Mental Health of Youth in Context of Cyber-Peer Experiences: Moderating Role of Social Media Use

Faiza^{1*}, and Humaira Jami²

¹ M Phil Scholar, National Institute of Psychology, Quaid-i-Azam University, Islamabad ² Assistant Professor, National Institute of Psychology, Quaid-i-Azam University, Islamabad *faiza.f22@nip.edu.pk

Abstract

Youth are involved in cyber aggression and also experiencing cyber victimization, which could have detrimental effects on their mental health. In light of this, the current study examined the role of cyber aggression and cyber victimization on mental health problems and explored the moderating role of social media use along with its components among youth. Five hundred participants with ages ranging from 16 to 25 years (M = 20.14, SD = 2.50) were approached from public and private institutions of Rawalpindi and Islamabad, Pakistan using a convenient sampling technique. Cyber-Peer Experiences Questionnaire (Landoll et al., 2015), Gaming and Social Media Questionnaire (Burén et al., 2023), and Depression, Stress, and Anxiety Scale (Lovibond & Lovibond, 1995; Aslam & Kamal, 2016) were used. The results demonstrate that cyber aggression and cyber victimization are significantly positively associated with mental health problems. However, composite scoring of social media and its component negative consequences do not significantly moderate the association between cyber aggression and mental health problems. However, heavy involvement in social media moderates the association between cyber aggression and mental health problems and appears as a risk factor. Moreover, composite scoring of social media and its components consisting of heavy involvement and negative consequences nonsignificantly moderate the relationship between cyber victimization and mental health problems indicating that cyber peer experiences and mental health problems are not influenced by social media and its component, negative consequences, and heavy involvement. Thus, interventions that help create awareness against social media should be designed to alleviate cyber–peer experiences associated with mental health problems among youth.

Introduction

- Cyber-peer experiences have gained attention due to their impact on mental health, with frequent exposure to cyber victimization and aggression leading to mental health decline (Moore, 2015).
- Mental health issues affect thoughts, emotions, and behavior, hindering daily functioning (Ferrari et al., 2014).
- Social media influences these experiences, characterized by heavy involvement (obsession, withdrawal, and increased usage) and negative consequences (loss of interest, excessive use, dishonesty, and compromised relationships) (Bouna-Pyrrou et al., 2018; Burén et al., 2021; van den Eijnden et al., 2016).
- Males are more involved in cyber aggression as compared to females (Ngange et al., 2024) while it has been found that females are more likely to use more social media (Andreassen et al. 2017; Cudo et al., 2020; Kircaburun et al., 2018) for making relationships and then maintaining those existing relationships with their close friends than males (Kircaburun et al., 2020).
- Despite the significant concerns of healthcare professionals, educators, and students about the increase in bullying, very scarce literature is present on cyber victimization in South Asian countries, especially in Pakistan.

Method

Objective

- 1. To examine the association between cyber victimization, cyber aggression, and mental health problems.
- 2. To investigate the moderating role of social media along with its domains between cyber-peer experiences and mental health problems.

Hypotheses

- 1. There is a positive association between cyber victimization, cyber aggression, and mental health problems.
- 2. Social media along with its domains (heavy involvement and negative consequences) strengthen the association between cyber victimization and mental health problems.
- 3. Social media along with its domains (heavy involvement and negative consequences) enhances the association between cyber aggression and mental health problems.
- 4. Females are more likely to exhibit score higher levels of heavy involvement with social media while males score higher on cyber aggression.

Instruments

- Cyber-Peer Experiences Questionnaire (Landoll et al., 2015). High scores indicate high cyber victimization and aggressive behavior, and vice versa.
- Depression, Anxiety, and Stress Scale (Lovibond & Lovibond. 1995; Aslam, 2007). A high score indicates higher severity and vice versa.
- Gaming and Social Media Questionnaire (Burén et al., 2023). High scores indicate high symptom severity and vice versa.

Sample and Procedure

- Youth (N = 500) from Rawalpindi and Islamabad with ages ranging between 16 to 25 (M = 20.14, SD = 2.50).
- Convenient sampling technique.
- All the protocols of ethical considerations were followed such as informed consent, confidentiality anonymity, and the right to withdraw.

