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MEDIATING ROLE OF OPTIMISM IN THE RELATIONSHIP BETWEEN ATTACHMENT STYLES AND MENTAL HEALTH FUNCTIONING IN UNIVERSITY STUDENTS OF LAHORE, PAKISTAN.

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ABSTRACT

OBJECTIVE
To explore the mediating role of optimism between attachment styles and mental health functioning in university students of Lahore.

STUDY DESIGN
Cross-sectional study

PLACE AND DURATION OF STUDY
The study was conducted in Lahore, over an 8 month period.

METHOD
A total of 300 university students from private and government universities of Lahore were surveyed using Revised Adult Attachment Scale (RAAS), Optimism Scale (OS) and Student Problem Checklist Scale (SPCL). Data were entered and analysed with the help of SPSS version 25.

RESULTS
The correlation analysis depicted a significant positive relationship between attachment (Close) and optimism, whereas a significant negative relationship between optimism and mental health functioning. Mediation analysis showed that optimism mediated the relationship between close attachment style and mental health functioning.

CONCLUSION
In terms of perceived close attachment, optimism played a protective role in better mental health functioning of university students.

KEYWORDS
Attachment Styles, Optimism, Mental Health, Students

INTRODUCTION
University years are a time of great stress and adjustment with academic, personal and social challenges.[1] Changing societal demands, increased personal expectations, higher pressure to succeed and transition into adulthood may contribute to increased stress that is further associated with serious mental health problems, which is a matter of great concern for educationalists, counsellors and society at large.[2]

Literature has documented a higher prevalence rate of 20-50% mental health issues in university students, ranging from stress, anxiety, depression, substance abuse and suicide,[3,6] which further leads to academic, personal and social failures.[7,9] Therefore, early identification and management of these mental health concerns can prevent the onset of severe difficulties, which is possible by identifying risk and protective factors. Greater understanding of factors that influence mental health of students may help in devising targeted interventions to improve their functioning. One such factor that is said to have a critical impact on the psychological functioning of an individual is attachment styles, which influence an individual's thoughts, feelings and behaviours in close relationships.[10]

According to the attachment theory, early attachment and interactions with the caregivers become a template and base for future interpersonal interactions and relationships.[11] Secure attachment comprising emotional warmth, sense of security and safety is linked with positive self-perception, high self-esteem, optimism and sense of strong connectedness which consequently relates to better mental health outcomes.[12] Insecure attachment on the other hand characterised by anxious, ambivalent and avoidant interactions, results in a greater vulnerability of mental health problems including depression, suicidal ideation and serious pathologies.[13,16] Even though the connection between attachment styles and mental health is well-documented yet, a need to explore potential mediators that can explain this dynamic relationship more precisely and offer a deeper understanding of mental health functioning of university scholars is warranted.

With the emergence of positive psychology, many factors have been identified that enhance mental health functioning, and among these factors, optimism is said to play a buffering role against adverse life conditions and stressors.[17] Optimism can be defined as a personality characteristic of having a positive and favourable view about one's future life.[18]

Individuals with high optimistic tendencies may have high self-esteem, resilience, better communication and psychological well-being.[19] Whereas, low optimism may result in depression, self-harm behaviours, anxiety and suicide.[20] Literature suggests that secure attachment is linked with the higher level of optimism and those individuals with insecure attachment tend to show a lower level of optimism and more mental health concerns.[21] Studies show that optimism is related to lesser psychological problems,[22] though limited literature is available that examines the mediating role of optimism in the relationship with attachment styles and mental health consequences in university students.

This research can contribute to the development of targeted interventions aimed at fostering positive mental health outcomes in university students as the study hypothesised that optimism would mediate the association of close attachment and mental health problems in young adults.

