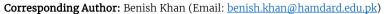
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Cyberbullying and Its Psychological Effects on Secondary School Students in Urban Pakistan

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Abstract: Adolescents are highly engaged in the digital world is evident from the growth of the cyberbullying problems in urban settings. Online abuse can cause depression, anxiety, stress, and low self-esteem. Nevertheless, few studies have examined its effects on secondary school students in Pakistan. This study explores the psychological impact of cyberbullying on secondary school students (n=441) in urban Pakistan, specifically its association with psychological distress and self-esteem. A cross-sectional design conducted on 300 students using purposive sampling. Data were gathered via the Cyberbullying Victimization Scale, the Depression, Anxiety, and Stress Scale (DASS-21), and the Rosenberg Self-Esteem Scale. Statistical analyses of these variables were performed in SPSS Version 28 (IBM Corp. Released 2021. IBM SPSS Statistics for Windows, Version 28.0. Armonk, NY: IBM Corp). Cyberbullying was strongly associated with depression (r=0.48, p<.001), anxiety (r=0.51, p<.001), depression (r=.001), and negatively associated with stress (r=0.46, p<.001). The results indicated a negative correlation between self-esteem and cyberbullying (r=0.39, p<.001). Psychological distress partially mediated the association between cyberbullying and self-esteem according to mediation analysis. Cyberbullying has a serious impact of students' mental health. Schools must conduct awareness campaigns, foster digital literacy, and introduce psychological interventions.

Keywords: Cyberbullying, Psychological Distress, Depression, Anxiety, Self-Esteem, Secondary School Students, Urban Pakistan

Introduction

Blending digital technology into daily activities has altered the way adolescents engage with each other and receive education. Although social media channels and virtual communication mediums offer great value, they have also facilitated the emergence of new types of aggressive behavior, such as cyberbullying (Saleem et al., 2021). Cyberbullying is different from other forms of bullying in that it does not require physical interaction and can occur at any time, which makes it a constant and unavoidable threat for the targeted individual (Ahmmad et al., 2024). The anonymity provided by digital platforms makes it easier for the aggressors to engage in repeated harassment without any accountability. In urban areas of Pakistan where internet connectivity and smartphone usage are increasing tremendously, secondary school pupils remain the most susceptible to this form of online abuse, which is profoundly worrying from a psychological perspective (Iqbal & Jami, 2022).

The Mental and emotional effects of cyberbullying on adolescents can be very intense and life changing (Siddiqui & Schultze-Krumbholz, 2023; Tehreem et al., 2024). Victims of cyberbullying experience anxiety, depression, and lowered self-esteem, which in extreme cases may lead to self-isolation, dropping out of school, and self-harm (Noreen & Iqbal, 2024). This type of bullying makes people feel even more powerless, since the perpetrator's identity and true self is hidden behind a screen, enabling them to operate

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with different personas (Amjad et al., 2023; Asad & Fatima, 2024). Additionally, as the content is shared online, it becomes harder to erase or delete, causing the user to repeatedly share harmful messages, images and rumors that will only add to the suffering of the victim (Shaikh et al., 2021). In a country like Pakistan, where students are bullied online, the lack of mental stability lowers one's concentration, motivation, and grades, since academic success and reputation is greatly valued (Nawaz & Mushtaq, 2024).

Within the Pakistan region, cultural factors significantly shape adolescents' experiences with cyberbullying (Zulfqar et al., 2022; Hamdi et al., 2023). People in Pakistan tend to be more collectivistic in nature believing in family honor and society's perceptions of them which prevents many people from seeking help due to shame or consequences (Ahmmad et al., 2024). More specifically, girls tend to experience higher amounts of psychological distress than boys because of the social stigmas that accompany digital harassment which invades their personal integrity (Siddiqui & Schultze-Krumbholz, 2023). The problem is aggravated by schools that do not have proper reporting systems (Noreen & Iqbal, 2024). Most students feel unsupported or believe that reporting will only result in bans to their internet access rather than addressing the cause. Because of this, many students suffer in silence which ultimately increases the risk of enduring psychological problems in the future (Saleem et al., 2021).

