

PSYCHOLOGICAL DISTRESS IN RELATION TO BULLYING/VICTIMIZATION AT SECONDARY SCHOOLS

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ABSTRACT

OBJECTIVE

To investigate psychological distress experienced by students as a result of bullying and victimization. Gender and grade differences were also observed.

STUDY DESIGN

Cross sectional research design.

PLACE AND DURATION OF THE STUDY

Different public sector secondary schools of Faisalabad were approached during a period of 3 months from February 2016 to September 2016.

SUBJECTS AND METHODS

A convenient sample of 247 students was drawn from respondents and Olweus Bully Victim Questionnaire was used to classify students into bullies, victims, bully-victims and the students who were not involved. Depression Anxiety and Stress Scale was used as measure of psychological distress.

RESULTS

Results of One way ANOVA showed that Victims of bullying was the most vulnerable group to be affected by depression and anxiety, as compared with uninvolved students, all the three involved groups experienced significantly greater levels of depression, anxiety and stress. Multivariate Analysis of Variance (MANOVA) showed significant main effects of gender and grade on depression and anxiety and the same was true for interaction effect. Girls in lower grades were more depressed and anxious.

CONCLUSION

Psychological distress among bully/victim groups is discussed for contributory factors and necessary preventive actions.

KEY WORDS

Bullying, Victimization, Psychological Distress.

INTRODUCTION

School violence particularly bullying, is a noticeable issue adversely affecting a large number of students in middle and secondary schools¹. Bullying is any repetitive undesirable hostile behavior toward an adolescent by another adolescent or group of adolescents, who are not siblings, including an imbalance of power². Olweus (1994) in his classic definition explains bullying as a type of violence that is characterized by imbalance of power, tormenting, and aggression to dominate others³.

The individuals involved in bullying tend to exhibit four main types of behavior as: bully, victim, bully/victim and bystander or not involved. Bullies are those students who bullied others; victims are those individuals who become targets of repeated aggression or negative acts against them and who had been bullied and also bullied others were categorized as bullying/victims. The students who do not participate in any bullying like behavior or victimized are labeled as bystanders or uninvolved⁴.

Bullying take a variety of forms such as verbal tormenting, for example, name calling, prodding, taunting and debilitating or may be physical, such as , hitting, pushing, spitting, punching, taking and harming property, or it may also appear as social harassing, for example, spreading gossip tidbits, exclusion by peers or spreading rumors about him in school⁵. Around 10 to 20% of children and adolescents are regularly involved in school bullying/harassing as either bullies, victims, or both. Boys are more frequently involved in bullying as compared with girls, and a significant extent of adolescents (especially in elementary grades) report exploitation from tormenting⁶. Prevalence of bullying in South East Asian countries ranged between 7 to 59% with highest rates reported in Philippine 30-59%⁷. Taiwanese researchers reported 10.9% bullies, 10.7% victimization and 5.5% bully/victims in China⁸. In a recent Turkish study 20.1% bullies and 24.6% victimization were reported by school students⁹.

Literature reports contradictory findings with regard to prevalence across gender, age and grade. It may depend on assessment tools and the type of bullying/victimization. Elementary grade children were more involved in physical bullying but it declined with age, and in secondary grades, they were engaged in verbal bullying¹⁰. Some studies found no gender differences¹¹ while other reported girls to be involved more in indirect bullying as compared with boys¹².

This issue has recently captured the attention of Pakistani researchers. A study investigated the tendency and distinctive types of harassing and peer victimization among 817 students in grades 4 to 6, enrolled in public and private sector schools in Lahore, Pakistan. More boys than girls reported being harassed by verbal, racial and sexual means¹³. Another study conducted in Pakistan had found that 23.2% students were bullied, and

24.1% were victimized¹⁴. It had been demonstrated that involvement in bullying and deteriorated physical and psychological health are interconnected¹⁵.

