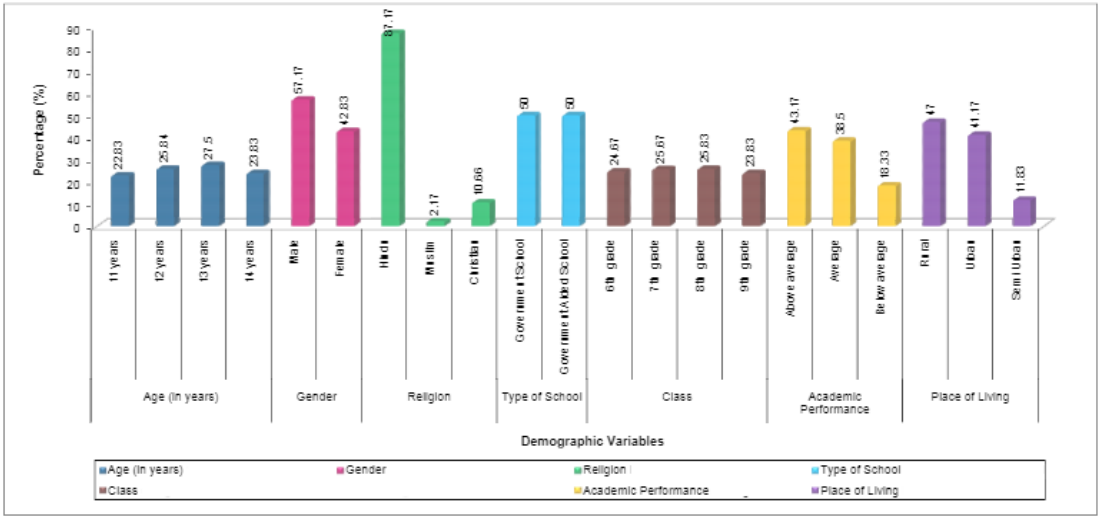

Figure 2

Frequency and Percentage Distribution of Socio Demographic Variables of parents of school children School Children