For the target audience, cyber bullying translates into its living effects out of what it hurts the victim with most, which is emotional trauma, and extends to how it would affect their psychological development (Nadeem & Usman, 2022). Adolescents who undergo constant cyber victimization are at risk of adopting inappropriate coping mechanisms such as avoidance, self-isolation, self-abuse and aggression, which interferes with their social and academic endeavors. Online stalking results in emotional insecurity which reinforces their unwillingness to engage in digital places which are very critical for employment and education (Zulfqar et al., 2022). On top of that, cyber bullying offers a lot of freedom for parents and teachers whereby students get little necessary psychological and emotional resources to deal with the challenges for lack of informed guidance and support (Nawaz & Mushtaq, 2024).

The growth of cyberbullying in Pakistan has outpaced the actual research done on its various psychological effects, which means that more of the society's mental health needs to be studied (Asad & Fatima, 2024). Even though international studies shed light on the impact of cyber victimization, the difference in culture and context scope requires more focus on the students of Pakistan (Nadeem & Usman, 2022). International or even local Pakistani students do not focus on this issue, but it is important because it can aid in creating procedures that ensure the student's Digital security, psychological response, and protective care appropriation (Siddiqui & Schultze-Krumbholz, 2023). Understanding the issues will not only help minimize the adverse impacts but also enable informative dialogue on youth mental health within the context of technology (Siddiqui & Schultze-Krumbholz, 2023).

Problem Statement

Cyber bullying is increasingly affecting secondary school students in urban Pakistan leading to dire mental health consequences (Noreen & Iqbal, 2024). Victims are likely to present with anxiety, depression, and school avoidance; however, the cultural stigma makes it difficult to seek help. Lack of school policies and parental apathy further adds to the problem which is quite concerning and requires immediate attention.

Significance of the Study

This study will assess the ways in which cyberbullying impacts students' mental health, academic success, and overall psychosocial well-being. It will assist educators, parents, and policymakers in understanding cyberbullying's effects so that they can create proper policies and intervention programs. Furthermore, it will allow policymakers in the region to take action in preventing adverse effects of technology on adolescent psychology.

Aim of the Study

The study is designed to study the emotional, cognitive, and behavioral impact of cyberbully victimization on secondary school students in urban Pakistan. It will assess the scope, forms, and consequences of cyber

victimization and adolescent mental health. Furthermore, it attempts to investigate the social, familial, and institutional conditions that could modify these effects.

Methodology

The research utilized a quantitative cross-sectional design to explore the psychological impacts of cyberbullying among secondary school students in urban Pakistan. This design allowed the data to be collected at a single point in time, capturing the association between cyberbullying and its psychological implications. This particular research was carried out among secondary school students in urban Pakistan, where the availability of the internet and the use of digital services was high. To ensure representation across all major cities, schools with students from varying socio-economic statuses were selected. A purposive non-probability sampling method was adopted by the researchers, and with the G*Power sample size calculator, 300 students were determined as the sample. The students were chosen based on their age ranging from 13 years to 18 years, frequent social media users, and students attending urban schools. Students diagnosed with psychiatric disorders, who did not have internet, or were unwilling to take part in the study were not included.

The sheet covered participants' age, gender, educational grade, social economic bracket, and their internet usage. The Psychological Effects of Cyberbullying Scale was assessed using three different approaches. The Cumulative Cyberbullying Victimization Scale (Byrne et al., 2021) which had 10 or more questions regarding online abuse, social exclusion and threats, had a Cronbach's alpha of 0.85. The Depression, Anxiety, and Stress Scale (DASS-21) (Thiyagarajanet et al., 2022) used psychometric measures of distress comprising of twenty one items categorized in three subscales in a highly reliable manner (Cronbach for depression 0.91, anxiety 0.89, and stress 0.87). The Rosenberg Self-Esteem Scale (Monteiro et al., 2022) used 10 items on self-esteem tested on a scale of four with a reliability measure of 0.88. Analysis was made using SPSS Version 28 where descriptive statistics; mean, standard deviation, and skewness and kurtosis were computed to assess normality. Inferential statistics were estimating the reliability using Cronbach's alpha, relationships among variables using Pearson product moment correlation, predictive analysis using linear regression, group differences using independent sample t-test, and multiple group differences using ANOVA.

