INTRODUCTION

Bullying is an interpersonal hostile behavior marked by continuous and intentional abuse of power. A bully always tries to establish his/her dominance over the meeker victim who hasn’t even provoked the former. Bullying practices include physical beating, name-calling, use of abusive language, threatening or taunting, damaging personal belongings and cyber-bullying. Despite being particularly highlighted in recent decades, bullying in educational institutions has always been a major concern for parents, teachers and education experts.

Bullying observed in the primary, middle or secondary schools have a drastic impact on the young minds of victims. The bullied students are more likely to suffer from anxiety & depression, poor academic record, low self-esteem and even suicidal tendency. A research conducted in Intermediate and Secondary schools of Kingdom of Saudi Arabia showed that bullied students had 3.44 times higher risk of having mental health problems as compared to non-bullied students. Researcher has linked it to an increase in the habit of smoking or substance abuse among the bullied students. Certain biomedical studies have also proved how exposure to chronic stress in early youth leads to an abnormal development of neuroendocrine and immune systems resulting in impaired learning skills, lack of social interactive functions and emotional disturbance. A study carried out in the United States of America reveals that almost 22.7% children and adolescents suffered from bullying victimization. Brito et al, reported that about 115 out of 237 8th grade students suffered from school violence in multiple municipal schools in Brazil. Data showing bullying statistics in rural and urban public schools of China indicates a bullying prevalence of 6.3% in the previous 3 months.

In Pakistan, school education is offered in public as well as private institutions while both the sectors comprise of students from contrasting socio-economic classes. This variation also affects the extent of bullying in these schools. The data obtained from 6th graders from Pakistan suggested that 24.1% of them were victimized by bullies. Apart from this study, no other significant work has been accomplished in this field in Pakistan. Moreover, there is also a lack of comparative data between public and private sectors with respect to

ABSTRACT

Objectives: To find out prevalence of bullying, its associated factors and extent of awareness against bullying among the students of public/private schools of Lahore and to compare them.

Study Design: Comparative cross-sectional study.

Place and Duration of Study: Study was carried out in different schools of Lahore, Pakistan, from May to Nov 2019.

Methodology: A total of 294 students of public/private schools (8-10th grade students) of Lahore were recruited in study by purposive sampling. The students filled a pretested and pre-structured questionnaire consisting of questions about bullying, number of bullies, forms of bullying, its causes and consequences, reaction of students towards bullying and if anybody was informed about it.

Results: A higher frequency of bullying was reported in public schools (54%) than in private (46%). Students mostly suffered bullying in the form of humiliating remarks (56.3%) and verbal abuse (25.3%). Causes of bullying in public schools were physical appearance (48.9%), illness (19.1%) and imbalance of power (19.1%) whereas in private schools, physical status (45.0%), imbalance of power (25.0%) and low socioeconomic status (22.5%) were common. Bullying was associated with loss of concentration on studies (19.5%) and behavioral changes (18.4%). The students usually reported bullying incidents to teachers (36.8%) and parents (28.7%). A majority of students walked away from the bully (45.4%).

Conclusion: Bullying is relatively more prevalent in public schools and predominantly manifested in the form of humiliating remarks & verbal abuse. Majority of students show no appropriate resistance towards the bully while bullying causes a critical psychological distress in them.

Keywords: Awareness, Bullying, Psychological distress, Schools.
bullying statistics. Therefore, the current research was designed to provide an insight into the contrast between public and private schools in Lahore (Pakistan) with reference to bullying and to highlight the level of awareness of students in this regard.

**METHODOLOGY**

This comparative cross-sectional study was carried out in schools of public and private sectors in Lahore, Pakistan, from May, 2019 to November, 2019. A list of those schools registered with the Board of Intermediate and Secondary Education (Lahore) was prepared. Out of the cataloged schools, the students studying in 8th-10th grades/O-levels in eight schools which were located near King Edward Medical University, Lahore, were included in the research. The co-education schools and the students absent on day of data collection were excluded from the research. The selected schools comprised of four public schools (two girls’ & two boys’ schools) and four private schools (two girls’ & two boys’ schools). The public sector schools were Government Girls High School, Napier Road, Lahore; Government Higher Secondary School for Girls, Dev Samaj Road, Lahore; Government Saleem Model High School, Lower Mall, Lahore and Government Muslim Model High School, Lower Mall, Lahore. The private institutions included Sacred Heart Convent Girls School, Napier Road, Lahore; A.V Girls High School, Millat Road, Lahore; A.V Boys High School, Millat Road, Lahore and Abdali Grammar School for Boys, Islampura, Lahore. Purposive sampling technique was used. Sample size was calculated to be 294 (147 each group) by using the following formula;

\[
\text{Sample size} = \frac{Z^2 \cdot \alpha^2 \cdot \left(1-P_1 \right) \cdot \left(1-P_2 \right)}{d^2}
\]

