

Screening and Identification on Risk of Behavioral Problems among School Children by Teachers

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Abstract

Introduction: Behavioral disorders are disruptive behaviors' in a child that are not common and are unacceptable. These abnormal behaviors are usually associated with biological, family, academic factors as well as parenting practices, parenting styles and parent-child interaction.

Objectives: The current study was the initial phase of a 2-phase project. The objective of this study was the identification of risk of behavioral problems by the class teachers, among school children between 8 to 13 years of age. The findings enabled to provide a planned Parenting Program for parents of those children identified to be at risk of behavioral problems in the next phase.

Methods: Using a Structured Screening tool, totally 1202 school children from selected Government schools were screened by their class teachers.

Results: Findings revealed that, 129 school children were identified to be at risk of behavioral problems which revealed a prevalence rate of 10.7%. Majority of school children in the experimental group and control group exhibited externalizing signs than internalizing signs of behavioral problems. A smaller proportion of them had both externalizing and internalizing signs among both the groups.

Conclusions: Behavioral problems among children are on the rise. Use of appropriate parenting practices with good nurturing techniques will enable children to lead a healthy life and grow up to be productive adults in the society.

Keywords: Screening, Identification, Risk of Behavioral Problems, Children, Teachers

Introduction

Behavior is the way in which an individual reacts to a particular situation or experience. The term Behavioral Problems (BP) generally refers to a range of behaviors, from those which can be considered part of the expected developmental process, which when severe, can significantly interfere with the ability of children to learn and develop. If a child can't control his anger, frustration, or disappointment in an age-appropriate manner, he may have an underlying emotional problem. Certain behaviors like, difficulty in managing a child's impulses, emotional outbursts, behaviors that do not respond to discipline, those that interfere with school and social interactions show that the child is at risk of behavioral problems¹.

Gongala² stated that, there is no yardstick for normal behavior. It totally depends on a child's age, his personality, emotional development and environment of upbringing by the parents. Williams³ explains externalizing behavior as the expression of feelings and emotional responses into behaviors that are directed outward into delinquent or aggressive behavior whereas, internalizing behaviors refer to behaviors in which children direct feelings and emotions inward. Eight years is the point at which many children start having academic tests at school, expectations for homework, focus, and an increase in abstract thinking.

Adolescence is defined by the World Health Organization (WHO) as the age between 10-19 years, which is marked by immense turmoil in emotional and behavioral spheres. Children below 16 years of age make 40% of India's population and estimating the prevalence of mental disorders in children and adolescents is critical to providing the mental health services that they are in need⁴. Community studies on behavioral disorders in children and adolescents conducted in India have yielded point prevalence rates of 2.6% to 35.6%. The prevalence rate of children between 8-12 years was 9.4%⁵.

The prevalence of behavioral problems was estimated in 14 schools among I to IV grade children at Karnataka⁶. Modified Developmental Psychopathology Checklist for Children and Modified Behavioral Problems Questionnaire, the class teachers identified children with externalizing and internalizing behavioral problems. The overall prevalence of behavioral problems was 14.27%. Among students in government school, the average

overall percentage of prevalence of behavioral problems was 16.42%. In aided schools the average percentage of prevalence of behavioral problems was 14.95% and among children from private school the average overall percentage of prevalence of behavioral problems was 11.42 %.

A study⁷ among 198 children between 6-12 years of age in 3 government schools of Dharmapuri district in Tamil Nādu was done to assess the prevalence of behavior problems and to find if there was an association between the scholastic performance of students and behavior problems. The class teachers assessed the child by using the Achenbach Child Behavior Checklist (CBCL 6-18years)-Teacher Rating Form (TRF). Totally, 126 (63.7%) were found to have behavior problems. The mean CBCL score was 50.54 with a Standard deviation of 19.40.

Methods

The Research Approach was quantitative in nature with a descriptive survey design. The research setting was selected Government schools within the corporation limits of Coimbatore City. The study population comprised of school children between 8-13 years of age and their Class teachers. The study was carried out in 2 phases. In Phase I, using total enumeration method, 1202 school children from 9 schools (for which permission was granted for conducting the study by the Chief Education Officer) were screened by their Class teachers. Totally, 129 School Children were identified by their class teachers to be at a risk of Behavioral Problems. These children were randomly assigned to experimental (n=68) and control groups (n=61). The final sample size was 123 with 62 children in the experimental and 61 in the control group as there was a case attrition of 6 samples in the experimental group. In the second phase of the study, an investigator-designed Parenting Program was offered to parents of children in the experimental group.

