

Prevalence and Forms of Bullying Perpetration and Victimization in Indian Adolescents

Mamta S Chhabria¹, Aditi Rao², Chandrika Rao³, Somashekar AR⁴

ABSTRACT

Background: Bullying in childhood and adolescence has pervasive negative impacts in adulthood in both victims and bullies. There are few studies describing the prevalence of bullying in Indian schools, and few which have documented the various forms of bullying prevalent in our country. This study is being carried out with working hypothesis that various forms of bullying perpetration and victimisation exists in Indian urban schools. **Objectives:** To study the prevalence of bullying perpetration/ victimization, forms of bullying/victimization in Indian high school students. **Methods:** A cross sectional study conducted in 2 urban schools in Bangalore. A cohort of 435 adolescents (13-18yrs) were administered a pre validated 8 item questionnaire, part of the Student School Survey to assess bullying perpetration/ victimization. Results: 435 students in all, with 242 girls (55.6%), 170 boys (39.1%), 23 not revealing gender were studied. Total prevalence of bullying perpetration was 70.74%, and victimization was 74.94%. Verbal bullying was the most prevalent (55.17%) with physical bullying (40.46%) and cyber bullying (15.86%) being less frequently reported. Similarly verbal victimization (65.75%) was most prevalent followed by physical victimization (40.23%) and cyber victimization (14.48%). **Conclusions:** The information revealed by our study sensitizes doctors to the existing prevalence of bullying. Paediatricians and adolescent physicians should enquire about bullying from their adolescent patients and offer anticipatory guidance. Assessment of bullying can be implemented routinely in schools. A multi-targeted approach at individual/family level, school level, community level, State level and National level to make the school a safer environment for children can be adopted.

Key words: Urban high school children, Physical bullying, Verbal bullying, Cyber bullying, Cyber victimization.

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INTRODUCTION

Various definitions of bullying exist in the absence of a universal definition. Bullying is defined as long-standing violence, physical or psychological, conducted by an individual or a group and directed against an individual, who is not able to defend himself in the actual situation, with a conscious desire to hurt, threaten or frighten that individual or put him under stress.¹

Bullying is a subcategory of aggressive behaviour characterized by the following three minimum criteria: (1) hostile intent, (2) imbalance of power and (3) repetition over a period of time.² If bullying is done by a group, it is called mobbing.³ Olweus describes bullying perpetration as “intentional, repeated, negative (unpleasant or hurtful) behaviour by one or more persons directed against a person (the victim) who has difficulty defending himself or herself.”⁴ Mob mentality, peer pressure, popularity, academic or athletic excellence, ethnic and racial characteristics of school cliques, physical appearance, financial differences between groups of students, dress sense are some factors which can lead to a power differential which propagates bullying.⁵

Victimized students reveal more loneliness, depression, school avoidance and suicidal ideation than their peers.⁴ Such effects are often permanent in nature and adults who were chronically victimized as children reported lower self-esteem and higher rates of depression.⁶ Research has shown that bullying can increase the child's risk for chronic diseases in adulthood.⁷

Bully perpetrators too have been documented to experience more psychosocial problems such as aggressiveness, violence, juvenile delinquency when compared with their peers.⁸

The problem is pervasive in all aspects of human life and the need of the hour is to effectively curb it in childhood itself.

There are few studies describing the prevalence of bullying in Indian schools and few which have documented the various forms of bullying prevalent in our country. This study is being carried out with working hypothesis that various forms of bullying perpetration and victimization exists in Indian urban schools. Hence the objectives of the study are to estimate the prevalence of bullying perpetration/

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victimization in Indian high schools and to report the prevalence of various subtypes of bullying perpetration/victimization, the pattern of bullying perpetration/victimization across different age and gender groups this will aid physicians and pediatricians to give anticipatory guidance to adolescents and parents in their practice.