Psychological distress is a state full of emotions portrayed by symptoms of depression and anxiety¹⁶. A meta-analysis of researches demonstrated the connection between bullying and psychosocial maladjustment and found a significant relationship with measures of anxiety, depression, loneliness and self-esteem. Generally, victim reported higher levels of psychological distress¹⁷⁻¹⁹. Some researches with schoolchildren of age 8 to 16 years indicated that depression was fundamentally related with victimization^{20,21}. Literature provided evidence for the relationship between involvement in bullying and depression. Many studies exhibited a simultaneous relationship between bullying and depression in children. Children or adolescents who bully others developed symptoms of depression⁶. Many studies had confirmed that victimized students indicated more unhappiness and distress as compared with uninvolved²². Most recent study explored a strong relationship between bullying and anxiety. Typical symptoms of anxiety, misery, and negative affectivity had been reported by bully victims²³. Many researches demonstrated that people who were victimized, usually encountered social anxiety^{24,25}.

Current study particularly focuses on the bullying behavior and its psychological outcomes in secondary school students. This is such a transitional age that bullying and victimization bring major psychological consequences in this age group. Moreover existing research on bullying in Pakistan has mainly discussed elementary school students^{14,26}. Keeping in view the deficiency of information on psychological outcomes of bullying and victimization in high school students, the current study explored the distressing aspects such as stress, anxiety and depression as result of involvement in a variety of bullying roles.

Current study was designed to assess the variety of bullying behaviors among secondary schools and also aimed to check the level of psychological distress (depression, anxiety, stress) among students involved in different forms of bullying (bullies victims, bully-victims, uninvolved). Furthermore this study was intended to examine the gender differences bullying, victimization and psychological distress in terms of depression, anxiety and stress. The Study hypothesized the following;

1. The level of psychological distress (depression, anxiety, stress) would differ across bully victim group.
2. There would be gender and grade differences in bullying/victimization and level of psychological distress (depression, anxiety, stress) among secondary school students.

SUBJECTS AND METHODS

Participants

Sample for the present research comprised of 247 students (121 girls; 126 boys) having an age range between 12 to 17 years ($M_{age} = 14.77$; $SD_{age} = 1.21$). The participants were recruited from 8th, 9th and 10th grades of four secondary schools of Faisalabad using convenient sampling technique. Based on Solberg and Olweus (2003) criteria, students were identified as bullies ($n = 37$), victims ($n = 49$), and bully/victims ($n = 37$). The sample is actually based on a larger study on psychosocial outcomes of school bullying and victimization, therefore a random sub-sample ($n = 124$) of

uninvolved students was also included in the present research for the sake of comparison. However, it prevented to report the prevalence estimates in the current paper.

INSTRUMENTS

Olweus Bully Victim Questionnaire (OBVQ)

Olweus questionnaire is the most widely used self-report measure, especially used for identifying students in different bullying roles. It is a five point Likert scale (1-5) and consisted of 32 items. An Urdu version (26) was used that has shown excellent psychometric properties in terms of reliability ($\alpha = .91$) and construct validity. Based on the prescribed cut off (4) students who always become the target and do not act as offenders are known as victims; those who always perpetrate and not victimized are referred to as bullies; while those who are frequently targeted and mostly act as offenders are said to be the bully-victims. Those who never or very rarely involved in offending others or being targeted are classified as uninvolved²⁷.

Depression Anxiety and Stress Scale (DASS)

DASS is extensively used measure of psychological distress in terms of providing subscale scores on Depression, Anxiety and Stress. A short form, the DASS-21, is accessible with 7 items for every scale²⁸. Urdu version of the measure has been used in the present study. It too has sound psychometric evidence and has been widely used with adolescents²⁹.

PROCEDURE

After obtaining permission from school authorities, an informed consent was obtained from the students. Those who gave consent were provided with the instruments by the researcher. Students first completed a set of questions from Olweus Bully Victim Questionnaire and later reported on DASS-21. They were instructed to be honest and were also assured of the confidentiality of the information provided by them. No compensation was presented, however, in case of experiencing any problems; the students were offered to consult the researcher for 2 weeks following the data collection. Data were analyzed through Statistical Package for Social Sciences (IBM SPSS 21 version).