A questionnaire was used to collect data. This consisted of 2 sections with, baseline data of class teachers and a screening tool on identification of risk of behavioral problems among children by the class teachers. There were totally 30 items. The first 15 items measured externalizing behavioral signs and the rest 15 measured internalizing behavioral signs among school children. Each item was measured on a three-point scale. The maximum score was 45. The interpretation was decided upon as, higher the score, higher the risk of behavioral problems. The reliability of the screening tool was checked by test-retest method. The reliability computed was $r=0.74$ for Externalizing signs and $r=0.73$ for Internalizing signs.

Data Collection Procedure: The study was carried out after approval by Institutional Ethical Clearance Committee and permission from the Chief Education Officer of Coimbatore Corporation, School authorities, Class teachers and Parents of school children. To ensure that the class teacher was able to appropriately identify the children at risk, they were given a training session by the investigator on the signs of Behavioral problems, and the means of identifying them, prior to screening. An important criteria in selection of class teachers included those who had handled the students for a period of at least 3 months in order to be acquainted well with the children, which will enable in identifying children with externalizing and internalizing risk behaviors.

Results: The results of the study are presented below.

Table 1: Demographic Variables of Teachers in Experimental and Control Groups

Demographic Variables	Experimental Group		Control Group		Chi Square value & P value
	Frequency	%	Frequency	%	
Teachers Experience (Years)					
0 – 5	7	11.3	0	0.0	$\chi^2 = 18.755$ d.f = 4 P=0.001 ***
5 – 10	12	19.4	18	29.5	
10 – 15	10	16.1	18	29.5	
15 – 20	20	32.2	23	37.7	
> 20	13	21.0	2	3.3	
Experience in Present School (Years)					
0 – 5	34	54.8	28	45.9	$\chi^2 = 7.556$ d.f = 3 P=0.056 (NS)
5 – 10	15	24.2	13	21.3	
10 – 15	7	11.3	18	29.5	
15 – 20	6	9.7	2	3.3	
Heard about BP in the past					
Yes	47	75.8	41	67.2	$\chi^2 = 1.115$ d.f = 1

No	15	24.2	20	32.8	P= 0.291 (NS)
Received Training on BP					
Yes	16	25.8	26	42.6	$\chi^2 = 5.348$
No	31	50.0	15	24.6	d.f = 2
Not applicable	15	24.2	20	32.8	P= 0.069 (NS)
Specific Training Received.					
Cluster Resource Centre	4	6.5	0	0.0	$\chi^2 = 4.325$
Inclusive Education for Differently-abled	12	19.4	15	24.6	d.f = 2
Not applicable	46	74.2	46	75.4	P= 0.115 (NS)

Note: *** P<0.001 Level of Significance, NS – Not Significant

The above table reveals that, majority (32.2% & 37.7%) of class teachers had a work experience of 15 to 20 years, and majority (54.8% & 45.9%) had an experience of 0-5 years in the current school among both the experimental and control groups. Majority (75.8% & 67.2%) of the teachers had heard about Behavioral problems in the past in both the groups. The data also shows that only 25.8% in the experimental group and 42.6% had received training on behavioral problems in the past.

Table 2: Distribution on Baseline Information of School Children in Experimental and Control Groups

Baseline Information of School Children	Experimental Group (n=62)		Control Group (n=61)		χ^2 value and p value
	Frequency	%	Frequency	%	
Age of School Children					
8 - 9 years	19	30.6	17	27.9	$\chi^2 = 1.33$
10 - 11years	16	25.8	17	27.9	d.f = 2
12 – 13 years	27	43.5	27	44.3	p=0.936 (NS)
Gender of School Children					
Male	40	64.5	43	70.5	$\chi^2 = 0.500$
Female	22	35.5	18	29.5	d.f = 1
Class Studying In					
Third and Fourth Standard	21	33.9	18	29.5	p=0.479 (NS)
Fifth and Sixth Standard	20	32.3	20	32.8	$\chi^2 = 3.14$
Seventh and Eighth Standard	21	33.9	23	37.7	d.f = 2
					p= 0.855 (NS)

Note: NS – Not Significant

The above table describes the frequency distribution on baseline information of the school children. Data reveals that, majority (43.5%, 44.3%) of the children were between 12 to 13 years of age among experimental group and control groups. Majority (64.5%, 70.5%) of them were male children among the experimental and control groups respectively. Majority (33.9%) of children in the experimental group were studying in third and fourth and in seventh and eighth standards in the experimental group. Among the control group, majority (37.7%) of children were in seventh and eighth standards.

