



The Relationship between Emotional Intelligence and Game Addiction: Mediating Role of Psychological Well-Being

Mohammad Reza Zoghi Paydar¹, Yasaman Ghaemizadeh², Meysam Akbari³, Maryam Zolgharnein⁴, Fatemeh Besharat⁵, Sayed Ali Sharifi Fard⁶

¹Department of Psychology, Faculty of Economic and Social Sciences, Bu Ali Sina University, Hamedan, Iran

²Department of Psychology, Faculty of Humanities, Shahed University, Tehran, Iran

³Department of Psychology, Faculty of Social Sciences, Razi University, Kermanshah, Iran

⁴Department of Philosophy, Faculty of Philosophy, University of Flensburg, Flensburg, Germany

⁵School of Medicine, Rafsanjan University of Medical Sciences, Rafsanjan, Iran

⁶Department of Psychology, Faculty of Educational Sciences and Psychology, University of Mohaghegh Ardabili, Ardabil, Iran

*Corresponding Author: Sayed Ali Sharifi Fard, Email: sharififard68@gmail.com

Abstract

Introduction: Excessive use of games, especially among children and adolescents, can lead to harmful consequences, including game addiction. Thus, it is important to understand the psychological mechanisms underlying game addiction. The purpose of this study was to investigate the relationship between emotional intelligence and game addiction, with the mediating role of psychological well-being.

Methods: This study comprised a cross-sectional survey, and the statistical population included all the secondary school students of Alborz city (Iran). A sample of 374 participants was selected using a multistage cluster sampling design. The measures included the Ryff Psychological Well-Being Scale (RPWBS-18/2002), the Wong Law Emotional Intelligence Scale (WLEIS-16/2002), and the Game Addiction Scale (GAS-7/2007).

Results: The findings indicated that the research model has a good fit with the data. Also, regarding direct relationships, emotional intelligence had a negative and significant relationship with game addiction ($P < 0.01$), and a positive and significant relationship with psychological well-being ($P < 0.01$). The relationship between psychological well-being and game addiction was negative and significant ($P < 0.01$). In addition, regarding indirect relationships, emotional intelligence had a strong, negative and significant relationship with game addiction through psychological well-being ($P < 0.01$).

Conclusion: Emotional intelligence plays a direct and indirect (through well-being) role in preventing game addiction. Therefore, it can act as a buffer, enabling adolescents to spend the right amount of energy and time on the game, enjoying its benefits while being protected from its adverse effects. Also, the role of emotional intelligence in psychological well-being is dramatic.

Keywords: Computer-based games, Game addiction, Emotional intelligence, Psychological well-being

Citation: Zoghi Paydar MR, Ghaemizadeh Y, Akbari M, Zolgharnein M, Besharat F, Sharifi Fard SA. The relationship between emotional intelligence and game addiction: mediating role of psychological well-being. *Journal of Kerman University of Medical Sciences* 2026;33:4044. doi:10.34172/jkmu.4044

Received: May 5, 2025, **Accepted:** September 13, 2025, **ePublished:** March 1, 2026

Introduction

Nowadays, the use of computer-based games (online and offline) is quite common in the daily life of children, adolescents and young people (1,2). Using technology such as a mobile phone or a game console for entertainment can be fun and useful (3–5). However, when users spend too much time playing the game, the classic signs of addiction may appear, including disruption in daily tasks, various problems in family and peer relationships, and mood changes (6). Game addiction is not officially classified as a disorder in the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-5). However, the

category “internet gaming disorder” was added to it in the latest DSM-5 supplement, in the category of disruptive, impulse-control, and conduct disorders, which has encouraged further research (7). In addition, the World Health Organization (WHO) included gaming disorder in the International Classification of Diseases (ICD-11) in 2018 (8). Moreover, game addiction and its negative consequences, including depression and anxiety disorders (9,10), tolerance of distress and loneliness (11) and poor school performance (12,13) in adolescents, have caused researchers to try to investigate the psychological mechanisms of game addiction. Therefore, considering the



sensitivity of developmental periods, especially childhood and adolescence, identifying protective and risk factors for game addiction seems necessary (14,15).

Based on studies, important psychological variables play a role in game addiction, including emotional intelligence (16,17). From this point of view, one of the models that sees emotions as a mechanism involved in problematic behaviors (such as game addiction) is a dual systems model of adolescent risk-taking. Based on this model, the increase in problematic behaviors during adolescence is more influenced by the limbic system (social-emotional processes) than the frontal cortex (cognitive processes) (18). Moreover, this model confirms the role of emotional intelligence in the occurrence of problematic behaviors (including game addiction) (19).

Emotional intelligence includes the ability to manage one's own and others' emotions, distinguish between them, and use this information to guide one's thoughts and actions (20). The model of emotional intelligence based on the theory of Mayer and Salovey (21) includes four components: the ability to understand emotions, evaluate and accurately express emotions, create emotions, and regulate emotions for optimal adaptation. Based on this model, adolescents with higher emotional intelligence have a greater capacity to use strategies for emotional regulation. They are more likely to choose adaptive, more effective strategies than adolescents with lower emotional intelligence (21,22). Accordingly, individuals with low emotional intelligence are more likely than those with high emotional intelligence to seek external regulatory resources (such as problematic game use) to reduce their negative emotions (19,23).