RESULTS

Results showed that sample consisted of approximately equal proportion of boys and girls. 43% of the sample were from 8th grade (see table 1 for details). Involvement in different bullying roles seems almost the same across gender except for higher frequency of boys as bully-victims. Across grades, percentage of students classified as bullies, victims and bully-victims was higher in lower grades i.e 8th grade, showing a gradual decline in higher grades i.e 9th and 10th.

Table 1.
Frequency of Bullying Roles across Gender and Grades (N = 247)

		Bullying Roles				Total f(%)
		Bullies f(%)	Victims f(%)	Bully-Victims f(%)	Uninvolved f(%)	
Gender	Boys	17 (13.9)	25 (19.84)	24 (19.04)	60 (47.62)	126 (51)
	Girls	19 (15.70)	24 (19.83)	14 (11.57)	64 (52.89)	121 (49)
Total		36 (14.57)	49 (19.84)	38 (15.38)	124 (50.20)	247 (100)
Grade	8.00	19 (17.92)	23 (21.70)	20 (18.87)	44 (41.51)	106 (43)
	9.00	8 (10.96)	14 (19.18)	11 (15.07)	40 (54.79)	73 (29.5)
	10.00	9 (13.23)	12 (17.65)	7 (10.29)	40 (58.82)	68 (27.5)
	Total	36 (14.57)	49 (19.84)	38 (15.38)	124 (50.20)	247 (100)