Taking \(Z=1.96\) confidence interval at 95% , \(P_1=\) First population proportion (public sector)=67.5% 8, \(P_2=\) Second population proportion (private sector)= 20.3% 11 and \(d=\) Absolute precision=10%  .

Prior to data collection, an ethical approval was obtained from IRB (Institutional Review Board) of King Edward Medical University, Lahore with letter No. 925/RC/KEMU (05-07-2019). Consent was also obtained from the administration of each school while students were beforehand briefed about questionnaire and gave consent. A pretested and pre-structured questionnaire was provided to them which comprised of questions inquiring; forms of bullying, number of bullies involved, reaction of the student towards bullying and if he/she informed anybody about it, its causes, consequences and role of their schools in prevention of bullying2. All the questions after the presence of bullying (frequency of bullying) were filled by only those students who were bullied at least once, as they were applicable to them only.

Bullying was defined as a violent behavior in which an individual or a group of people intentionally causes verbal, physical abuse, frightens or passes humiliating remarks to a person (self-reported). Awareness about bullying was assessed by asking the students if they ever resist (verbally or physically) against the bully or report bullying to an elderly person such as their parents/teachers.

Data was analyzed through SPSS version 26 software. Mean while, \(p\)-value \(\leq\)0.05 was considered significant and chi-square test was applied to compare bullying in public & private schools.

**RESULTS**

The study showed that 174 students out of a sample of 294, suffered from at least one instance of bullying victimization. The frequency of bullying practices in public schools (54% of 174 cases) was comparatively greater than private sector (46% of 174 cases). An equal percentage of bullied children were seen among boys and girls of private schools. However, a slightly greater number of girls were bullied in the public sector as compared to boys.

More than 50% students from public institutions suffered victimization at the hands of 1 bully only. However, private school students were mostly bullied by more than 1 bully at a time (\(p\)-value <0.05). In addition to this, the majority of bullied students from both types of schools reported having experienced humiliating remarks as the most common form of bullying. Table-I also shows other forms of bullying encountered by students \((p=0.018)\).

Major causes of school bullying were evaluated based upon the bullying experience of the students. The reasons behind bullying in public schools (as considered by the students themselves) were found to be student’s physical appearance (height or weight), illness and imbalance of power. Major reasons of bullying seen in private schools were student’s physical appearance and imbalance of power followed by low socioeconomic status of the student \((p\)-value=0.004). Bullying was found closely related to a number of psychological effects (loss of concentration on studies, not going to school, lack of motivation, suicidal ideas, behavioral changes and low self-esteem). Table-II
Awareness of Bullying shows the major causes and effects of bullying observed in both public and private schools. The awareness of students regarding bullying was assessed by asking them how they reacted towards the bully at the time of bullying (p=0.023) Public school students mostly preferred to walk away from the bully (>50%) whereas private students (>50%) either picked up a fight against bully or chose to stand up against him/her without fighting. Students were also inquired about the individuals (teachers, parents or siblings) whom they inform about school bullying. Their answers are depicted in table-III.

Table-I: Type of school with gender, number of bullies & forms of bullying.

| Variable       | Categories                  | Type of School | Total Prevalence | p-value |
|----------------|-----------------------------|----------------|-----------------|---------|
|                |                             | Public (n=94)  | Private (n=80)  | (n=174) |       |
| Gender         | Male                        | 44 (46.8%)     | 40 (50%)        | 84 (48.3%) | 0.675 |
|                | Female                      | 50 (53.2%)     | 40 (50%)        | 90 (51.7%) |
| Number of Bullies | 1 Person                  | 54 (57.4%)     | 19 (23.8%)      | 73 (42%)  | 0.000 |
|                | 1-3 Persons                 | 15 (16%)       | 30 (37.5%)      | 45 (25.9%) |
|                | >3 Persons                  | 25 (26.6%)     | 31 (38.8%)      | 56 (32.2%) |
| Form of Bullying | Verbal abuse               | 25 (26.6%)     | 19 (23.8%)      | 44 (25.3%) | 0.018 |
|                | Humiliating remarks         | 60 (63.8%)     | 38 (47.5%)      | 98 (56.3%) |
|                | Frightened                  | 7 (7.4%)       | 13 (16.3%)      | 20 (11.5%) |
|                | Physical assault            | 1 (1.1%)       | 4 (5%)          | 5 (2.9%)  |
|                | Humiliating remarks + physical assault | 1 (1.1%) | 6 (7.5%) | 7 (4%) |