Results

Figure 1 Heavy Involvement on Social Media Cyber Aggression t = -.27 (p = .03)t = 2.18 (p = .03)2.05 95% CI = [-.37, -.02]95% *CI* = [.01, .24] 2.00 1.85

Male (n = 244)

Female (n = 256)

Figure 2

Female (n = 256)

Male (n = 244)

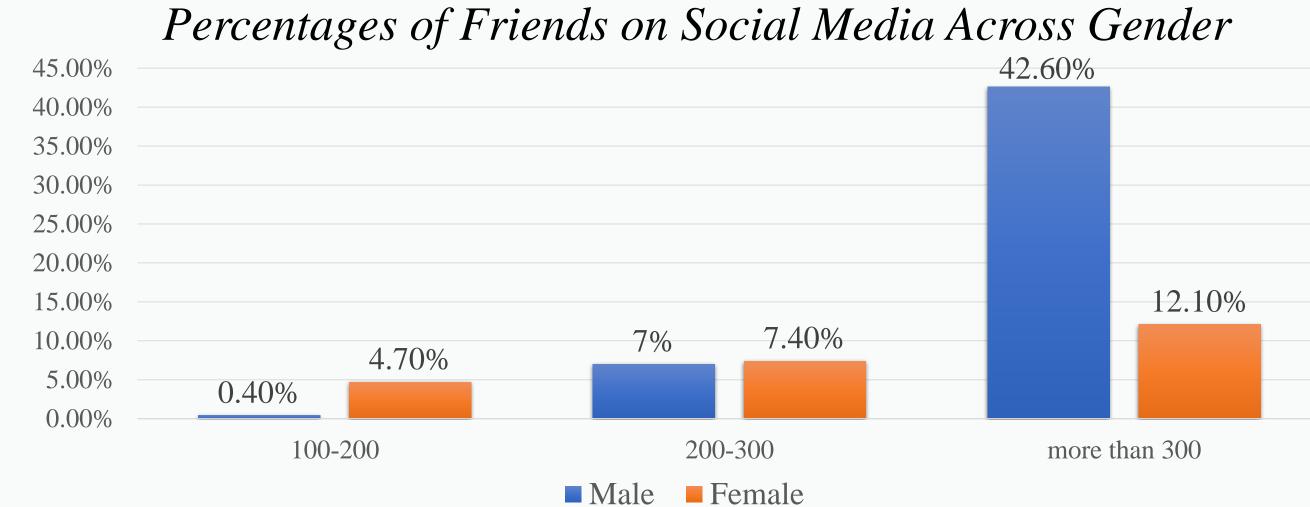


Table 1 Correlation Analysis Between Cyber-Peer Experiences, Mental Health Problems, and Social Media Use and its Domains Among Youth (N = 500)

				0	Y	,
		1	2	3	4	5
1	Cyber Victimization	-				
2	Cyber Aggression	.74**	-			
3	Mental Health Problems	.27**	.24**	-		
4	Social Media Use	.20**	.21**	.33**	-	
5	Heavy Involvement	.06*	.11**	.20**	.85**	-
6	Negative Consequences	.27**	.25**	.37**	.93**	.60**
Note	e. **p < .05. **p < .01.					

Figure 3

Mod Graph Showing Interaction Effect of Heavy Involvement on Social Media and Cyber Aggression on Mental Health Problems