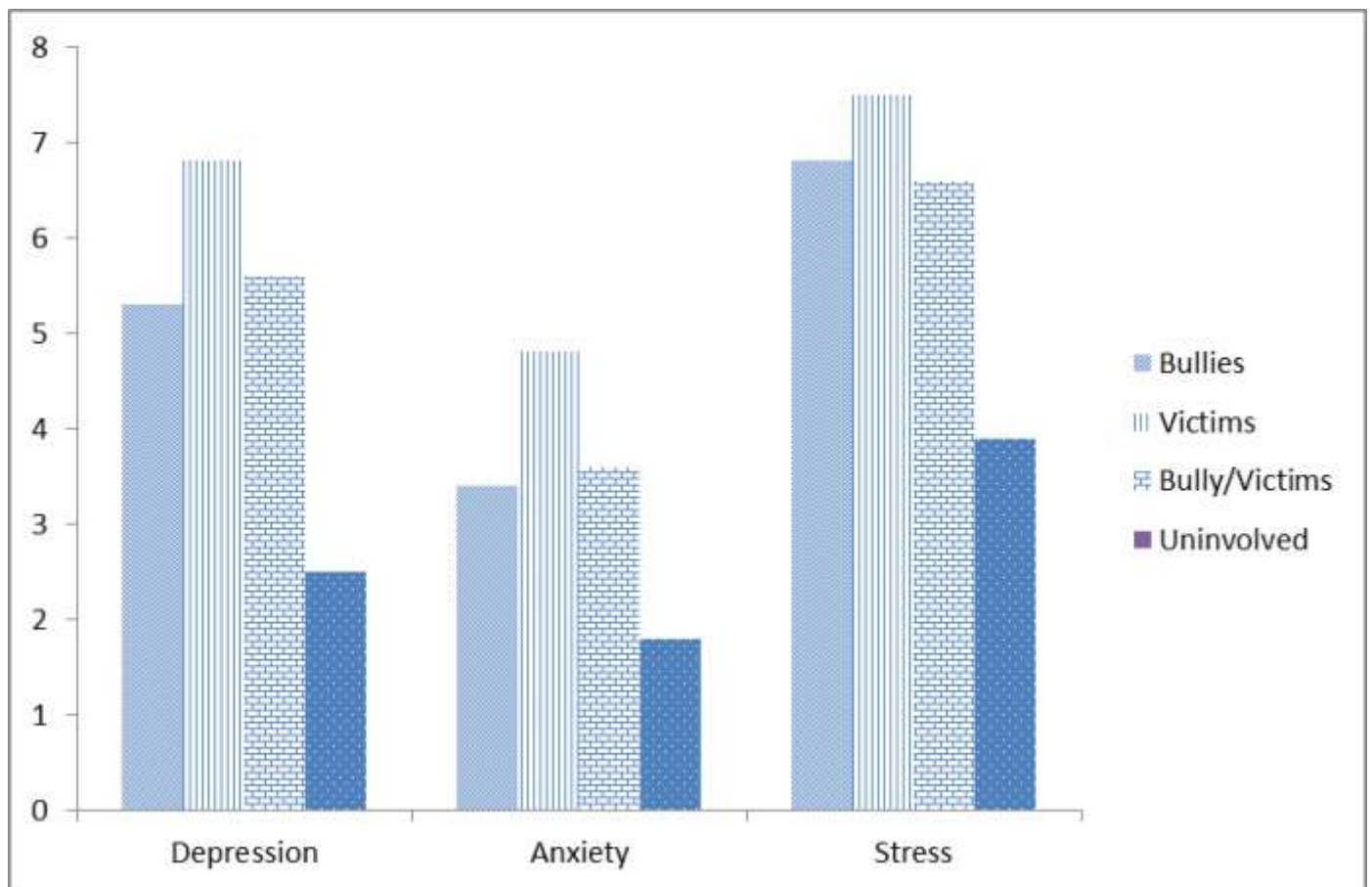


Figure 1
Mean Differences on DASS Subscales across Bully/Victim Groups (N = 247)

The figure showed victims scored higher than other groups on all the three subscales of DASS. Uninvolved group markedly seemed to have lower scores on depression anxiety and stress. Bullies and bully-victims had though obtained greater scores than uninvolved group on the 3 subscales, but not they were lesser than victims. The differences were further explored using one way ANOVA.

Table 2
One Way ANOVA Showing Main Effects of Bully/Victim Status on DASS Subscales (N = 247)

		SS	df	MS	F
Depression	Between Groups	780.53	3	260.17	17.99***
	Within Groups	3498.09	242	14.45	
	Total	4278.63	245		
Anxiety	Between Groups	349.28	3	116.42	13.62***
	Within Groups	2059.91	241	8.54	
	Total	2409.20	244		
Stress	Between Groups	624.18	3	208.06	14.73***
	Within Groups	3403.05	241	14.12	
	Total	4027.24	244		

*** $p < .001$.

Results of One way ANOVA confirmed the differences illustrated in Figure 1, by showing significant differences among groups on all the three subscales; however to explore the nature of these differences, LSD Post Hoc test was performed.

Table 3
LSD Post Comparisons across Bully-Victim Roles for Depression, Anxiety and Stress (N = 247)

DV	(I) BV Roles	(j) BV Roles	M.diff (I-J)	SE	95% CI	
					LB	UB
Depression	Victims	Bully/victim	1.67*	.82	.05	3.29
		Bullies	-2.81***	.72	-4.22	-1.38
	Uninvolved	Victims	-4.35***	.64	-5.61	-3.08
		Bully/victim	-2.68***	.70	-4.07	-1.29
Anxiety	Bullies	Victims	-1.33*	.64	-2.61	-.05
		Bullies	-1.64**	.56	-2.75	-.54
	Uninvolved	Victims	-2.97***	.49	-3.95	-2.01
		Bully/victim	-1.76**	.54	-2.83	-.69
Stress	Uninvolved	Bullies	-2.93***	.71	-4.33	-1.53
		Victims	-3.61***	.63	-4.85	-2.35
		Bully/victim	-2.75***	.69	-4.13	-1.38

* $p < .05$; ** $p < .01$; *** $p < .001$.

DV: Dependent Variable; BV Roles: Bully/victim Roles

Note: Only significant results are reported.

Results indicated that Victims were more depressed than bully-victims ($M.diff = 1.67, p < .05$) whereas the magnitude of depression did not differ than bullies. Similarly, bullies and bully-victims also experienced equal level of depression. All the three involved groups scored significantly higher than the uninvolved group on depression. Victims also experienced higher levels of anxiety than bullies ($M.diff = 1.33, p < .05$) while no significant difference was reported between victims, bully-victims and bullies, bully-victims. Again Uninvolved students showed significantly lesser anxiety than victims, bullies and bully-victims. Finally, all the three involved groups experienced equal level of stress by showing no significant differences; however all of these reported significantly higher level of stress than uninvolved group.

