Indus Journal of Social Sciences
Online ISSN: 2960-219X
Print ISSN: 2960-2203
Volume 3, Number 1, 2025, Pages 314 – 323
Journal Home Page
https://induspublishers.com/IJSS/about

Relationship between Emotional Regulation and Video Game Addiction among Adolescents: Role of Perceived Social Support

Eman Naeem[1], Samra Rafique[2], Rukhsar Nazir[3*] & Sidra Rasool[4]

[1]*Student Department of Psychology, Govt. Fatima Jinnah Post Graduate College Azad Jammu and Kashmir Muzaffarabad, Email: emannaeem868@gmail.com*
[2]*Student Department of Psychology, Govt. Fatima Jinnah Post Graduate College Azad Jammu And Kashmir Muzaffarabad, Email: samrarafique618@gmail.com*
[3]*Lecturer Department of Psychology, University of Azad Jammu and Kashmir Muzaffarabad, Email: rukhsarnazir896@gmail.com*
[4]*Incharge Psychology Lab Air University Islamabad, Email: sidrarasool@au.edu.pk*

ARTICLE INFO

Article History:

Received:	*January*	*07, 2025*
Revised:	*February*	*06, 2025*
Accepted:	*February*	*08, 2025*
Available Online:	*February*	*10, 2025*

Keywords:

Addiction, Adolescents, Regulation

Corresponding Author:
Rukhsar Nazir
Email:
rukhsarnazir896@gmail.com

ABSTRACT

The study investigated the Relationship between emotional regulation and video gaming addiction: Role of perceive social support among the adolescents. The sample of adolescents' age ranges from 10-19 years (N = 298) were taken included both male (n = 210) and female (n = 88) participants. The participants filled the Emotion Regulation Scale (Phillips & Power, 2007) for emotional regulation, Video Game Addiction Test (Lemmens et al., 2009) for video game addiction, and Multidimensional Scale of Perceived Social Support (Mitchell & Zimet, 2000) to measure social support. The results of the study suggested that emotional regulation is negatively correlated with video game addiction. There is a significant negative impact of emotional regulation on video game addiction. Moreover, social support did not significantly moderate the relationship between emotional regulation and video game addiction. The Mann-Whitney U test revealed that male scored higher on video game addiction and female scored higher on emotional regulation, whereas on higher educational level students scored more on video game addiction than lower education level. The study findings highlight that the emotional regulation is important in overcoming the videogame addiction with findings having strong implications for parents, teachers and policy makers to work upon the guidance and skill building of the adolescents.

Introduction

Digital gaming has become a popular form of entertainment and communication among adolescents, but it has also led to issues like video game addiction and internet gaming disorder, which have become more common in recent years. (Bengtsson et al., 2021).Adolescents, facing emotional challenges like stress and anxiety, may turn to video games for comfort. Video games can help them manage negative emotions and urges, providing a way to cope with real-world issues. (Melodia et al., 2020).Research indicates that inadequate emotional regulation is strongly linked to higher levels of gaming addiction (Schettler et al., 2023).

Emotion regulation involves the strategic efforts individuals employ to control their emotional states. Emotion regulation refers to managing the occurrence, intensity, and duration of emotions, as well as related physiological, motivational, and behavioral responses, to adapt socially or achieve personal goals (Eisenberg et al., 1998)

Social support is essential for human well-being, impacting emotional, psychological, and physical health. It involves the help and comfort individuals receive from family, friends, coworkers, and community members (Umberson& Kara's-Montez, 2010).

Video game addiction involves frequent online gaming, which can negatively affect various aspects of life. With recent advancements making gaming more accessible, it has become a major public health concern. Research shows that video game addiction can lead to brain changes similar to those seen in substance abuse and gambling. (Kiraly et al., 2023). Video game addiction can be considered a behavioral addiction, driven by the desire for rewards and achievements, similar to gambling. This often leads young individuals to over-invest time and become excessively focused on winning. (Griffiths, 2010).

