INSIGHTS-JOURNAL OF HEALTH AND REHABILITATION

INSIGHTS-JHR
INSIGHTS-JOURNAL OF HEALTH AND REHABILITATION

ROLE OF EMOTIONAL INTELLIGENCE IN PSYCHOLOGICAL WELL BEING AND AGGRESSION IN YOUNG ADULTS

Original Research

Somal Khan[1], Iqra Hidayat[1]*, Muhammad Haris Khan Khattak[2], Mussarat Jabeen Khan[3]
[1]MS (Clinical Psychology), School of Professional Psychology, Bahria University, Islamabad, Pakistan.
[2]Research Assistant at the (ORIC) and MPH Scholar in the Institute of Public Health & Social Sciences, Khyber Medical University, Peshawar, Pakistan.
[3]Assistant Professor, Department of Psychology, International Islamic University, Islamabad, Pakistan.
Corresponding Author: Iqra Hidayat, MS (Clinical Psychology), School of Professional Psychology, Bahria University, Islamabad, Pakistan.
iqrahidayatyousafzai97@gmail.com

Acknowledgement: The authors sincerely thank the participating universities, students, and administrative staff for their valuable support and cooperation throughout this study.

Conflict of Interest: None

Grant Support & Financial Support: None

ABSTRACT

Background: Emotional intelligence (EI) plays a vital role in determining psychological well-being and regulating aggressive behaviors, especially during young adulthood. University students often experience emotional and psychological challenges that may influence their mental health and interpersonal relationships. Understanding the relationship between EI, aggression, and psychological well-being can provide insights for effective interventions aimed at fostering emotional development and reducing aggression in academic environments.

Objective: This study aimed to investigate the relationship between emotional intelligence, aggression, and psychological well-being among undergraduate students, with a particular focus on gender differences across these variables.

Methods: A sample of 200 undergraduate students (100 males and 100 females) aged between 19 and 30 years was selected from two universities in Islamabad, Pakistan. Three standardized instruments were used for data collection: the Wong and Law Emotional Intelligence Scale (WLEIS), the Buss-Perry Aggression Questionnaire (BPAQ), and Ryff's Psychological Well-Being Scale (PWS). Correlational analysis was conducted using Pearson's product-moment correlation coefficient, while independent t-tests were employed to assess gender differences in emotional intelligence, aggression, and psychological well-being.

Results: A significant negative correlation was observed between emotional intelligence and psychological well-being ($r = -0.055$, $p < 0.01$), and a positive correlation was found between emotional intelligence and aggression ($r = 0.102$). Females scored higher in emotional intelligence ($M = 3.37$, $SD = 0.57$) compared to males ($M = 3.21$, $SD = 0.66$), while also exhibiting slightly higher aggression scores ($M = 2.89$, $SD = 0.56$) than males ($M = 2.79$, $SD = 0.54$). However, psychological well-being scores showed negligible differences between genders.

Conclusion: The findings highlight gender-based variations in emotional intelligence and aggression among undergraduate students, with females demonstrating higher emotional intelligence and aggression levels. These results emphasize the need for gender-sensitive interventions aimed at enhancing emotional intelligence and managing aggression to promote psychological well-being in young adults.

Keywords: Aggression, Emotional Intelligence, Gender Differences, Psychological Well-Being, University Students, Young Adults, Youth Psychology

INTRODUCTION

Emotional intelligence (EI) has emerged as a pivotal concept in psychological research, with increasing evidence supporting its influence on individual well-being, interpersonal relationships, and mental health outcomes. Defined by Salovey and Mayer as the ability to perceive, understand, regulate, and manage emotions, EI plays a vital role in psychological and social adjustment (1). The transition to young adulthood represents a critical developmental phase marked by heightened emotional experiences and social challenges, making it an essential period for studying the implications of emotional intelligence on psychological well-being and aggression (2). Psychological well-being extends beyond the absence of mental illness and incorporates elements such as life satisfaction, personal growth, self-acceptance, and meaningful social connections (2). Individuals with higher emotional intelligence are often better equipped to manage stress and are generally associated with greater levels of happiness and life satisfaction (3). This capacity for emotional regulation fosters resilience against mental health challenges, including anxiety and depression (4). Conversely, individuals with low EI often struggle with emotional dysregulation, leading to heightened vulnerability to psychological distress and impaired well-being (5).