MATERIALS AND METHODS

The study was conducted in a cohort of children belonging to Standards 8th, 9th, 10th, 11th and 12th (13-18 years) in 2 urban, co-educational high schools located in Bengaluru, Karnataka, India. Informed consent was obtained from the principals of the English medium schools and the students’ parents and the purpose of the study was adequately explained. Children aged 12 years and older gave assent to participate in the study. Each child was handed an individual copy of the questionnaire. The questionnaire was in English and researchers explained the scale clearly to groups of about 40 students before they answered. Confidentiality was maintained throughout the study. The Bullying Perpetration (Items 23-26) and Bullying Victimization (Items 35-38) sub-scales of the “School Student Survey” released by the CDC in the Compendium of Assessment Tools for Bullying Victimization, Perpetration and Bystander Experiences was used to carry out our study. This scale has been adapted from the original scale validated by Espelage and Holt.^{9,10} Of the four items each for Bullying Perpetration and Victimization respectively in the scale, 1 item adjudged Physical Bullying/Victimization, 2 items adjudged Verbal Bullying/Victimization and the last item determined Cyber Bullying/Victimization.

Students were asked to rate each item based on their experience on a scale of 0-4, as follows: 0- Does not wish to reply, 1- Never, 2- 1 or 2 times, 3- several times, 4- A lot.

Bully Perpetration/ Victimization were defined as follows: 3,4- Severe Bully Perpetration/Victimization, 2- Moderate Bully Perpetration/Victimization, 1- No Bully Perpetration/Victimization, 0- Indeterminate. Based on the study carried out on “Prevalence of Bullying and Victimization among Sixth Graders with Reference to Gender, Socio-economic Status and Type of Schools”¹¹ and with a relative precision of 4 for bullying others, with a desired confidence level (1-alpha) of 95%, the sample size was calculated as 428 students. The categorical variables of bullying perpetration/victimization were then expressed as % with a 95% confidence interval. Analysis of prevalence of bullying with other factors such as age, sex was also estimated. The association of factors with bullying was tested for statistical significance using Chi squared test.

RESULTS

The cohort consisted of 435 students in all, with 242 girls (55.6%), 170 boys(39.1%) and 23(5.2%) students choosing not to reveal their gender. Their ages ranged from 12 to 18 years of age, with 19 students not revealing their age [Figure 1].

Bullying perpetration

The overall bullying perpetration (including both moderate and severe bullying was estimated to be 70.74%. Out of 170 Males, 126 (74.12%) reported being perpetrators and 168 (69.42%) of 242 Females admitted to being bullying perpetrators. As seen in Table 1, verbal bullying perpetration (55.17%) was the commonest form of bullying perpetration in both males and females, followed by physical bullying perpetration (40.46%) and cyber bullying perpetration being the least common (15.86%).

In the stacked bar graph (Figure 2), we have depicted the numbers and percentages of the various subtypes of bullying and the severity

of bullying perpetration (Moderate, Severe, No bullying in the total population, in males and females respectively.

It was found that male students(47.65%) reported engaging in physical bullying more than female students(37.19%) and this was statistically significant ($p=0.033$).

Victimization: The total prevalence of victimization was found to be 74.94%. Of them, 128 Male students (75.29%) and 180 female students (74.38%) admitted to being victims. Table 2 demonstrates that the prevalence of verbal victimization (65.88%) was the commonest followed by physical victimization (40.23%) and cyber victimization (14.48%) in both males and females. The stacked bar graph (Figure 3) pictorially depicts a comparison of the different subtypes and grades of severity of victimization in Males, Females and the Total Population.

Verbal bullying including teasing/saying mean things was commonest followed by physical bullying such as pushing/shoving and cyber bullying in bullying perpetrators as well as victims

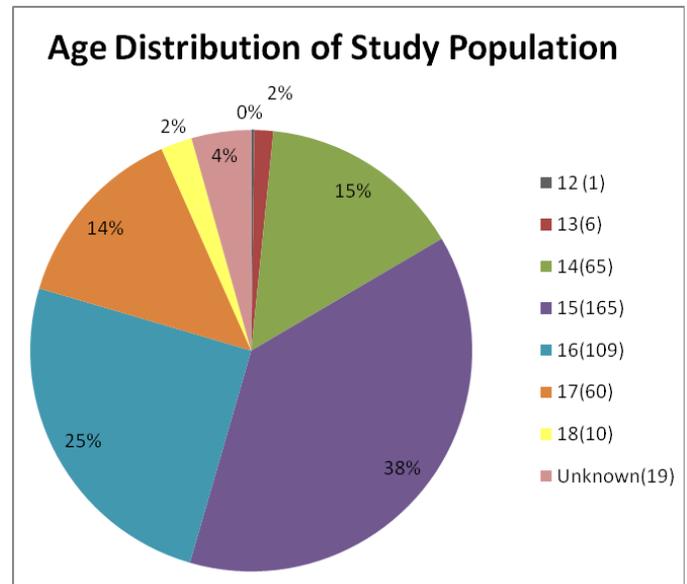


Figure 1: Age distribution of study population.