The rise of internet gaming and its growing player base has led to internet gaming disorder, causing negative effects like poor academic performance, social issues, and self-regulation difficulties. Video game addiction is linked to higher social anxiety, poor communication, and family problems (Kiraly et al., 2023). Perceived social support is key in understanding the connection between gaming addiction and mental health, with research showing that individuals with problematic gaming often experience social isolation (Malak et al., 2023). Healthy social relationships can protect against gaming disorders, while peer support can reduce excessive gaming (Gunuc, 2016). Social support significantly influences mental health, academic success, and well-being, especially during adolescence and early adulthood (Orben et al., 2020). A lack of support can lead to isolation and emotional issues, increasing the risk of addiction (Gillman et al., 2023). Adequate social support helps with emotional regulation, lowering addiction risk (Lemmens et al., 2011). Strong social networks assist in managing challenges and preventing gaming addiction (Bauer et al., 2021). Positive social support also protects against addictive behaviors, including gaming (Ucur & Donmez, 2021). This study examines the role of emotional regulation and social support in mitigating video game addiction.

Globalization has significantly integrated technology and online gaming into modern life, leading to widespread issues related to excessive video gaming both globally and within Pakistan. This research investigated the impact of family bonds and peer relationships on online video gaming addiction among male and female adolescents in Sialkot, Pakistan. The findings revealed a significant relationship between strong family bonds and online video gaming addiction and identified peer attachment as a significant predictor of online video game addiction (Khalid et al., 2023).

THEORETICAL FRAMEWORK

Emotion Regulation Theory

Gross (2013) proposed that emotional regulation theory focuses on how individuals manage and respond to their emotions, particularly in stressful situations. Strategies like Cognitive Reappraisal (changing how we think about a situation), Suppression (inhibiting emotional expression), and Acceptance (recognizing and accepting emotions without trying to alter them) are key components of emotional regulation. In adolescents, challenges with emotional regulation may cause them to turn to external outlets, such as video games, to cope. These games offer a temporary escape or sense of control, which can lead to excessive or addictive gaming behaviors (Giardina et al., 2024).

Objectives

1. To investigate the relationship between emotional regulation and videogame addiction among adolescents.
2. To find out the impact of emotional regulation on video game addiction among adolescents.
3. To explore the moderating role of perceived social support on relationship between emotional regulation and video game addiction among adolescents.
4. To study the role of demographics such as gender, education in study variables (emotional regulation, videogame addiction and role of perceived social support) among adolescents.

Hypotheses

1. There is a negative relationship between emotional regulation and video game addiction among adolescents.
2. Emotional regulation will have negative impact on video game addiction among adolescents.
3. Perceived social support moderates the relationship between emotional regulation and video game addiction among adolescents.
4. The demographics such as age, gender, education have significantly difference with variables (emotional regulation, videogame addiction and role of perceived social support) among adolescents.

Instruments

Inform Consent

Inform consent was ensuring that the participation will be on voluntary basis. Their identities will keep anonymous and data will be kept confidential.

Demographic Sheet

The demographics sheet will be used in the study to collect information about variables like age, gender, education.

Emotion Regulation Scale

The scale was developed by Phillips and Power (2007). It is an 18-item, with 5-point Likert scale and 4 factors such as internal and external regulation strategies ,functional and dysfunctional regulation, awareness of regulating emotions, perception of academic self Efficacy with response categories; 1, almost never;2, sometimes; 3, about half of time; 4, most of the time; 5, almost always. If the total score is 64-90(out of 90) the emotional regulation is good, scores18-45(out of

90) emotional regulation is poor Cronbach Alpha internal consistency coefficient was found as .68 for external dysfunctional factor, as .67 for internal dysfunctional factor, as .72 for internal functional factor and as .60 for external functional factor (Ekerand Taş, 2022)

Video Game Addiction Test

Video game Addiction Test is developed by Lemmens, Valkenburg, Peter in 2009.The VAT is a 14-item psychometric questionnaire designed to assess game addiction intensity. It is a 14-item self-reported questionnaire, with a 5-point Likertscale : 0, never; 1, seldom; 2, sometimes; 3, often; and 4, very often.50 Possible scores ranged from a minimum of 0 to a maximum of 4, calculated by dividing the total score by 14, with higher scores reflecting greater severity of addiction. This test is with high reliability (Cronbach's a = 0.93) (Antonius J. vanRooji et al., 2012).