Table 4.
MANOVA Showing Main Effects and Interactions of Gender and Grades for DASS Subscales (N = 247)

Source	Dependent Variable	SS	df	MS	F
Gender	Depression	95.54	1	95.54	5.89**
	Anxiety	30.54	1	30.54	3.68*
	Stress	32.29	1	32.29	1.97
Grade	Depression	184.67	2	92.33	5.69***
	Anxiety	233.13	2	116.56	14.04***
	Stress	60.02	2	30.01	1.83
Gender * Grade	Depression	154.61	2	77.30	4.77***
	Anxiety	104.04	2	52.02	6.26***
	Stress	67.74	2	33.87	2.07
Error	Depression	3840.31	237	16.20	
	Anxiety	1967.01	237	8.30	
	Stress	3876.28	237	16.35	
Total	Depression	8592.00	243		
	Anxiety	4386.00	243		
	Stress	11470.00	243		

* $p < .05$; ** $p < .01$; *** $p < .001$.

Main effects of gender and grade were significant for depression and anxiety. Girls ($M = 4.74$; $SD = 4.04$) felt more depressed than boys ($M = 3.72$; $SD = 4.20$). They ($M = 3.18$; $SD = 2.74$) also reported to be more anxious than boys ($M = 2.64$; $SD = 4.40$). Grade differences were further analyzed using LSD Post Hoc test and the results are shown in table 5. Gender and Grade interaction effect was also found significant for depression $F(2, 243) = 4.77, p < .001$, and anxiety, $F(2, 243) = 6.26, p < .001$. Figure 2 and 3 illustrated the nature of interaction effects.

Table 5.
LSD Post Hoc for within Grade Comparisons (N = 247)

DV's	(I) Grade	(J) Grade	M.diff (I-J)	SE	95% CI	
					LB	UB
Depression	8.00	9.00	1.98**	.62	.76	3.20
		10.00	1.48*	.63	.24	2.72
Anxiety	8.00	9.00	1.99***	.44	1.12	2.87
		10.00	2.01***	.45	1.12	2.89

* $p < .05$; ** $p < .01$; *** $p < .001$. Note: Only significant results are reported

Post hoc comparisons demonstrated significant differences for depression between students of 8th and 9th grade and also between 8th and 10th grade students. These differences were also evident for anxiety in the same way. Student in class 8th scored higher on both depression and anxiety as compared with students of 9th and 10th class, while no significant differences were found between students of grades 9 and 10.

Figure 2.
Gender and Grade Interaction Effect on Depression Scores (N = 247)

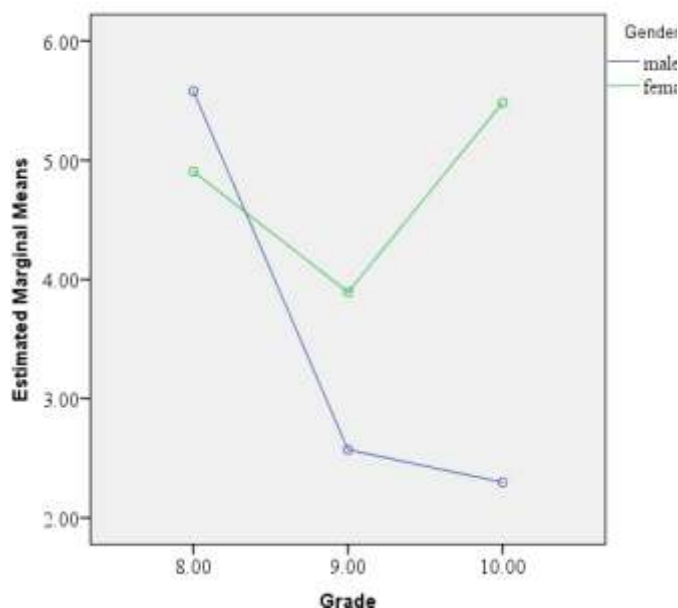


Figure 2 showed that boys especially of class 8th were more depressed than girls in the same class, while girls in higher grades scored higher on depression than boys.