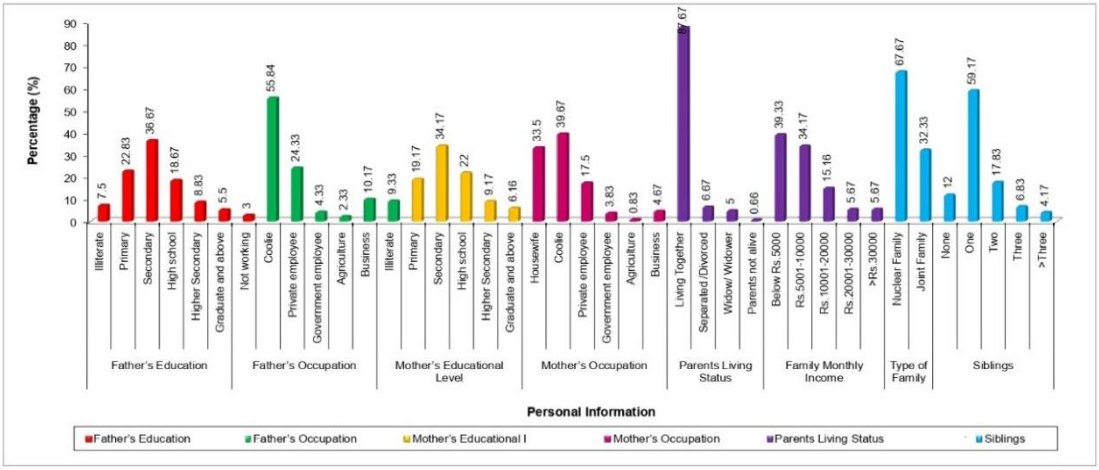

Figure 3

Frequency and Percentage Distribution of personal Variables of School children

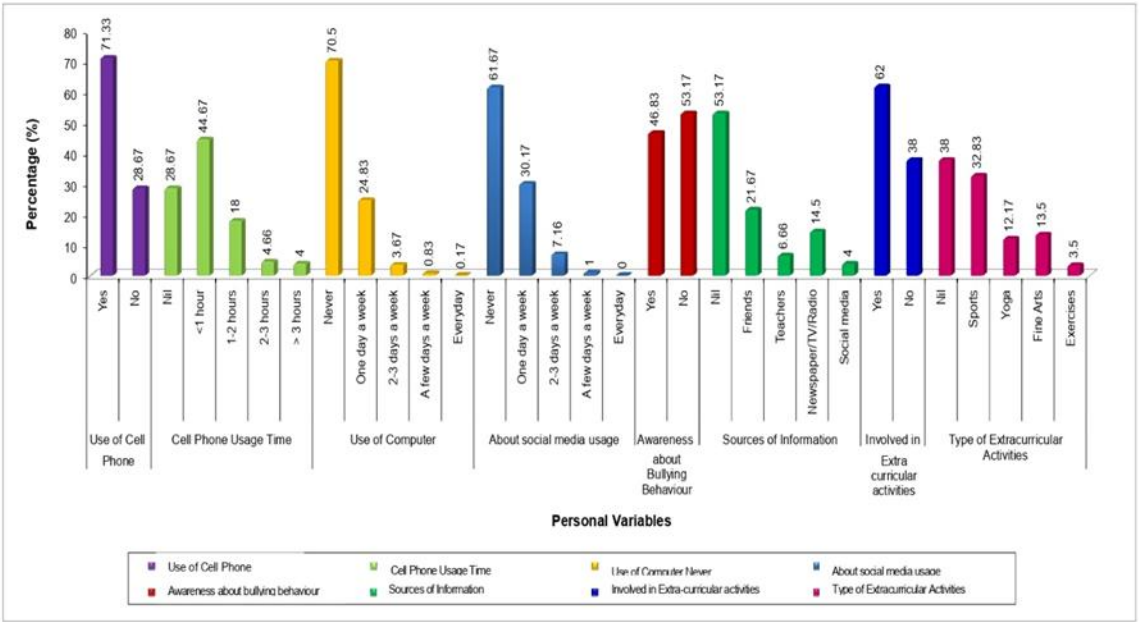

Table 1

Frequency and Percentage Distribution of level of Selected Behavioral Problems among School Children (N=600)

Behavioral Problems	**No.**	**Percentage (%)**
No Behavioral Problems	386	64.3
Mild Behavioral Problems	194	32.3
Moderate Behavioral Problems	20	3.4
Severe Behavioral Problems	0	0
Total	**600**	**100**

Table 2.

Prevalence of selected behavioral problems based on domain wise in school children.

Behavioral Problems domain	**Behavioral Problems Score**			
	Maximum Score	**Mean**	**Standard Deviation**	**% Of mean score**
Anxious/Depressed	36	7.19	6.72	20.0
Withdrawn/Depressed	16	2.90	3.07	18.1
Somatic Complaints	16	4.49	3.25	28.1
Rule-Breaking Behavior	24	2.62	3.29	10.9
Aggressive Behavior	24	3.68	4.22	15.3
Thought Problems	30	6.32	5.39	21.1
Attention Problems	18	4.15	3.91	23.0
Social Problems	16	3.96	2.79	24.8
Total	**180**	**35.31**	**25.12**	**19.61**

Tabl

e 3

*Mean and Standard Deviation Scores on Internalizing Behavioral problems (Emotional Symptoms) among School Children at Selected Schools (N = 214***)**

Behavioral Problems	**Maximum Score**	**Mean Score**	**Standard Deviation**	**%Of Mean Score**
Anxious/Depressed	36	7.19	6.72	20.0
Withdrawn/Depressed	16	2.90	3.07	18.1
Somatic Complaints	16	4.57	3.15	28.6
Total	**68**	**14.66**	**11.50**	**21.6**

SD: Standard Deviation

Table – 4 Mean and Standard Deviation scores on Externalizing behavioral Problems (Behavioral Symptoms) among School Children at Selected Schools (N = 214)

Externalizing Problem	**Maximum Score**	**Mean Score**	**Standard Deviation**	**% Of Mean Score**
Rule-Breaking Behavior	24	2.62	3.29	10.9
Aggressive Behavior	24	3.69	4.22	15.4
Total	**48**	**6.31**	**6.86**	**13.2**

SD: Standard Deviation

Table 5

Association between Level of Selected Behavioral Problems and Socio- demographic Variables of School Children (N = 214)