Multidimensional Scale of Perceived Social Support

The Multidimensional Scale of Perceived Social Support (MSPSS) was developed by Greg Zimet and his colleagues in 1998.MSPSS is a brief research tool designed to measure perceptions of support from 3 sources: Family, Friends, and a Significant Other. The scale is comprised of a total of 12 items, with 4 items for each subscale, using a 7-point Likert scale (1: very strongly disagree, 2: strongly disagree, 3: mildly disagree. 4: neutral, 5: mildly agree, 6: strongly agree, 7: very strongly agree). It shows greater internal consistency, and factor analysis validates the three subscale structures of the MSPSS: family, friends, and significant other. Additionally, correlations with a family caring scale reinforce the discriminate validity of the family subscale.. The score between 1.0 and 2.9indicate low perceived social support,3.0 to 5.0 indicate moderate perceived social support ,5.1 to 7 indicate high perceived social support. The MSPSS internal reliability has been widely tested, showing strong internal consistency for the measure's total score 0.93-0.98 (Mitchell & Zimet ,2000)

Procedure

The research was conducted with approval from Fatima Jinnah Post Graduate College in Muzaffarabad. A sample of 298 students was selected after obtaining consent from the relevant schools and colleges. Informed consent forms, explaining the study's aims and objectives, were attached to the questionnaires. Participants were assured that their personal information would remain confidential and used solely for the study. There were no time restrictions. Once the data was collected, it was entered into the Statistical Package for the Social Sciences (SPSS, version 27). Descriptive statistics were used to summarize demographic factors, such as age, gender, and education. To explore the primary relationships, the Pearson Product-Moment Correlation (PPMC) assessed the link between emotional regulation and video game addiction among adolescents. Additionally, a Mann-Whitney U-test was conducted to examine potential differences in gender (male, female) and education level (HSC, SSC).

Results

Table 1: Socio-demographic Characteristics of Participants (N=298)

Variables	F	(%)
Gender		
Male	210	70.5
Female	88	29.5
Family System		

Nuclear	185	62.1
Joint	113	37.9
Education		
Matriculation	142	47.7
Intermediate	156	52.3

Note:f = frequencies of demographic variables; % = percentage.

Table 1 shows that participants were male (F=210, %=70.5), while females comprised a smaller portion (F=88, %=29.5). For family systems, most participants came from nuclear families (F=185, %=62.1), and from joint family systems (F=113, %=37.9). For educational levels, 47.7% of participants (F=142) had completed matriculation, and 52.3% (F=156) had intermediate education.

Table 2: Psychometric Properties of the Instruments (N=298)

Variables				**Range**				
	K	**M**	**SD**	**Potential**	**Actual**	**α**	**Skew**	**Kur**
Emotion Regulation Scale	18	47.77	12.35	18-90	20-87	.85	.17	-.35
Videogame Addiction Scale	14	21.73	11.19	0-56	0-46	.88	-.22	-.70
Social Support Scale	12	57.18	12.09	12-84	14-82	.83	-.69	.31

Note: K= no. of items, M= Mean, SD= Standard Deviation, α= Reliability value, Skew= Skewness and Kur=Kurtosis

Table 2 shows that the Emotion Regulation Scale had a mean score (M=47.77) and standard deviation (SD=12.35), with an actual score range from 20 to 87, and a reliability coefficient (α=.85). The Videogame Addiction Scale had a mean score (M=21.73) and standard deviation (SD=11.19), with actual scores ranging from 0 to 46, and a reliability coefficient (α=.88). Finally, the Social Support Scale had a mean score (M=57.18) and standard deviation (SD=12.09), with actual scores ranging from 14 to 82, and a reliability coefficient (α=.83)

Table 3: Correlation among Study Variables (N = 298)

	Variables	**M**	**SD**	**1**	**2**
1	Emotional Regulation	47.77	12.35	-	-.39**
2	Videogame Addiction	21.73	11.19	-	-

Note: **=p<.01

Table 3 shows that Emotional Regulation shows a significant negative correlation with Video Game Addiction ($r = -0.39$, $p < 0.01$), indicating that higher the emotional regulation abilities in adolescents, lower will be the videogame addiction and vice-versa.

