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Effect Of Addiction To Online Games On Social-Emotional Well-Being And Academic Performance Of Children

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Abstract
Online shifting of classes contributed to the extreme use of the internet and a growing majority of children started to play online games in their leisure time. Primarily, online games served the purpose of entertainment, but excessive playing has led to an addiction that raises concerns about its effects on social, emotional, physical, and academic problems. This study was planned to see the effect of addiction to online games on social-emotional and academic performance by a cross-sectional survey with 322 students of 9th grade. Data were collected by a questionnaire and analysis revealed that there is a moderate negative effect of addiction to online gaming on social emotional well-being. The academic performance was also found negatively correlated to online gaming addiction. Hence, it can be inferred that the students more addicted to online games have had social-emotional issues and their academic performance was also poor. Teachers should motivate the students to participate in creative activities to renovate their bad routine into a good one.

Keywords: Online game, addiction, social-emotional wellbeing, academic performance

Introduction

The inception of the pandemic Covid-19 had been caused advances in digital technologies because most routine matters shifted to the online system. Consequently, the use of the internet across the world unpredictably increased which have completely transformed the way we live our lives. From smartphones and laptops to social media platforms and streaming services, these technologies have become an integral part of our daily routines. We use them for communication, entertainment, work, education, and even for mundane tasks like shopping and banking. Internet connection made it easier to stay informed about current events and to access a wealth of knowledge and resources from anywhere (Anierobi et al. 2021).

Closure of educational institutions caused by the novel coronavirus children spent more time at home and the accessibility to the internet provided them an opportunity to utilize more screen time with online games (Sahu, 2020). Being a popular form of entertainment, online gaming has become more accessible and convenient with the proliferation of smartphones and other mobile devices. Online games can offer children a sense of community and social interaction, as they connect with a variety of players of different ages from around the world. Many online games are designed to be highly addictive and engaging because children immerse completely in the game and accept challenges to reach a higher level. Online games often provide immediate rewards and a sense of accomplishment, which can trigger the release of dopamine in the brain, leading to feelings of pleasure and satisfaction, however, at the same time losing the game make children anxious (Brunborg et al. 2014).

Internet use is becoming an addiction for more and more individuals. They are also developing an addiction to playing internet games, these games are becoming increasingly well-liked among the younger generation and dominating on a worldwide scale (Iowa State University, 2011). For instance, online gaming activity has increased by 75%. This frequent engagement on the internet and social media, consequently, has amplified the risk of online game addiction among students (De-Pasquale et al. 2021), Wan & Chiou (2006) further added online gaming is one of the most addicting internet pastimes.

The excessive use of online games can lead to addiction in children, which can have a negative impact on their physical, emotional, and social well-being. Addiction to online games can lead to a loss of interest in other activities, social isolation, and a decline in academic performance. In a study, Anierobi et al (2021) observed that frequent use of the internet for enjoyment impacted students' study habits. They ignore their academic obligations and could not manage their time appropriately which results in low academic performance.

Addiction has been considered as a frequent physical dependency on using a computer that negatively affects a user's capability to control internet use to the level of causing relational, occupational, health, and social problems (Young, 2009). Nevertheless, it has been reported that students usually neglect their academic tasks due to frequent engagement in online gaming, which can badly affect their academic engagement, social-emotional well-being, and health condition (Anierobi et al., 2021). Growing

studies reported that addiction to digital games is one of the major causes of anxiety, anxious, dissatisfaction, and depression among children which leads to disengagement from studies and social and emotional well-being (Wang et al., 2021).

Several studies have observed that online games have severe effects, especially on student's health consequences, sleeping patterns, social anxiety, loneliness, study habits and time management (Syracuse University, 2007). Furthermore, the attraction to online games causes many problems related to mental and physical health, social and emotional wellbeing, disengagement to studies and other somatic and intellectual harm among children and adolescents (Ng & Wiemer-Hastings, 2005). Literature clearly indicated that gaming no doubt is a popular leisure activity that is enjoyed by people of all ages and particularly teenagers' students. However, addiction to online games has many bad effects on children health, social-emotional behavior, and their studies. Therefore, researchers want to get insight into the effect of addiction to online games on 9th grade students' social-emotional wellbeing and academic engagement.