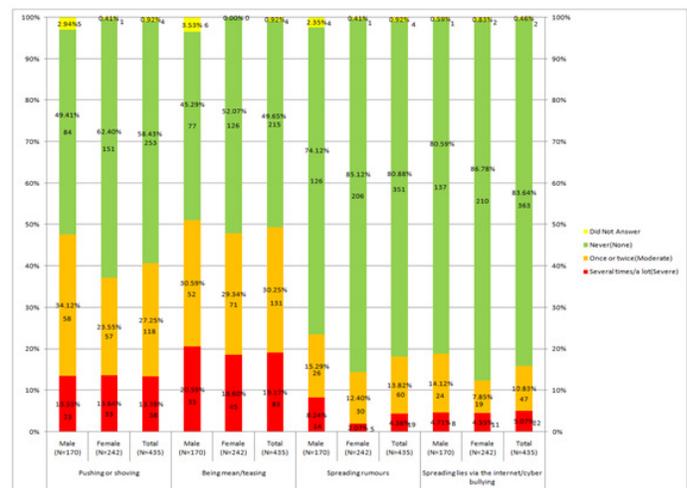


Figure 2: Subtypes and Severity of Bullying Perpetration in Males, Females and the Total Population.

We also observed that Perpetration was less than Victimization in the total population. This could imply that students who exhibited bullying behaviour had more than one victim or that students either under reported their Bullying behaviour, or felt subjectively more victimized than they actually were.

There was no correlation with parental education or income levels. Relation with grades was also not significant in bullying perpetration and victimisation.

DISCUSSION

In this study, the total bullying perpetration was 70.57% and total victimization was 74.94%. A study in Gujarat in 2017 revealed that overall prevalence of any form of bullying was 49%, with bullies being 29.9% and victims being 29.7%.¹² Another study by Malhi et al.¹³ also carried out in an Indian sample concluded that the overall prevalence of bullying was 53%, with 19.2% of the population being victims. A recent

article published by the Olweus Bullying Prevention Program reported the 2013 trends of Bullying in the US, where 15% of students were victimized and 6% bullied others.¹⁴ We also found that males tended to be involved in physical bullying more than females ($p=0.033$).

Our study found that verbal bullying was the most prevalent (55.17%) with physical bullying (40.46%) and cyber bullying (15.86%) being less frequently reported. Similarly, verbal victimization (65.75%) was most prevalent followed by physical victimization (40.23%) and cyber victimization (14.48%). This was comparable to the findings of studies by Kshirsagar et al.¹⁵ and Ramya et al.¹⁶

Cyber bullying is a problem of the new age of internet connectivity and social media and has not been studied as extensively as traditional forms of bullying. As per Mishna et al. 49.5% had been bullied online and 33.7% admitted to bullying others online.¹⁷ Another study by Hinduja and Patchin showed that 74% of the participants reported that bullying occurs online and almost 30% of the youth reported being victimized by others while online.¹⁸ Both the above studies describe the trends of cyber bullying in the US. Our findings have demonstrated that cyber bullying perpetration/victimization isn't as widespread in our sample.

Bullying behaviour is a complex issue. Previous research on bullying has suggested that the aetiology of bullying is more directly related to conditions at home rather than conditions at school. Environmental factors like watching violence in media,¹⁹ dysfunctional families²⁰ and presence of peer groups contribute to bullying. The perpetrator often has a better self-esteem but low empathy compared to the victim.²¹ The development of an instinct to dominate or an instinct to be subdued and also gender power differences in society all play a role in the aetiology of bullying behaviour.

There have been studies to identify the role of genetics and understand the intricate interplay between genetics and environmental influences in bullying perpetration and victimization. There is compelling evidence from twin studies that heritable influences are a contributor to the development of antisocial behaviour.^{22,23} Bullying maybe an evolutionary adaptation of individuals with inheritable traits that enable bullying.^{24,25} Inheritable traits include negative emotionality,²⁶ poor impulse control,²⁷ sensation seeking behaviour and poor emotional regulation.²⁸ Swearer and Hymel²⁹ state that bullying stems from complex interactions between individuals and the contexts in which they function, both proximal (i.e., family, peers, school climate) and distal (i.e., societal, cultural influences) and all these influences need to be addressed by a multi-target approach. Bullying victimisation leaves adverse impact even in adulthood. Bullying is a form of chronic allostatic stress, which, if not given adequate time to recover from can lead to hormonal, inflammatory and metabolic responses- increasing the child's risk for chronic diseases such as heart disease and diabetes in adulthood.⁷ An increased DNA methylation of SERT (serotonin transporter gene) in the victimized twin and also a blunted cortisol response³⁰ has been observed in identical twins. These changes are linked to poor coping strategies and increased risk of many psychiatric and mood disorders.