Table 4: Linear Regression analysis for prediction of Videogame addiction from emotional regulation (N=298)

Variables	**B**	**SE**	**T**	**p**	**95% CI**
Constant	49.71***	2.45	20.21	.00	[44.87, 54.55]
Emotional Regulation	-.32***	.05	-6.50	.00	[-.42, -.22]
R^2	.13				
ΔR^2	.12				
F	42.35				

Note. B = Beta, SE= Standard Error, *= Significance level, CI = Confidence Interval

The table presents a linear regression analysis examining the impact of emotional regulation on the dependent variable. The model's constant is 49.71 (B = 49.71, p< .001), with a standard error (SE) of 2.45, indicating that when emotional regulation is at zero, the predicted value of the outcome variable is 49.71. The associated t-value for the constant is 20.21, which is highly significant (p = .00), with a 95% confidence interval ranging from 44.87 to 54.55. Emotional regulation is negatively associated with the dependent variable, as indicated by the unstandardized coefficient (B = -.32, p< .001). This suggests that for every one-unit increase in emotional regulation, there is a .32 decrease in the dependent variable. The standard error for emotional regulation is .05, and the t-value is -6.50, also highly significant (p = .00), with a 95% confidence interval between -.42 and -.22, reinforcing the precision of the estimate. The model explains 13% of the variance in the dependent variable (R^2 = .13), with a change in R^2 of .12 (ΔR^2 = .12), and the overall model is statistically significant (F = 42.35). These results suggest that emotional regulation significantly contributes to explaining the variation in the outcome, though other factors may also be involved.

Table 5: Moderating effect of social support between emotion regulation and videogame addiction (N=298)

Variable	Model 1			Model 2		
	B	Beta	SE	B	Beta	SE
Constant	56.45		2.45	34.16***		14.42
Emotion Regulation	-.32***	-.35	.05	-.33***	-.36	.04
Social Support	-.11*	-.10	.04	-.11*	-.12	.05
Emotional Regulation* Social Support				-.01	-.04	.01
R^2			.12			.14
ΔR^2						.13

Table 5 shows the moderating role of social support between emotion regulation and videogame addiction. In Model 1, emotion regulation (B = -0.32, SE = 0.05, Beta = -0.35, p < .001) and social support (B = -0.11, SE = 0.04, Beta = -0.10, p < .05) are both significant predictors, explaining 12% of the variance in the outcome (R^2 = 0.12). In Model 2, the interaction term (Emotion Regulation * Social Support) is added, yielding an estimated coefficient (B = -0.01, SE = 0.01, Beta = -0.04) that is not statistically significant. However, the inclusion of this interaction increases the variance explained to 14% (R^2 = 0.14), with a change in R^2 (ΔR^2 = 0.13).

Table 6: Non-Parametric Test for Gender differences on Emotional Regulation, Social Support and Videogame addiction (N=298)

Variables	Gender			
	Male (N=210)	Female (N=88)	Mann Whitney U	
	Mean Rank	Mean Rank		p
Emotional Regulation	141.00	165.02	7523.50	.02
Videogame Addiction	161.63	122.12	6830.50	.000

Note, p= Level of Significance.

The table show that females had a higher mean rank (165.02) compared to males (141.00), and the test yielded a Mann-Whitney U value of 7523.50 with a p-value of .02, indicating a statistically

significant difference, suggesting that females exhibit better emotional regulation than males. For Video Game Addiction, males had a higher mean rank (161.63) than females (122.12), with a Mann-Whitney U value of 6830.50 and a p-value of .000, showing a significant difference, suggesting that males are more prone to video game addiction than females in this sample

Table 7: Non-Parametric Test for Education group differences on Emotional Regulation, Social Support and Videogame addiction (N=298)

Variables	Gender			
	SSC (N=142)	HSC (N=156)	Mann Whitney U	
	Mean Rank	Mean Rank		p
Emotional Regulation	159.06	136.11	9026.00	.02
Social Support	146.55	152.19	10656.50	.57
Videogame Addiction	138.68	159.35	9540.00	.04

Note: p= Level of Significance.