Growing literature indicated that online games addiction can have substantial negative effects on the social & emotional wellbeing and academic performance of students. Consequences of too much gaming including lack of sleep, poor concentration, and decreased cognitive function can lead to social and emotional issues that effect on academic performance (Jackson et al., 2011). One of the most significant effects of online games addiction on students is a sedentary lifestyle. Sitting for prolonged periods of time obstacle in performing any physical activity impacts on sleep patterns, leading to insomnia and fatigue, which can negatively impact academic performance (Kim & So, 2012). Mental health issues such as anxiety and depression can also result from online gaming addiction, as students may become isolated and withdraw from social interactions. This can lead to a lack of emotional support and feelings of loneliness, which can impact academic performance and overall well-being (Singh & Barmola, 2015). Excessive gaming can also lead to poor time management skills, as students may prioritize gaming over other important activities such as studying and completing assignments. This can lead to poor academic performance and a lack of motivation to achieve academic goals.

Theoretical Framework and Hypothesis

Addiction to Online Games

Due to the rapid expansion and integration of ICT in all walks of life, the use of the internet has appeared as an important habit. No matter the age and gender, internet use became a significant necessity for human beings. Apart from other influences, online gaming is reported as one of the influences. The term online game is on an activity which takes place through the internet, whereas game means an activity which creates enjoyment. Therefore, online game is a game that creates an environment in which a player can play using his internet connection and try to achieve challenging goals by following rules which are set in games (Karapetsas et al., 2014; Kordrostami, 2015). Online game refers to competitive video gaming played on a variety of platforms, including PCs, consoles, and mobile devices.

Some of the most popular online games include League of Legends, Fortnite, DOTA 2 and CS:GO. Tournaments and events attract massive audiences and generate huge revenues through sponsorships, advertising, and merchandise sales. There are various types of online games including person shooter (Jansz & Tanis 2007), online casinos (Auer & Griffiths, 2022), sport (Adinolf & Turkay, 2018), action and adventure (Dormans, 2010), board games (Gobet, 2004), cross-platform online games (Taylor et al., 2019), multiplayer online games (Ng & Wiemer-Hastings, 2005), arcade games (Siegel et al., 2009) etc.

Addiction is a complex and chronic condition that refers to the compulsive use of anything or behavior despite negative consequences. Addiction is characterized by a physical and/or psychological dependence in which individuals experience intense cravings and an inability to control their use. Addiction can take many forms, including substance use disorders, such as drugs and alcohol, as well as behavioral addictions, such as gambling and gaming and gaming addiction entails a physical's dependency on games online (Young, 2009).While online games have faced some criticism in terms of addiction which also known as gaming disorder, refers to as a mental health condition characterized by a compulsive and excessive use of online games to the extent that it leads to impairment in other areas of life such as work, school, social and emotional wellbeing (Hur, 2006; Ferraro et al., 2007; Byun et al., 2009). This addiction can affect people of all ages, but it is more common among children of elementary school level.

The addictive nature of online game is due to the release of dopamine, a neurotransmitter that produces feelings of pleasure and reward in the brain, which occurs when playing games. The more a person plays, the more dopamine is released, and the more they want to play. This cycle can lead to neglect of other responsibilities and a loss of control over the amount of time spent in games. There are six core signs of online gaming addiction. These include disagreement (online game play have conflicts with other important tasks), taking away (if a gamer cannot play an online game, then negative emotions may arise in the gamer), relapse and reinstatement (gamers are helpless to reduce their time spent), behavioral Salience (online games take over one's life and replace other tasks) (Brown, 1997; Charlton & Danforth, 2010)

Addiction to Online Games and Social-Emotional Wellbeing

Social emotional wellbeing refers to an individual's ability to manage their emotions, build and maintain positive relationships, and navigate social situations effectively. It encompasses a range of factors that impact an individual's overall mental health, including their sense of purpose, connection to others, and self-esteem. Social emotional wellbeing is essential for leading a fulfilling life and achieving success in various areas, such as work, education, and personal relationships (Raith et al.,2021).

Research revealed that online game addiction is becoming an increasingly prevalent problem in society. As more people spend time playing video games, there is a growing concern about the impact this activity can have on social and emotional wellbeing. While many people play games for fun and entertainment, others find themselves unable to control their gaming habits, leading to addiction (Babic et al., 2017).

One of the main ways that online game addiction can impact social well-being is by isolating individuals from others. Gamers can become so absorbed in the world of the game that they lose touch with the real world, withdrawing from social activities

and relationships. This can lead to feelings of loneliness and depression, as individuals struggle to find connections outside of the virtual world (Zhang & Kaufman, 2017).

In addition to social isolation, online game addiction can also have a negative impact on emotional wellbeing. The intense focus and stimulation provided by video games can cause players to become overly aroused and agitated, leading to increased anxiety and stress levels. This can further exacerbate feelings of social isolation and depression, as individuals struggle to manage their emotions and connect with others. Another way that online game addiction can impact emotional wellbeing is through the development of compulsive and addictive behaviors. Individuals who become addicted to online gaming may begin to neglect other aspects of their lives, including work, study, and personal relationships. This can lead to feelings of guilt, shame, and low self-esteem, further impacting emotional wellbeing (Cheung et al., 2018). Online game addiction can also impact physical health. Spending long hours sitting in front of a computer screen can lead to poor posture, eye strain, and other physical health problems. This can further exacerbate feelings of anxiety and stress, as individuals struggle to manage the physical and emotional toll of their addiction (Lee & Kim, 2017).