Table 3: Prevalence of Risk of Behavioral Problems among School Children

Total Number of School Children Screened	Total Number of School Children Identified	Prevalence %
1202	129	10.7

Table 3 shows that, 1202 school children between 8 to 13 years of age were screened for the risk of behavioral problems. Totally 129 children were identified to have the risk of behavioral problems. Therefore, the prevalence rate of the risk of behavioral problems in this study was 10.7%.

Figure 1 shows that, majority (56.46%, 68.85%) of school children in the experimental group and control group exhibited externalizing signs of risk of behavioral problem. Regarding internalizing signs, majority of school children in experimental group (30.64%) exhibited more internalizing signs than the control group (21.31%). Findings also showed that, some (12.9%, 8.94%) of the children had signs of both externalizing and internalizing type of behavioral problems in both the groups.

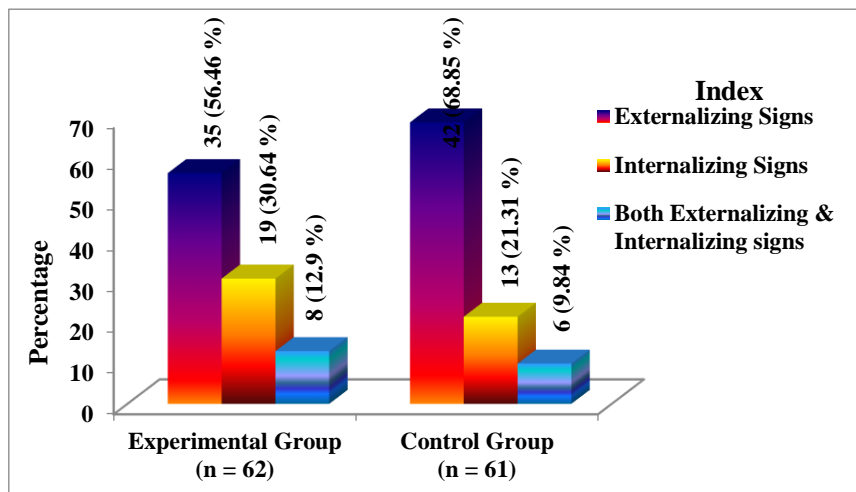


Figure: 1. Frequency and Distribution on Types of Risk of Behavioral Problems among School Children

Table: 4. Frequency Distribution on Gender of School Children with different Signs of Risk of Behavioral Problems

Types of Risk of Behavioral Problems based on Gender of School Children	Experimental Group (n=62)		Control Group (n=61)	
	No	%	No	%
Male Children:				
Externalizing Signs	31		36	
Internalizing Signs	1	50.00	1	59.01
Both Externalizing & Internalizing Signs	7	1.61	6	1.64
		11.29		9.84
Female Children:				
Externalizing Signs	4		6	
Internalizing Signs	18	6.45	12	9.84
Both Externalizing & Internalizing Signs	1	29.03	0	19.67
		1.61		0

The above table on gender distribution reveals that, majority (50%) of male children in the experimental group exhibited externalizing sign of behavioral problems and 29.03% of girls exhibited internalizing problems. Among those in the control group, it was found that, 59.01% of male children exhibited externalizing sign of behavioral problems while 19.67% of female children exhibited Internalizing signs.

Table 5: Comparison on Risk of Behavioral Problems among School Children in Experimental and Control Group as Assessed by Class Teachers

Types of Behavioral Problems	Experimental Group (n=62)		Control Group (n=61)		Independent t value & p value
	Mean	S.D.	Mean	S.D.	
Externalizing Signs	14.79	6.23	16.15	6.54	t = 1.179, P=0.241 (NS)
Internalizing Signs	11.18	6.28	9.66	7.01	t = 1.268, P=0.207 (NS)
Overall Risk of Behavioral Problems	25.97	5.24	25.80	7.03	t = 1.160, P=0.147 (NS)

Note: NS – Not Significant

Table 5 shows the comparison of mean, standard deviation of externalizing and internalizing signs among children in both groups. The findings reveal no significance in the types of behavioral problems among children in the experimental and control groups.