The table presents the results of a Mann-Whitney U test. For emotional regulation, SSC students had a higher mean rank (159.06) compared to HSC students (136.11). The Mann-Whitney U value for this comparison was 9026.00, and the result was statistically significant (p = .02). This indicates that SSC students exhibit significantly higher emotional regulation than HSC students. In terms of social support, the mean rank for SSC students was 146.55, while HSC students had a slightly higher mean rank of 152.19. The Mann-Whitney U value was 10656.50, and the result was not statistically significant (p = .57), suggesting no significant difference in social support between the two groups. For video game addiction, HSC students had a higher mean rank (159.35) compared to SSC students (138.68). The Mann-Whitney U value was 9540.00, with a statistically significant result (p = .04). This suggests that HSC students exhibit significantly higher levels of video game addiction compared to SSC student

Discussion

This study aimed to analyze the impact of emotional regulation on video game addiction, with social support moderating the relationship between emotional regulation and addiction among adolescents. Using a quantitative survey approach, the study revealed significant findings.

The first hypothesis confirmed a significant negative relationship between emotional regulation and video game addiction, suggesting that poor emotional regulation may lead to video game addiction as games provide an escape from real-life stressors (Yu et al., 2018; Zhang et al., 2019). The second hypothesis also found that improved emotional regulation reduced video game addiction, supporting previous studies (Kwahk & Ahn, 2010; Estupiñá-Puig et al., 2024).

However, the third hypothesis regarding the moderating role of social support was not supported, as social support did not moderate the relationship between emotional regulation and video game addiction. This may be because gaming environments offer their own sense of community, reducing the need for external social support (Kao et al., 2016).

The fourth hypothesis highlighted sociodemographic factors, showing that males were more prone to video game addiction than females, and SSC students exhibited higher emotional regulation and

lower addiction levels compared to HSC students. This aligns with previous studies (Mehmood-Bajwa & Arif, 2022; Zahra et al., 2019).

Conclusion

The study concludes that emotional regulation is negatively related to video game addiction among adolescents, with better emotional regulation reducing the likelihood of addiction. Social support did not moderate this relationship, possibly because adolescents may rely more on in-game interactions. Additionally, demographic factors like gender and education level influenced gaming addiction, with male students and those at the HSC level showing a higher tendency for addiction.

Limitations and Suggestions

This study, while offering valuable insights into the role of emotional regulation in video game addiction among adolescents, has some limitations that should be acknowledged. First, the use of a correlation research design limits the ability to draw causal conclusions. Future research may benefit from longitudinal or experimental designs that can better assess causal relationships over time. The sample was limited to a specific population of adolescents. Future studies could explore a more varied demographic, including adolescents from different cultural, economic, and geographical backgrounds.

Implications

The study has strong implications not only for the future research but also for the parents, teachers, educational institutes and policy makers. Raising awareness among parents on the importance of supporting adolescents in developing healthy emotional regulation practices could prevent reliance on gaming as an emotional outlet. Moreover, the parents along with teacher can work on the awareness against the negative impact of videogame addiction along with developing healthy hobbies and physical activities in the adolescents. Moreover, the parents and teachers should also improve the bonding with adolescents and also encourage friendships in the adolescents. The policy makers should devise policies against the increased digital gaming by controlling and restricting them to certain age and time limit.

References

1. Eisenberg, N., Cumberland, A., &Spinrad, T. L. (1998). Parental socialization of emotion.Psychological Inquiry, 9, 241– 273.https://doi.org/10.1207/s15327965pli0904_1
2. Király, O., Koncz, P., Griffiths, M. D., &Demetrovics, Z. (2023). Gaming disorder: A summary of its characteristics and aetiology. Comprehensive Psychiatry, 122, 152376.https://doi.org/10.1016/j.comppsych.2023.152376
3. Malak, M. Z., Shuhaiber, A., Alsswey, A., & Anwar Tarawneh. (2023). Social support as the mediator for the relationship between internet gaming disorder and psychological problems among university students. Journal of Psychiatric Research, 164, 243–250.https://doi.org/10.1016/j.jpsychires.2023.06.007
4. Gunuc, S. (2016). Peer Influence in Internet and Digital Game Addicted Adolescents: Is Internet / Digital Game Addiction Contagious? International Journal of High Risk Behaviors and Addiction, Inpress(Inpress). https://doi.org/10.5812/ijhrba.33681