Table-II: Causes and effects of bullying.

| Variable       | Categories                  | Type of School | Total Prevalence | p-value |
|----------------|-----------------------------|----------------|-----------------|---------|
|                |                             | Public (n=94)  | Private (n=80)  | (n=174) |       |
| Causes of bullying | Low socioeconomic status | 7 (7.4%)       | 18 (22.5%)      | 25 (14.4%) | 0.004 |
|                | Height/weight               | 46 (48.9%)     | 36 (45%)        | 82 (47.1%) |
|                | Some deformity              | 5 (5.3%)       | 2 (2.5%)        | 7 (4%)   |
|                | Imbalance of power          | 18 (19.1%)     | 20 (25%)        | 38 (21.8%) |
|                | Illness                     | 18 (19.1%)     | 4 (5%)          | 22 (12.6%) |
| Effects of bullying | Loss of concentration on studies | 25 (26.6%) | 9 (11.3%) | 34 (19.5%) |
|                | Not going to school         | 17 (18.1%)     | 7 (8.8%)        | 24 (13.8%) |
|                | Lack of extracurricular activities | 2 (2.1%) | 7 (8.8%) | 9 (5.2%) |
|                | Lack of motivation/creativity | 6 (6.4%) | 11 (13.8%) | 17 (9.8%) |
|                | Suicidal ideas              | 16 (17%)       | 5 (6.3%)        | 21 (12.1%) |
|                | Behavioral changes          | 24 (25.5%)     | 8 (10%)         | 32 (18.4%) |
|                | Low self esteem             | 1 (1.1%)       | 6 (7.5%)        | 7 (4%)   |
|                | Not going to school + lack of motivation/creativity + low self-esteem | 1 (1.1%) | 11 (13.8%) | 12 (6.9%) |
|                | Not going to school + suicidal ideas | 1 (1.1%) | 10 (12.5%) | 11 (6.3%) |
|                | Loss of concentration + lack of extracurricular activities + lack of motivation/creativity + low self-esteem | 1 (1.1%) | 6 (7.5%) | 7 (4%) |

Table-III: Awareness regarding bullying.

| Variable       | Categories                  | Type of School | Total Prevalence | p-value |
|----------------|-----------------------------|----------------|-----------------|---------|
|                |                             | Public (n=94)  | Private (n=80)  | (n=174) |       |
| What was your reaction to bullying? | Walked away silently | 50 (53.2%)     | 29 (36.3%)      | 79 (45.4%) | 0.023 |
|                | Fought with bully           | 25 (26.6%)     | 20 (25%)        | 45 (25.9%) |
|                | Stood up but did not fight | 16 (17%)       | 21 (26.3%)      | 37 (21.3%) |
|                | Cried                       | 3 (3.2%)       | 10 (12.5%)      | 13 (7.5%) |
| Whom do you inform about bullying? | Teacher | 47 (50%)       | 17 (21.3%)      | 64 (36.8%) |
|                | Parents                     | 24 (25.5%)     | 26 (32.5%)      | 50 (28.7%) |
|                | Sibling                     | 1 (1.1%)       | 3 (3.8%)        | 4 (2.3%)  |
|                | School friends              | 9 (9.6%)       | 16 (20%)        | 25 (14.4%) |
|                | Nobody                      | 13 (13.8%)     | 18 (22.5%)      | 31 (17.8%) |

Table-IV indicates how the bullied students were helped by those individuals to whom they reported the bullying issue. In addition to this, nearly 92% public school students indicated their school’s performance
to control bullying as satisfactory while 95% private school students were satisfied by their school’s anti-bullying strategy.

while the bullying victims were usually girls. Zhang et al, show that more boys as compared to girls reported bullying others and being the victims of bullying3.