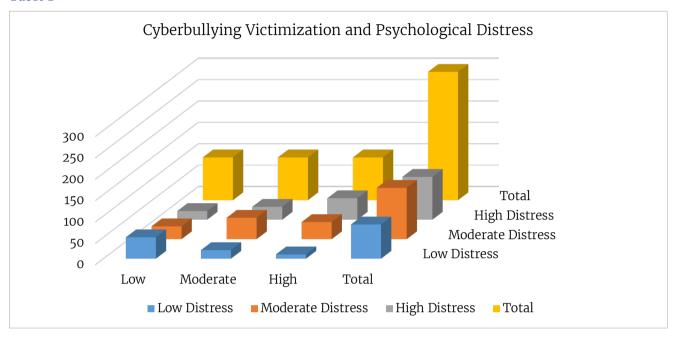
Data collection started post the authorization of the Institutional Review Board (IRB). Students and their parents were asked for informed consent that was voluntary. Additionally, appropriate permission was sought from the school authorities prior to the issuance of the survey questionnaire. All ethical principles were complied with to protect the identity of the respondent, as well as the confidentiality of voluntary respondents. Participants were made aware of the confidentiality of their responses and also that they could withdraw from the study at any time without any consequences.

Results Table 1Demographic Characteristics of Participants (N = 300)

Variable	Category	Frequency (n)	Percentage (%)
Gender	Male	150	50.0
	Female	150	50.0
Age Group	13-15 years	120	40.0
	16-18 years	180	60.0
Grade Level	9th	100	33.3
	10th	100	33.3
	11th	50	16.7
	12th	50	16.7
Socioeconomic Status	Low	90	30.0
	Middle	150	50.0
	High	60	20.0
Internet Usage (hours/day)	1-3 hours	80	26.7
	4-6 hours	130	43.3
	7+ hours	90	30.0

Table 1 of the sample characteristics revealed that of the 300 respondents, there is gender balance. Most of the respondents (60%) are between the ages of 16 and 18 years, and there is reasonable balance in the representation of the grade levels. Half (50%) of the respondents are from the middle class, and 43.3% report spending 4–6 hours on the internet every day.

Table 1



The cases of participants classified according to self-reported accounts of victimization and level of psychological distress. It shows that as the scale of victimization grows, so does the number of people suffer from high psychological distress. This correlation is strong.

Table 2Correlation between Study Variables (N = 300)

Variables	Mean	SD	1	2	3	4	5
1. Cyberbullying Victimization	22.5	6.2	1				
2. Depression	18.3	5.7	0.48**	1			
3. Anxiety	19.1	6.0	0.51**	0.62**	1		
4. Stress	20.4	5.8	0.46**	0.58**	0.61**	1	
5. Self-Esteem	14.7	4.3	-0.39**	-0.41**	-0.45**	-0.38**	1

The table illustrates depression, anxiety, stress, and self-esteem in relationship to cyberbullying victimization. There are significant positive relationships in the self-reported survey regarding cyberbullying and psychological distress variables. Meanwhile, self-esteem's negative relationship with all distress variables shows self-esteem might act as a mediating factor.

Table 3Mediation Analysis of Psychological Distress between Cyberbullying and Self-Esteem

Pathways	В	SE	95% CI	β	t	p
Cyberbullying → Psychological Distress	0.55	0.08	[0.39, 0.71]	0.48	6.88	<.001
Psychological Distress → Self-Esteem	-0.47	0.09	[-0.65, -0.29]	-0.41	-5.22	<.001
Cyberbullying → Self-Esteem (Direct Effect)	-0.32	0.07	[-0.46, -0.18]	-0.34	-4.57	<.001
Cyberbullying → Self-Esteem (Indirect Effect)	-0.26	0.06	[-0.38, -0.14]	-0.29	-4.33	<.001

Table 3 illustrates there is a significant psychological distress mediator in the relationship between self-esteem and cyberbullying victimization. Self-reported results indicated the presence of a direct effect of cyberbullying on self-esteem; however, psychological distress emerged as a notable intervening factor, supportive of the concept that increased victimization increases psychological distress, which consequently lowers self-esteem.