At present, no separate legislation exists in India to deal with bullying at school level. In 2015, the CBSE board issued a notice to all schools to set up anti-bullying committees and take strict action in all cases of bullying.³¹ The UGS (University Grants Commission) in 2009 passed regulations to help prevent bullying which include measures such as toll free helplines, textbooks to include chapters on ragging, periodic psychological counselling of all students, exemplary punishment of the perpetrators in accordance with the Criminal Procedural Code and an affidavit signed by parents and students at the time of admission.³²

The limitations of our study were that we used self-reported questionnaires and did not have an equal representation of boys and

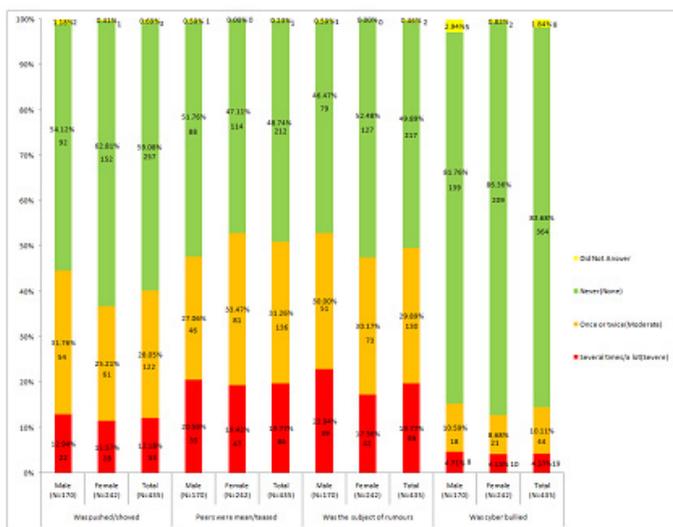


Figure 3: Subtypes and Severity of Victimization in Males, Females and the Total Population.

Table 1: Forms of Bullying Perpetration.

| | Total Population (N=435) | Male (N=170) | Female (N=242) | P value (between M and F): |
|-----------|--------------------------|--------------|----------------|----------------------------|
| All Forms | 307 (70.57%) | 126 (74.12%) | 168 (69.42%) | 0.299 |
| Physical | 176 (40.46%) | 81 (47.65%) | 90 (37.19%) | 0.033 |
| Verbal | 240 (55.17%) | 98 (57.65%) | 129 (53.31%) | 0.383 |
| Cyber | 69 (15.86%) | 32 (18.82%) | 30 (12.39%) | 0.072 |

Table 2: Forms of Victimization.

| | Total Population (N=435) | Male (N=170) | Female (N=242) | P value (difference between M and F): |
|-----------|--------------------------|--------------|----------------|---------------------------------------|
| All Forms | 326 (74.94%) | 128 (75.29%) | 180 (74.38%) | 0.833 |
| Physical | 175 (40.23%) | 76 (44.71%) | 89 (36.78%) | 0.105 |
| Verbal | 286 (65.75%) | 112 (65.88%) | 159 (65.70%) | 0.972 |
| Cyber | 63 (14.48%) | 26 (15.3%) | 31 (12.81%) | 0.472 |

girls. Furthermore, our study was carried out in co-educational schools and the findings are probably different in the unique environments fostered in all boys and all girls schools. These differences are definitely worth exploring in further studies.

In conclusion, the information revealed by our study sensitizes doctors to the existing prevalence of bullying. Paediatricians and adolescent physicians should enquire about bullying from their adolescent patients and offer anticipatory guidance. Assessment of bullying can be implemented routinely in schools. A multi-targeted approach at individual/family level, school level, community level, State level and National level to make the school a safer environment for children can be adopted.

CONFLICT OF INTEREST

The authors declare no Conflict of interest.

ABBREVIATIONS

CDC: Centres for Disease Control and Prevention.

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