A relatively higher prevalence of bullying in public sector (19.1-24.9%) than private schools (20.4-23.8%) was also observed by Shujja et al, in Pakistani schools. These statistics indicate a greater risk of bullying for students of public schools as shown by the current research work. A study analyzed the prevalence of bullying in 600 school students and classified the bullying practices as physical, verbal and emotional bullying. Emotional form of bullying was most likely to be experienced (58.3%), followed by verbal bullying (44.5%) and physical bullying (19.0%)16.

According to a study, students having low socio-economic status (294) were mostly found to be the receiving end of bullying victimization (20.5%)10. Lebrun et al have shown association of special health disorders, behavioral problems and poor mental health with either bullying victimization or bullying perpetration7. Al-Buhairan et al, concluded from their study that school bullying had a significant correlation with anxiety/depression disorders as well as poor academic performance4. Shayo et al, have also found a strong risk of mental agony and suicidal ideation among those bullied3.

In current study, public school students mostly preferred to walk away from the bully (>50%) whereas private students (>50%) either picked up a fight against bully or chose to stand up against him/her without fighting. Another study indicated that the most common methods employed against bullying were fighting (63%), ignoring the bully (52%), complaining to parents/older sibling (44%) and reporting the bullying practice to a peer (42%).

The most effective strategies reported were counter-aggression (75%), making a safety plan (74%) and telling a peer (71%) or an adult at home (71%)17. Another study addressed if teachers are properly trained, they can play essential preventive role in this regard18.

### DISCUSSION

This study shows an overall bullying prevalence of 59.2% (174 cases among 294 school children). School bullying statistics as gathered by the American Psychological Association (APA) reveal that 40-80% of school age children experience bullying at some point during their school life. In a study conducted by Shujja et al in Pakistan, it was revealed that 24.1% of 836 school students of the 6th grade had suffered victimization while almost 23.2% admitted that they had been involved in bullying others. Approximately 25% boys and 22.2% girls reported bullying10. These frequencies are quite lesser as compared to this study and also show variation in gender distribution. A similar study carried out in Saudi Arabia by Al-Buhairan et al found that out of 9073 school students, 26% reported an exposure to bullying in the previous 30 days. The prevalence of any abusive treatment in the past year at the schools was nearly 33.3%. Comparatively it is lesser than what was found in the current analysis of schools in Lahore, Pakistan. Lebrun-Harris et al, have found a prevalence of bullying experience equal to 22.7% in U.S.A while 6.4% participants in the same research agreed that they had bullied others7. Garmy et al, have found frequency of being bullied (at least 2-3 times every month) as 5.5%13.

According to Brito et al8, a scenario quite similar to the current statistics, exists in Olinda, Brazil where the overall prevalence of bullying was found to be 67.5%. The gender distribution showed that 41.7% males and 58.3% females suffered bullying. Hicks et al, have reported a prevalence of over 37% in a sample of 463 middle school students who reported being bullied either directly or online14. Nazim et al15, have conducted a research in Northern Cyprus which showed that 9% of the students were bullies, 12.2% were victims, and 5.6% were both bully and victims. The study showed that boys were more likely to bully other students

### Table IV: Role of others (Helpers).

| Variable                  | Categories        | Type of School          | Total Prevalence | p-value |
|---------------------------|-------------------|-------------------------|------------------|---------|
|                           |                   | Public (n=94)           | Private (n=80)   | (n=174) |
| When you tell somebody    | Do nothing        | 9 (9.6%)                | 13 (16.3%)       | 22 (12.6%) | 0.003  |
| about bullying, how do    | Help reasonably   | 22 (23.4%)              | 34 (42.5%)       | 56 (32.2%) |       |
| they react?               | Solve the problem | 63 (67%)                | 33 (41.3%)       | 96 (55.2%) |       |
| School’s success to        | Terrible          | 8 (8.5%)                | 4 (5%)           | 12 (6.9%)  | 0.097  |
| counter bullying          | Good              | 31 (33%)                | 39 (48.8%)       | 70 (40.2%) |       |
|                           | Fantastic         | 55 (58.5%)              | 37 (46.3%)       | 92 (52.9%) |       |
LIMITATION OF STUDY

Comparative cross-sectional study, relatively smaller sample of students, selection of a single city.

RECOMMENDATIONS

Education department must start bullying awareness, counseling for not bullying anyone, how to react to a bully and when and where to inform authorities, in both government & private schools.