Socio-Demographic Variables		No.	Level of Selected Behavioral Problems						Chi Square Test (x^2)
			No Behavioral Problems		Mild Behavioral Problems		Moderate Behavioral Problems		
			No.	%	No.	%	No.	%	
Age(in years)	11 years	137	87	63.5	45	32.85	5	1.46	x^2**=21.78** **P=0.001*** ** **df=6(S)**
	12 years	155	89	57.42	57	36.77	9	5.81	
	13 years	165	97	58.78	63	38.19	5	3.03	
	14 years	143	113	79.02	29	20.28	1	0.7	
Gender	Male	343	216	62.97	119	34.69	8	2.33	x^2=4.01 P=0.13 df =2 (NS)
	Female	257	170	66.14	75	29.18	12	4.69	
Religion	Hindu	523	342	65.39	163	31.17	18	3.44	x^2=7.71 P=0.10 df =4 (NS)
	Muslim	13	11	84.62	2	15.38	0	0	
	Christian	64	33	51.56	29	45.31	2	3.13	
Type of Schools	Government	300	218	72.67	75	25	7	2.33	x^2**=18.25** **P=0.001*** ** **df =2 (S)**
	Government Aided	300	168	56	119	39.67	13	4.33	
Class studying	6th grade	148	93	62.84	52	35.14	3	2.03	x^2**=19.69** **P=0.01**** **df = 6(S)**
	7th grade	154	94	61.04	53	34.42	7	4.55	
	8th grade	155	88	56.77	58	37.42	9	5.81	
	9th grade	143	111	77.62	31	21.68	1	0.7	
Academic	Above average	259	166	64.09	88	33.98	5	1.93	x^2=3.67 P=0.45
	Average	231	149	64.5	73	31.6	9	3.9	

Performance	Below average	110	71	64.55	33	30	6	5.45	df =4(NS)
Place of Living	Rural	282	191	67.73	78	27.66	13	4.61	x^2=8.54
	Urban	247	150	60.72	90	36.43	7	2.83	P=0.07
	Semi Urban	71	45	63.38	26	36.62	0	0	df =4 (NS)

S - Significant at p<0.05 level ***S – Very Highly Significant at p<0.001 level

Table 6

Association between Level of Selected Behavioral Problems and Socio- demographic variables of Parents of School Children (N = 214)

Parent's Information		**N**	**Level of Behavioral Problems**						**Chi square test (x^2)**
			No Behavioral Problems		**Mild Behavioral Problems**		**Moderate Behavioral Problems**		
			No.	**%**	**No.**	**%**	**No.**	**%**	
	Illiterate	45	31	68.89	12	26.67	2	4.44	
	Primary	137	95	69.34	37	27.01	5	3.65	x2=13.18
	Secondary	220	149	67.73	64	29.09	7	3.18	P=0.21
	High school	112	65	58.04	43	38.39	4	3.57	df=10(NS)
Father's Education	Higher Secondary	53	30	56.6	21	39.62	2	3.77	
	Graduate and above	33	16	48.48	17	51.52	0	0	
	Not working	18	13	72.22	3	16.67	2	11.11	

Father's Occupation	Coolie	335	234	69.85	91	27.16	10	2.99	x^2=17.15 P=0.08 df =10(NS)
	Private employee	146	74	50.68	69	47.26	3	2.05	
	Government employee	26	17	65.38	9	34.62	0	0	
	Agriculture	14	9	64.29	3	21.43	2	14.29	
	Business	61	39	63.93	19	31.15	3	4.92	
Mother's Educational Level	Illiterate	56	44	78.57	10	17.86	2	3.57	x^2=17.21 P=0.07 df =10(NS)
	Primary	115	82	71.3	29	25.22	4	3.48	
	Secondary	205	134	65.37	65	31.71	6	2.93	
	High school	132	70	53.03	56	42.42	6	4.55	
	Higher Secondary	55	35	63.64	19	34.55	1	1.82	
	Graduate and above	37	21	56.76	15	40.54	1	2.7	
Mother's Occupation	Not working	201	119	59.2	77	38.31	5	2.49	x^2=17.78 P=0.06 df =10(NS)
	Coolie	238	167	70.17	62	26.05	9	3.78	
	Private employee	105	60	57.14	41	39.05	4	3.81	
	Government employee	23	16	69.57	6	26.09	1	4.35	
	Agriculture	5	4	80	0	0	1	20	
	Business	28	20	71.43	8	28.57	0	0	
Parent's Living status	Living Together	526	334	63.5	174	33.08	18	3.42	x^2=4.62 P=0.59 df =6(NS)
	Separated /Divorced	40	30	75	9	22.5	1	2.5	
	Widow/ Widower	30	18	60	11	36.67	1	3.33	