Overall, the role of online game addiction in social and emotional wellbeing is significant. While gaming can be a fun and engaging activity, it is important for individuals to maintain a healthy balance and avoid becoming addicted. This can be achieved through self-awareness, setting boundaries, and seeking professional help if necessary. According to Young (2009) 23% to 56.9% of school going children are addicted by gaming worldwide. In Kuss & Griffiths (2012) study revealed that addiction to games can destroy behavior and life; it significantly impacts students' social relationships, emotional balance, academic efficiency. Therefore, based on the above discussion, the researchers formulated the hypothesis:

H1: Addiction to online games has a significant negative effect on social-emotional wellbeing levels in students

Addiction to Online Games and Academic Performance

Academic performance based on a variety of factors, including a student's individual abilities, study habits, motivation, and access to educational resources like the internet, academic videos etc. (Lambić, 2016). The internet plays a significant role in academic performance, as it provides students with access to a vast amount of information and resources. Through the internet, students can access academic journals, textbooks, and other educational materials that can support their learning and understanding of complex subjects. The internet also allows students to communicate and collaborate with peers and instructors, which can enhance their learning experience (Chen & Fu, 2009). However, the internet can also be a source of distraction and can negatively impact academic performance if used excessively or for non-educational purposes. Therefore, it is important for students to develop a healthy relationship with the internet and to use it as a tool to support their academic success. Apart from academic use, students used the internet for leisure activities and start playing games online (Dumrique & Castillo, 2018).

Though, the excessive use of online games makes students addicted and impacting their academic excellence (Anand, 2007). Anand (2007) also narrated that there was a link between students' SAT and Grade average scores with the duration of time they spent engaging in online games. This suggests that both the SAT and Academic record have declined. Ramadan (2020) confirms that online games and their effects on academic achievement and some other activities among young pupils show that as the level of playing online games increases, academic success decreases and online games also lead to nonparticipation in extracurricular activities and physical exercise among children of age 10–13 cohort. Anderson and Dill (2000) measured the relationship between levels of aggression and online gaming and concluded that, in addition to directly affecting results, gaming also increases enmity, which is frequently linked to academic struggles and poor academic performance. Whereas, Skoric et al. (2009) reported that online game addiction leads to poor academic performance whereas moderate gaming participation can lead to better academic performance. According to Young (2009) 23% to 56.9% of school going children are addicted by gaming worldwide. Kuss & Griffiths (2012) study revealed that addiction to games significantly impacts students' academic efficiency. Jackson et al. (2011) discovered that game time was a negative predictor of academic achievement, with those who played online games more often receiving lower grades than those who did not. Therefore, based on the above discussion, the researchers formulated the hypothesis:

H2: Addiction to online games has a significant negative effect on academic performance of students

Purpose of The Study

It has been seen that however, e-gaming is a popular leisure activity, but its addiction causes many adverse effects on personality and educational attainments. This study aimed at to determine the level and effect of the construct addiction to online on the social-emotional wellbeing and academic attainment of 8th grade students. Review of related literature and research directed towards the formulation of following objectives:

1. To measure the level of addiction to online games, social emotional well-being, and academic performance of 9th grade students.
2. To determine the what extent addiction to online games significantly effect on the social-emotional well-being and academic performance of 9th grade students?

Method and Materials

The quantitative research paradigm focuses on collecting numerical data and using it to understand a specific event or generalize it across groups of individuals (Babbie, 2010). A causal research design was used to examine the effect of addiction to online games on social-emotional well-being and academic performance of 9th grade students.

1. In this study, a questionnaire about additions to online games, social-emotional well-being, and academic performance was administered to 9th-grade students of district Sargodha. 580 questionnaires were distributed (boys = 365 & girls = 215) out of

which the mean score of 322 students in the scale addition to the online games was found to be 3.09 which signified a high level of addiction. Hence, the data of 322 students (boys = 226 & girls = 96) were analyzed.