DISCUSSION

The study evaluated the impact of school bullying and victimization on mental health of secondary school students by studying the psychological distress in terms of depression, anxiety and stress. Students were identified as bullies only, victims only, and bully-victim and these three groups were compared with a control group of students who have been completely uninvolved in bullying and victimization.

Findings indicated that bully victimization exerted an adverse impact on mental health of students. The students who had been

Figure 3.
Gender and Grade Interaction Effect on Anxiety Scores (N = 247)

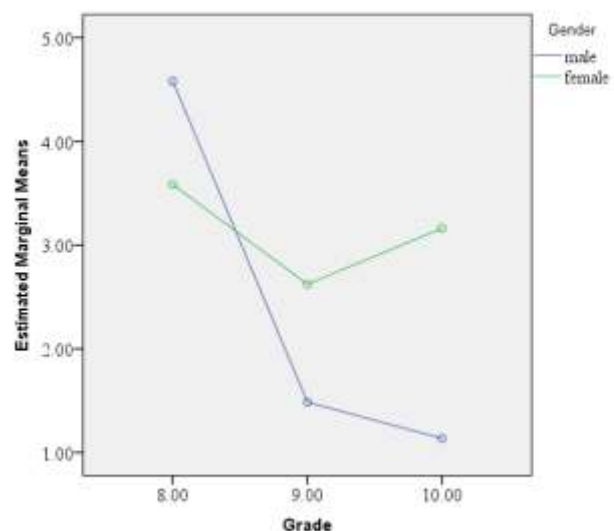


Figure 3 demonstrated that boys in lower grades (8th) were more anxious than girls while girls in higher grades (9th and 10th) tended to score higher on anxiety as compared to boys

experienced bullying most frequently were the most depressed of all bullying roles especially as compared with the bully-victim group who can also be called the offensive. Existing literature supported these findings by reporting depression in victims at school³⁰. Bully victimization at school is associated with poor self-esteem and other psycho-social problems. Being unable to fulfill the social demands and feelings of worthlessness at the same time makes the students more vulnerable to depression. This effect can be two ways actually as students who were already vulnerable to depression as being less confident or having poorer self-esteem tend to become the victims always. So further investigation of personal and situational factors associated with depression among victims is

required. Bully-victims in some extent find a way to express their distress by bullying others and therefore feel less depressed. However contradictory findings exist as some studies suggested that bully-victim group experienced higher levels of distress for being involved in victimization and bullying³¹.

Bully victims also suffered from higher levels of anxiety as compared with bullies. Their frequent experience of being targeted and fear to be in danger contributes to the higher levels of anxiety. Anxiety of being harmed by bullies in both direct and indirect ways could haunt their thoughts and result in apprehension³². Unfortunately these adverse impacts may take more severe forms as studies had confirmed the association of childhood anxiety as a result of victimization with increased risk of generalized anxiety disorder, agoraphobia and panic disorder in adulthood³³. It is important to note that in the present study, involvement in bullying in any of the roles (bullies, victims, bully-victims) proved to be a significant contributor to distress (depression, anxiety, stress) for students as compared with the students who were categorized as uninvolved. Therefore bullies are also at risk of psychological maladjustment though less frequently than bully-victims and pure victims. A meta-analysis found that bullies experienced poor school adjustment, delinquent behavior, poor social relationships and tendency for drug abuse³⁴.

Lastly the study explored gender and grade differences in psychological distress in total sample. Results of MANOVA suggested that girls and students studying in lower grade (8th) typically reported higher levels of distress in terms of depression and anxiety. Findings are in line with the previous studies on gender and grade differences in depression and anxiety among adolescents^{35,36}. Interaction effects however presented somewhat inconsistent findings as boys rather than girls in lower grade were more depressed and anxious. The results should be interpreted carefully as a large number of students in the present sample were involved in bullying and victimization that should have been controlled while analyzing the scores. However, length did not allow discussing this aspect in the current manuscript as paper mainly focused on differences across bully/victim groups.