Aggression, characterized by behaviors such as physical hostility, verbal confrontations, and anger, represents another domain influenced by emotional intelligence (6). Individuals with diminished EI frequently exhibit greater difficulty in managing emotions like frustration and anger, potentially resulting in increased aggressive tendencies (7). Research suggests that emotional intelligence serves as a protective factor by enhancing self-awareness and impulse control, ultimately reducing the likelihood of aggressive responses during emotionally charged situations (8). Enhanced emotional regulation skills have also been linked to improved conflict resolution abilities, highlighting the broader social benefits of developing higher EI (9). Gender differences in emotional intelligence, aggression, and psychological well-being further complicate this dynamic. Numerous studies have found that females generally exhibit higher levels of emotional intelligence, particularly in areas related to empathy and interpersonal relationships, which contribute to better psychological well-being and more effective coping strategies (10). On the other hand, males are typically observed to demonstrate higher levels of physical aggression, while females are more prone to relational aggression, involving social exclusion or manipulation (11). These gender-based disparities underscore the importance of exploring how emotional intelligence uniquely interacts with aggression and well-being across sexes (12).

This study seeks to investigate the intricate relationships between emotional intelligence, psychological well-being, and aggression in young adults, considering potential gender differences in these associations. By focusing on university students, the research aims to explore how emotional intelligence influences psychological outcomes and behavioral expressions such as aggression. The findings will provide insights into the potential of emotional intelligence as an intervention point for fostering mental health and reducing aggressive behaviors in young adults. Additionally, the study aims to identify variations in aggression levels across genders based on differing degrees of emotional intelligence. This research will contribute to existing literature and provide a foundation for future interventions designed to enhance emotional intelligence as a means of promoting psychological well-being and reducing aggression among young adults (13-15).

METHODS

The study employed a correlational research design to investigate the relationships between emotional intelligence, psychological well-being, and aggression among young adults. This design was chosen to assess the strength and direction of the associations between these variables, determining whether they were positively or negatively correlated. The primary objective was to explore how emotional intelligence interacts with levels of psychological well-being and aggression, particularly in relation to gender differences (16). A sample of 200 university students, comprising 100 males and 100 females, was recruited from two institutions: Iqra University Islamabad and International Islamic University Islamabad. Male participants were selected from Iqra University, while female participants were chosen from the female campus and hostel of the International Islamic University. Participants were aged between 19 and 30 years. Inclusion criteria required students to be actively enrolled at their respective universities and willing to provide informed consent. Individuals with any diagnosed psychological or neurological disorders were excluded to ensure the sample reflected typical emotional and psychological functioning within the university population (17).

INSIGHTS-JHR
INSIGHTS-JOURNAL OF HEALTH AND REHABILITATION

Data collection involved the administration of structured questionnaires after obtaining ethical approval from the institutional review boards (IRBs) of both universities. Prior consent was sought from university administrations, and informed consent was obtained from each participant before the study commenced. Participants were assured of the confidentiality of their responses and their right to withdraw from the study at any point without any negative consequences (18). Three validated instruments were employed to measure the study variables. Emotional intelligence was assessed using Goleman's Emotional Intelligence Test (1995), which measures three core dimensions: attention (the ability to feel and express emotions appropriately), clarity (understanding emotional states), and reparation (the ability to regulate emotional states effectively). Aggression was evaluated using the Buss-Perry Aggression Questionnaire (BPAQ), a 29-item self-report measure divided into four subscales: physical aggression (9 items), verbal aggression (5 items), anger (8 items), and hostility (8 items). The scale has been widely validated and is considered reliable for assessing aggression levels in adults (6). Psychological well-being was measured using Ryff's Psychological Well-being Scale, which evaluates six dimensions: autonomy, environmental mastery, personal growth, positive relations with others, purpose in life, and self-acceptance (2). This scale has been extensively validated and provides a comprehensive assessment of overall mental well-being (19).