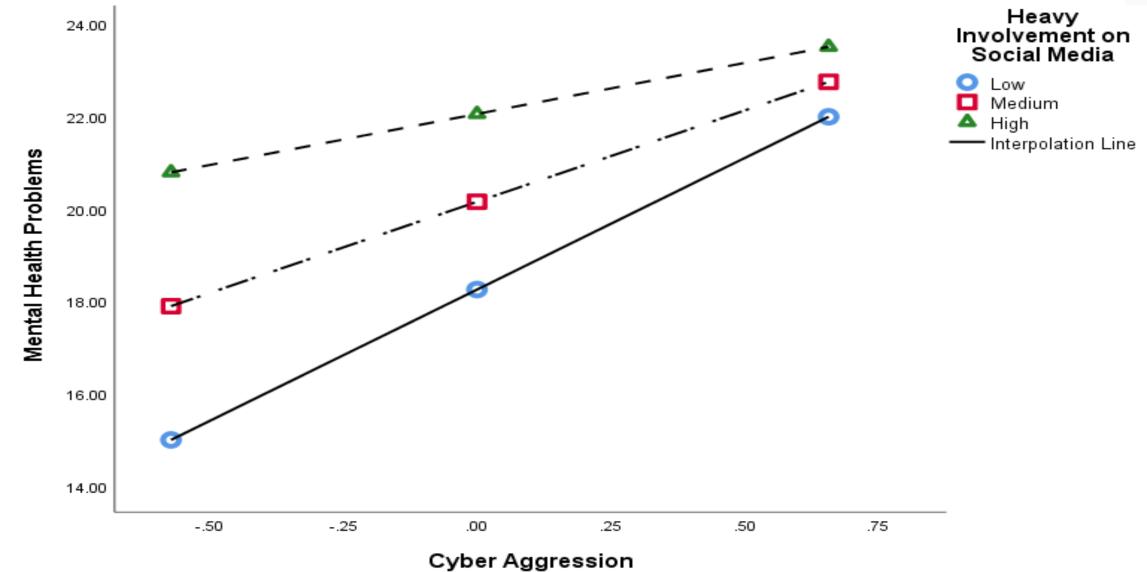


Figure 3 shows that with an increase in cyber aggression, mental health problems also increased in all three groups. However, mental health problems are steeper (strongest positive association) for individuals with medium involvement on social media (t = 5.30, p = .00) than for individuals high in heavy involvement (t = 2.31, p = .02). This means that cyber aggression and mental health problems are very pronounced with medium involvement on social media as compared to the other two groups.

Hypothesis 2 is rejected, as social media along with its domains i.e., heavy involvement and negative consequences nonsignificantly moderate the relationship between cyber victimization and mental health problems. Moreover, Hypothesis 3 is partially accepted as heavy involvement on social media moderates between cyber aggression and mental health problems while social media use and negative consequences nonsignificantly moderate the association between cyber aggression and mental health problems.

Discussion

- The general strain theory states that people are more likely to face psychological problems when confronted with cyber-peer experiences.
- Mental health problems increase when showing aggression toward others in cyberspace space. This gets more pronounced if participants keep using social media heavily which is a risk factor.
- Cyber victimization and mental health problems may not be directly influenced by social media and its components i.e., heavy involvement and negative consequences because individual coping mechanisms, social (Dennehy, 2020), and the nature of online interactions vary widely.

Limitations and Suggestions

- Less generalizability.
- Researchers may consider additional experiences and covariates in future tests of these variables.

Implications

- Government officials can improve youth mental health by implementing "heavy usage" alerts on social media.
- Encouraging educators to educate students about the risks of excessive online time. School counselors can play a key role in this prevention.

References

 Agnew, R. (1992). Foundation for a general strain theory of crime and delinquency. Criminology, 30(1), 47-88. https://doi.org/10.1111/j.1745-9125.1992.tb01093 Bouna-Pyrrou, P., Aufleger, B., Braun, S., Gattnar, M., Kallmayer, S., Wagner, H., ... Lenz, B. (2018). Cross-sectional and longitudinal evaluation of the social network use disorder and internet gaming disorder criteria. Frontiers in Psychiatry, 9, 692. https://doi.org/10.3389/fpsyt.2018.00692. • Burén, J., Nutley, S. B., Crisci, G., & Thorell, L. B. (2023). Evidence of a two-factor structure for internet gaming disorder and social media disorder: psychometric properties of a new screening instrument for adolescents and adults. Journal of Psychopathology and Behavioral Assessment, 45(3), 702-715. https://doi.org/10.1007/s10862-023-10066-4 Dennehy, R., Meaney, S., Cronin, M., & Arensman, E. (2020). The psychosocial impacts of cyber victimization and barriers to seeking social support: Young people's perspectives. Children and Youth Services Review, 111, 104872.https://doi.org/10.1016/j.childyouth.2020.104872 • Landoll, R. R., La Greca, A. M., Lai, B. S., Chan, S. F., & Herge, W. M. (2015). Cyber victimization by peers: Prospective associations with adolescent social anxiety and depressive symptoms. Journal of Adolescence, 42(1), 77-86. https://doi.org/10.1016/j.adolescence.2015.04.002 • Lovibond, P. F., & Lovibond, S. H. (1995). The structure of negative emotional states: Comparison of the Depression Anxiety Stress Scales (DASS) with the Beck Depression and Anxiety Inventory. Behavior

Research and Therapy, 33(3), 335–343. https://doi.org/10.1016/0005-7967(94)00075-U Moore, K. (2015). Investigating construct validity of the Cyber-Peer Experiences Questionnaire. (Master's thesis). Retrieved from https://scholarcommons.sc.edu/etd/3201 • an den Eijnden, R. J. J. M., Lemmens, J. S., & Valkenburg, P. M. (2016). The social media disorder scale. Computers in Human Behavior, 61, 478–487. https://doi.org/10.1016/j.chb.2016.03.038.