

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

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Title: Distribution and correlations of school bully activities in a Central Indian district of Madhya Pradesh.

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 6th to 10th standards and find its positive and negative correlates.

Methods: candidates' selection was done through simple random and proportionate sampling methods 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 (6th – 10th standard) in equal proportion. An equal representation (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. The age ranged from 10 years to 18 years with the mean age at 13.9 years and a standard deviation of 1.66. From the total studied population 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 had strong interconnect (strong positive correlation $r = 0.259^{**}$, $p - 0.000$) their relation with prosocial and self-esteem scores were negative ($p - 0.001$). GHQ (General Health Questionnaire) score was not related to any of the above sub-scales.

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 reported empathetic activities.

Key-words: School bully, prosocial, self-esteem, GHQ

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 mental wellbeing of the students which can lead to effective learning and skill development¹. Providing a conducive and ameliorated surrounding for all children has become a bare necessity both legally and socially². 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 was made to expose this unruly behavioral issue and to identify the factors supporting and antagonizing it.

Methods: A cross-sectional evaluation of students from 6th to 10th 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 0.5%, 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 number³. 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) for evaluation of psychiatric morbidity were used as information collecting tools ⁴⁻⁶. Level of statistical significance was fixed at $p \leq 0,05$, computer coded data were analyzed by SPSS Version 21 of IBM Inc. US.

Results: From 480 participants 240 each were from both urban and rural localities. 160(1/3rd) of the participants were from the three different types of schools (boy's, girl's and co-educational). An equal number of participants (96) were enrolled from each class (6th to10th). The mean age of participants was 13.9 year with a standard deviation of 1.66. Students involved bully activities were 232(48.3%) of which most i.e., 20.2% were victims. Prosocial candidates were 298(62.1%) and participants with normal or higher self-esteem were 68.4% and psychological distress was noted in 46.7%. The descriptive details of these variables are presented in table number 1.

Table Number 1.

Frequency distribution of studied variables

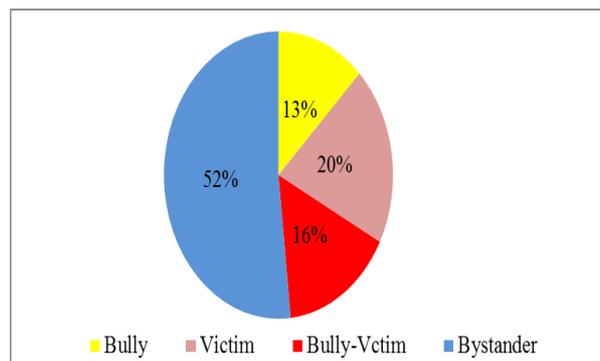
Variable	Frequency	Percentage (%)
Residence		
Urban	240	50
Rural	240	50
Type of Schools		
Girls	160	33.3
Co-education	160	33.3
Boys	160	33.3
Class/Standard		
6 th	96	20
7 th	96	20
8 th	96	20
9 th	96	20
10 th	96	20
Gender		
Boys	240	50
Girls	240	50
Age groups		
10-12 years	113	23.6
13-15 years	278	57.9
16-18 years	89	18.5
Total Bullying population	232	48.3
1. Only bully	60	12.5
2. Only Victim	97	20.2
3. Bully-Victim both	75	15.6
Bystanders	248	51.7
Sociality		
1. Pro-social	298	62.1
Social	182	37.9

Self-esteem		
1. Low Self-esteem	152	31.7
2. Normal Self-esteem	286	59.6
High Self-esteem	42	8.8
Psychological distress		
1. Severe psychological distress	45	9.4
2. Some psychological distress	179	37.3
3. No psychological distress	256	53.3

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

figure Number – 1

Pie-chart showing the distribution of participants in line with school behavior (rounded up to nearest non-fractioned %)



On Pearson correlation analysis Bully score and Victim score showed strong positive result ($r = 0.259$, $p \leq 0.001$) among them but both Prosocial and Self-esteem scores were negative relations with them ($p \leq 0.001$). GHQ – 12 score was not related to any of the above subscales (scores $p \geq 0.05$). The correlation table explaining these observations is presented in table number 2.

Table Number - 2

“Pearson Correlation” among bully score, victim score, pro-social score, self-esteem score and psychological distress score of the study participants.

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 aggressions	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)
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 (%).

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 world⁹. 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 India¹⁰. 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 pupils¹¹. T. Biswas et al. also reported a Global bully prevalence at 50% for school attending adolescents¹². The report by Biswas et al. is a recent one (2020) thereby making it worth mentioning.

The break of bully activities revealed the prevalence of victims at 20%, Bully victims at 16%, and bully at 13%. Bibou-Nakou & Markos also reported that between 15% to 30% of school children are either bullied or bully others¹³. A higher victimization score is a thing of common occurrence followed by bully-Victim category who are involved in both ends of the activities i.e., 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 group dynamics. Researchers across the globe have opined in similar lines^{10,14,15}.