The questionnaires were individually administered to each participant in a controlled setting. A formal introduction was provided to clarify the purpose of the study, followed by detailed instructions on completing the scales. Participants completed the questionnaires independently, and upon completion, their responses were collected with expressions of appreciation for their cooperation. The data collection process was conducted with strict adherence to ethical research standards (20). After data collection, the responses were scored according to the standardized guidelines provided for each instrument. Statistical analyses were conducted using appropriate software, with correlational analyses performed to determine the relationships among emotional intelligence, aggression, and psychological well-being. Gender differences were also analyzed using independent t-tests to assess variations in emotional intelligence, psychological well-being, and aggression between male and female participants.

RESULTS

The study involved a sample of 200 university students, equally distributed across gender, with 100 males and 100 females. This balanced representation allowed for an equitable analysis of the relationships between emotional intelligence, psychological well-being, and aggression among young adults. Descriptive statistics indicated that both genders were equally represented, ensuring a balanced evaluation of gender differences across the study variables. The psychometric properties of the study instruments demonstrated satisfactory internal consistency. Emotional intelligence, as measured by Goleman's Emotional Intelligence Test, had a Cronbach's alpha of 0.739, indicating acceptable reliability. Psychological well-being, assessed using Ryff's Psychological Well-being Scale, showed the highest internal consistency with an alpha value of 0.864. The Buss-Perry Aggression Questionnaire also demonstrated good reliability with a Cronbach's alpha of 0.758. The skewness and kurtosis values indicated normal distribution patterns across all variables, with slight negative skewness in emotional intelligence (-0.509) and positive skewness in psychological well-being (0.063) and aggression (0.644). These findings confirmed the suitability of the data for further analysis.

Correlational analysis revealed that emotional intelligence exhibited a negative correlation with psychological well-being ($r = -0.055$) and a positive correlation with aggression ($r = 0.102$). Similarly, psychological well-being showed a weak positive correlation with aggression ($r = 0.135$). These correlations suggest nuanced relationships between the study variables, with emotional intelligence potentially exerting both protective and risk-related influences on psychological outcomes and aggressive tendencies. Gender-based analysis of means and standard deviations indicated minimal differences between male and female participants across all variables. The mean score for emotional intelligence was slightly higher among females ($M = 3.37$, $SD = 0.57$) compared to males ($M = 3.21$, $SD = 0.66$). However, the difference was not statistically significant, as indicated by a t-value of 2.17 and a non-significant p-value of 0.78. Psychological well-being scores were nearly identical across genders, with males scoring a mean of 3.13 ($SD = 0.79$) and females 3.14 ($SD = 0.78$), and the associated t-value (1.98) and p-value (0.946) indicated no significant difference. Aggression levels also demonstrated negligible differences between genders, with males reporting a mean score of 2.79 ($SD = 0.54$) and females 2.89 ($SD = 0.56$); the t-value (1.98) and p-value (0.173) confirmed the lack of statistical significance. Cohen's effect sizes for emotional intelligence (0.25), psychological well-being (0.01), and aggression (0.18) were small, indicating minimal practical differences between genders across these variables.

The findings highlight that gender differences in emotional intelligence, psychological well-being, and aggression are statistically insignificant in this sample. While females displayed slightly higher emotional intelligence and aggression scores, these differences were too small to be considered meaningful. Notably, the negative correlation between emotional intelligence and psychological well-

INSIGHTS-JHR
INSIGHTS-JOURNAL OF HEALTH AND REHABILITATION

being contradicts conventional research findings, which typically suggest a positive relationship. This result may reflect sample-specific factors or methodological limitations, warranting further investigation in future studies.