2. To collect relevant data, researchers used questionnaire which split up into three portions. In the first portion demographic information and marks obtained in 8th grade examination was directed to mention to measure academic performance of respondents. The second portion includes three factors such as "intention to play" (6 items), "social interaction" (6 items), and "time flexibility" (6 items) to measure addition to online games. The third portion was used to measure social-emotional wellbeing with the help of four factors including "perceived stress" (6 items), "self-efficacy" (7 items), "loneliness" (7 items), and "social support" (6 items). To quantify the constructs a five-point Likert type scale ranging from 1 (never) to 5 (always) was used in which 1 signifies "Never", 2 signifies "Rarely", 3 signifies "Sometimes", 4 signifies "Very often", and 5 signifies "Always". The questionnaire was self-developed based on related literature and researches which was validated. To measure the level of addiction to online games and social-emotional wellbeing, the mean score was distributed into three parameters including 1.00 to 2.33 (low), 2.34 to 3.66 (high), and 3.67 to 5.00 (very high). While to gauge the level of academic performance the marks percentage was distributed into 40% to 59% (low), 60% to 79% (high), and 80% to 99% (very high).

3. To confirm the questionnaire was trustworthy, the reliability and validity were performed using a pilot study and experts' opinions. There were 55 items in the initial draft of the questionnaire, after validation from the experts three from psychology, the final draft consisted of 44 items including addiction to online game (18 items) and social-emotional wellbeing (26 items). 11 items were discarded, and the wording of various items was amended according to the experts' suggestions. The final version of the questionnaire was administered to 30 students and reliability was determined through Cronbach's alpha coefficient. The Cronbach's alpha coefficient for the whole questionnaire was found to be 0.87, however, for addiction to online game and social-emotional wellbeing it was found to be .86, and .88 respectively. All Cronbach's alpha coefficient values were acceptable to achieve the objectives of this study (Obiedat et al., 2016).

Results

The first objective was concerned with the measurement of level of addition to online games, social-emotional wellbeing, and academic performance. The finding for this objective is given below

Table 1. Descriptive statistics about level of addiction to online games

Factors	N	Mean	SD	Level
Intension to play		3.26	1.33	
Social Interaction	322	2.83	1.41	High
Time Flexibility		3.18	1.34	
Overall		***3.09***	***1.36***	

Data in table-1 reveals that the total items' mean ratings of 9th grade students' responses regarding addiction to online games ranged from 2.83 to 3.26 on Likert type scale of 1 to 5. The overall mean score was found to be 3.09 (SD = 1.36) and based on scoring criteria the mean value lies in the range of high level. Therefore, high level of addiction to online games among 9th grade students was found.

Table 2. Descriptive statistics about level of Social-emotional Well-being

Factors	N	Mean	SD	Level
Perceived stress		3.13	1.23	
Self-efficacy		3.36	1.17	
Loneliness	322	3.07	1.08	High
Social support		3.16	1.20	
Overall		***3.18***	***1.17***	

Table-2 depicts that the total items' mean ratings of 9th grade students' responses towards social-emotional well-being ranged from 3.07 to 3.36 on Likert type scale of 1 to 5. The overall mean score was found to be 3.18 (SD = 1.17) and based on scoring criteria the mean value lies in the range of moderately high level. Therefore, a moderately high level of the social-emotional well-being of students of 9th grade as per their self-reported data was found.

Table 3. Descriptive statistics about level of Academic Performance

Criterion in terms of marks	Level	Frequency	Percent	Achieved Level
40% to 59%	Low	211	66	
60% to 79%	Moderately high	87	27	Low
80% to 99%	Very high	24	7	
Overall		***322***	***100***	

Table-3 refers that the percentage of marks obtained by 9th grade students in their final examination as academic performance. 211 (66%) students obtained marks ranged from 40% to 59%, 87 (27%) students obtained marks ranged from 60% to 79%, and 24 (7%) students obtained marks ranged from 80% to 99%. Based on devised criteria a low level of academic performance of students of 9th grade was found.

The second objective was to determination the effect of addiction to online games on social-emotional well-being and academic performance of 9th grade students. The finding is as under:

Table 4. Pearson correlation between addiction to online games and social-emotional well-being

		Addiction to Online games	Social-emotional well-being
Addiction to online games	Pearson correlation	1	-.341**
	Sig. (2-tailed)		.000
	N	320	319
Social-emotional well-being	Pearson correlation	-.341**	1
	Sig. (2-tailed)	.000	
	N	319	319

**. Correlation is significant at the 0.01 level (2-tailed)

The data on Table 4, is indicating that a negative correlation was found between addiction to online games and social-emotional well-being of 9th grade students with the coefficient of 34% (*r* = - .341; *p* < *.01, N=320*). Moreover, the value of r = -.341 shows significant high effect of addiction to online games on social-emotional well-being. It means as the level of addiction to online games is increased thereby resulting in a lower level of students' social-emotional well-being.