Another field in which the role of emotional intelligence has been investigated is positive psychology. Positive psychology focuses on the study of positive personal characteristics (including emotional intelligence) and plays an important role in shaping individual responses to optimal performance and psychological well-being (24–26). Emotional intelligence has become increasingly important in many studies on well-being and mental health over the last two decades (27,28). The practice of emotional intelligence and emotional skills may lead to higher positive affect and reduced negative affect, thereby increasing psychological well-being (23). On the one hand, emotional intelligence may reduce the frequency and duration of negative emotions following stressful events. On the other hand, emotional skills may increase the frequency and maintenance of positive emotions over time (29). Therefore, emotional intelligence serves as an indicator of psychological adjustment and a key factor in the development of psychological well-being (30).

Psychological well-being is also a state that not only excludes psychological problems but is considered a healthy and positive psychological state that leads to good, and even optimal, performance (24). Therefore, psychological well-being includes positive psychological functioning (31). On the other hand, Ryff and Keyes (1995) identified six components of psychological well-

being: positive relationships, mastery of the environment, self-acceptance, purpose in life, personal growth, and autonomy (32). Moreover, psychological well-being is strongly associated with fundamental indicators (including genetics and attachment style) (33). It is considered very important for the positive development of adolescence because it is an indicator of mental health and social and individual effectiveness (personal growth) (34).

Cross-sectional studies have shown that game addiction is related to low psychological well-being (7,35,36). One of the valid hypotheses to explain this relationship is the compensatory hypothesis, which suggests game addiction may be created as a mechanism to compensate for psychological problems that can appear under the influence of low psychological well-being (37). In this view, game addiction may be caused by the need to escape problems in daily life (38,39).

Therefore, the research literature shows that game addiction has significant negative relationships with psychological well-being (38,40), mental health (6,41), and positive interpersonal relationships (14,42). Also, apart from the direct effect of emotional intelligence, there is evidence that emotional intelligence interacts with risk factors (including stressful life events) to predict game addiction among adolescents (23). In general, game addiction has an adverse effect on the lives of adolescents (11,43).

Hence, considering the sensitivity of adolescence in terms of identity and social and academic issues (44,45), the increasing use of games among individuals in different age groups (1,2), and the adverse consequences of game addiction among adolescents (10,12) and also considering the absence of research on the mediating role of well-being in the relationship between emotional intelligence and game addiction, this research investigated the relationship between emotional intelligence and game addiction with the mediating role of psychological well-being.

Methods

Participants

The present study was an online cross-sectional study using the structural equation method. The statistical population included all secondary schools in Alborz city, from which, using multistage cluster sampling, the first two districts, two schools from each district, and four classes from each school (16 classes) were selected. All steps were random (i.e., by lottery). At the end, a sample of 400 individuals was selected, and due to incomplete and outlier data ($n=26$), 374 participants formed the final sample (46). Moreover, the condition for participation was playing computer-based games (at least twice a week and for at least 3 hours each time). This condition was intended to ensure that the participants were more likely to have computer-based game addiction. The measures were posted and completed online.

Procedure

After obtaining the necessary permissions to conduct the

research, the items were posted as an internet link on the class's channel (social media platforms) so that participants (gamers) could submit their answers. The link was configured so that only the target sample could answer the items. The inclusion criteria for answering included being a secondary school student, playing computer games regularly, and having no psychiatric history (no mental disorder). On the other hand, exclusion criteria included incomplete responses to the measures (not responding to some items), scattered or occasional computer game play, and a lack of interest in answering the questions. Also, for a better, more accurate implementation, the items were pinned in the channels every 3 days to remind participants and to reach the target responder number. Also, in case of questions or confusion, participants could connect to the server (moderator) to resolve issues with answering the questions.

Measures

Ryff Psychological Well-being Scale (RPWS-18): The original scale was designed by Ryff in 1989 and revised in 2002 (47). This scale is a self-assessment measure with 18 items and is scored on a 6-point Likert scale from 1 (completely agree) to 7 (completely disagree). This scale has six subscales: autonomy, positive relationships, mastery of the environment, personal growth, purpose in life, and self-acceptance. Regarding the main scale, the internal consistency coefficients of the subscales range from 0.86 to 0.93, and Cronbach's alpha ranges from 0.83 to 0.91 (24). Also, this scale has been validated in Iran, with a test-retest reliability coefficient of 0.82 for the whole scale and 0.70–0.78 for the subscales (48). The Cronbach's alpha in the present study was 0.86 for the whole scale and ranged from 0.71 to 0.93 for the subscales.

Wong Law Emotional Intelligence Scale (WLEIS-16): This scale is a self-report measure of emotional intelligence skills based on the theory of Mayer and Salovey (1997), developed by Wong and Law (2002) (21,49). This scale has 16 items that are scored on a 7-point Likert scale from 1 (completely disagree) to 7 (completely agree). The components include evaluation of personal emotions, evaluation of others' emotions, regulation of emotions, and application of emotions, each component measured by four items. The reliability of these four components in the main scale has been confirmed by Cronbach's alpha values ranging from 0.83 to 0.90 (49). The reliability and validity of the Persian version of this scale were also confirmed by Ali Babaei et al. (2022), who reported the Cronbach's alpha as 0.90 for the whole scale and 0.76–0.88 for the components (50). The Cronbach's alpha in the present study was 0.87 for the whole scale and ranged from 0.70 to 0.91 for the components.