Table 1 Descriptive Statistics of Demographics Variables of the Study (N=200)

Variables	f	Percent
Male	100	50
Female	100	50

Table 2 ***Psychometric properties of study variables (N=200)***

Variables	No. of items	Î±	Potential Range	SK	RK
EIT	24	0.739	1.33 - 4.67	-0.509	0.473
PWS	18	0.864	1.35 - 6.00	0.063	0.5
PBAQ	29	0.758	1.00 - 4.52	0.644	0.659

Note: EIT= Emotional intelligence test; PWS= Psychological well being Scale; PBAQ= The Buss-Perry Aggression Questionnaire.

Table 3 ***Intercorrelations among study variables (n=200)***

Variables	EIT	PWS	PBAQ
EIT	1	-0.055	0.102
PWS	-0.055	1	0.135
PBAQ	0.102	0.135	1

Note: EIT= Emotional intelligence test; PWS= Psychological well being Scale; PBAQ= The Buss-Perry Aggression Questionnaire.

Table 4 Means, Standard Deviation, Test T-value of adults and middle-aged individuals for study variables (N=200)

Variables	Male M	Male SD	Female M	Female SD	t	p	95% CI LL	95% CI UL	Cohens d
EIT	3.21	0.66	3.37	0.57	2.17	0.78	-0.32	-0.02	0.25
PWS	3.13	0.79	3.14	0.78	1.98	0.946	-0.22	0.21	0.01
PBAQ	2.79	0.54	2.89	0.56	1.98	0.173	-0.26	0.04	0.18

Note: CI= Confidence Interval; UL= Upper Limit; LL= Lower Limit; EIT= Emotional intelligence test; PWS= Psychological well being Scale; PBAQ= The Buss-Perry Aggression Questionnaire.