Table 5. Linear Regression analysis between Addiction to online games and Social-emotional well-being

Variables	B	Beta	SE
Constant	.14		5.00
Addiction to online games	-.80	-.341	.096

Dependent variable = Social-emotional well-being R^2 =.17 N= 320 *P<.001*

To test the hypothesis, the Table-5, shows that when the independent variable is constant, students' social-emotional well-being was predicted to decrease by 0.14%. However, students' addiction to online games (independent variable) is predicted to decrease social-emotional well-being (dependent variable) by -.80%. It shows that for any additional unit of students' addiction to online games, their social-emotional well-being is predicted to decrease by 0.80%. Based on the obtained results, addiction to online games has a significant effect on the social-emotional well-being of students. Thus, the findings revealed that students' addiction to online games has a negative effect on their social-emotional well-being. Similarly, the findings also exposed that addiction to online games serves as a good predictor of students' social-emotional well-being. Hence the findings are supporting the formulated hypothesis such as "a*ddiction to online games has a significant negative effect on social-emotional wellbeing levels in students", which means* that as *online games in* students are bigger, their performance drops/lesser.

Table 6. Pearson correlation between Addiction to online games and Academic Performance

		E-gaming addiction	Academic performance
Addiction to online games	Pearson correlation	1	-.329
	Sig. (2-tailed)		.002
	N	320	319
Academic performance	Pearson correlation	-.329	1
	Sig. (2-tailed)	.002	
	N	319	320

**. Correlation is significant at the 0.01 level (2-tailed)

The data on Table 6, is showing a negative correlation between addiction to online games and academic performance of 9th grade students with the coefficient of 32% (*r* = - .329; *p* < *.01, N=320*). Moreover, the value of r = -.329 indicates a significant high effect of addiction to online games on academic attainment in the 9th grade students. It means as the level of addiction to online games is increased thereby resulting in a lower level of students' academic performance. The negative value of sample correlation coefficient (r) implies that if there higher the level of addiction to online games thereby resulting in a lower the level of academic performance.

Table 7. Regression coefficients of E-gaming addiction and academic performance

Variables	B	Beta	SE
Constant	.13		5.00
Addiction to online games	-.80	-.341	.095

Dependent variable = Academic performance R^2 =.18 N= 320 *P<.001*

Data from the table-7, when the independent variable is constant, students' academic performance was predicted to increase by 0.13%. However, students' addiction to online games (independent variable) is predicted to decrease academic performance (dependent variable) by -.80%. That shows that for any additional unit of students' addiction to online games, their academic performance is predicted to decrease by .80%. Based on the obtained results, addiction to online games has significant effect

on the academic performance of 9th grade students. The findings showed that students, addiction to online games had a negative effect on students' academic performance., moreover, the findings also revealed that addiction to online games serves as a good predictor of students' academic performance. Hence the findings are supporting the formulated hypothesis such as "a*ddiction to online games has a significant negative effect on academic performance of students", which means* that as *online games in* students are increased, their academic performance decrease/lesser.

Discussions

The results of the present study revealed a negative relationship between addiction to online games and social emotional wellbeing. Wei et al. (2012) conducted a study on the association between online gaming, social phobia, and depression, and reported a positive correlation between gaming hours, depressing symptoms, somatic symptoms, and pain symptoms. Furthermore, Schimit & Monteiro (2011) also confirmed that online game dependency for longer periods of time causes higher scores for aloneness/isolation from social networks and depression. Whereas lower scores for social belonging in real life, self-esteem, and reduced ability to survive with emotional problems compared with those who are less addicted. Moreover, it could be explained that extreme game-playing caused muscle pain, eye strain, lack of sleep, insufficient exercise, and even changes in diet which impact on social and emotional behavior of students.

The present study showed the negative effect of addiction to online games on social emotional wellbeing. Students were found suffering from somatic symptoms, anxiety, insomnia, and social dysfunction because they were more addicted. If a student is more addicted to playing games, then he/she could suffer from behavioral issues which resulting in imbalance in social and emotional wellbeing. In a study, Hellström et al. (2015) also found a same result that excessive gaming had a negative influence on academic tasks, sleep, relations with friends and family, and other activities.

Weaver et al., (2013) have discovered the association between online games, and their effect on time management skills, study habits, and student Grade Point Average (GPA). The results revealed that playing online games correlates to lower GPAs. And the statistically significant relationship was not found between online game usage and the variables of time management skills/study habits. Present study findings also revealed an insignificant relationship between gaming addiction and academic performance. However, (Brunborg et al., 2014; Sahin et al., 2016) also found no relationship between game addiction and academic success.