METHOD

Procedure

Before the initiation of the study, the ethical approval was obtained from the Institutional Review Board of the School of Professional Psychology, University of Management of Technology, Lahore, Pakistan (Ref. ICPY/20/163, dated: 05-03-2021). Initially, different universities were approached and a brief explanation of the aims of the current research was described to them with the assurance of anonymity and confidentiality of research data. Once permission was granted, the authorities randomly selected sections from BS (Hons) semesters 1, 2, 3 and 4 of different departments.

All the ethical considerations were taken into account, the participants were assured about the confidentiality, anonymity and the right to withdraw from the research at any time. All the agreed participants were provided the final testing material to fill in. The data were collected in a group setting averaging 20 participants in a group, and it took 15 minutes to complete the testing protocol. All students were debriefed at the end of the study.

Participants

This cross-sectional study was conducted on 300 participants, with an equal proportion of 150 men and 150 women at different educational levels, between 19 to 24 years of age, and data were collected from different institutes of Lahore. The sample was selected randomly. Participants with any psychological or physical impairments were excluded from the current research.

Instruments

The study tools comprised the Revised Adult Attachment Scale (RAAS), the Optimism Scale (OS), Student Problem Checklist and a demographic sheet.

Revised Adult Attachment Scale (RAAS):[23] It is an 18-item self-report measure with a five points Likert scale ranging from "not at all characteristic of me" (1) to "very characteristic of me" (5) with three subscales of attachment such as Close, Dependent and Anxious; All three subscales have sufficient reliability (α=.68, .71, and .52 respectively). Each subscale had six items in it.

Optimism Scale (OS):[24] This scale consists of 32 items, scored on a 5-point Likert scale with the options (0= Never, 1= Rarely, 2= Neutral, 3= Sometimes, 4= Very Much). It has high internal consistency (.90).

Student Problem Checklist (SPCL):[25] It is a 45 items self-report measure with satisfactory reliability (α=.83). The items are rated on a 4-point Likert scale such as not at all (0), rarely (1), to some extent (2), very much (3). High scores on this scale reflected high psychological problems.

RESULTS

The study sample had an age range of 19 to 24 years, with a mean of 21.29 years (SD=±1.65). Participants in this research predominantly had nuclear family systems (56%). Furthermore, most of the participants were aged between 19 and 21 (54%).

Table 1

Means, Standard Deviation and Correlation between Close Parental Attachment, Optimism and Mental Health Problems (N=300).

Variables	CA	DA	AA	O	MHP
CA	-	.14*	-.11	.18**	-.15**
DA		-	-.37***	-.07	-.08
AA			-	-.06	.21***
O				-	-.27***
MHP					
M	17.89	16.57	18.67	75.76	60.01
SD	3.82	3.64	5.12	16.95	25.22

Note. *p<.05, **p<.01, ***p<.001. CA: Close Attachment; DA: Dependent Attachment; AA: Anxious Attachment; O: Optimism; MHP: Mental Health Problems.

Findings of Pearson Product-Moment Correlation revealed a significant positive association between close attachment and optimism. Additionally, findings suggested a significant negative association of close attachment and mental health problems. Similarly, anxious attachment is significantly positively associated with mental health problems. Moreover, optimism is also significantly negatively associated with mental health problems. However, no significant association of dependent attachment with optimism and mental health problems is found. Also, anxious attachment is not significantly associated with optimism.

Findings of Pearson Product-Moment Correlation suggested interrelatedness of close attachment, optimism and mental health problems. Therefore, the mediating role of optimism in the association of close attachment and mental health problems is identified through Hayes (2018) bootstrapping approach as shown in Figure 1.

Figure 1
Mediation Model of Optimism (M) on the relationship between close attachment (X) and mental health problems (Y).

