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# **Original Research Article**

# Distribution and correlations of school bully activities in a Central Indian district of Madhya Pradesh

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#### ABSTRACT

**Background**: Bullying at schools is a known but neglected phenomenon. The study of its prevalence and correlates are essential to curb this aberrant behavior for building a healthy society.

Aim and Objective: This cross-sectional evaluation was carried out to study the pattern through which bully activities manifests in students from  $6^{th}$  to  $10^{th}$  standards and find its positive and negative correlates

**Materials and Methods:** 'Candidates' selection was done through simple random technique and proportionate sampling was adopted to ensure equal presentation across the board i.e., urban vs rural, types of schools, gender and class(standard).

**Results:** 480 participants were studied both from rural and urban high schools ( $6^{th} - 10^{th}$  standard) in equal proportion. An equal portion (33.3%) of participants were ensured from the three groups of schools studied i.e., Girls, Co-education, and Boys, across gender (50%) and class(standard) 20% from each of them. Their age ranged from 10 years to 18 years with the mean age at 13.9 years and a standard deviation of 1.66. Of them 52% were bystanders, and 48% were engaged in some form of bully activities (20% victim, 16% bully victim, and 13% bully). While both bully and victim scores showed a strong positive correlation (r - 0.259\*\*, p - 0.000) their relation with prosocial and self-esteem scores were strongly negative (p – 0.001). GHQ (General Health Questionnaire) score was not related to any of the above ones.

**Conclusion:** Bully related behavior was predominant in the studied population. From the results, it appears that measures directed at improving prosocial behaviors and self-esteem of pupils can act as effective counters to the empathetic school bully activities.

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## 1. Introduction

A sound psychosocial foundation at an early and formative stage is imperial for holistic personality development. Providing such an environment is one of the prime responsibilities of any sensible society. Schools considered as the learning towers are one such organization which has a great role to play in this regard. Under the right to education, one of the prime criteria is to ensure the physical and

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mental wellbeing of the students which can lead to effective learning and skill development. Providing a conducive and ameliorated surrounding for all children has become a bare necessity both legally and socially. Regardless of sustained legal and social reforms, we are far away from such a situation. At ground level school bully activities, a prominent psychosocial deranged situation is glaringly prominent. Through the present study, an attempt is made to expose this unruly behavioral issue and to identify the factors supporting and antagonizing it.

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#### 2. Materials and Methods

A cross-sectional evaluation of students from  $6^{th}$  to  $10^{th}$ standards(classes) was undertaken over 1 year from a western district of the Indian state of Madhya Pradesh to assess the prevalence, type, and relating factors to school bully activities. Total 6 schools, 3 each from urban and rural areas were randomly selected from the enlisted ones provided by district educational office. Of them 1 each was a boy's school, a girl's school and a coeducational school from both the chosen settings. The sample size of 480 participants was estimated by using a prevalence-based formula where the locally relevant literature supported prevalence used was 31.4%, the margin of error fixed at 0.05%, an add-on of 10% was considered to cover the dropouts and a final roundup of number was carried out to the nearest feasible higher number. Bullying Prevalence Questionnaire (BPQ) to measure subscales such as Bully, Victim, and Pro-social Scales, Rosenberg's Self-Esteem Scale (RSES) to estimate participants self-esteem and General Health Questionnaire (GHQ- 12) was used for evaluation of psychiatric morbidity were used as tools for collecting information. 4-6 The "back/reverse translated," and field-tested tools were employed in data collections. Questionnaires in both English and Hindi(local vernacular) were employed keeping the need of the participants and medium instruction of schools in mind. Level of significance was fixed at p  $\leq 0.05$ , computer coded data were analyzed by SPSS 21 of IBM Inc. US.

#### 2.1. Inclusion and exclusion criteria

Students of  $6^{th}$  -10<sup>th</sup> standards free from major comorbid conditions with parental permission were included.

## 3. Results

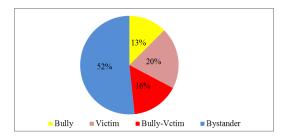
From 480 participants 240 each were from both urban and rural localities.  $160(1/3^{rd})$  of the participants were from the three different types of schools (boy's, girl's and coeducational). An equal number of participants (96) were enrolled from each class ( $6^{th}$  to 10th). The mean age of participants was 13.9 year with a standard deviation of 1.66. Students involved in some form of bully activities was 48.3% of which 20.2% were victims. From 480 candidates 298(62.1%) were prosocial, 68.4% had normal or higher self-esteem and 53.3% reported no psychological distress. This along with other descriptive details of studied variables are presented in Table 1.