While bully scores and victim scores were positively correlated, prosocial behaviour and high self-esteem were reported protagonist against them (table number 2). Pro-social pupils had high self-esteem (r, 0.202**) too. This was 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 vest¹⁶⁻¹⁸.

The most astonishing/encouraging observation of the study was no relation of pupils psychiatric score (GHQ 12) with 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 number 3). Many researchers have emphasized on the comfort of place and existence of psycho-social power imbalance as it's important contributors¹⁹⁻²¹.

Strength and weakness: Robust sampling of participants by simple random and proportionate methods was its 'main strength. This was adopted to counter bias. The weakness worth mentioning is that which is inherent to the cross-sectional design.

Study highlights:

- No relation of psychiatric morbidity with bully activates
- Protective effect of prosocial self-esteem score against school bully behaviour
- Strong inter relation (positive) between Bully and Victim scores

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 these devilish activities.

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

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Conflict of interest: None

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References:

1. Ersilia Menesinia and Christina Salmivallib; Bullying in schools: the state of knowledge and effective interventions. *Psychology, health & Medicine*, 2017 Vol. 22, no. s1, 240–253 <http://dx.doi.org/10.1080/13548506.2017.1279740>
2. Krishna Kumari Paudel Subedi; Literature Review On School Bullying. *World Journal of Advance Healthcare Research*; 2020, 4, 4. 233-246.
3. V.Y. Kshirsagar, Rajiv Agarwal and Sandeep B Bavdekar; Bullying in Schools: Prevalence and Short-term Impact. *Indian Pediatrics*. 2007; 44, January 17, 25-28.
4. Ken Rigby, Phillip Slee. Bullying Prevalence Questionnaire (BPQ). 1993. Free download from ken.rigby@unisa.edu.au
5. Rosenberg, M., Schooler, C., Schoenbach, C., & Rosenberg, F. (1995). Global self-esteem and specific self-esteem: different concepts, different outcomes. *American Sociological Review*, 60, 141-156.
6. Goldberg DP, Hillier VF. A scaled version of the General Health Questionnaire. *Psychol. Med.* 1979. 9: 139–145
7. Abbreviations.com, STANDS4 LLC, 2020. "SCHOOL." Accessed September 2, 2020. <https://www.abbreviations.com/SCHOOL>.
8. (Educational. Ref: Abbreviations.com, STANDS4 LLC, 2020. "SCHOOL." Accessed September 2, 2020. <https://www.abbreviations.com/SCHOOL>.)
9. Krishna Kumari Paudel Subedi; Literature Review On School Bullying. *World Journal of Advance Healthcare Research*; 2020, 4, 4. 233-246.
10. Rashmi Shetgiri, Bullying and Victimization Among Children. *Adv Pediatr* . 2013; 60(1): 33–51. doi: 10.1016/j.yapd.2013.04.004
11. Dake JA, Price JH, Telljohann SK. The nature and extent of bullying at school. *J Sch Health*. 2003;73(5):173-180. doi:10.1111/j.1746-1561.2003.tb03599.x
12. T. Biswas et al. / *EClinical Medicine* 20 (2020) 100276.
1-8:
<https://www.journals.elsevier.com/eclinicalmedicine;https://doi.org/10.1016/j.eclinm.2020.100276>
13. Bibou-Nakou, Ch. Asimopoulos, Th. Hatzipemou, E. Soumaki & J. Tsiantis , *International Journal of Mental Health Promotion* (2013): Bullying in Greek secondary schools: prevalence and profile of bullying practices, *International Journal of Mental Health Promotion*, DOI: 10.1080/14623730.2013.857824
14. Monks, C., & Smith, P. K. (2006). Definitions of bullying: Age differences in understanding of the term, and the role of experience. *British Journal of Developmental Psychology*, 24, 801–821
15. Aud, S., Wilkinson-Flicker, S., Kristapovich, P., Rathbun, A., Wang, X., and Zhang, J. (2013). *The Condition of Education 2013 (NCES 2013-037)*. U.S. Department of

Education, National Center for Education Statistics. Washington, DC. Retrieved [date] from <http://nces.ed.gov/pubsearch>