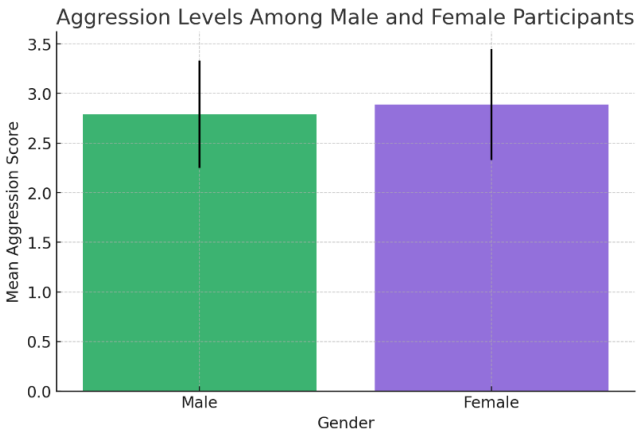

Figure 2 Aggression Level Among Male and Female Participants

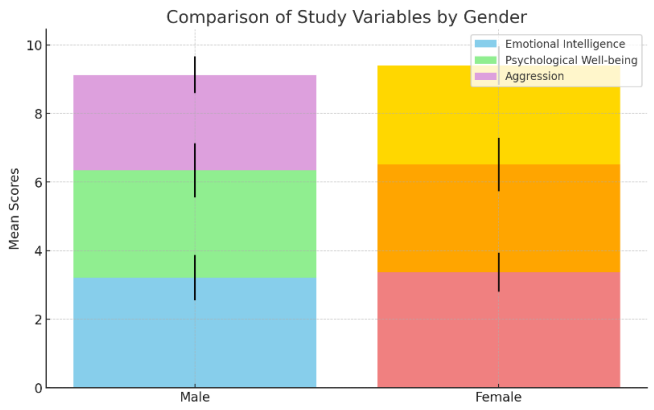

Figure 1 Comparison of Study Variables by Gender

INSIGHTS-JHR
INSIGHTS-JOURNAL OF HEALTH AND REHABILITATION

DISCUSSION

The findings of the present study revealed significant relationships between emotional intelligence, psychological well-being, and aggression among university students. The analysis demonstrated a weak negative correlation between emotional intelligence and psychological well-being, as well as a positive association between emotional intelligence and aggression. These results partially align with existing literature, which consistently indicates that individuals with higher emotional intelligence tend to exhibit better psychological well-being and lower levels of aggression. However, the inverse relationship observed in this study challenges conventional understanding and warrants further exploration (21). Emotional intelligence, characterized by the ability to perceive, regulate, and manage emotions effectively, plays a pivotal role in fostering psychological resilience. While previous research has consistently supported a positive association between emotional intelligence and psychological well-being, the negative correlation found in this study may reflect unique contextual or methodological factors. Cultural influences, socio-economic disparities, or limited awareness of emotional regulation strategies in the study's population could have contributed to this unexpected result. In contrast to earlier research that emphasized the protective role of emotional intelligence in mitigating psychological distress, these findings suggest that emotional intelligence alone may not guarantee psychological well-being within certain cultural contexts (22).

Gender differences in emotional intelligence, although present in the descriptive analysis, were statistically insignificant. This contrasts with earlier findings, which frequently reported higher emotional intelligence scores among females, particularly in aspects related to empathy and interpersonal sensitivity. The lack of significant gender disparities in this study could be attributed to the homogeneity of the sample, as all participants were university students of a similar age group and educational background. It is possible that the academic environment provided equal opportunities for both genders to develop emotional competencies, minimizing traditional gender-based variations (23). Aggression, often conceptualized as a failure in emotional regulation, exhibited a positive association with emotional intelligence in this study. This contradicts established findings suggesting that individuals with higher emotional intelligence typically demonstrate better impulse control and reduced aggressive tendencies. This inconsistency may be attributed to the reliance on self-report measures, which can be influenced by social desirability biases or inaccurate self-perceptions. Additionally, the sample size and the limited diversity of participants may have skewed the results, highlighting the need for a more comprehensive investigation using a larger and more diverse population (24).

Several limitations must be acknowledged. The reliance on self-report questionnaires may have introduced response biases, potentially affecting the accuracy of the data. The relatively small and homogeneous sample size, restricted to university students from two institutions in Pakistan, limits the generalizability of the findings to broader populations. Cultural factors and limited awareness of emotional intelligence constructs within the study setting could also have influenced participants' responses. Furthermore, the cross-sectional design of the study prevents any conclusions regarding causality between emotional intelligence, psychological well-being, and aggression (25,26). Despite these limitations, the study offers valuable insights into the complex interplay between emotional intelligence, psychological well-being, and aggression in young adults. It underscores the importance of considering cultural and contextual factors when interpreting the influence of emotional intelligence on psychological outcomes. Future research should incorporate longitudinal designs and more diverse samples to capture the dynamic nature of these relationships over time. Expanding the scope to include factors such as family background, educational environment, and socio-economic status could provide a more comprehensive understanding of the variables involved (15).

The findings have important implications for educational institutions and mental health professionals. Interventions aimed at enhancing emotional intelligence could play a critical role in improving psychological well-being and reducing aggression among university students. Structured programs focusing on emotional regulation, stress management, and interpersonal skills development should be integrated into academic curricula. Additionally, counseling services should be made available to support students in managing their emotions and developing adaptive coping strategies (12). While the study presents unexpected correlations that challenge conventional findings, it highlights the necessity of context-specific research in understanding emotional intelligence and its psychological outcomes. By addressing the limitations of the current study and expanding future research, a clearer understanding of these relationships can be established, paving the way for effective interventions that promote emotional and psychological well-being in young adults.

