

## Psychological Impact of Internet Gaming Addiction on Undergraduate Students- A Cross -Sectional Study

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### Abstract

As more and more people join the digital age, online gaming or online video games have exploded in popularity, particularly among the young generation of teenagers and students. For many young people, taking on a new challenge in an online game provides an addicting, adrenaline-filled getaway from the stresses of real life. People have a hard time setting limits on their Internet use, which can lead to the emergence of addictive behaviours in those who play frequently. The researcher drew on two theories—the Uses and Gratification Theory (UGT) and the Theory of Planned Behavior (TPB)—to examine the impact of the three primary considerations (independent variables) in this study: social context, psychological make-up, and media exposure. This study's purpose, then, is to look at what makes undergraduates vulnerable to developing an addiction to internet gaming or online video games. In this qualitative study, 387 participants filled out a questionnaire that was delivered via a Google Form. The respondents were chosen at random from the population of college students in Delhi and the National Capital Region. These findings highlight the role that social and psychological influences, as well as the influence of the media, play in the development of online gaming addiction among college students. Students and faculty in the College of Business showed a moderate but manageable addiction to online gaming. The findings of this study should serve as a useful resource for many people, including parents, teachers, school administrators, researchers, and the general public, who are all in a position to offer strategic and proactive advice to those who are interested in playing video games online.

**Keywords:** Internet, Gaming, Videos, Factors, Students

### 1. INTRODUCTION

As a result of the prevalence of the internet and other forms of digital media in modern life, many students have found themselves unable to resist the allure of online gaming. Because most games available now are played through the internet, the medium has evolved to include games with increasingly gorgeous graphics, imagery, realistic characters, and extremely complicated game mechanisms. The professor also noted that the vast majority of students may safely enjoy internet gaming(Farchakh et al., 2020). Pathological gamers show signs of addiction such as preoccupation with the game, inability to stop playing, increased tolerance, secretive behaviour, and risking important relationships and opportunities.

Online gaming have sped up the evolution of the internet, making it more affordable for people to engage in online gaming. This has resulted in certain unavoidable shifts in people's routines and practices. Previous research has shown that students are increasingly engaging in online gaming or online video games due to the accessibility of these mediums (students can play on virtually any device, including but not limited to smartphones, tablets, laptops, and desktop computers) and the fact that the term "game" refers to a simulated competition in which players engage to achieve a tangible goal(Zul Kamal & Wok, 2020).

A recent study estimates that 44% of the global online population is gamers, mostly because they spend so much time engaging in online gaming. This figure includes the 700 million people who play online games via a mobile device. Online games present simulated circumstances in which players must meet a variety of objectives in order to progress to later levels. It's safe to say that most people have had a good time playing online games, especially students(Granic, Lobel, & Engels, 2014). They're entertaining, and it may be hard to stop playing if you become hooked on the thrill of discovery or the rush of completing a challenge. According to the researchers, online games have developed and are now widely available on the web. Games like World of Warcraft and Elder Scrolls Online are two examples of MMOGs, or “*massively multiplayer online games. Multiplayer Online Role Playing Games (MMORPGs)*” have attracted millions of concurrent users(Navaneetham & Chandran, 2018).

Addiction is the state of being dependent upon a drug or behaviour for satisfaction. Because of how easily available internet games have become, people of all ages, and especially students, are at risk of developing an addiction to them. According to the researchers, modern online games also provide players with the option to use cloud storage for saving and restoring their game progress.

While Icek Ajzen created the Theory of Planned Behavior in 1980, “*Elihu Katz and Jay Blumler established the Uses and Gratification Theory (UGT)*” in 1974. Thus, the purpose of this investigation is to pinpoint the causes of compulsive video game playing among college students. The goal of this study is to identify risk factors for students developing an addiction to online gaming.

## **2. REVIEW OF LITERATURE**

The term "technology" refers to the human-made system that entails the application of skill, study, and planning to the creation of tools and methods for accomplishing predetermined ends. As a result of this constant evolution, new types, species, or upgrades and alterations to existing technologies are always being introduced. As the professor pointed out, the development of new technologies is a methodical process that cannot be reduced to the change of a single component or artefact(Wang, Sheng, & Wang, 2019). Many more technologies and supporting infrastructures are needed for technological progress to be made. As time has progressed, technology became an integral major part of our daily lives, to the point that we cannot imagine a world without our televisions, smartphones, and the newest internet gadgets(Müezzini, 2015).