Game Addiction Scale (GAS-7): This scale was developed by Khazaal et al. (2007) and has seven items and seven components, which include salience (a person's mental engagement with games during the day), tolerance (time that the person must play to be psychologically satisfied), mood modification (for example, playing to

escape from everyday problems or a specific problem), relapse (unsuccessful attempts to stop or reduce game time), withdrawal (the degree of distress and isolation the person feels when they do not have access to the game), conflict (the level of conflict and conflicts of the individual after the game), problems (loss of interests, and problems in the academic, work, and family fields) (51). The items are scored on a 5-point Likert scale ranging from 1 (never) to 5 (very often). The lowest score is seven, and the highest score is 35. To calculate the cut-off point of each component (item), if the participant chooses option 4 or 5, then he has obtained the cut-off point for addiction in that component, and to calculate the overall cut-off point, which is the criterion of game addiction, the sum of the points obtained from the seven items is divided by the number of items, which is 7, and if the result is 4 and above, it can be said that the person has a game addiction (52). Cronbach's alpha for the whole scale in the present study was also 0.93.

Statistical Analysis

The variables were examined for normality and the presence of outliers. Then, descriptive analyses were conducted; skewness and kurtosis indices were used to assess the normality of the research variables. Pearson correlations and structural equation analysis were used to test the model. This study investigated the relationship between emotional intelligence and game addiction, considering the mediating role of psychological well-being. Subsequently, structural equation modelling was used to examine the direct effects, and bootstrapping was used to estimate the study variables' indirect effects. All calculations were performed in SPSS 27 and LISREL 8.8.

Results

The sociodemographic information for the study participants, including 374 participants (228 boys and 146 girls), is shown in [Table 1](#). The mean and standard deviation were 16.28 ± 2.31 for the total sample, 16.22 ± 2.41 for males and 16.36 ± 2.62 for females. The results showed that six participants (1.7%) were married, 366 participants (97.8%) were single, and two participants (0.5%) were divorced. Regarding educational status, 135 participants (36.1%) were in the 10th grade, 128 (34.2%) in the 11th grade, and 111 (29.7%) in the 12th grade. Regarding family economic status, 88 participants (23.5%) had income above \$500, 224 participants (59.9%) had income between \$200 and \$500, and 62 participants (16.6%) had income below \$200 ([Table 1](#)).

Descriptive indicators (means and standard deviations) and correlations among the variables were investigated, along with results on skewness and kurtosis. [Table 2](#) shows the descriptive statistics (mean and standard deviation) of the research variables. Skewness and kurtosis statistics were within the range of -1 to $+1$, indicating that the research variables were normally distributed. As shown in [Table 2](#), there were significant correlations between all variables ($P < 0.01$) ([Table 2](#)).

Table 1. Results of Sociodemographic information of the sample (t-test, χ^2 , P-value<0.05)

Variable	N	Percentage (%)	Statistical test	p
	Mean	SD		
Age (in years)				
Male	16.22	2.41	t	0.457
Female	16.36	2.62		
Total	16.28	2.31		
Gender				
Male	228	61	χ^2	<0.001**
Female	164	39		
Marital status				
Married	6	1.7	χ^2	<0.001**
Single	366	97.8		
Divorced	2	0.5		
Education status				
Tenth grade	135	36.1	χ^2	0.011*
Eleventh grade	128	34.2		
Twelfth grade	111	29.7		
Family income (per month)				
≥\$500	88	23.5	χ^2	<0.001**
\$200–500	224	59.9		
≤\$200	62	16.6		

The difference is significant: $P<0.05$, ** $P<0.01$

Path analysis was used to investigate the mediating role of emotional intelligence in the relationship between psychological well-being and game addiction. Structural equation analysis was used to examine the relationships between variables, the results of which are presented in Figure 1 (Figure 1).

The chi-square ratio to the degrees of freedom (χ^2/df) was 2.31, where values below 3 are good ($P<0.05$). The goodness of fit index (GFI) was 0.91, the comparative fit index (CFI) was 0.93, and the normed fit index (NFI) was 0.91 (values above 0.9 are appropriate for all fit indices). Also, the root mean square error of approximation (RMSEA) was 0.059, where values less than 0.05 are acceptable. In general, the model fit results in Figure 1 indicate that the relationship between emotional intelligence and game addiction, with psychological well-being as a mediator, had a good fit. The results in Figure 1 show that 21% of the variance in psychological well-being is explained by emotional intelligence, and 18% of the variance in game addiction is explained by both emotional intelligence and psychological well-being. The standard coefficients and significance levels of the variables in the model shown in Figure 1 were examined. The results in Table 3 show that all direct effects were significant (positive or negative), with a positive direct effect of emotional intelligence on psychological well-being ($\beta=0.46$, $P<0.01$). The adverse direct effects comprised (i) emotional intelligence on game addiction ($\beta=-0.19$, $P<0.01$), (ii) psychological

Table 2. Mean, standard deviation, normality, and Pearson correlation of research variables (P-value<0.05)

Variable	Mean (SD)	Skewness	Kurtosis	1	2	3
1 Emotional intelligence	80.83 (14.47)	-0.45	0.15	-		
2 Psychological well-being	74.49 (10.09)	0.34	-0.13	0.36**	-	
3 Game addiction	17.28 (5.73)	0.36	-0.27	-0.32**	-0.34**	-

The difference is significant: * $P<0.05$, ** $P<0.01$; Normality: skewness, kurtosis, correlation: Pearson test.