16. Ersilia Menesini & Christina Salmivalli , Bullying in schools: the state of knowledge and effective interventions, *Psychology, Health & Medicine*, 2017;22:sup1, 240-253,DOI: 10.1080/13548506.2017.1279740
17. Reijntjes, A., Vermande, M., Thomaes, S., Goossens, F., Olthof, T., Aleva, L., & Van der Meulen, M. (2016). Narcissism, bullying, and social dominance in youth: A longitudinal analysis. *Journal of Abnormal Child Psychology*, 44, 63–74.
18. J. Ashwin Rambaran , Jan Kornelis Dijkstra, and Ren•e Veenstra. Bullying as a Group Process in Childhood: A Longitudinal Social Network Analysis; *Child Development*, 2020, 91, 4, 1336–1352; DOI: 10.1111/cdev.13298
19. Reijntjes, A., Vermande, M., Thomaes, S., Goossens, F., Olthof, T., Aleva, L., & Van der Meulen, M. (2016). Narcissism, bullying, and social dominance in youth: A longitudinal analysis. *Journal of Abnormal Child Psychology*, 44, 63–74.
20. Jing Wang, Ronald J. Iannotti, Jeremy W. Luk; Co-occurrence of Victimization from Five Subtypes of Bullying: Physical, Verbal, Social Exclusion, Spreading Rumors, and Cyber; *J Sch Psychol.* 2012; 50(4): 521–534. doi: 10.1016/j.jsp.2012.03.004
21. Alana M. Vivolo-Kantor, Brandi N. Martell, Kristin M. Holland, Ruth West; A systematic review and content analysis of bullying and cyber-bullying measurement strategies; *Aggress Violent Behav.* 2014; 19(4): 423–434. doi: 10.1016/j.avb.2014.06.008

Figures

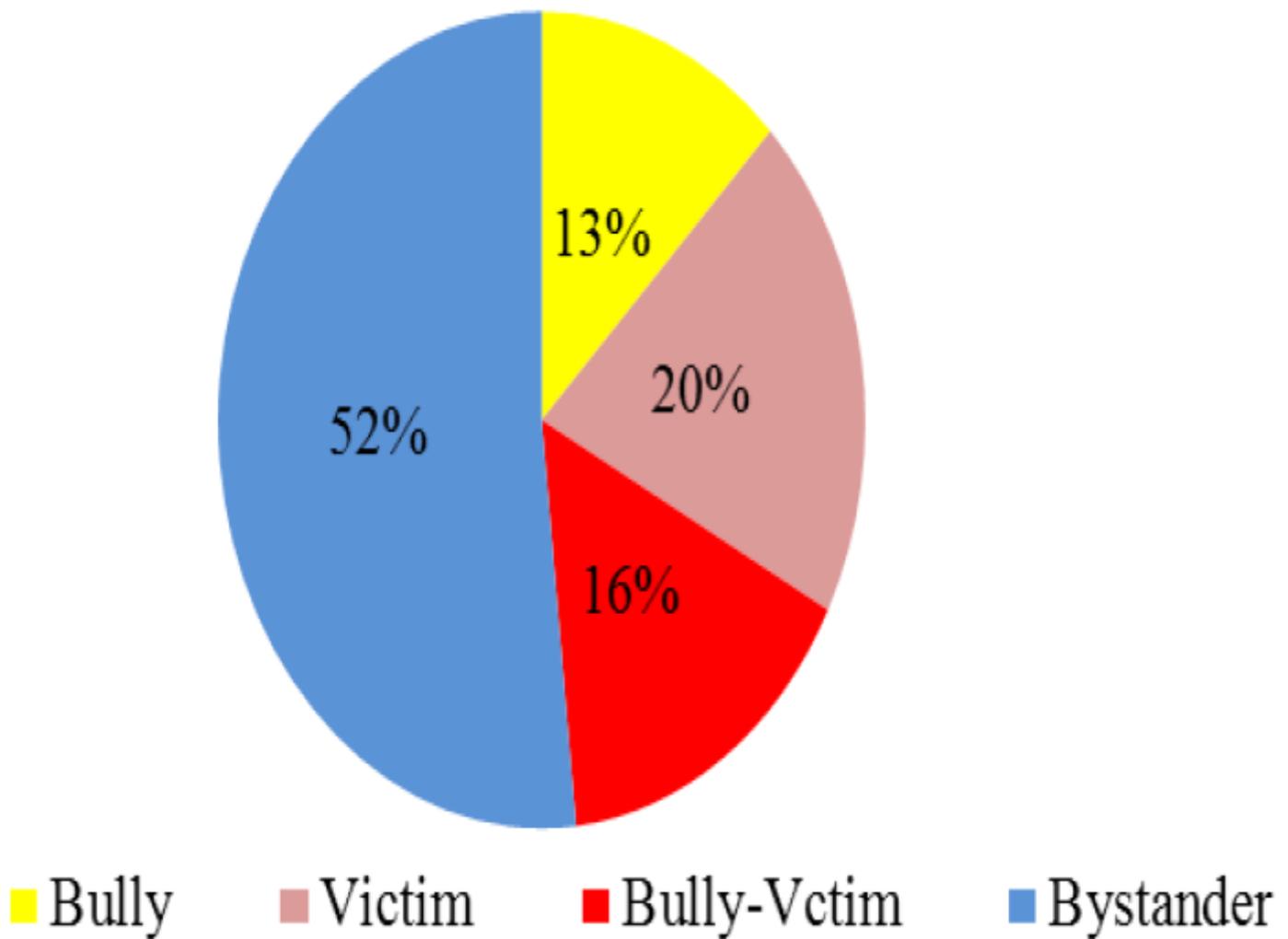


Figure 1

Pie-chart showing the distribution of participants in line with school behavior (rounded up to nearest non-fractioned %)