According to the expert, the advancement of technology has altered society in a way that impacts individuals everywhere. Lamey (2018) argues that the proliferation of internet connectivity and related technologies has fundamentally altered modern society. With the advent of mobile devices like smartphones and tablets, physical media players have mostly become useless. Most people can now view the sights of other countries without actually travelling there, and they can experience the thrill of a performance or game that took place in another country without actually travelling there themselves, all thanks to the advancements in information and communication technology made possible by the internet. Because different societal demands give rise to the need for different technologies, and because the development of new technologies inevitably gives rise to the emergence of new social demands, technology and society are inextricably linked(Aquino, 2019).

Technology is widely available and strongly encouraged in today's culture because of its potential to improve the quality of life for the vast majority of people. Computers and communication technologies allow for distant communities of actors who rarely or never meet in person to collaborate in ways that complement traditional face-to-face and textual means of communication(S, Aswathy, & E, 2019). The worldwide and always-on nature of these communication infrastructures means that these technologies can be used for both asynchronous and synchronous interactions between people and businesses around the clock.

Most humans are sociable creatures, and the widespread adoption of technological solutions to problems has been taken as both a sign of a community's openness to new ideas and a prerequisite to survival. The internet is a fantastic tool for finding information and expanding one's horizons, thus it should come as no surprise that those who seek to expand their horizons often turn to the internet to do it. As a result of the rise of digital computer

technology, the majority of people will acquire a dependency on electronic media, particularly on online gaming(Hjelpdahl, 2020).

### 3. RESEARCH GAP

The issue of addiction to online games has garnered a lot of attention, and this particular game is meant to hook pupils for a whole four hours. The expert claimed that young people and students could find solace in online gaming because it would provide them with "an escape from reality" and because most would experience a "addictive, adrenaline high" while confronting a new challenge in a game. The internet has become a cultural phenomenon, allowing people from all over the world to connect and engage in activities like playing video games online. Most people would prefer be playing games on their phones than conversing with others. Neither male nor female students can be blamed for associating the availability of online gaming, the professor added, because individuals are finding it simpler to accomplish anything, including playing an online game, thanks to modern technology.

#### Objectives of the study

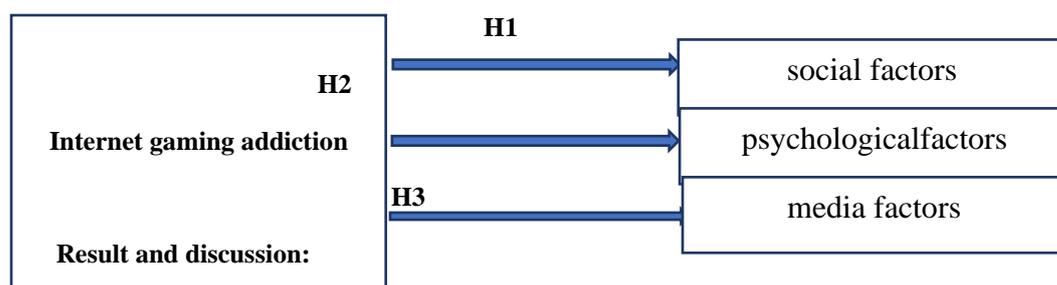
- To identify the social factors that affected internet gaming addiction among undergraduate students.
- To determine the psychological factors that contributed to internet gaming addiction among undergraduate students.
- To investigate the media factors associated with internet gaming addiction among undergraduate students.

#### Hypothesis of the study

- H01: There is no significant social factors influencing on internet gaming addiction among undergraduate students.
- Ha1: There is significant social factors influencing on internet gaming addiction among undergraduate students.
- H02: There is no significant psychological factors influencing on internet gaming addiction among undergraduate students.
- Ha2: There is significant psychological factors influencing on internet gaming addiction among undergraduate students.
- H03: There is no significant media factors influencing on internet gaming addiction among undergraduate students.
- Ha3: There is significant media factors influencing on internet gaming addiction among undergraduate students.

