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Impact of internet gaming on academic performance and their rejection sensitivity of a private university on female students

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DOI: https://doi.org/10.33545/26648903.2024.v6.i1a.46

Abstract
The present study assessed the impact of internet gaming on academic performance of female students of a private university. The sample consisted of 60 female subjects (age range 18 -26 years) playing online games of a Private University. Then Internet Gaming Disorder Scale–Short-Form (IGDS9-SF, Pontes *et al*. 2015) [16] and Rejection Sensitivity Questionnaire, Adult version (A-RSQ) were administered to assess the effect of Internet gaming on academic performance anxiety and their rejection sensitivity respectively. For the data; mean, standard deviation and correlation were calculated, the analysis revealed that: Internet gaming has no significant impact on academic performance but it has negative impact on rejection sensitivity.

Keywords: Academic performance, online gaming, internet gaming disorder, rejection sensitivity

Introduction
The global surge in Internet gaming, featuring popular titles like "Grand Theft Auto," "Mortal Kombat," and "Call of Duty," has led to the creation of a thriving industry (Király, Nagygyörgy, Griffiths, & Demetrovics, 2014; Kuss, 2013) [3, 10]. While gaming offers enjoyment and social interaction, concerns have arisen regarding gaming addiction or Internet Gaming Disorder (IGD), characterized by persistent and compulsive gaming that disrupts various aspects of life. These disruptions include psychological impacts, declines in academic performance, sedentary lifestyle issues, strained social relationships, cognitive development disruption, and financial implications. Academic performance, a crucial measure in formal education, is influenced by various factors, with Internet gaming's impact involving poor time management, distraction, sleep disruptions, social isolation, and addiction potential. A balanced approach is essential to mitigate risks for individuals. Rejection sensitivity, marked by heightened emotional responses to potential rejection or criticism, impacts thoughts, emotions, behavior, and relationships. Addressing rejection sensitivity is crucial for personal growth and healthy relationships, although limited research exists on its specific relationship with Internet gaming. In conclusion, excessive Internet gaming can adversely affect psychological well-being, academic performance, and rejection sensitivity. Promoting awareness, responsible gaming habits, and a balanced lifestyle is crucial to mitigate potential negative impacts. Further research is needed to better understand the relationship between Internet gaming and rejection sensitivity. Examining relevant literature, findings by Emil G. M. van Schie *et al*. (1996) [19] reveal no significant link between videogame time and aggressive behavior, with a negative association observed with prosocial behavior and a positive correlation with a child's intelligence. Yi-Ping Hsieh *et al*. (2016) [26] show a positive correlation between multidimensional victimization and internet addiction among fourth-grade students in Taiwan. Hawi *et al*. (2018) [7] present a study revealing that younger age, inadequate sleep, and lower academic achievement were positively associated with IGD. Kubey *et al*. (2001) [11] find that heavier recreational Internet use correlated with impaired academic performance, and self-reported Internet dependency and academic impairment were linked to greater use of synchronous communication applications. Weinstein *et al*. (2016) [24] observe that individuals with Internet and video game addictions display impulsive behaviors, prioritize immediate rewards, and show a

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preference for the virtual world over real-life social interactions, possibly driven by fear of social rejection. Additionally, Demircioğlu *et al*. (2018)[4] associate insecure attachment styles, rejection sensitivity, and Dark Triad traits with lower relationship satisfaction, correlating with higher levels of social media addiction**.**

Methodology
The research is based on 60 female subjects (age range 18 - 26 years) playing online games of a Private University.
Purposive sampling and snowball sampling techniques have been used for data collection.
There is one independent variable- Internet Gaming and two dependent variables- Academic performance and Rejection Sensitivity.
As part of the study, information schedule, General Health Questionnaire – 28 (GHQ-28), the Internet Gaming Disorder Scale-Short-Form (IGDS9-SF), and the Rejection Sensitivity Questionnaire, Adult version (A-RSQ) and academic performance of the students before and after started playing online games as evaluation instruments have been utilized.
The Pearson Correlation coefficient formula has been used for the result.

Result

Table 1: Shows the correlation between academic performance after online gaming and Internet gaming.

	IGA	APPOST
IGA Pearson Correlation Sig. (2-tailed) N	1 60	-.009 .943 60
APPOST Pearson Correlation Sig. (2-tailed) N	-.009 .943 60	1 60

From table-1 it can be shown that the calculated product-moment correlation of co-efficient is -0.009, which is lesser than the critical table value against df= 58 at both the 0.05 and 0.01 level of significance. It can be said that there is no significant relationship between the two variables. Thus the probability of the null hypothesis being correct is >0.01. Thus null hypothesis was accepted and the alternative hypothesis has been rejected.

Table 2: Shows the correlation between rejection sensitivity and Internet gaming.

IGA Pearson Correlation Sig.(2-tailed) N	1 60	.495 .000 60
RS Pearson Correlation Sig.(2-tailed) N	.495 .000 60	1 60

Correlation is significant at the 0.01 level (2-tailed)
p<.01 **p*<.05

From table-2 it can be shown that the calculated product-moment correlation of co-efficient is 0.495, which is greater than the critical table value against df= 58 at 0.01 level of significance. It can be said that there is a significant

relationship between the two variables. Thus the probability of the null hypothesis being correct is <0.01. Thus alternative hypothesis has been accepted and the null hypothesis has been rejected.

Summary of the results
- There is no significant effect of Internet gaming on Academic performance.
- There is a significant effect of Internet gaming on Rejection sensitivity.

Discussion
1. Research indicates no significant impact of internet gaming on academic performance; factors like self-regulation and educational support play a more influential role in academic success.
2. A significant association exists between internet gaming and rejection sensitivity, suggesting heightened sensitivity to social rejection among individuals heavily engaged in online gaming. (Kellij S., 2023)[9]
3. The divergence in findings may stem from distinct influencing mechanisms, with academic performance affected by various factors beyond gaming, while rejection sensitivity is more directly influenced by gaming social dynamics.
4. Understanding these effects is vital for interventions, emphasizing a balanced gaming approach and addressing rejection sensitivity through social support, highlighting the need for further research to explore underlying mechanisms and potential moderating factors.

Conclusion: 1.The study finds no significant impact of internet gaming on academic performance, suggesting factors like self-control and educational support are more influential in academic success.
2. A notable association is observed between internet gaming and rejection sensitivity, indicating that excessive engagement in online gaming may heighten sensitivity to social rejection or disapproval (Weinstein A., 2016)[25]

Limitations of the study
There are some limitations of the present study, which are as follows-
- The sample size was not large enough (N=60 college students)
- As all the subjects were female. Thus gender differences could not be assessed.
- There might be the possibility of some faking in the self-report inventories, which could have been eliminated by using some supplementary tools that were not done in the present experiment.
- Due to the age range (18-26)

Implication of the study: 1. The study highlights the crucial link between internet gaming and psychological well-being in female students, underscoring the necessity to promote healthy gaming and offer support for rejection sensitivity.
2. Educational institutions should implement interventions to help female students build effective coping strategies and resilience, while fostering a balanced gaming approach and a supportive social environment for their overall well-being regarding internet gaming and rejection sensitivity.

Suggestions

1. The study indicates that internet gaming doesn't significantly impact female students' academic performance, emphasizing a lack of direct influence on academic outcomes from gaming time.

2. Future research should delve into factors like online interactions, harassment, and coping strategies to comprehensively understand the relationship between internet gaming and rejection sensitivity in female students.

3. Interventions should focus on providing psychological support, raising awareness, and creating inclusive gaming communities to empower female students in making informed choices and fostering a balanced approach to gaming.

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