The current research study exposed a negatively effect of addiction to online games with social-emotional wellbeing. Pervious research has supported the results such as problematic or excessive utilization of internet gaming leaded to a negative influence on sleep and highly related with sleep problems like insomnia, somatic symptoms, lesser sleep duration, and bad quality of sleep which impacted on social and emotional wellbeing. Study added that students with overuse of online games were more likely to go late to bed for sleeping thereby unable to focus their studies, fail to engage themselves in their studies and not consistently manage their time for study (Hussain et al., 2009).

A previous study confirms that playing online games reduces the amount of time spent engaging in educational pursuits, which would negatively affect academic performance (Weis & Cerankkosky, 2010). While the present study is also supported by previous studies that engaging in online games has a negative effect on academic performance. Moreover, in the regression analysis, the present study results showed that addiction to online games had a statistically insignificant negative effect on academic performance which indicates that addiction to online games have a significant harmful effect on academic performance. It can be concluded that students balance their academic activities and online gaming (Drummond & Sauer, 2014).

It has seen that online games addiction can have substantial negative effects on the social & emotional wellbeing and academic performance of students. Consequences of too much gaming including lack of sleep, poor concentration, and decreased cognitive function can lead to social and emotional issues that effect on academic performance (Jackson et al., 2011). One of the most significant effects of online games addiction on students is a sedentary lifestyle. Sitting for prolonged periods of time obstacle in performing any physical activity impacts on sleep patterns, leading to insomnia and fatigue, which can negatively impact academic performance (Kim & So, 2012). Mental health issues such as anxiety and depression can also result from online gaming addiction, as students may become isolated and withdraw from social interactions. This can lead to a lack of emotional support and feelings of loneliness, which can impact academic performance and overall well-being (Singh & Barmola, 2015). Excessive gaming can also lead to poor time management skills, as students may prioritize gaming over other important activities such as studying and completing assignments. This can lead to poor academic performance and a lack of motivation to achieve academic goals.

Conclusion

The study concluded that the effect of addiction to online games on the social emotional wellbeing and academic performance of 9th grade students. It was concluded that a moderately high level of addiction to online games as well as social-emotional wellbeing whereas a low level of academic performance was also found. There is negative effect of addiction to online games on social emotional wellbeing status of students, furthermore, addiction to online games has significant effect on the academic performance of 9th grade students. The current research study exposed a negatively effect of addiction to online games with social and emotional issues including somatic symptoms, anxiety, insomnia, and social dysfunction. Study further concluded that students with overuse of online games were more likely to go late to bed for sleeping thereby unable to focus their studies, fail to engage themselves in their studies and not consistently manage their time for study. It is important for students to maintain a healthy balance between gaming and other activities to prevent the negative effects of online gaming addiction and to achieve academic success. It is recommended that awareness may be initiated through social media platforms on signs and symptoms of gaming on daily activities, physical health, and social relationships. Furthermore, parents may keep their children's phones out of the bedroom so that they won't play at night and strictly set specific number of hours to play per day so that

they can manage their time for studies. Teachers may motivate students to participate in creative activities to renovate their bad routine into a good one.