### 4. RESEARCH METHODOLOGY

The study employed the use of a simple random sampling method by the researcher. The entire sample size for this study is 387 undergraduates. The study's data gathering went smoothly, though, because 387 undergraduates were chosen at random. After researching the causes of internet gaming addiction among undergraduates and the elements that contribute to it at length, a series of surveys is produced. Prior to distribution, the questionnaire is mapped out and checked for validity and reliability. The questions on the survey were all pick-one-of-threes. The Likert Scale.



**Table 1: Age distribution**

Age	Frequency	Percentage
18-25	39	10.07%
26-35	76	19.63%
36-45	90	23.25%
46-55	123	31.78%
Above 55	59	15.24%

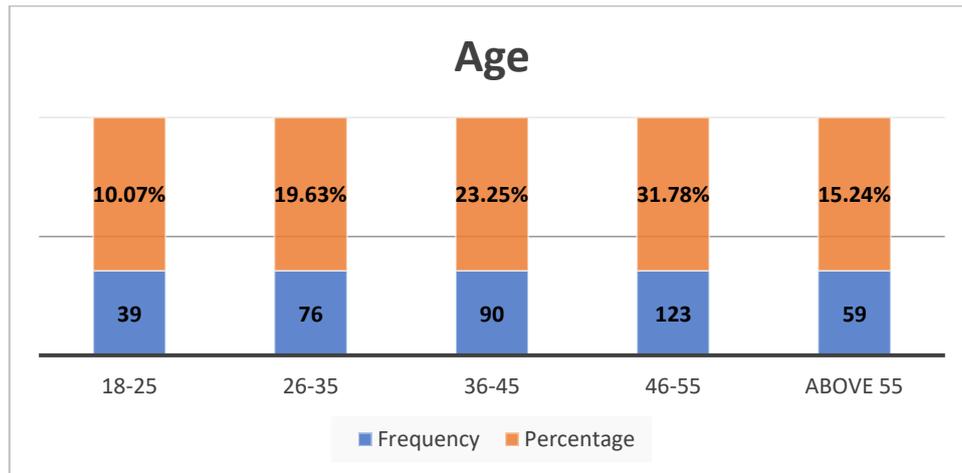


Table 1 stated the age distribution analysis and documented that the majority of employees working the organisations were of the age of 46-55 years (n=123, 31.78%) followed by 36-45 years (n=90, 23.25%). The employees above 55 years of age (n=59, 15.24%) are found to be least in the study.

**Table 2: Gender**

Gender	Frequency	Percentage
Male	126	32.55%
Female	261	67.44%

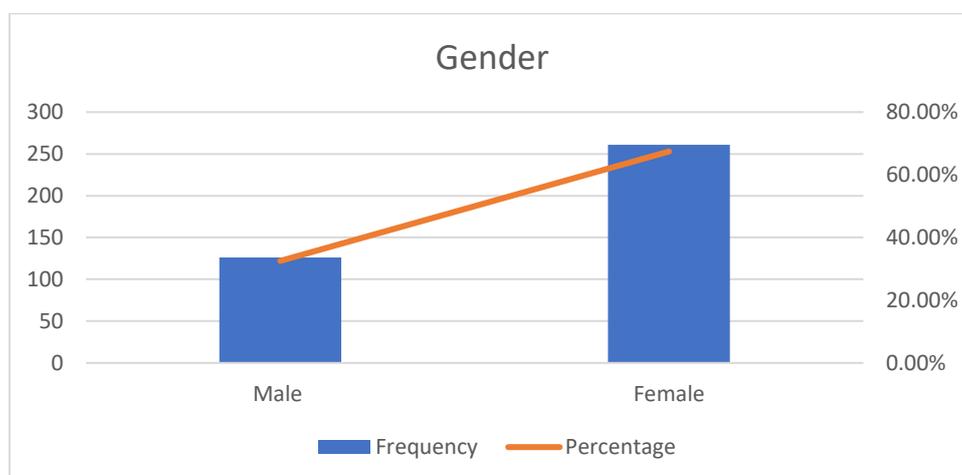


Table 2 found the gender analysis and documented that majority of respondents in the study were Female (n=261, 67.44%). Only male participated in the study were few (n=126, 32.55%).