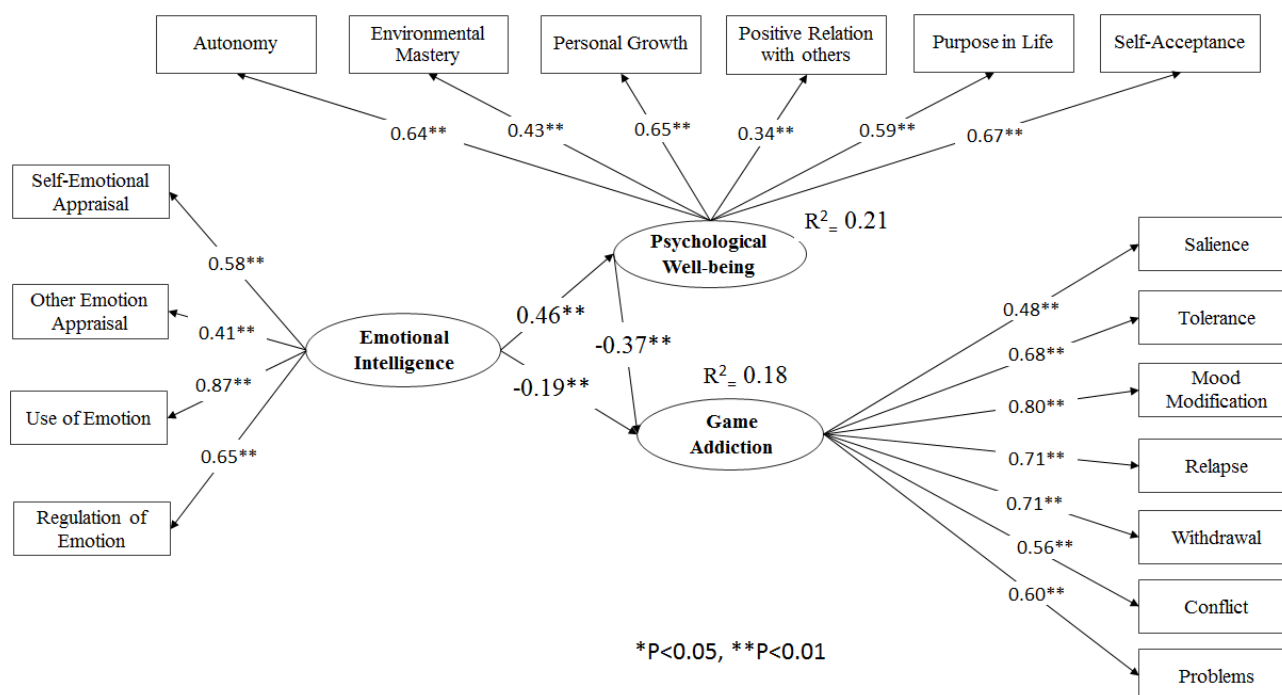


Figure 1. Proposed mediation model (* $P<0.05$, ** $P<0.01$)

Table 3. Standard coefficients (β) and significance levels of relationships between research variables (P -value < 0.05)

Variable	Direct effect β^a	P	95% CI*	
			(Lower)	(Upper)
EQ→PW	0.46	<0.001	0.208	0.412
EQ→GA	-0.19	<0.006	-0.064	-0.168
PW →GA	-0.37	<0.001	-0.147	-0.261
-	Indirect effect (β)	-		
EQ→PW →GA	-0.17	<0.001	-0.186	-0.325

*Abbreviations: CI: confidence interval; EQ: emotional intelligence; PW: psychological well-being; GA: game addiction; a: beta coefficient

well-being on game addiction ($\beta = -0.37$, $P < 0.01$). To investigate the mediating role of psychological well-being in the relationship between emotional intelligence and psychological well-being, the bootstrap method in the Macro program in SPSS v. 27 was used. Table 3 shows the bootstrap results and 95% confidence intervals, with bootstrap resampling over 5000 samples. Preacher and Hayes (53) stated that the role of the mediator variable is significant if the upper and lower limit values (confidence intervals) do not include zero. Based on bootstrapping (95% confidence interval), the indirect effect of emotional intelligence on game addiction via psychological well-being ($\beta = -0.17$) was significant, with a 95% confidence interval ranging from -0.186 to -0.325 (Table 3).

Discussion

The purpose of the present study was to investigate the relationship between emotional intelligence and game addiction, with the mediating role of psychological well-being. The results showed that the developed model has a good fit. Regarding the direct relationship between the variables in this study, the results showed that emotional intelligence is positively and significantly associated with well-being, consistent with other studies (23,27,29).

According to the dual system theory of problematic behavior (18), individuals with high emotional intelligence can evaluate their emotions, both their own and those of others, regulate and apply them, and basically identify, process and control them in a healthy and timely manner. These skills can in the future lead to the promotion of healthy feelings and behaviors of individuals (such as the goals in life) and interpersonal interactions (such as positive relationships with others). On the other hand, the healthy regulation of emotions and impulses can play an effective role in preventing risky thoughts and behaviors and unhealthy lifestyles (30). Thus, by increasing positive emotions and behaviors and by reducing negative emotions and behaviors, emotional intelligence leads to greater psychological well-being.