A closer look at the participant behavior provided the break up into bystanders (52%), victims (20%), Bully victims (16%) and bully (13%). The Figure 1 depicts these observations.

On pearson correlation analysis Bully score and Victim score showed strong positive result (r - 0.259,  $p \le 0.001$ ) among them but prosocial and self-esteem scores showed

**Table 1:** Frequency distribution of studied variables

Variable	Frequency	Percentage (%)
Residence		
Urban	240	50
Rural	240	50
Type of Schools		
Girls	160	33.3
Co-education	160	33.3
Boys	160	33.3
Class/Standard		
$6^{th}$	96	20
$7^{th}$	96	20
$8^{th}$	96	20
$9^{th}$	96	20
$10^{th}$	96	20
Gender		
Boys	240	50
Girls	240	50
Age groups		
10-12 years	113	23.6
13-15 years	278	57.9
16-18 years	89	18.5
<b>Total Bullying population</b>	232	48.3
Only bully	60	12.5
Only Victim	97	20.2
Bully-Victim both	75	15.6
Bystanders	248	51.7
Sociality		
Pro-social	298	62.1
Social	182	37.9
Self-esteem		
Low Self-esteem	152	31.7
Normal Self-esteem	286	59.6
High Self-esteem	42	8.8
Psychological distress		
Severe psychological distress	45	9.4
Some psychological distress	179	37.3
No psychological distress	256	53.3



**Fig. 1:** Showing the distribution of participants in line with school behavior (rounded up to nearest non-fractioned %)

Scores Scores Value Self-esteem score **Bully score** Victim score **Pro-social score** 0.259\*\* r Victim score 0.000 p -0.107\* -0.154\*\* r Pro-Social score .001 0.019 p 0.202\*\* -0.043-0.194\*\* r Self-esteem score 0.351 0.000 0.000 p 0.080 0.088 0.007 -0.06r GHQ score 0.079 0.053 0.871 0.188

Table 2: "Pearson Correlation" among bully score, victim score, pro-social score, self-esteem score and psychological distress score of the study participants

r = correlation coefficient; \* significant at p - 0.05; \*\* significant at p - 0.000 level

strong negative relations with both bully and victim scores  $(p \le 0.001)$ . GHQ – 12 score was not related to any of the above scores (p  $\geq$ 0.05). The correlation table explaining these observations is presented in Table 2.

## 3.1. Types and sites of occurrence of bully activities

p

Bully activities manifested through verbal, psychological, and physical forms in that order. Verbal and physical bully was more site-specific and mostly materialized at fixed locations. Lesser varieties of psychological bullying (exclusion from groups and threats) mostly (56.9% and 53.1%) took place at fixed locations but sever forms (thefts of objects of poor or great values and extortion of money) was mostly opportunistic (no specific site preference noted). The respective number and percentages (in parenthesis) are presented in Table 3.

## 4. Discussion

Schools the dome of learning should be sanitized from all aspects so that the tender mind can learn and the persona groomed unhindered. 7,8 Though much been said and done in this regard but still wide gaps exist. One such arena is existence of bullying at middle and high schools across the world.<sup>2</sup> The legislations for ensuring safe learning environment are a far-reaching goal at least in present context. The situation is no good in developing countries including India. <sup>9</sup> This study highlights pertinent correlates of this psycho-social apathy.

A bully prevalence of 48.3% as reported in the present study is a staggering number considering the time, we are living in. Dake JA et al. reported an overall prevalence of 49.8% in Irish pupils. 10 T. Biswas et al. also reported a Global bully prevalence at 50% for school attendance adolescents. 11 Bibou-Nakou & Markos also reported that between 15 and 30% of school children are either bullied or bully others. 12 The report by Biswas et al. is a recent one (2020). Bibou-Nakou & Markos study was from Greek secondary schools which have somewhat encouraging statistics.