Discussion

The current research focused on the nature of the socio-psychological impacts of cyber bullying on degree college students in urban regions of Pakistan. The self-reported findings showcased that victimization from cyberbullying was notably linked to escalated depression, anxiety, and stress, and self-esteem was found to correlate with cyber-bullying in a negative manner. These findings corroborate existing research that has shown online victimization as a form of emotional abuse causes increased mental health concerns and deteriorating well-being among the youngsters (Soomra et al, 2024; Shaikh et al., 2024). Considering the ever-growing digital footprint of students through the Internet, these results call for immediate action on how we tackle cyberbullying within the educational framework.

The results of the analysis showed that self-reported experiences of cyberbullying victimization had a significant positive correlation with the self-report of mental health issues, especially with anxiety neurosis and major depression. This means the students who were more afraid and emotionally disturbed were those who were repetitively targeted online and bullied through social media platforms (Shahzad, 2024). Furthermore, the negative relationship between self-esteem and psychological distress suggests that students who fall prey to cyberbullying have negative self-images, thereby worsening their emotional health. These noted results highlight the need for teachers and parents to help youngsters improve their coping mechanisms while dealing with the online space.

The results regarding mediation suggested that self-esteem and emotional distress are correlated with psychological distress serving as a mediator. This finding also suggests that the self-esteem damaging effects of cyberbullying are at least partly due to the self-reported increase in psychological distress (Touloupis et al., 2025). Students claiming to suffer chronic online harassment are likely to have emotional distress which lowers their self-esteem (Souza et al., 2024). The underlying rationale for this is the need to support the claim that there should be remedies put in place to help those suffering from the adverse effects of cyber bullying, indiscriminately.

The aforementioned evidence which suggests that students suffering high levels of cyberbullying victimization automatically suffers high levels psychosomatic disorders is aligned with the crosstabulation results. Students who are suffering severe cases of cyberbullying are significantly more likely to suffer high levels of emotional distress (Souza et al., 2024). These findings suggest that the assumption of the multi-directional impact of cyberbullying on students' psychological health should be considered as valid. The findings justify the existence of school based anti-cyberbullying programs aimed towards reducing the effects of online bullying.

As a result, this research highlights the negative effects that cyberbullying has on the mental health and self-perception of adolescents. The conclusion argues for the need for proactive measures such as digital literacy training, counseling, and more effective regulation of cyberbullying practice (Fang et al., 2023). Further studies should analyze the role of parental and peer support as potential moderators of the resilience among cyberbullying victims (Wu et al., 2024). In students, the holistic management of these psychological factors will enhance their online experience and improve their mental health.

Future Direction

In the future, emerging research will seek protective factors that alleviate the psychological impacts of cyberbullying during adolescence. The inquiry into the contribution of parental participation, peer assistance, and school-based efforts may help provide information on building resilience (Rahman et al., 2023). Moreover, studies focusing on the persistence of the aftermath of cyberbullying towards mental health in a longitudinal frame of reference would help understand its consequences better. Lastly, further

research skepticism should also incorporate a qualitative dimension so as to accommodate the perspectives and ways of dealing with cyberbullying of students (Soomra et al., 2024).

Limitation of the Study

The study, however, has some difficulties that need addressing. The self-reporting portions of the data may have incurred social desirability bias as students might underreport or exaggerate their activities regarding cyberbullying or psychological distress (Abbas et al., 2023). In addition, the design of the study not being longitudinal means no cause and effect can be determined for the relations of cyberbullying, psychological distress, and self-esteem. The study also limited participants to urban secondary school students within Pakistan which makes extrapolation of results to rural and other cultures difficult (Hazime et al., 2024). In a more diverse longitudinal approach, future study should focus on these limitations.

Conclusion

This study demonstrates the immense psychological effect of cyberbullying on urban Pakistan secondary school students. Findings show that self-reported cyberbullying victimization is strongly associated with higher levels of depression, anxiety, and stress, and self-esteem is inversely correlated. The mediation analysis showed more self-esteem being correlated with low levels of psychological distress, demonstrating the importance of interventions. These results highlight the importance of developing and implementing school-centered cyberbullying policies and systems of mental support and digital education (Hazime et al., 2024). These policies can reduce the negative impact of cyberbullying on adolescents and so the need for employing more comprehensive strategies to deal with cyber bullying is needed.