The results showed that the relationship between emotional intelligence and game addiction is negative and significant, which is in line with the results of other studies (17,28). One of the prominent features of behavioral addiction, including game addiction, is the difficulty in using and regulating emotions (54). Based on the theory of Salovey and Mayer (1997), emotional

intelligence increases the ability to regulate emotions and to use this capacity to guide one's behavior, which can lead to a reduction in behavioral addictions (such as internet and gaming addiction) (17,55). On the other hand, people with high emotional intelligence have a strong ability to identify and manage emotions and impulses. They can identify obsessive and sticky tendencies (including excessive gaming) and, in this case, control their emotions. Therefore, adolescents with high emotional intelligence can manage playing time and engage in other daily activities instead, which acts as a buffer for game addiction. Moreover, the ability to manage and regulate emotions, and control them in situations of emotional pressure (such as when a person has failed to complete the desired stage in a strategic game, or when a person has lost several times in competitive games (two- or multi-player). There is an emotional pressure to win, which can cause adolescents to get stuck or become too immersed in the game. Emotional intelligence enables them to stop playing after a while, preventing the development of behavioral addiction (e.g., game addiction).

Results showed that psychological well-being has a negative and significant relationship with game addiction, which is in line with the results of other studies (6,35,37–39). Based on the compensatory hypothesis, behavioral addiction or specific types of sticky behavior (e.g., game addiction) can be a compensating mechanism for psychological problems that can appear as a result of low well-being (40,56). In this view, game addiction may be caused by the need to escape from common problems in everyday life or specific problems that the person is dealing with (such as a problematic relationship with parents or a disturbance and confusion in the identification process).

On the other hand, psychological well-being, as a variable of personal growth, plays a role in the psychosocial development of individuals and is also influenced by fundamental factors such as the satisfaction of psychological needs and personality traits (22,24,57,58). Therefore, game addiction occurs in two ways: (i) directly through low well-being (37), and (ii) indirectly through fundamental factors that affect well-being (25,58). In addition, the components of well-being, including personal growth and being purposeful in life, are based on discipline and planning, which are in conflict with engaging in addictive behaviors (including game addiction) that lead to spending a lot of time and energy on gaming.

The results of the model also showed that psychological well-being can mediate between emotional intelligence and game addiction. No similar study assessing this relationship was found. Based on Mayer and Salovey's model of emotional intelligence (1997), higher emotional intelligence and skills in adolescents can increase the ability to use emotion regulation strategies and the likelihood of using adaptive strategies, thereby reducing negative emotions and improving psychological well-being (and its components) (21,22,26). Based on this, emotional intelligence enables adolescents to effectively regulate their emotions when faced with challenges, and

they are less likely to seek external solutions (such as excessive gaming) to achieve catharsis (19). In addition, by engaging in positive behaviors, such as spending time with friends and family or practicing self-acceptance (one of the components of well-being), individuals with high emotional intelligence do not need addictive behaviors to reduce loneliness or resolve conflicts (11,55).

Therefore, due to the many consequences of gaming addiction (including academic failure), paying attention to the antecedents of this phenomenon seems necessary and important, especially during adolescence, as this period is a sensitive period of development due to the formation of identity and preparation for entering university.

One limitation of the present study was the use of a self-reported, cross-sectional design, and the age group of adolescence and the second secondary level of education were additional limitations. Therefore, further studies with large sample sizes should be conducted across other age groups and educational levels. In addition, future studies can use a longitudinal design for a more detailed investigation. They can add other collection methods, such as semi-structured interviews, to better determine the causal chain or the direction of effects and to control for confounding factors to a greater extent. Based on the results, and considering the direct and indirect role of emotional intelligence in game addiction, as well as the teachability of emotional intelligence, it is suggested that planning for regular emotional intelligence training be done through school counselors and psychologists to prevent the negative consequences of gaming in adolescents (such as game addiction and academic problems) and to improve adolescents' level of well-being at the same time.

In addition to raising awareness about the consequences of gaming addiction in schools and through public and social media, prioritizing education on well-being (for example, fostering positive relationships or developing a sense of meaning in life) can help prevent gaming addiction.

Conclusion

This study investigated the joint effects of emotional intelligence and psychological well-being on game addiction in adolescents. The results showed that i) emotional intelligence and well-being have a positive and meaningful relationship, ii) emotional intelligence and game addiction have a negative and meaningful relationship, and iii) psychological well-being and game addiction have a negative and meaningful relationship. Moreover, the results showed that the indirect effect of emotional intelligence on game addiction was strengthened through well-being and was stronger than the direct effect of emotional intelligence alone.

Acknowledgments

The authors are highly grateful to all the study participants, the General Directorate of Education of Alborz province (funding source), and the Research Ethics Committee of Bu Ali Sina University, which made this scientific study possible through their

support and cooperation.