**Table 3: Marital Status**

Marital Status	Frequency	Percentage
Single	117	30.23%
Married	150	38.75%
Others	120	31%

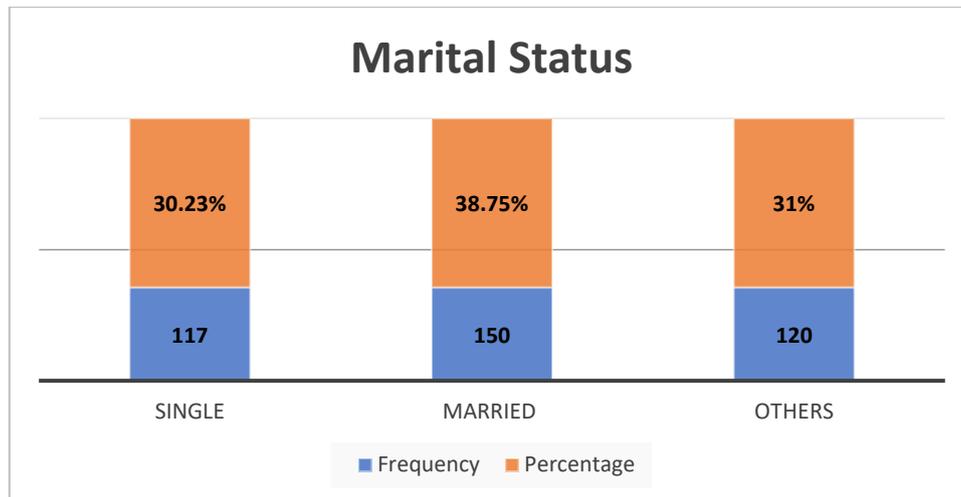


Table 3 documented the marital status and stated that majority of respondents were married (n=150, 38.75%) followed by single (n=117, 30.23%). Others found to be least (n=120, 31%) in the study.

**Table 4: Educational Qualification**

Educational Qualification	Frequency	Percentage
10 <sup>th</sup>	57	14.72%
12 <sup>th</sup>	74	19.12%
Graduation	77	19.89%
PG & Higher	56	14.47%
Professional degree	123	31.78%

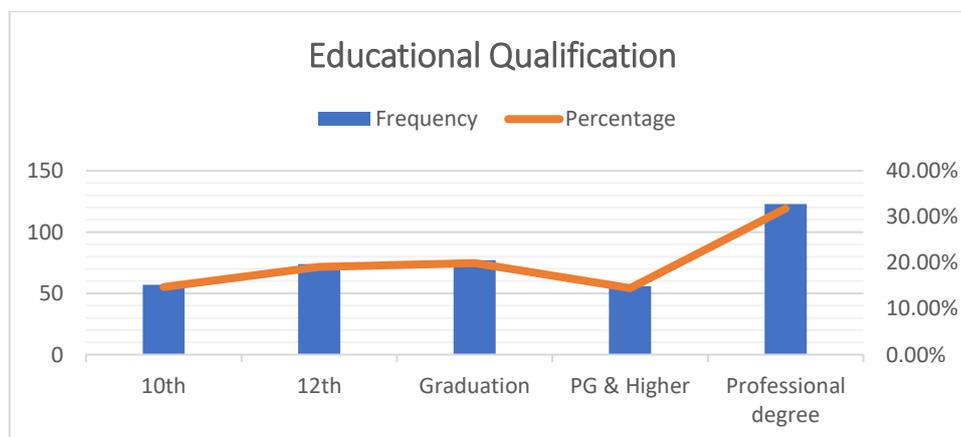


Table 4 stated the educational qualification and documented that majority of respondents holding professional degree (n=123, 31.78%) followed by Graduation (n=77, 19.89%). PG and Higher qualification found to be least in the study (n=56, 14.47%).