References

- Abbas, Z., Dahar, M. A., & Sadiqa, M. (2023). Impact of Media Addiction on Mental Health of Secondary School Students (Gilgit-Pakistan). *Journal of Asian Development Studies*, 12(4), 754-762. https://poverty.com.pk/index.php/Journal/article/view/249
- Ahmmad, M., Iqbal, N., & Naz, W. (2024). Cyberbullying and its Impact on Mental Health among Female University Students in Sindh, Pakistan: A Case Study. *Media and Communication Review*, 4(2), 22-42. https://journals.umt.edu.pk/index.php/MCR/article/view/5378
- Amjad, F., Latif, D., Hanif, S., Bashir, K., Batool, R., & Khalid, U. (2023). Functional Movement Screen Differences in Male and Female Footballers and as an Injury Prevention Tool: Functional Movement Screen Differences. *Pakistan Journal of Health Sciences*, 30–34. https://doi.org/10.54393/pjhs.v4i12.1191
- Asad, M. M., & Fatima, S. S. (2024). Influence of cyber violence and online victimization on cognitive development of female students from Pakistani higher education institutions. *Journal of Aggression*, *Conflict and Peace Research*, 16(4), 330–347. https://doi.org/10.1108/JACPR-03-2024-0892
- Byrne, V. L. (2021). Validating a cyberbullying victimization measure among undergraduates. *Journal of college student development*, 62(1), 124–129. https://doi.org/10.1353/csd.2021.0010
- Fang, X., Zhang, K., Chen, J., Chen, M., Wang, Y., & Zhong, J. (2023). The effects of covert narcissism on Chinese college students cyberbullying: The mediation of hostile attribution bias and the moderation of self-control. *Psychology Research and Behavior Management*, 2353–2366. https://www.tandfonline.com/doi/full/10.2147/PRBM.S416902
- Hamdi, A. M. A., Alasmari, A. S., Batool, R., Alshahrani, F. N., Alqarni, R. S. M., Al Shehri, A. H., ... & Asiri11, S. S. (2023). Association Between Maternal Stress Levels and Infant Health Outcomes In Asser Region.
- Hazime, M. (2024). The lived experience of middle school counselors with cyberbullying in the virtual learning environment [Doctoral dissertation]. Walden University.
- Iqbal, S., & Jami, H. (2022). Exploring definition of cyberbullying and its forms from the perspective of adolescents living in Pakistan. *Psychological studies*, 67(4), 514–523. https://link.springer.com/article/10.1007/s12646-022-00689-0
- Monteiro, R. P., Coelho, G. L. D. H., Hanel, P. H., de Medeiros, E. D., & da Silva, P. D. G. (2022). The efficient assessment of self-esteem: proposing the brief rosenberg self-esteem scale. *Applied Research in Quality of Life*, 17(2), 931–947. https://link.springer.com/article/10.1007/s11482-021-09936-4
- Nadeem, M. A., & Usman, A. (2022). Bullying In Universities: Effects on Mental Health and Academic Performance of The Students in Punjab, Pakistan. *Pakistan Journal of Social Research*, 4(03), 29–37. https://pisr.com.pk/wp-content/uploads/2022/09/4.-Vol.-4.-Issue-3.-September-2022-Article-Mudasar-Ali-revised.pdf
- Nawaz, S., & Mushtaq, A. (2024). Predicting Emotional and Behavioral Problems through Bullying and Victimization in Pakistani Adolescents. *Human Nature Journal of Social Sciences*, 5(3), 111–128. https://doi.org/10.71016/hnjss/rb5b8m32
- Noreen, Z., & Iqbal, M. (2024). The Consequences of Cyberbullying on the Psychological Well-being of University Students. *Research Journal of Social Sciences and Economics Review*, 5(1), 36-46. https://doi.org/10.36902/risser-vol5-iss1-2024(36-46)
- Rahman, T., Hossain, M. M., Bristy, N. N., Hoque, M. Z., & Hossain, M. M. (2023). Influence of cyber-victimization and other factors on depression and anxiety among university students in Bangladesh. *Journal of Health, Population and Nutrition*, 42(1), 119. https://link.springer.com/article/10.1186/s41043-023-00469-0
- Saleem, S., Khan, N. F., & Zafar, S. (2021). Prevalence of cyberbullying victimization among Pakistani Youth. *Technology in Society*, 65, 101577. https://doi.org/10.1016/j.techsoc.2021.101577
- Shahzad, S. A. (2024). Assessment of emotional intelligence in the association between bullying and forgiveness among high school students in Pakistan. https://docs.neu.edu.tr/library/9682900326.pdf
- Shaikh, F. B., Ayyasamy, R. K., Balakrishnan, V., Rehman, M., & Kalhoro, S. (2024). Cyberbullying attitude, intention and behaviour among Malaysian tertiary students—A two stage SEM-ANN