5. Orben, A., Tomova, L., & Blakemore, S.-J. (2020). The Effects of Social Deprivation on Adolescent Development and Mental Health. The Lancet Child & Adolescent Health, 4(8), 634–640. https://doi.org/10.1016/s2352-4642(20)30186-3
6. Lemmens, J. S., Valkenburg, P. M., & Peter, J. (2011). Psychosocial causes and consequences of pathological gaming. Computers in Human Behavior, 27(1), 144–152. https://doi.org/10.1016/j.chb.2010.07.015
7. Khalid, M., Mir, Z. K., & Khalid, M. (2023). Gamers Revealed: Peer Attachment and Family Bonds as Predictors of Adolescent Online Video Gaming Addiction in District Sialkot, Pakistan.
8. Kim, S., & Chun, J. (2023). The Impact of Parental and Peer Attachment on Gaming Addiction among Out-of-School Adolescents in South Korea: The Mediating Role of Social Stigma. International Journal of Environmental Research and Public Health, 20(1), 72.https://doi.org/10.3390/ijerph20010072
9. Gross, J. J. (Ed.). (2013). Handbook of emotion regulation. Guilford publications.
10. Gunuc, S. (2016). Peer Influence in Internet and Digital Game Addicted Adolescents: Is Internet / Digital Game Addiction Contagious? International Journal of High Risk Behaviors and Addiction, Inpress(Inpress). https://doi.org/10.5812/ijhrba.33681
11. Giardina, A., Schimmenti, A., Starcevic, V., King, D. L., Di Blasi, M., &Billieux, J. (2024). Problematic gaming, social withdrawal, and Escapism: The Compensatory-Dissociative Online Gaming (C-DOG) model. Computers in Human Behavior, 155, 108187.https://doi.org/10.1016/j.chb.2024.108187
12. Kwahk, K.-Y., &Ahn, H. (2010). Moderating effects of localization differences on ERP use: A socio-technical systems perspective. Computers in Human Behavior, 26(2), 186–198. https://doi.org/10.1016/j.chb.2009.10.006
13. Kao, H.-Y., Yu, M.-C., Masud, M., Wu, W.-H., Chen, L.-J., & Wu, Y.-C. J. (2016). Design and evaluation of hospital-based business intelligence system (HBIS): A foundation for design science research methodology. Computers in Human Behavior, 62, 495–505.https://doi.org/10.1016/j.chb.2016.04.021
14. MehmoodBajwa, A., &Arif, M. (2022). Online gaming addiction among educated youth in Pakistan:
15. Kwahk, K.-Y., &Ahn, H. (2010). Moderating effects of localization differences on ERP use: A socio-technical systems perspective. Computers in Human Behavior, 26(2), 186–198. https://doi.org/10.1016/j.chb.2009.10.006
16. Zhang, M. X., Wang, X., Yu, S. M., & Wu, A. M. S. (2019). Purpose in life, social support, and internet gaming disorder among Chinese university students: A 1-year follow-up study.
17. Uçur, Ö., &Dönmez, Y. E. (2021). Problematic internet gaming in adolescents, and its relationship with emotional regulation and perceived social support.
18. Gillman, J., Turner, M. J., & Slater, M. J. (2023). The role of social support and social identification on challenge and threat cognitive appraisals, perceived stress, and life satisfaction in workplace employees. PLOS One, 18(7), e0288563–e0288563. https://doi.org/10.1371/journal.pone.0288563
19. Gunuc, S. (2016). Peer Influence in Internet and Digital Game Addicted Adolescents: Is Internet / Digital Game Addiction Contagious? International Journal of High Risk Behaviors and Addiction, Inpress(Inpress). https://doi.org/10.5812/ijhrba.33681
20. Griffiths, M. D. (2010). The Role of Context in Online Gaming Excess and Addiction: Some Case Study Evidence. International Journal of Mental Health and Addiction, 8(1), 119–125. https://doi.org/10.1007/s11469-009-9229-x

21. Schettler, L. M., Thomasius, R., &Paschke, K. (2023). Emotional dysregulation predicts problematic gaming in children and youths: a cross-sectional and longitudinal approach. European Child & Adolescent Psychiatry.https://doi.org/10.1007/s00787-023-02184-x