The break of bully activities revealed the prevalence of victims at 20%, Bully victims at 16%, and bully at 13%. A higher victimization score is a thing of common occurrence followed by bully-Victim category who are involved in both activities, sometimes getting bullied(victimized) and at other times bullying others. This attribute is related to the power equation at the time of the episode. The authorities can step in and discourage this power/group activities by a regular student and parental counselling and dismantling such groups. Researchers across the globe have opined in similar lines. 9,13,14

While bully scores and victim scores were positively correlated, prosocial behaviour and high self-esteem were reported protagonist against them (Table 2 ). Pro-social pupils had high self-esteem (r, 0.202\*\*) which is an encouraging and synergic sign. Schools need to work on strengthening these domains which can bring the bully burden down. J. Ashwin Rambaran et al. 2020 and a host of other researchers have reported with the same vest. 15–17

The most encouraging observation was pupils psychiatric score (GHQ 12) was found away from this vicious phenomenon.

Verbal bullying was noticed as a more frequent phenomenon which was followed by psychological and physical ones. Irrespective of their modality most bully activities happened in fixed locations (Table 3). Many researchers have emphasized on the comfort of place and existence of psycho-social power imbalance as it's important contributors. 18-20

## 4.1. Strength and weakness

The stringent and scientific sample selection process and involvement of a single investigator were aimed at bias reduction. The obvious limitation is that which is inherent to the selected study design i.e., cross-sectional study.

#### 4.2. New observation

The most encouraging observation was pupils psychiatric score (GHQ 12) was found not to be related to this vicious

Types of Bullying	Out of school	In the way to the classroom	In the classroom	In the bathroom	On playground	At eatery	No specific site	Multiple sites	One site only
Psychological									
gunying		:		i !	:	!		;	
Exclusion	71 (14.8)	49 (10.2)	55 (11.5)	13 (2.7)	73 (15.2)	12 (2.5)	119 (24.8)	88 (18.3)	273(56.9)
from groups									
Threats	102 (21.2)	40 (8.3)	52 (10.8)	26 (5.4)	24 (5)	11 (2.3)	154 (32.1)	71 (14.8)	255 (53.1)
Theft of	52 (10.8)	12 (2.5)	83 (17.3)	6 (1.2)	14 (2.9)	15 (3.1)	245 (51.3)	52 (10.8)	182 (37.9)
objects of									
poor value									
Great Theft	84 (17.5)	15 (3.1)	25 (5.2)	8 (1.7)	9 (1.9)	9 (1.9)	295 (61.5)	35 (7.3)	150 (31.2)
Money	95 (19.8)	25 (5.2)	18 (3.8)	4 (0.8)	12 (2.5)	15 (3.1)	267 (55.6)	44 (9.2)	169 (35.2)
extortion									
physical									
bullying									
Injuries	61 (12.7)	32 (6.7)	27 (5.6)	4 (0.8)	95 (19.8)	5(1)	156 (32.5)	100(20.8)	224 (46.7)
Physical	82 (17.1)	25 (5.2)	43 (9)	14 (2.9)	33 (6.9)	8 (1.7)	223 (46.5)	52 (10.8)	205 (42.7)
aggressions									
Verbal									
bullying									
Jokes	60 (12.5)	24 (5)	69 (14.4)	3 (0.6)	51 (10.6)	14 (2.9)	37 (7.8)	222(46.2)	221 (46)
Verbal teasing	63 (13.1)	27 (5.6)	45 (9.4)	8 (1.7)	50 (10.4)	11 (2.3)	135(28.1)	141(29.4)	204 (42.5)

\*Figures in parenthesis represents percentage (%).

phenomenon.

#### 5. Conclusion

Perpetual offenders are a part of every society. It is our role and responsibility to bring their number down through reformist measures. Though many such measures are in place for prevention of bullying at schools but the results are hardly impressive. Identifying the potential problem in terms of its manifestations and place of occurrence will give additional inputs to concerned authorities to be more vigilant, targeted and proactive. Additionally, encouraging and awarding prosocial and self-esteem acumens will be further rewarding in curbing this social evil. All efforts must be made to sustain the gain achieved by no entanglement of the differently-abled subject into this devilish activity.

## 6. Ethical permission

The study had IEC (institutional ethical committee clearance of R D Gardi Medical College - RDGMC) clearance vid version number 225.

## 7. Source of Funding

None.

#### 8. Conflict of Interest

None.

## 9. Acknowledgement

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