Authors' Contribution

Conceptualization: Sayed Ali Sharifi Fard.
 Data curation: Meysam Akbari, Yasaman Ghaemi Zadeh.
 Formal analysis: Maryam Zolgharnein.
 Investigation: Sayed Ali Sharifi Fard, Mohammad Reza Zoghi Paydar.
 Methodology: Sayed Ali Sharifi Fard.
 Project administration: Mohammad Reza Zoghi Paydar.
 Resources: Mohammad Reza Zoghi Paydar, Fatemeh Besharat, Yasaman Ghaemi Zadeh.
 Software: Fatemeh Besharat.
 Supervision: Mohammad Reza Zoghi Paydar.
 Validation: Maryam Zolgharnein.
 Visualization: Sayed Ali Sharifi Fard.
 Writing—original draft: Mohammad Reza Zoghi Paydar, Sayed Ali Sharifi Fard, Yasaman Ghaemi Zadeh.
 Writing—review & editing: Sayed Ali Sharifi Fard, Mohammad Reza Zoghi Paydar, Fatemeh Besharat.

Competing Interests

The authors declare no conflict of interest.

Ethical Approval

This project has been approved by the Ethics Committee of Bu Ali Sina University (ethical code: IR.BASU.REC.1402.005). Also, the participants were aware of the goals and nature of the study and provided consent to complete the measures.

Funding

This paper was part of a research project titled "Validation of Game Addiction Scale; the Relationship between Basic Psychological Needs and Emotional Intelligence with Game Addiction: The Mediating Role of Psychological Well-being and Life Satisfaction," which was funded by the General Directorate of Education of Alborz Province (grant number: 2400/17211/62).

References

1. Sharifi Fard SA, Khodadadi Jokar F, Ali Babaei G, Zolqarnain M, Taheri H. Surveying the frequency of using computer-based games in Iranian students by demographic components. In: The first international counseling conference [Internet]. Ardabil, Iran; 2019. Available from: <https://civilica.com/doc/1325731>
2. Statista. Number of video game users worldwide from 2018 to 2027 (in millions). Retrieved November 14 [Internet]. 2023. Available from: <https://www.statista.com/statistics/748044/number-video-gamers-world/>
3. Sharifi Fard SA, Ahmadpanah M, Ghotbi SA, Ghebleverdi H. Review and Analysis of Iranian and Foreign Digital games; Ideation for Designing, Localizing and Promotion the Quality of Iranian Games. *New Media Studies* 2023;9(34):317–279. doi:10.22054/nms.2022.65004.1319
4. Sharifi Fard SA, Ahmadpanah M, Mohammadi G, Ahmadi M. Comparison of progressive motivation psychological resilience, and failure tolerance in professional players, amateur players and non-players of video games. *J Police Cult Stud* 2021;8(3):1–12.
5. Llorens R, Noé E, Ferri J, Alcañiz M. Videogame-based group therapy to improve self-awareness and social skills after traumatic brain injury. *J Neuroeng Rehabil* 2015;12:37. doi:10.1186/s12984-015-0029-1
6. Pontes HM. Investigating the differential effects of social networking site addiction and Internet gaming disorder on psychological health. *J Behav Addict* 2017;6(4):601–10. doi:10.1556/2006.6.2017.075
7. American Psychiatric Association. Diagnostic and statistical manual of mental disorders: DSM-5 [Internet]. 5th ed. Arlington, VA: American Psychiatric Association Publishing; 2013. 38–457 p. Available from: <https://d1wqtxts1xzle7>.