**Table 5:** Annual income

Annual income	Frequency	Percentage
Up to 1,00,000	96	24.80%
1,00,001 - 2,00,000	88	22.73%
2,00,001 - 5,00,000	79	20.41%
5,00,001 – 10,00,000	73	18.86%
Above 10,00,000	51	13%

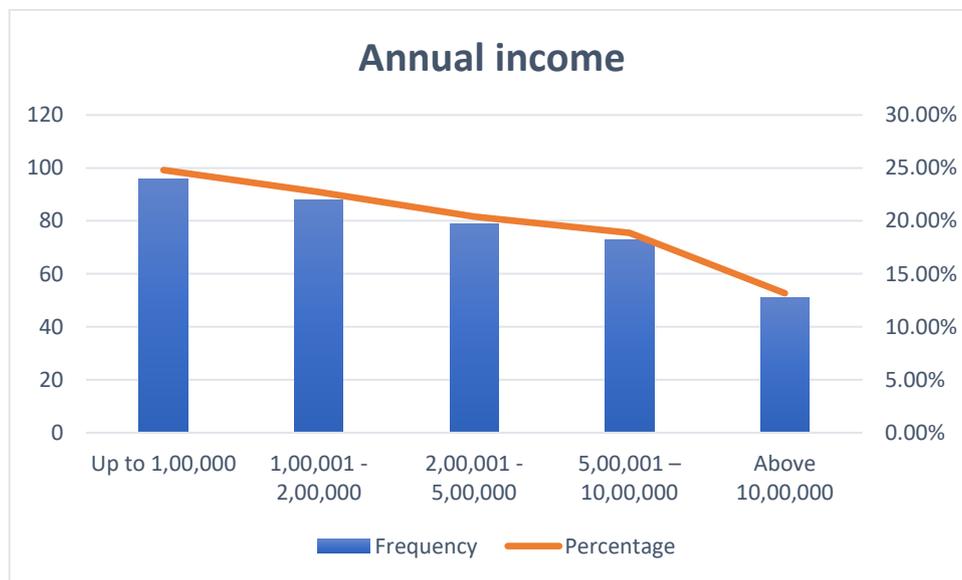


Table 5 documented the annual income and stated that up to Rs. 100000 is the annual income of the majority of respondents (n=96, 24.80%) followed by Rs. 100001-200000 (n=88, 22.73%). Above 1000000 (n=51, 13%) annual income found to be least in the study.

**Table 6:** Reliability test

S.No.	Factors understudy	Cronbach Alpha	Items
1.	Social factors	7.69	5
2.	Psychological factors	8.12	6
3.	Media factors	7.77	6

Table 6 stated the reliability test and stated that the psychological factors (CA=8.12, N=6) estimated Cronbach alpha value is the most followed by media factors (CA=7.77, N=6). Social factors (CA=7.69, N=5) found to be least in the study.

**Table 7:** Descriptive test (Social factors)

S.No.	Social Factors understudy	Mean	Standard deviation
1.	Family influence	3.89	.021
2.	Perceived parental approval	4.12	.321
3.	Lack of parental supervision	3.77	.453
4.	Social interaction	3.23	.123
5.	Promotional activities	3.03	.645

Table 7 documented the estimation of social factors understudy and documented that perceived parental approval (mean =4.12 and standard deviation=.321) influence the most as social factor followed by family influence (Mean =3.89 and standard deviation=.021). The promotional activities (Mean =3.03 and standard deviation=.645) found to be the least social influencer factor under the study.

**Table 8:** Descriptive test (Psychological factors)

S.No.	Psychological Factors understudy	Mean	Standard deviation
1.	Emotional satisfaction	3.73	.043
2.	Stress relief	4.10	.011
3.	Low self esteem	3.99	.523
4.	Negative obsession	3.89	.021
5.	Impulsivity	4.12	.321
6.	Joylessness	4.08	.343

Table 8 documented the estimation of psychological factors understudy and documented that Impulsivity(mean =4.12 and standard deviation=.321) influence the most as psychological factor followed by Stress relief (Mean =4.10 and standard deviation=.011). The Emotional satisfaction (Mean =3.73 and standard deviation=.043) found to be the least psychological influencer factor under the study.

**Table 9:** Descriptive test (Media factors)

S.No.	Media Factors understudy	Mean	Standard deviation
1.	Personal Identity	3.73	.043
2.	self-confidence	4.17	.011
3.	personal stability	3.99	.523
4.	Integrity	3.89	.021
5.	the need for self-respect	4.12	.321
6.	Social status	4.08	.343

Table 9 documented the estimation of media factors understudy and documented that self-confidence (mean =4.17 and standard deviation=.011) influence the most as media factor followed by the need for self-respect (Mean =4.12 and standard deviation=.321). The Personal Identity (Mean =3.73 and standard deviation=.043) found to be the least media influencer factor under the study.