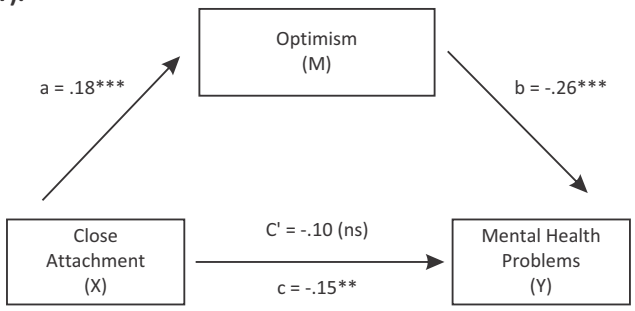

Table 2
Close Attachment, Optimism and Mental Health Problems of University students' Mediation Analysis (N=300).

		Consequent						
		M(O)				Y(MHP)		
Antecedent		β	SE	p-value		β	SE	p-value
CA(X)	a	.18	.25	.001***	c´	-.10	.37	.06
O(M)		-----	-----	------	b	-.25	.08	.001***
Constant	i	61.1	4.67	.001***	i	101.0	8.4	.001***
		R^2=.03				R^2=.08		
		F(1,295)=10.11, p=.001***				F(2,294)=14.16, p=.001***		

Note. CA: Close Attachment; O: Optimism; MHP: Mental Health Problems. ***p<.001, p>.05

Table 2 showed the results as Regression Coefficients, Standard Error and Model Summary Information for the mediation analysis. Path a illustrated a significant predictive relationship between close attachment as an independent variable and optimism as mediator, β=.18, SE=.25, p<.001. Path b in Table 2 revealed a predictive association between optimism as the predictor and mental health functioning as the outcome. This path also depicts optimism as a significant predictor of mental health functioning, β=-.25, SE=.08, p<.001.

Furthermore, Figure 1 depicted a significant total effect of the independent variable on the dependent variable as shown in path c, c= -.15, SE= .37, p< .01. Findings indicated that optimism is fully mediating the association of the independent variable on the dependent variable as after controlling optimism as a mediator, the direct effect of the independent variable on the dependent variable reduced to 0 and the path c´ is non-significant as β= -.10 SE=.37, p<.01.

DISCUSSION

This research is an attempt to explore the role of attachment styles and optimism in mental health functioning of university students. The results highlight the crucial role of optimism as a protective factor and buffer against mental health problems in university students, as reported by previous research.[19] The correlational analysis signifies a positive relationship between close attachment style and optimism, confirming the previous findings that secure, emotional warmth and supportive perception of relationships with significant others foster positive outcomes and improve mental health functioning of university students.[21]

Optimism was found to have a significant negative association with mental health, indicating that high level of optimism is linked with positive mental health outcomes.[22] Findings of this study align with previous literature showing that optimism and positive future oriented mindset serve as a buffer and protective factor against mental health challenges and facilitate better coping and adjustment with the ever-changing psychological, social and emotional demands of university years. In other words, as optimism is characterised by dispositional inclination to have a generalised positive outlook even when faced with adversity or struggle in their lives. It is argued that in tough circumstances the optimistic people exhibit positive emotional reactions and expectations, which in turn are associated with many productive outcomes, like life satisfaction, well-being, and lower levels of mental health issues including depression, anxiety and stress.

Moreover, mediation analysis indicated a mediating role in the relationship between close attachment pattern and mental health problems. This further affirms the protective role of optimism against life stress. These findings highlight the importance of fostering secure attachment and cultivating optimism as a way of coping with ever-changing demands and expectations. Future research should further explore the mechanisms through which optimism influences mental well-being and investigate intervention strategies to enhance optimistic thinking in individuals with insecure attachment styles.

Limitations

This study has several limitations. First, the choice of study design being cross-sectional restricted causal interpretations between attachment styles, optimism, and mental health functioning. Additionally, the sample was limited to a single

city with urban university students within a narrow age range, which resulted in generalisability. The socio-cultural factors influencing emotional expression were not taken into consideration, which may have influenced outcomes. Lastly, the study lacked qualitative insight, limiting the depth of understanding regarding participants' experiences.