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References
1. Adinolf, S., and Turkay, S. (2018, October). Toxic behaviors in Esports games: player perceptions and coping strategies. In Proceedings of the 2018 Annual Symposium on Computer-Human Interaction in Play Companion Extended Abstracts (pp. 365-372).
2. Anand, V. (2007). A Study of Time Management: The Correlation between Video Game Usage and Academic Performance Markers. CyberPsychology & Behavior 10 (4): 552–559.
3. Anderson, C.A., and Dill, K.E. (2000). Video Games and Aggressive Thoughts, Feelings, and Behavior in the Laboratory and in Life. Journal of Personality and Social Psychology 78 (4): 772–790.
4. Anierobi, E. I., Etodike, C. E., Anierobi, E. I., Okeke, N. U., & Ezennaka, A. O. (2021). Social media addiction as correlates of academic procrastination and achievement among undergraduates of Nnamdi Azikiwe University Awka, Nigeria. *International Journal of Academic Research in Progressive Education and Development*, *10*(3), 20-33.
5. Auer, M., & Griffiths, M. D. (2022). Gambling before and during the COVID-19 pandemic among online casino gamblers: An empirical study using behavioral tracking data. International Journal of Mental Health and Addiction, 20(3), 1722-1732.
6. Babbie, Earl R. (2010). The Practice of Social Research (12th Ed). CA: Wadsworth Cengage.
7. Babic M.J., Smith J.J., Morgan P.J., Eather N., Plotnikoff R.C., Lubans D.R.(2017). Longitudinal associations between changes in screen-time and mental health outcomes in adolescents. *Ment. Health and Phys. Act-* 2017;12:124–131.
8. Brown, RIF. (1997) A theoretical model of the behavioural addictions – applied to offending. In Addicted to Crime (Hodge Je, Mcmurran M And Hollin Cr, Eds), pp 13–66, Wiley, Chi Chester, UK.
9. Brunborg, G. S., Mentzoni, R. A., & Froyland, L. R. (2014). Is video gaming, or video game addiction, associated with depression, academic achievement, heavy episodic drinking, or conduct problems? Journal of Behavioral Addictions, 3(1), 27-32. DOI: 10.1556/jba.3.2014.002
10. Byun, S., Ruffini, C., Mills, Je., Douglas, Ac., Niang, M., Stepchenkova, S., Lee, Sk., Loutfi, J., Lee, Jk., Atallah, M., and Blanton, M. (2009). Internet addiction: met synthesis of 1996–2006 quantitative research. CyberPsychology & Behavior 12(2), 203–207.
11. Caratiquit, K., & Pablo, R. (2021). Exploring the practices of secondary school teachers in preparing for classroom observation amidst the new normal of education. *Journal of Social, Humanity, and Education*.
12. Charlton, J. P., & Danforth, I. D. (2010). Validating the distinction between computer addiction and engagement: online game playing and personality. Behaviour & Information Technology, 29(6), 601–613.
13. Chen, S. Y., & Fu, Y. C. (2009). Internet use and academic achievement: gender differences in early adolescence. *Adolescence*, *44*(176).
14. Cheung, J. C. S., Chan, K. H. W., Lui, Y. W., Tsui, M. S., & Chan, C. (2018). Psychological well-being and adolescents' internet addiction: A school-based cross-sectional study in Hong Kong. *Child and Adolescent Social Work Journal*, *35*, 477-487.
15. De Pasquale, C., Sciacca, F., Conti, D., Pistorio, M. L., Hichy, Z., Cardullo, R. L., & Di Nuovo, S. (2021). Relations between mood states and eating behavior during COVID-19 pandemic in a sample of Italian college students. *Frontiers in Psychology*, *12*, 684195.
16. Dormans, J. (2010, June). Adventures in level design: generating missions and spaces for action-adventure games. In Proceedings of the 2010 workshop on procedural content generation in games (pp. 1-8).
17. Drummond, A., & Sauer, J. D. (2014). Video-games do not negatively impact adolescent Academic performance in science, mathematics or reading. PloS one, 9(4), e87943.
18. Dumrique, D., & Castillo, J. G. (2018). Online gaming: Impact on the academic performance and social behavior of the students in Polytechnic University of the Philippines Laboratory High School. *KnE Social Sciences*, 1205-1210.
19. Ferraro, G., Caci, B., D'amico, A., and Blasi, D. (2007). Internet addiction disorder: an Italian study. CyberPsychology & Behavior 10(2), 170–175.
20. Gobet, F., Retschitzki, J., and de Voogt, A. (2004). Moves in mind: The psychology of board games. Psychology Press.
21. Hellström, C., Nilsson, K. W., Leppert, J., & Åslund, C. (2015). Effects of adolescent online gaming time and motives on depressive, musculoskeletal, and psychosomatic symptoms. Upsala journal of medical sciences, 120(4), 263-275.
22. Hur, M. (2006). Demographic, habitual, and socioeconomic determinants of internet addiction disorder: an empirical study of Korean teenagers. CyberPsychology & Behavior 9(5), 514–525.
23. Hussain, Z., and Griffiths, M. D. (2009). Excessive use of massively multi-player online role-playing games: a pilot study. Int. J. Mental Health Addict. 7:563. doi: 10.1007/s11469-009-9202-8.
24. Jackson, L. A., Von Eye, A., Fitzgerald, H. E., Witt, E. A., & Zhao, Y. (2011). Internet use, videogame playing and cell phone use as predictors of children's body mass index (BMI), body weight, academic performance, and social and overall self-esteem. *Computers in Human Behavior*, *27*(1), 599-604.