- cloudfront.net/38718268/CSL6820_21-libre.pdf
8. World Health Organization. Gaming disorder 2018. Accessed June 2025. Available from: <https://www.who.int/features/qa/gaming-disorder/en/>
 9. Wang JL, Sheng JR, Wang HZ. The Association Between Mobile Game Addiction and Depression, Social Anxiety, and Loneliness. *Front Public Health* 2019;7:247. doi:10.3389/fpubh.2019.00247
 10. Karaca S, Karakoc A, Can Gurkan O, Onan N, Unsal Barlas G. Investigation of the Online Game Addiction Level, Sociodemographic Characteristics and Social Anxiety as Risk Factors for Online Game Addiction in Middle School Students. *Community Ment Health J* 2020;56(5):830–8. doi:10.1007/s10597-019-00544-z
 11. Sharifi Fard SA, Shast Fooladi M, Ali Babaei G, Yaghoobi S. Comparison of the nostalgia, tolerance of distress and loneliness in adolescent boys who are dependent and non-dependent on computer games. In: The 6th International Conference on Psychology of School, Al-Zahra University [Internet]. Tehran, Iran; 2021. Available from: <https://civilica.com/doc/1203293>
 12. Sahin M, Gumus YY, Dincel S. Game addiction and academic achievement. *Educational Psychology* 2016;36(9):1533–43. doi:10.1080/01443410.2014.972342
 13. Esposito MR, Serra N, Guillari A, Simeone S, Sarracino F, Continisio GI, et al. An investigation into Video Game Addiction in Pre-Adolescents and Adolescents: A Cross-Sectional Study. *Medicina (Kaunas)* 2020;56(5). doi:10.3390/medicina56050221
 14. Mun IB, Lee S. A longitudinal study of the impact of parental loneliness on adolescents' online game addiction: The mediating roles of adolescents' social skill deficits and loneliness. *Computers in Human Behavior* 2022;136:107375. doi:10.1016/j.chb.2022.107375
 15. Sayed Ali Sharifi F, Forough A, Golnaz Ali B, Ali K, Safdar N. Comparing the Components of Psychological Well-Being and Emotional Intelligence in Players with and Without Computer Game Addiction in Secondary School Students of Alborz City: A Descriptive Study. *Journal of Rafsanjan University Of Medical Sciences* 2024;23(2):169–82. [Persian]
 16. Griffiths MD. Gaming addiction in adolescence (revisited). *Educ Heal* 2014;32(4):125–9. Available from: <https://irep.ntu.ac.uk/id/eprint/25869>
 17. Dang DL, Zhang MX, Leong KK, Wu AMS. The Predictive Value of Emotional Intelligence for Internet Gaming Disorder: A 1-Year Longitudinal Study. *Int J Environ Res Public Health* 2019;16(15):2762. doi:10.3390/ijerph16152762
 18. Steinberg L. A dual systems model of adolescent risk-taking. *Dev Psychobiol* 2010;52(3):216–24. doi:10.1002/dev.20445
 19. Panno A. Trait Emotional Intelligence Is Related to Risk Taking when Adolescents Make Deliberative Decisions. *Games* 2016;7(3):23. doi:10.3390/g7030023
 20. Salovey P, Mayer JD. Emotional intelligence. *Imagination, Cognition and Personality* 1989;9(3):185–211. doi:10.2190/DUGG-P24E-52WK-6CDG
 21. Mayer JD, Salovey P. What is emotional intelligence? In: *Emotional development and emotional intelligence: Educational implications*. New York, NY, US: Basic Books; 1997. p. 3–34.
 22. Guerra-Bustamante J, León-Del-Barco B, Yuste-Tosina R, López-Ramos VM, Mendo-Lázaro S. Emotional Intelligence and Psychological Well-Being in Adolescents. *Int J Environ Res Public Health* 2019;16(10):1720. doi:10.3390/ijerph16101720
 23. Che D, Hu J, Zhen S, Yu C, Li B, Chang X, et al. Dimensions of Emotional Intelligence and Online Gaming Addiction in Adolescence: The Indirect Effects of Two Facets of Perceived Stress. *Front Psychol* 2017;8:1206. doi:10.3389/fpsyg.2017.01206
 24. Ryff CD. Psychological well-being revisited: advances in the science and practice of eudaimonia. *Psychother Psychosom* 2014;83(1):10–28. doi:10.1159/000353263
 25. Dangi S, Nagle YK. Personality factors as determinants of psychological well being among adolescents. *Indian J Heal Wellbeing* 2015;6(4):369–73.
 26. Sanchez-Ruiz MJ, Tadros N, Khalaf T, Ego V, Eisenbeck N, Carreno DF, et al. Trait Emotional Intelligence and Wellbeing During the Pandemic: The Mediating Role of Meaning-Centered Coping. *Front Psychol* 2021;12:648401. doi:10.3389/fpsyg.2021.648401
 27. Zeidner M, Matthews G, Roberts RD. The Emotional Intelligence, Health, and Well-Being Nexus: What Have We Learned and What Have We Missed? *Appl Psychol Health Well Being* 2012;4(1):1–30. doi:10.1111/j.1758-0854.2011.01062.x
 28. Jain A, Jain P. Inter-relationship between Gaming Addiction, Emotional Intelligence, and Psychological Well-being of Playerunknown's Battlegrounds and Non-Playerunknown's Battlegrounds Online Mobile Game Players: A Comparative Cross-sectional Study. *Acta Medica International* 2021;8:117. doi:10.4103/amit.amit_84_21
 29. Kircaburun K, Griffiths MD, Billieux J. Psychosocial factors mediating the relationship between childhood emotional trauma and internet gaming disorder: a pilot study. *Eur J Psychotraumatol* 2019;10(1):1565031. doi:10.1080/20008198.2018.1565031
 30. Cheng C, Sun P, Mak KK. Internet Addiction and Psychosocial Maladjustment: Avoidant Coping and Coping Inflexibility as Psychological Mechanisms. *Cyberpsychol Behav Soc Netw* 2015;18(9):539–46. doi:10.1089/cyber.2015.0121
 31. Sánchez-Álvarez N, Extremera N, Fernández-Berrocal P. The relation between emotional intelligence and subjective well-being: A meta-analytic investigation. *The Journal of Positive Psychology* 2016;11(3):276–85. doi:10.1080/17439760.2015.1058968
 32. Ryff CD, Keyes CL. The structure of psychological well-being revisited. *J Pers Soc Psychol* 1995;69(4):719–27. doi:10.1037//0022-3514.69.4.719
 33. Kim HH-s. The impact of online social networking on adolescent psychological well-being (WB): a population-level analysis of Korean school-aged children. *International Journal of Adolescence and Youth* 2017;22(3):364–76. doi:10.1080/02673843.2016.1197135
 34. Okoli AC, Okoli T. Investigating the effectiveness of motivational interviewing on the academic performance of senior secondary students in private schools in niger state, Nigeria. *Int J Innov Res Dev* 2018;7(6). doi:10.24940/IJIRD/2018/V7/I6/JUN18086.
 35. Kochuchakkalackal GK, Reyes MES. Compulsive Internet Gaming and Its Relationship with Poor Psychological Well-Being Among Selected Adolescents. *Journal of Technology in Behavioral Science* 2019;4(4):303–8. doi:10.1007/s41347-019-00098-7
 36. Chen CY, Chang SL. Moderating effects of information-oriented versus escapism-oriented motivations on the relationship between psychological well-being and problematic use of video game live-streaming services. *J Behav Addict* 2019;8(3):564–73. doi:10.1556/2006.8.2019.34
 37. Larrieu M, Billieux J, Décamps G. Problematic gaming and quality of life in online competitive videogame players: Identification of motivational profiles. *Addict Behav* 2022;133:107363. doi:10.1016/j.addbeh.2022.107363
 38. Snodgrass JG, Lacy MG, Cole SW. Internet gaming, embodied distress, and psychosocial well-being: A syndemic-syndaimonic continuum. *Soc Sci Med* 2022;295:112728. doi:10.1016/j.socscimed.2019.112728
 39. Cheng C, Cheung MWL, Wang H-y. Multinational comparison of internet gaming disorder and psychosocial problems