- approach. *Education and Information Technologies*, 29(5), 6293-6317. https://link.springer.com/article/10.1007/s10639-023-12064-1
- Shaikh, F. B., Rehman, M., Amin, A., Shamim, A., & Hashmani, M. A. (2021). Cyberbullying behaviour: a study of undergraduate university students. *IEEE Access*, 9, 92715–92734. https://doi.org/10.1109/ACCESS.2021.3086679
- Siddiqui, S., & Schultze-Krumbholz, A. (2023). Bullying prevalence in Pakistan's educational institutes: Preclusion to the framework for a teacher-led antibullying intervention. *PLoS one*, *18*(4), e0284864. https://doi.org/10.1371/journal.pone.0284864
- Siddiqui, S., & Schultze-Krumbholz, A. (2023). The Sohanjana Antibullying Intervention: Pilot results of a peer-training module in Pakistan. *Social Sciences*, 12(7), 409. https://doi.org/10.3390/socsci12070409
- Soomra, N. U. A., Ahmad, I., Muntaha, S. T., & Saba, Z. (2024). Cyber–Bullying Impact on Young Adults; Examining Stress, Coping Mechanism and Self–Esteem. *Journal of Excellence in Social Sciences*, 3(2), 94–104. https://doi.org/10.69565/jess.v3i1.234
- Souza, S. B., Pardo-Gonzalez, E., Paulino, P., Francisco, S. M., Fredes-Montero, J., & Herrera, H. A. (2024). Measuring and characterizing cyberbullying among Chilean university students. *Current Psychology*, 43(19), 17416–17431. https://link.springer.com/article/10.1007/s12144-023-05541-w
- Tehreem, A., Batool, R., Mubarak, F., & Kaurar, S. (2024). Dynamic Synergies: Exploring Knowledge Exchange, Innovation, Creative Self-Efficacy, and Project Success in Public and Private Sector Organizations of Twin Cities, Pakistan. *Dialogue Social Science Review (DSSR)*, 2(4), 576–586. https://www.thedssr.com/index.php/2/article/view/110
- Thiyagarajan, A., James, T. G., & Marzo, R. R. (2022). Psychometric properties of the 21-item Depression, Anxiety, and Stress Scale (DASS-21) among Malaysians during COVID-19: a methodological study. *Humanities and Social Sciences Communications*, 9(1), 1–8. https://www.nature.com/articles/s41599-022-01229-x
- Touloupis, T., Andreou, E., & Chasapis, D. (2025). Relations among perceived school context-related factors, cyberbullying, and school adjustment: An examination between native and immigrant students in elementary and secondary education. *Social Psychology of Education*, 28(1), 44. https://link.springer.com/article/10.1007/s11218-024-09998-w
- Wu, J., Zhang, X., & Xiao, Q. (2024). The longitudinal relationship between cyberbullying victimization and loneliness among Chinese middle school students: the mediating effect of perceived social support and the moderating effect of sense of hope. *Behavioral Sciences*, 14(4), 312. https://doi.org/10.3390/bs14040312
- Zulfqar, A., Hussain, B., Shahzadi, U., & Mazhar, I. (2022). Analyzing the Relationship between Cyberbullying Victimization and Well-Being of Students at Higher Education. *Academy of Education and Social Sciences Review*, 2(2), 59-69. https://doi.org/10.48112/aessr.v2i2.362