25. Jansz, J., and Tanis, M. (2007). Appeal of playing online first-person shooter games. CyberPsychology & behavior, 10(1), 133-136.
26. Johnson J., (2021), Leading online markets based on penetration rate 2021, https://www.statista.com/statistics/227082/countries-with-thehighest-internet-penetration-rate.
27. Iowa State University, 2011. Risks, Consequences of Video Game Addiction Identified in New Study. ScienceDaily. [Online]. Available at: < http://www.sciencedaily.com/releases /2011/01/110119120550.htm > (Accessed 24th March, 2011).
28. Karapetsas, A., Karapetsas, V., Zygouris, N., & Fotis, A. (2014). Internet gaming addiction. Reasons, diagnosis, prevention and treatment. Encephalos, 51, 10-14.
29. Kim, D. H., & So, W. Y. (2012). The relationship between daily Internet use time and school performance in Korean adolescents. *Open Medicine*, *7*(4), 444-449.
30. Kordrostami, S. (2015). E-Gaming Learning Method. The University of Western Sydney.
31. Kuss, D. J., & Griffiths, M. D. (2012). Online gaming addiction in children and adolescents: A review of empirical research. *Journal of behavioral addictions*, *1*(1), 3-22.
32. Lambić, D. (2016). Correlation between Facebook use for educational purposes and academic performance of students. *Computers in Human Behavior*, *61*, 313-320.
33. Lee, C., & Kim, O. (2017). Predictors of online game addiction among Korean adolescents. *Addiction Research & Theory*, *25*(1), 58-66)
34. Ng, B., & Wiemer-Hastings, P. (2005). Addiction to the internet and online gaming. *Cyberpsychology & behavior*, *8*(2), 110-113.
35. Obiedat, D. H; Kayed, A; & Adass, A. (2016). Scientific research: understandable, tools and methods. Dar Alfiker: Publishers and distributors. Amman, Jordan
36. Raith, L., Bignill, J., Stavropoulos, V., Millear, P., Allen, A., Stallman, H. M., ... & Kannis-Dymand, L. (2021). Massively multiplayer online games and well-being: A systematic literature review. *Frontiers in Psychology*, *12*, 698799.
37. Ramadan, N. (2020). Social Relations of Online Gaming Users PUBG (Model). Arab Journal for Scientific Publishing, 14, 446-498.
38. Sahin, S., Arseven, Z., & Kiliç, A. (2016). Causes of Student Absenteeism and School Dropouts. *International Journal of Instruction*, *9*(1), 195-210.
39. Sahu, P. (2020). Closure of universities due to coronavirus disease 2019 (COVID-19): impact on education and mental health of students and academic staff. *Cureus*, *12*(4).
40. Schimit, P., & Monteiro, L. (2011). A vaccination game based on public health actions and personal decisions. *Ecological Modelling*, *222*(9), 1651-1655.
41. Siegel, S., Haddock, B., Dubois, A., and Wilkin, L. (2009). Active video/arcade games (exergaming) and energy expenditure in college students. International journal of exercise science, 2(3), 165.
42. Singh, N., & Barmola, K. C. (2015). Internet addiction, mental health and academic performance of school students/adolescents. *Int J Indian Psychol*, *2*, 98-108.
43. Skoric, M. M., Teo, L. C. T., & Neo, R. L. (2009). Children and video games: Addiction, engagement, and scholastic achievement. CyberPsychology & Behavior, 12, 567–572.
44. Syracuse University, 2007.Online Multiplayer Video Games Create Greater Negative Consequences, Elicit Greater Enjoyment than Traditional Ones. Science Daily.(Online). Available at: [Accessed 24th March, 2011].
45. Taylor, D., Mwiki, J., Dehghantanha, H., Akibini, A., Choo, A., Hammoudeh, K., and Parizi, R. (2019). Forensic investigation of cross platform massively multiplayer online games: Minecraft as a case study. Science & Justice, 59(3), 337-348.
46. Wan, C. S., & Chiou, W. B. (2006). Why are adolescents addicted to online gaming? An interview study in Taiwan. *Cyberpsychology & behavior*, *9*(6), 762-766.
47. Wang, X., Abdelhamid, M., & Sanders, G. L. (2021). Exploring the effects of psychological ownership, gaming motivations, and primary/secondary control on online game addiction. *Decision Support Systems*, *144*, 113512.
48. Weaver, J., Kim, P., Metzer, R. L., & Szendrey, J. M. (2013). The impact of video games on student GPA, study habits, and time management skills: What's the big deal. Issues in Information Systems, 14(1), 122-128.
49. Wei, H. T., Chen, M. H., Huang, P. C., & Bai, Y. M. (2012). The association between online gaming, social phobia, and depression: an internet survey. BMC psychiatry, 12(1), 1-7.
50. Weis, R., and Cerankosky, B. C. (2010). Effects of video-game ownership on young boys'
51. Academic and behavioral functioning: A randomized, controlled study. Psychological Science, 21(4), 463-470.
52. World Health Organization. Coronavirus disease 2019 (COVID-19): Situation Report, 73. https://apps.who.int/iris/handle/10665/331686 (2020).
53. Young, K. S. (2009). Understanding Online Gaming Addiction and Treatment Issues for Adolescents, the American Journal of Family Therapy, 37, pp. 355-372.
54. Zhang, F., & Kaufman, D. (2017). Massively multiplayer online role-playing games (MMORPGs) and socio-emotional wellbeing. *Computers in Human Behavior*, *73*, 451-458.