CONCLUSION

Perception of close, secure and emotionally connected attachment is one of the hallmarks of successful relationships in young adulthood in collectivistic cultures. The transition period from adolescent to adulthood requires interpersonal as well as intrapersonal support to survive the struggles and battles of this phase. Thus, close or healthy attachment in interpersonal relationships may facilitate higher levels of optimism in oneself and lead towards healthy mental functioning during emerging adulthood.

Recommendations

Future research should consider longitudinal and mixed-method designs to illustrate causal and contextual relationships. Broader sampling across rural and diverse populations is recommended to improve representativeness. Interventions aimed at enhancing optimism and secure attachment should be piloted to evaluate their impact on mental health outcomes in academic settings.

CONFLICT OF INTEREST

None

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DISCLOSURE

None

REFERENCES

1. Liu X, Ping S, Gao W. Changes in Undergraduate Students' Psychological Well-Being as They Experience University Life. Int J Environ Res Public Health. 2019;16(16):2864. doi: 10.3390/ijerph16162864.
2. Pedrelli P, Nyer M, Yeung A, Zulauf C, Wilens T. College Students: Mental Health Problems and Treatment Considerations. Acad Psychiatry. 2015;39(5):503-511. doi: 10.1007/s40596-014-0205-9
3. Cvetkovski S, Reavley NJ, Jorm AF. The prevalence and correlates of psychological distress in Australian tertiary students compared to their community peers. Aust N Z J Psychiatry. 2012;46(5):457-467. doi: 10.1177/0004867411435290
4. AlJaber MI. The prevalence and associated factors of depression among medical students of Saudi Arabia: A systematic review. J Family Med Prim Care. 2020;9(6):2608-2614. doi: 10.4103/jfmpc.jfmpc_255_20
5. Han B, Compton WM, Eisenberg D, Milazzo-Sayre L, McKeon R, Hughes A. Prevalence and Mental Health Treatment of Suicidal Ideation and Behavior Among College Students Aged 18-25 Years and Their Non-College-Attending Peers in the United States. J Clin Psychiatry. 2016;77(6):815-824. doi: 10.4088/JCP.15m09929
6. Teh CK, Ngo CW, Zulkifli RA, Vellasamy R, Suresh K. Depression, Anxiety and Stress among Undergraduate Students: A Cross Sectional Study. Open Journal of Epidemiology. 2025; 5(1):260-268. http://dx.doi.org/10.4236/ojepi.2015.54030
7. Othman N, Ahmad F, El Morr C, Ritvo P. Perceived impact of contextual determinants on depression, anxiety and stress: a survey with university students. Int J Ment Health Syst. 2019;13:17. doi:10.1186/s13033-019-0275-x
8. Mebrahtu K, Mebrahtu Z, Tesfay K. Prevalence of Mental Distress and Suicidal Ideation among Undergraduate Students of Mekelle University, Ethiopia. Scientific Journal of Depression & Anxiety. 2019;3(1): 001-006.
9. Minchekar VS, Rahul GK. Academic Stress and Depression Among College Students. International Journal of Current Research. 2018;10:76429-76433. doi: https://doi.org/10.24941/ijcr.33132.12.2018
10. Yang Y, Chen K, Liang K, Du W, Guo J, Du L. Association between adult attachment and mental health states among health care workers: the mediating role of social support. Front Psychol. 2024;15:1330581. doi:10.3389/fpsyg.2024.1330581
11. Bowlby J. Attachment and loss. Vol. I: Attachment. New York, NY: Basic Books; 1969.
12. Charbonneau-Lefebvre V, Vaillancourt-Morel MP, Rosen NO, Steben M, Bergeron S. Attachment and Childhood Maltreatment as Moderators of Treatment Outcome in a Randomized Clinical Trial for Provoked Vestibulodynia. J Sex Med. 2022;19(3):479-495. doi:10.1016/j.jsxm.2021.12.013
13. Trucharte A, Valiente C, Espinosa R, Chaves C. The role of insecure attachment and psychological mechanisms in paranoid and depressive symptoms: An exploratory model. Schizophr Res. 2022;243:9-16. doi:10.1016/j.schres.2022.02.021
14. Yang S, Ren Y, Song X, Ge J, Peng Y. Insecure Attachment and Depressive Symptoms among a Large Sample of Chinese Young Adults: The Mediating Role of Positive and Negative Self-Compassion. Behav Sci (Basel). 2024;14(3):238. doi:10.3390/bs14030238
15. Mwania J, Owino W, Kimatu J. Attachment Styles as Predictors of Suicidal Behavior in School Going Adolescents. International Journal of Psychology. 2023; 8(2):31–44. doi: https://doi.org/10.47604/ijp.2049