**Table 10:** t test (social factors)

S.No.	Social Factors understudy	T test
1.	Family influence	124.021
2.	Perceived parental approval	129.321
3.	Lack of parental supervision	102.453

<b>4.</b>	<b>Social interaction</b>	116.123
<b>5.</b>	<b>Promotional activities</b>	119.645

Table 10 documented the estimation of social factors understudy and documented that perceived parental approval (t=129.321) influence the most as social factor followed by family influence (t=124.021). The Lack of parental supervision (t=102.453) found to be the least social influencer factor under the study.

**Table 11:** t test (Psychological factors)

<b>S.No.</b>	<b>Psychological Factors understudy</b>	<b>T test</b>
<b>1.</b>	<b>Emotional satisfaction</b>	101.043
<b>2.</b>	<b>Stress relief</b>	131.011
<b>3.</b>	<b>Low self esteem</b>	117.523
<b>4.</b>	<b>Negative obsession</b>	113.021
<b>5.</b>	<b>Impulsivity</b>	167.321
<b>6.</b>	<b>Joylessness</b>	103.343

Table 11 documented the estimation of psychological factors understudy and documented that Impulsivity(t=167.321) influence the most as psychological factor followed by Stress relief (t=131.011). The Emotional satisfaction (t=101.043) found to be the least psychological influencer factor under the study.

**Table 12:** t test (Media factors)

<b>S.No.</b>	<b>Media Factors understudy</b>	<b>T test</b>
<b>1.</b>	<b>Personal Identity</b>	132.043
<b>2.</b>	<b>self-confidence</b>	103.011
<b>3.</b>	<b>personal stability</b>	115.523
<b>4.</b>	<b>integrity</b>	176.021
<b>5.</b>	<b>the need for self-respect</b>	167.321
<b>6.</b>	<b>Social status</b>	112.343

Table 12 documented the estimation of media factors understudy and documented that integrity (t=176.021) influence the most as media factor followed by the need for self-respect (t=167.321). The self-confidence (t=103.011) found to be the least media influencer factor under the study.

#### **Hypothesis testing:**

By applying descriptive statistics and t test the findings of existing study documented that null hypothesis (There is no significant social factors influencing on internet gaming addiction among undergraduate students; There is no significant psychological factors influencing on internet gaming addiction among undergraduate students; There is no significant media factors influencing on internet gaming addiction among undergraduate students) is rejected and alternative hypothesis (There is significant social factors influencing on internet gaming addiction among undergraduate students; There is significant psychological factors influencing on internet gaming addiction among undergraduate students; There is significant media factors influencing on internet gaming addiction among undergraduate students) is accepted.

#### **5. CONCLUSION AND RECOMMENDATIONS**

It's safe to say that many college students have developed dependency issues as a direct result of playing online games. Therefore, the purpose of this study was to investigate the causes of internet gaming addiction among college students in the Delhi/National Capital Region. Using a Google Form, we were able to reach 387 of our study's intended participants and collect their responses. The study's findings corroborated the researcher's

hypotheses about three key causes of online gaming addiction among college students. All of the study's questions and aims can now be considered answered. Online gaming was a modest and not too addicted hobby among college students. In addition, this study can serve as a resource for a wide range of stakeholders, including parents, teachers, school administrators, researchers, and members of the general public, to offer strategic and proactive advice on the topic of online gaming.

In sum, this study examined the causes of internet gaming addiction among college students in the Delhi/National Capital Region. Some suggestions are made for additional investigation into this topic. The researcher hopes that future studies will broaden the scope of their inquiry beyond the current study's 387 participants and use even larger samples. Perhaps in the future we'll get different outcomes if we increase the sample size to 500 participants in this study. Quantitative methods were employed exclusively in the form of descriptive statistics evaluated with SPSS software for this investigation.

Therefore, the researcher would like to advise that other researchers conduct a qualitative or experimental technique, such as interviews and focus group discussions, to get convincing study findings based on the real scenarios, for use in later studies. This is due to the fact that the questionnaire does not involve linguistic analysis, therefore the researcher may have trouble deciphering some responses. It's clear that future studies might benefit greatly from either a qualitative or experimental approach. However, the researcher advises further identification and exploration of elements that lead to online gaming addiction among university students beyond the three categories covered in this study (social factors, psychological factors, and media aspects). The research will extend beyond its current boundaries and into uncharted territory by investigating the causes and consequences of college students' addiction to online gaming.