	Parents not alive	4	4	100	0	0	0	0	
	Below Rs.5000	236	160	67.8	71	30.08	5	2.12	**x^2=21.07**
Family Monthly income	Rs.5001-10000	205	133	64.88	68	33.17	4	1.95	**P=0.001*** df=8 (S)**
	Rs.10001-20000	91	55	60.44	30	32.97	6	6.59	
	Rs.20001-30000	34	18	52.94	11	32.35	5	14.71	
	>Rs.30000	34	20	58.82	14	41.18	0	0	
Type of family	Nuclearfamily	406	237	58.37	157	38.67	12	2.96	**x^2=23.06**
	Joint family	194	149	76.8	37	19.07	8	4.13	**P=0.001*** df=2 (S)**
Siblings	None	72	43	59.72	27	37.5	2	2.78	
	One	355	229	64.51	115	32.39	11	3.1	x^2=2.15
	Two	107	69	64.49	33	30.84	5	4.67	P=0.97
	Three	41	28	68.29	12	29.27	1	2.44	df=8(NS)
	>Three	25	17	68	7	28	1	4	

S - Significant at p<0.05 level ***S – Very Highly Significant at p<0.001 level

Table 7

Association between Level of Selected Behavioral Problems and Personal Variables of the School Children.

Personal Variables	**No.**	**Level of Behavioral Problems**			**Chi square test (x^2)**
		No Behavioral Problems	**Mild Behavioral Problems**	**Moderate Behavioral Problems**	

			No.	**%**	**No.**	**%**	**No.**	**%**	
Use of Cell Phone	Yes	428	254	59.35	158	36.92	16	3.74	x**2=16.20 P=0.001*** df =2 (S)**
	No	172	132	76.74	36	20.93	4	2.33	
	Nil	172	132	76.74	36	20.93	4	2.33	
Cell phone usage time	<1 hour	268	167	62.31	90	33.58	11	4.1	x**2=16.27**
	1-2 hrs	108	61	56.48	44	40.74	3	2.78	**P=0.05***
	2-3 hrs	28	11	39.29	16	57.14	1	3.57	**df =8 (S)**
	> 3 hrs	24	15	62.5	8	33.33	1	4.17	
Use of Computer	Never	423	289	68.32	125	29.55	9	2.13	x2=10.27 P=0.24 df =8 (NS)
	One day a week	149	83	55.7	57	38.26	9	6.04	
	2-3 days a week	22	11	50	9	40.91	2	9.09	
	A few days a week	5	2	40	3	60	0	0	
	Everyday	1	1	100	0	0	0	0	
About social media usage	Never	370	257	69.46	105	28.38	8	2.16	x2=7.98 P=0.24 df=6 (NS)
	One day a week	181	104	57.46	66	36.46	11	6.08	
	2-3 days a week	43	22	51.16	20	46.51	1	2.33	
	A few days a week	6	3	50	3	50	0	0	
	Everyday	0	0	0	0	0	0	0	
Awareness about Bullying Behavior	Yes	281	170	60.49	99	35.23	12	4.27	x2=3.97 P=0.13 df=2 (NS)
	No	319	216	67.71	95	29.78	8	2.51	
	Nil	319	220	68.97	91	28.53	8	2.51	
Sources of Information	Friends	130	70	53.85	54	41.54	6	4.62	x2=8.41 P=0.39 df=8 (NS)
	Teachers	40	26	65	12	30	2	5	
	Newspaper/TV/Radio	87	60	68.97	24	27.59	3	3.45	
	Social media	24	10	41.67	13	54.17	1	4.17	
Involved in Extracurricula	Yes	372	260	69.89	99	26.61	13	3.49	x**2=14.68**
	No	228	126	55.26	95	41.67	7	3.07	**P=0.01****

ractivities									**df =2(S)**
	Nil	228	156	68.42	65	28.51	7	3.07	x^2=10.21
Type of	Sports	197	117	59.39	74	37.56	6	3.05	P=0.25
Extracurricula	Yoga	73	49	67.12	23	31.51	1	1.37	df=8
ractivities	Fine Arts	81	54	66.67	23	28.4	4	4.94	(NS)
	Exercises	21	10	47.62	9	42.86	2	9.52	

S - Significant at p<0.05 level ***S – Very Highly Significant at p<0.001 level