Discussion

The current study had identified a prevalence of 10.7% of risk of behavioral problems among the population screened. A similar study⁸ was conducted by the class teachers among 957 school children in Ludhiana to estimate the prevalence of behavioral problems using Rutter-B scale. The results from the screening instrument and a parental interview revealed that, 45.6% of the children were estimated to have behavioral problems. Out of these children, 36.5% had significant problems.

A study⁹ that explored the perceptions of behavioral problems among 8-15 year old children on their parents', family members' and teachers' and reported that, parents, community members, and school teachers have been identified as key stakeholders keeping in mind their direct interactions with children and their potential influence on children's behavior.

Adhikari¹⁰ stated that, child problem behaviors show an increase in the beginning of the toddler period. Although a considerable percentage of children will outgrow these problems, few longitudinal studies suggest that, about 50–60% of children showing high rates of disruptive behavior at age 3–4 will continue to show these problems at the school age also. Disruptive behavior is also referred to as externalizing or “acting-out” problems, includes attention and oppositional problems and their corresponding disorders. Studies of preschool children using DSM-III and DSM-IV criteria have estimated prevalence of emotional disorder diagnoses; these tend to be low for each category: separation anxiety(0.3–5%), social phobia (2–4%), specific phobia (0–2%) and depression (0–2%). Multiple types of problem behavior, rates of any emotional disorder were as high as for disruptive disorders, both around 10%. The prevalence of depression and anxiety did not differ by gender in middle childhood.

Regarding gender distribution, findings of the present study showed that, majority (50%) of male children in the experimental group exhibited externalizing sign of BP and 29.03% of girls exhibited internalizing problems whereas, majority (59.01%) of male children exhibited externalizing sign of BP and 19.67% of female children exhibited Internalizing problems in the control group. Community studies⁵ on behavioral disorders in children and adolescents conducted in India have yielded point prevalence rates of 2.6% to 35.6%. The prevalence rate of children between 8-12 years was 9.4% which was slightly lower than the prevalence (10.7%) in the current study.

Fifty school children¹¹ aged 6-14 years studying at a government school were selected for a study on the prevalence, factors and the predictors that can be useful in the early diagnosis and management of behavioral issues. Parent's version of Child Behavioral Checklist (CBCL) was used to collect data. Twenty-one (42%) children were found to be above the cut-off score. Mean CBCL score was 43.3 (SD+ 27.17). Most common behavior problems in these subjects were “cannot sit still, restless, hyperactive” shown by 62% of the children. Female children had behavior problems like “too concerned with neatness or cleanliness”, “self-conscious or easily embarrassed” and “feels she has to be perfect” whereas male children had behavior problems like, “does not feel guilty after misbehaving”, cannot concentrate” and “restless” The overall pattern of distribution of behavior problems in the subjects revealed them to be more of externalizing ones. Female children had more of internalizing behavior problems whereas male children had more of externalizing problems. Findings of another

study⁶ showed that, more of boys had externalizing behavioral problems than girls which is supportive of the current study.

Limitations

The screening tool used by the class teachers identified 129 children who were at a risk of behavioral problems. However, only 123 children could take part in the next phase of the study, as parents of 6 children did not consent to participate. This was beyond the control of the researcher.

Conclusion

Children below 16 years of age make 40% of India's population and estimating the prevalence of mental disorders in children and adolescents is critical to providing the mental health services that they are in need⁵. Teachers play an important role in identifying children at risk of Behavioral Problems. If such issues are identified at an early stage, they can be assisted, managed and prevented from going into major disorders. Hence, it is essential for school teachers to be aware of the importance of identifying children who need early intervention. The authors of another study on behavioral problems among school children suggested that, appropriate management of these children includes family therapy, parental training and liaison with school to investigate possible reasons for refusal and negotiate re-entry. And so, there is an immense need for teachers to be trained to assess, identify, report and provide regular follow up of these children¹².

Conflict of Interest

The author declares no conflict of interest

Ethical Clearance

The study proceeded after approval from the Institutional Ethical Clearance Committee dated 10.05.2014.

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