- versus well-being: Meta-analysis of 20 countries. *Computers in Human Behavior* 2018;88:153–67. doi:10.1016/j.chb.2018.06.033
40. Sharma A, Sharma R. Internet addiction and psychological well-being among college students: A cross-sectional study from Central India. *J Family Med Prim Care* 2018;7(1):147–51. doi:10.4103/jfmpc.jfmpc_189_17
 41. Pontes HM, Griffiths MD. A new era for gaming disorder research: Time to shift from consensus to consistency. *Addict Behav* 2020;103:106059. doi:10.1016/j.addbeh.2019.106059
 42. Lee J-y, Ko DW, Lee H. Loneliness, regulatory focus, interpersonal competence, and online game addiction: A moderated mediation model. *Internet Research* 2019;29(2):381–94. doi:10.1108/IntR-01-2018-0020
 43. Griffiths MD. Online gaming addiction in youth: Some comments on Rosendo-Rios et al. (2022). *Addict Behav* 2022;130:107311. doi:10.1016/j.addbeh.2022.107311
 44. Galvan A. Adolescent development of the reward system. *Front Hum Neurosci* 2010;4:6. doi:10.3389/neuro.09.006.2010
 45. Eccles JS, Roeser RW. Schools as Developmental Contexts During Adolescence. *Journal of Research on Adolescence* 2011;21(1):225–41. doi:https://doi.org/10.1111/j.1532-7795.2010.00725.x
 46. Kline RB. Principles and practice of structural equation modeling. United Kingdom: Guilford publications; 2023. 494 p.
 47. Ryff CD, Singer BH. Best news yet on the six-factor model of well-being. *Social Science Research* 2006;35(4):1103–19. doi:10.1016/j.ssresearch.2006.01.002
 48. Khanjani M, Shahidi S, Fathabadi J, Mazaheri M, Shokri O. Factor structure and psychometric properties of the Ryff's scale of Psychological well-being, short form (18-item) among male and female students. *Thought and Behavior in Clinical Psychology* 2014;8(32):27–36.
 49. Wong C-S, Law KS. The effects of leader and follower emotional intelligence on performance and attitude: An exploratory study. In: *Leadership Perspectives* [Internet]. Routledge; 2002. p. 243–74. Available from: <https://www.taylorfrancis.com/books/9781351922555/chapters/10.4324/9781315250601-10>
 50. Ali Babaei G, Rahimi H, Nabizadeh S, Abdollahi Moghadam M, Ramezani S, Shad Gahraz S. Validation of Wang and Low Emotional Intelligence Scale. *Iranian Journal of Culture in The Islamic University* 2024;14(2):139–64.
 51. Khazaal Y, Breivik K, Billieux J, Zullino D, Thorens G, Achab S, et al. Game Addiction Scale Assessment Through a Nationally Representative Sample of Young Adult Men: Item Response Theory Graded-Response Modeling. *J Med Internet Res* 2018;20(8):e10058. doi:10.2196/10058
 52. Lemmens JS, Valkenburg PM, Peter J. Development and Validation of a Game Addiction Scale for Adolescents. *Media Psychology* 2009;12(1):77–95. doi:10.1080/15213260802669458
 53. Preacher KJ, Hayes AF. Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behav Res Methods* 2008;40(3):879–91. doi:10.3758/brm.40.3.879
 54. Henning C, Crane AG, Taylor RN, Parker JDA. Emotional Intelligence: Relevance and Implications for Addiction. *Current Addiction Reports* 2021;8(1):28–34. doi:10.1007/s40429-021-00356-w
 55. Beheshtian M. The relationship between components of emotional intelligence and addiction to internet among the high schools students of Tehran. *Sociological Cultural Studies* 2013;4(2):1–19.
 56. Sharifi Fard SA, Griffiths MD, Abesh Ahmad Loo MJ, Afzali A, Ali Babaei G, Aflaki M, et al. Prevalence of Instagram addiction among Iranians: A countrywide online survey. *Entertainment Computing* 2025;55:101010. doi:10.1016/j.entcom.2025.101010
 57. Sharifi Fard SA, Griffiths MD, Nabizadeh S, Taheri M, Refaei M. The Relationship between Five Personality Traits and Happiness: The Mediating Role of Problematic Instagram Use. *Addict Health* 2025;17:1523. doi:10.34172/ahj.1523
 58. Sharifi Fard SA, Griffiths MD, Mohseni F, Nabi Zadeh S, Ali Babaei G. Basic Psychological Needs and Psychological Well-being: The Mediating Role of Instagram Addiction. *Journal of Technology in Behavioral Science* 2024;9(2):171–9. doi:10.1007/s41347-023-00313-6