CONCLUSION

relatively higher frequency of bullying in public (54%) than in private schools (46%). The students were more likely to suffer from bullying in the form of humiliating remarks (56.3%) and verbal abuse (25.3%). Main causes of bullying seen in public schools were related to student’s physical appearance (48.9%), illness (19.1%) and imbalance of power (19.1%) whereas in private schools, physical status (45%), imbalance of power (25%) and low socioeconomic status (22.5%) were the main determinants of bullying. Bullying was also associated with loss of concentration on studies (19.5%) and behavioral changes (18.4%) among a number of students. The students from both types of schools reported bullying incidents to teachers (36.8%) and parents (28.7%) mostly. A majority of public/private school students simply walked away from the bully (45.4%) without showing any tactical strategy to handle the situation.

CONFLICT OF INTEREST

This study has no conflict of interest to be declared by any author.

REFERENCES

1. Hymel S, Swearer SM. Four decades of research on school bullying: An introduction. Am Psychol 2015; 70(4): 293-98.
2. Rezapour M, Khanjani N. The types of bullying behaviors and its association with general life satisfaction and self-rated health among Iranian pupils. J Health Sci Res 2019; 19(1): 1-5.
3. Shayo FK, Lawala PS. Does bullying predict suicidal behaviors among in-school adolescents? A cross-sectional finding from Tanzania as an example of a low-income country. BMC Psy 2019; 19(1): 1-6.
4. AlBuhaizan F, Abbas OA, El Sayed D, Badri M, Alshahri S, de Vries N. The relationship of bullying and physical violence to mental health and academic performance: A cross-sectional study among adolescents in Kingdom of Saudi Arabia. Int J Pediatr Adolesc Med 2017; 4(2): 61-65.
5. Livingston JA, Derrick JL, Wang W, Testa M, Nickerson AR, Espelage DL, et al. Proximal associations among bullying, mood, and substance use: a daily report study. J Child Fam Stud 2019; 28(9): 2558-71.
6. Hughes K, Bellis MA, Hardcastle KA, Sethi D, Butchart A, Miktun C, et al. The effect of multiple adverse childhood experiences on health: a systematic review and meta-analysis. Lancet Public Health 2017; 2(8): e356-66.
7. Lebrun-Harris LA, Sherman LJ, Limber SP, Miller BD, Edgerton EA. Bullying victimization and perpetration among US children and adolescents: 2016 National Survey of Children’s Health. J Child Fam Stud 2019; 28(9): 2543-57.
8. Brito CC, Oliveira MT. Bullying and self-esteem in adolescents from public schools. J Pediatr 2013; 89(6): 601-607.
9. Zhang H, Zhou H, Tao T. Bullying behaviors and psychosocial adjustment among school-aged children in China. J Interpers Violence 2019; 34(11): 2363-75.
10. Shuja S, Atta M, Shujat JM. Prevalence of bullying and victimization among sixth graders with reference to gender, socioeconomic status and type of schools. J Soc Sci 2014; 38(2): 159-65.
11. Cassiani-Miranda CA, Gómez-Alhach J, Cubides-Munévar AM. Prevalencia de bullying y factores rela-cionados en estudiantes de bachillerato de una institución educativa de Cali, Colombia, 2011. Rev Saude Publica 2014; 16(1): 13-24.
12. Data collection tool. Education and Training. 2019 [Internet] Available from: https://www.education.vic.gov.au/about/programs/bulystoppers/Pages/teachdata.aspx [cited 22 April 2019].
13. Garmy P, Vilhjálmssson R, Kristjánsdóttir G. Bullying in school-aged children in Iceland: A cross-sectional study. J Pediatr 2018; 38(1): e30-34.
14. Hicks J, Jennings L, Jennings S, Berry S, Green DA. Middle school bullying: Student reported perceptions and prevalence. J Clin Child Adolesc Counsel 2018; 43(4): 195-208.
15. Nasim AO, Duyan V. 2019. [Internet] Available at: https://www.researchgate.net/publication/338088787_Bullying_proble m_among_high_school_students_The_impact_of_school_life> [Accessed 4 April 2020].
16. Owuamanam DO, Makinwa VI. Prevalence of bullying among secondary school students in Ondo state, Nigeria. Europ Sci J 2015; 11(20): 326-33.
17. Black S, Weintes D, Washington E. Victim strategies to stop bullying. Youth Violence Juv Justice 2010; 8(2): 138-47.
18. Pas ET, Waasdorp TE, Bradshaw CP. Coaching teachers to detect, prevent, and respond to bullying using mixed reality simulation: An efficacy study in middle schools. Int J Bullying Prev 2019; 1(1): 58-69.