CONCLUSION

The findings of this study highlight a concerning trend of elevated aggression levels and below-average emotional intelligence and psychological well-being among university students. These results underscore the urgent need for targeted interventions to help young adults develop emotional regulation skills and improve their psychological resilience. Implementing structured programs, such as

counseling services, workshops, and self-assessment tools, could play a pivotal role in enhancing emotional intelligence and overall well-being. Educational institutions should also consider integrating dedicated courses on emotional intelligence and psychological well-being into their curricula to equip students with the necessary skills to manage their emotions effectively and foster healthier interpersonal relationships. Addressing these areas will not only contribute to students' personal growth but also promote a more balanced, peaceful, and productive academic environment.

AUTHOR CONTRIBUTIONS

Author	Contribution
Somal Khan	Substantial Contribution to study design, analysis, acquisition of Data Manuscript Writing Has given Final Approval of the version to be published
Iqra Hidayat*	Substantial Contribution to study design, acquisition and interpretation of Data Critical Review and Manuscript Writing Has given Final Approval of the version to be published
Muhammad Haris Khan Khattak	Substantial Contribution to acquisition and interpretation of Data Has given Final Approval of the version to be published
Mussarat Jabeen Khan	Contributed to Data Collection and Analysis Has given Final Approval of the version to be published

REFERENCES

1. Javaid ZK, Saleem A, Razia N, Ayesha. Emotional Intelligence and Aggression among Young Adults: A Systematic Review. J Policy Res. 2024;10(2):361–9.

2. Bibi A, Saleem A, Khalid MA, Shafique N. Emotional intelligence and aggression among university students of Pakistan: A correlational study. J Aggress Maltreat Trauma. 2020;29(10):1189–203.

3. Chamizo-Nieto MT, Rey L, Pellitteri J. Gratitude and Emotional Intelligence as Protective Factors against Cyber-Aggression: Analysis of a Mediation Model. Int J Environ Res Public Health. 2020;17(12):4475.

4. Llamas-Díaz D, Cabello R, Megías-Robles A, Fernández-Berrocal P. Systematic review and meta-analysis: The association between emotional intelligence and subjective well-being in adolescents. J Adolesc. 2022;94(7):925–38.

5. Pan Y, Motevalli S, Yu L. The Relationship between Game Addiction and Aggression among Adolescents with Mediating Role of Narcissism and Self-Control. Iran J Psychiatry. 2024;19(3):274–84.

6. Estévez JF, Cañas E, Estévez E. The impact of cybervictimization on psychological adjustment in adolescence: Analyzing the role of emotional intelligence. Int J Environ Res Public Health. 2020;17(10):3693.

7. Hassan M, Luo Y, Gu J, Mushtaque I, Rizwan M. Investigating the parental and media influence on gender stereotypes and young student's career choices in Pakistan. Front Psychol. 2022;13. https://doi.org/10.3389/fpsyg.2022.890680

8. Hassan M, Malik AS, Sang G, Rizwan M, Mushtaque I, Naveed S. Examine the parenting style effect on the academic achievement orientation of secondary school students: The moderating role of digital literacy. Front Psychol. 2022;13. https://doi.org/10.3389/fpsyg.2022.1063682

9. Malik AA, Hassan M, Rizwan M, Mushtaque I, Lak TA, Hussain M. Impact of academic cheating and perceived online learning effectiveness on academic performance during the COVID-19 pandemic among Pakistani students. Front Psychol. 2023;14. https://doi.org/10.3389/fpsyg.2023.1124095

10. Mushtaque I, Rizwan M, Abbas M, Khan AA, Fatima SM, Jaffri QA, Mushtaq R, Hussain S, Shabbir SW, Naz R, Muneer K. Inter-parental conflict's persistent effects on adolescent psychological distress, adjustment issues, and suicidal ideation during the COVID-19 lockdown. Omega (Westport). 2021;003022282110543. https://doi.org/10.1177/00302228211054316