16. Waters SF, Virmani EA, Thompson RA, Meyer S, Raikes HA, Jochem R. Emotion Regulation and Attachment: Unpacking Two Constructs and Their Association. J Psychopathol Behav Assess. 2010;32(1):37-47. doi:10.1007/s10862-009-9163-z
17. Seligman MEP. Positive psychology, positive prevention, and positive therapy. In Handbook of Positive Psychology; Snyder CR, Lopez SJ, Eds; Oxford University Press: Oxford, UK, 2002; pp.3–9.
18. Alarcon GM, Bowling NA, Khazon S. Great Expectations: A Meta-Analytic Examination of Optimism and Hope. Pers Individ Dif. 2013;54(7):821 827. doi:10.1016/j.paid.2012.12.004
19. Lai YJ, Tsai EY, Jarustanaput P, et al. Optimism and mental health in college students: the mediating role of sleep quality and stress. Front Psychol. 2024;15:1403146. doi:10.3389/fpsyg.2024.1403146
20. Öcal EE, Demirtaş Z, Atalay BI, Önsüz MF, Işıklı B, Metintaş S, Yenilmez Ç. Relationship between Mental Disorders and Optimism in a Community-Based Sample of Adults. Behav Sci (Basel). 2022;12(2):52. doi: 10.3390/bs12020052
21. Cruz-Vargas DJ, Sánchez-Aragón R. How do attachment style, optimism, resilience, and self-efficacy impact stress and its control in patients with diabetes? In Diabetes and couples-Protective and risk factors; Sánchez-Aragón R, Eds, Cham, Switzerland: Springer Nature Switzerland AG;2021. pp. 23–47. doi: 10.1007/978-3-030-68498-3_2.
22. Karhu J, Veijola J, Hintsanen M. The bidirectional relationships of optimism and pessimism with depressive symptoms in adulthood - A 15-year follow-up study from Northern Finland Birth Cohorts. J Affect Disord. 2024;362:468-476. doi:10.1016/j.jad.2024.07.049
23. Collins NL. Revised Adult Attachment Scale (RAAS) [Database record]. APA PsycTests. 1996. Available from: https://doi.org/10.1037/t19162-000
24. Khan Z. Optimism Scale (OS). [Unpublished master's thesis]. Department of Clinical Psychology, University of Management and Technology, Lahore, Pakistan; 2021.
25. Mahmood Z, Saleem S (2011) Assessing psychological problems in university students in Pakistan: A psychometric study. FWU Journal of Social Sciences.2011; 5(1): 134–148.

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2.	Sadia Saleem	Monash University, Malaysia and University of Management and Technology, Lahore, Pakistan.	Conceptualization, data collection, data entry, result, discussion
3.	Taskeen Zahra	Department of Clinical Psychology, School of Professional Psychology, University of Management and Technology, Lahore, Pakistan.	Conceptualization, writeup, analysis
4.	Fatima Aslam	Department of Clinical Psychology, School of Professional Psychology, University of Management and Technology, Lahore, Pakistan.	Results, write up and correspondence

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