CONCLUSIONS

Bullying and victimization in any form has devastating and long-term effects on psychological well-being of children and adolescents and findings of the present study not only emphasize the recognition of bullying and victimization as a serious threat to mental health of youngsters but also alert school authorities, parents and mental health professionals to draw attention to the gravity of this issue that is usually ignored by considering an age related casual outburst. These symptoms could further influence physical health, academic performance and social relationship of students. Promoting healthy peer relationships in schools by preventing violence and endorsing pro-social attitude is the dire need of time. School based mental health services are also highly recommended.

RECOMMENDATION




Bullying and victimization has devastating effects on students in terms of their mental as well as physical wellbeing. Present research can be helpful for teachers, parents and school counselors in perceiving bullying and victimization as a serious threat for physical

and psychological health of children and adolescents. These findings would provide profound understanding in the bullying phenomenon and its adverse effects on psychological and physical health of students. Intervention programs to eliminate bullying and victimization from our schools should be implemented. Counseling services should be provided to students as well as parents in order to drop bullying and related psychological issues (depression, anxiety, stress). Following research focused on psychological distress related to bullying other psychological phenomenon (social support, quality of life, emotional well-being etc) should also be explored related to this population. For present study sample was collected from few schools of Faisalabad due to the shortage of time that's why generalizability of findings is questionable; so, for future researches a large sample size should be incorporated from different regions of different cities.

REFERENCE

1. Seixas S, Coelho J, Nicholas-Fischer G. Bullies, victims and bully-victims: Impact on health profile. *Educação, Sociedade & Culturas*. 2013;38:53p-75p.
2. Center for Disease Control and Prevention 2018 [cited 2018]. Available from: <https://www.cdc.gov/features/prevent-bullying/index.html>
3. Olweus D. Bullying at school: basic facts and effects of a school based intervention program. *Journal of child psychology and psychiatry*. 1994;35(7):1171-90.
4. Solberg ME, Olweus D. Prevalence estimation of school bullying with the Olweus Bully/Victim Questionnaire. *Aggressive Behavior: Official Journal of the International Society for Research on Aggression*. 2003;29(3):239-68.
5. Egan LA, Todorov N. Forgiveness as a coping strategy to allow school students to deal with the effects of being bullied: Theoretical and empirical discussion. *Journal of Social and Clinical Psychology*. 2009;28(2):198-222.
6. Kaltiala-Heino R, Fröjd S. Correlation between bullying and clinical depression in adolescent patients. *Adolescent health, medicine and therapeutics*. 2011;2:37.
7. Sittichai R, Smith PK. Bullying in south-east Asian countries: A review. *Aggression and Violent Behavior*. 2015;23:22-35.
8. Chen L-M, Cheng Y-Y. Prevalence of school bullying among secondary students in Taiwan: Measurements with and without a specific definition of bullying. *School Psychology International*. 2013;34(6):707-20.
9. E'kisu M. The relationship between bullying, family functions, perceived social support among high school students. *Procedia-Social and Behavioral Sciences*. 2014;159:492-6.
10. Harris S, Hathorn C. Texas middle school principals' perceptions of bullying on campus. *Nassp Bulletin*. 2006;90(1):49-69.
11. Dake JA, Price JH, Telljohann SK. The nature and extent of bullying at school. *Journal of school health*. 2003;73(5):173-80.
12. Iossi Silva MA, Pereira B, Mendonça D, Nunes B, Oliveira WAD. The involvement of girls and boys with bullying: an analysis of gender differences. *International journal of environmental research and public health*. 2013;10(12):6820-31.
13. Khawar R, Malik F. Bullying behavior of Pakistani pre-adolescents: Findings based on Olweus questionnaire. *Pakistan Journal of Psychological Research*. 2016:23-43.
14. Shujja S, Atta M, Shujjat JM. Prevalence of bullying and victimization among sixth graders with reference to gender, socio-economic status and type of schools. *Journal of Social*