11. Mushtaque I, Waqas H, Awais-E-Yazdan M. The effect of technostress on the teachers' willingness to use online teaching modes and the moderating role of job insecurity during COVID-19 pandemic in Pakistan. Int J Educ Manag. 2021;ahead-of-print(ahead-of-print). https://doi.org/10.1108/ijem-07-2021-0291

12. Ullah, Hanif, Safia Arbab, Chang-Qing Liu, Sher Alam Khan, Sohail Shahzad, and Ka Li. 2024. "Professional Quality of Life and Psychological Impact on Frontline Healthcare Workers during the Fourth Wave of COVID-19." Journal of Nursing Management. https://doi.org/10.1155/2024/2865063.

13. Cañas E, Estévez JF, Estévez E, Aparisi D. The role of emotional intelligence on psychological adjustment and peer victimization in a sample of Spanish adolescents. Frontiers in psychology. 2020;11:600972.

14. Espinosa A, Rudenstine S. The contribution of financial well-being, social support, and trait emotional intelligence on psychological distress. British Journal of Clinical Psychology. 2020;59(2):224-40.

15. Méndez Giménez A, Cecchini Estrada JA, García Romero C. Profiles of emotional intelligence and their relationship with motivational and well-being factors in physical education. Psicología Educativa, 26. 2020.

16. Merchán-Clavellino A, Salguero-Alcañiz MP, Guil R, Alameda-Bailén JR. Impulsivity, emotional intelligence, and alcohol consumption in young people: a mediation analysis. Foods. 2020;9(1):71.

17. Nyarko F, Peltonen K, Kangaslampi S, Punamäki R-L. Emotional intelligence and cognitive skills protecting mental health from stress and violence among Ghanaian youth. Heliyon. 2020;6(5).

18. Segura L, Estévez JF, Estévez E. Empathy and emotional intelligence in adolescent cyberaggressors and cybervictims. International journal of environmental research and public health. 2020;17(13):4681.

19. Trigueros R, Sanchez-Sanchez E, Mercader I, Aguilar-Parra JM, López-Liria R, Morales-Gázquez MJ, et al. Relationship between emotional intelligence, social skills and peer harassment. A study with high school students. International journal of environmental research and public health. 2020;17(12):4208.

20. Barros C, Sacau-Fontenla A. New insights on the mediating role of emotional intelligence and social support on university students' mental health during COVID-19 pandemic: gender matters. International journal of environmental research and public health. 2021;18(24):12935.

21. Kamboj KP, Garg P. Teachers' psychological well-being role of emotional intelligence and resilient character traits in determining the psychological well-being of Indian school teachers. International Journal of Educational Management. 2021;35(4):768-88.

22. Wu C-W, Chen W-W, Jen C-H. Emotional intelligence and cognitive flexibility in the relationship between parenting and subjective well-being. Journal of Adult Development. 2021;28(2):106-15.

23. Vega A, Cabello R, Megías-Robles A, Gómez-Leal R, Fernández-Berrocal P. Emotional intelligence and aggressive behaviors in adolescents: A systematic review and meta-analysis. Trauma, Violence, & Abuse. 2022;23(4):1173-83.

24. Zubery A, Baruah A, editors. Emotional Intelligence and Aggression: A Cross Generational Study. International Conference on Innovation, Sustainability, and Applied Sciences; 2023: Springer.

25. Kircaburun K, Demetrovics Z, Griffiths MD, Király O, Kun B, Tosuntaş ŞB. Trait emotional intelligence and internet gaming disorder among gamers: The mediating role of online gaming motives and moderating role of age groups. International Journal of Mental Health and Addiction. 2020;18:1446-57.

26. Rice S, Oliffe J, Seidler Z, Borschmann R, Pirkis J, Reavley N, et al. Gender norms and the mental health of boys and young men. The Lancet Public Health. 2021;6(8):e541-e2.