- Sciences. 2014;38(2):159-65.
15. Undheim AM, Sund AM. Prevalence of bullying and aggressive behavior and their relationship to mental health problems among 12-to 15-year-old Norwegian adolescents. *European child & adolescent psychiatry*. 2010;19(11):803-11.
 16. Barlow DH, Durand VM. *Abnormal Psychology, An Integrative Approach*. 4th Eds. ed: Belmont, CA: Wadsworth Press.; 2005.
 17. Juvonen J, Graham S, Schuster MA. Bullying among young adolescents: The strong, the weak, and the troubled. *Pediatrics*. 2003;112(6):1231-7.
 18. Resnick HS, Kilpatrick DG, Best CL, Kramer TL. Vulnerability-stress factors in development of posttraumatic stress disorder. *Journal of Nervous and Mental Disease*. 1992.
 19. Schneider SK, O'donnell L, Stueve A, Coulter RW. Cyberbullying, school bullying, and psychological distress: A regional census of high school students. *American journal of public health*. 2012;102(1):171-7.
 20. Klomek AB, Marrocco F, Kleinman M, Schonfeld IS, Gould MS. Bullying, depression, and suicidality in adolescents. *Journal of the American Academy of Child & Adolescent Psychiatry*. 2007;46(1):40-9.
 21. Perren S, Dooley J, Shaw T, Cross D. Bullying in school and cyberspace: Associations with depressive symptoms in Swiss and Australian adolescents. *Child and adolescent psychiatry and mental health*. 2010;4(1):28.
 22. Jankauskiene R, Kardelis K, Sukys S, Kardeliene L. Associations between school bullying and psychosocial factors. *Social Behavior and Personality: an international journal*. 2008;36(2):145-62.
 23. Weng X, Chui WH, Liu L. Bullying behaviors among Macanese adolescents association with psychosocial variables. *International journal of environmental research and public health*. 2017;14(8):887.
 24. Humphrey JL, Storch EA, Geffken GR. Peer victimization in children with attention-deficit hyperactivity disorder. *Journal of Child Health Care*. 2007;11(3):248-60.
 25. Gladstone GL, Parker GB, Malhi GS. Do bullied children become anxious and depressed adults?: A cross-sectional investigation of the correlates of bullying and anxious depression. *The Journal of nervous and mental disease*. 2006;194(3):201-8.
 26. Khawar R, Malik F, Batool SS. Validation of the Urdu version of Olweus bully/victim questionnaire (OBVQ). *Journal of Pakistan Psychiatric Society*. 2015;12(1):24-8.
 27. Olweus D. Revised Olweus bully/victim questionnaire. *British Journal of Educational Psychology*. 1996.
 28. Lovibond PF, Lovibond SH. The structure of negative emotional states: Comparison of the Depression Anxiety Stress Scales (DASS) with the Beck Depression and Anxiety Inventories. *Behaviour research and therapy*. 1995;33(3):335-43.
 29. Farooqi Y, Habib M. Gender differences in anxiety, depression and stress among survivors of suicide bombing. *Pakistan Journal of Social and Clinical Psychology*. 2010;8(2):145-53.
 30. Zwierzyńska K, Wolke D, Lereya TS. Peer victimization in childhood and internalizing problems in adolescence: a prospective longitudinal study. *Journal of abnormal child psychology*. 2013;41(2):309-23.
 31. Arseneault L, Bowes L, Shakoor S. Bullying victimization in youths and mental health problems: 'much ado about nothing'? *Psychological medicine*. 2010;40(5):717.
 32. Isolan L, Salum GA, Osowski AT, Zottis GH, Manfro GG. Victims and bully-victims but not bullies are groups associated with anxiety symptomatology among Brazilian children and adolescents. *European Child & Adolescent Psychiatry*. 2013;22(10):641-8.
 33. Stapinski LA, Bowes L, Wolke D, Pearson RM, Mahedy L, Button KS, et al. Peer victimization during adolescence and risk for anxiety disorders in adulthood: a prospective cohort study. *Depression and anxiety*. 2014;31(7):574-82.
 34. Wolke D, Lereya ST. Long-term effects of bullying. *Archives of disease in childhood*. 2015;100(9):879-85.
 35. Graber JA, Sontag LM. Internalizing problems during adolescence. 2009.
 36. Fenzel LM. Prospective study of changes in global self-worth and strain during the transition to middle school. *The Journal of Early Adolescence*. 2000;20(1):93-116.

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