## REFERENCES

- [1] Aquino, P. I. (2019). the Effect of Online Games To the Academic Performance of the Students in the College of Teacher Education. *International Journal of Advanced Research in Management and Social Sciences*, 8(4), 245–262. Retrieved from <https://garph.co.uk/>
- [2] ARYA, B., & SHARMA, D. (2018). AN EMPIRICAL ANALYSIS OF CORRELATION BETWEEN NUTRITIONAL INTERVENTION AND COGNITIVE FUNCTIONING OF SCHOOL CHILDREN'S. *Kaav International Journal of Arts, Humanities & Social Science*, 5(3), 1-9. <https://www.kaavpublications.org/abstracts/an-empirical-analysis-of-correlation-between-nutritional-intervention-and-cognitive-functioning-of-school-childrens>
- [3] Farchakh, Y., Haddad, C., Sacre, H., Obeid, S., Salameh, P., & Hallit, S. (2020). Video gaming addiction and its association with memory, attention and learning skills in Lebanese children. *Child and Adolescent Psychiatry and Mental Health*, 14(1), 1–11. <https://doi.org/10.1186/s13034-020-00353-3>
- [4] Granic, I., Lobel, A., & Engels, R. C. M. E. (2014). The benefits of playing video games. *American Psychologist*, 69(1), 66–78. <https://doi.org/10.1037/a0034857>
- [5] Hellström, C., Nilsson, K. W., Leppert, J., & Åslund, C. (2015). Effects of adolescent online gaming time and motives on depressive, musculoskeletal, and psychosomatic symptoms. *Uppsala Journal of Medical Sciences*, 120(4), 263–275. <https://doi.org/10.3109/03009734.2015.1049724>
- [6] Hjelpdahl, A. (2020). Online gaming: A successful life? The influence of gaming on development. *Researchgate*, (November), 40–87. <https://doi.org/10.13140/RG.2.2.34362.41922>
- [7] Madaan, G., Swapna, H. R., Kumar, A., Singh, A., & David, A. (2021). Enactment of sustainable technovations on healthcare sectors. *Asia Pacific Journal of Health Management*, 16(3), 1–9. <https://doi.org/10.24083/apjhm.v16i3.989>
- [8] Muezzin, E. (2015). An investigation of high school students' online game addiction with respect to gender. *Turkish Online Journal of Educational Technology*, 2015(1), 55–60.
- [9] Navaneetham, J., & Chandran, J. (2018). Video game use among schoolchildren and its impact on the study habits. *Indian Journal of Social Psychiatry*, 34(3), 208. <https://doi.org/10.4103/ijsp.ijsp>
- [10] Pendharkar, D. R. (2022). Analysis of Impact of Methodologies of Intelligent Automation on Service and Knowledge Work. *Kaav International Journal of Science, Engineering & Technology*, 9(3), 5-8. <https://doi.org/10.52458/23485477.2022.v9.iss3.kp.a2>

- [11] Raouf, S. Y. A., Gabr, H. M., Al-Wutayd, O., & Al-Batanony, M. A. (2022). Video game disorder and mental wellbeing among university students: a cross-sectional study. *Pan African Medical Journal*, 41. <https://doi.org/10.11604/pamj.2022.41.89.31322>
- [12] S, G., Aswathy, V., & E, D. (2019). A Study on impact of online gaming and its addiction among youth with special reference to Kerala. *International Journal of Management, IT & Engineering*, Vol. 9(Issue 6), 308–316. Retrieved from [https://www.ijmra.us/project doc/2019/IJMIE\\_JUNE2019/IJMRA-15728.pdf](https://www.ijmra.us/project doc/2019/IJMIE_JUNE2019/IJMRA-15728.pdf)
- [13] Wang, J. L., Sheng, J. R., & Wang, H. Z. (2019). The association between mobile game addiction and depression, social anxiety, and loneliness. *Frontiers in Public Health*, 7(SEP), 5–10. <https://doi.org/10.3389/fpubh.2019.00247>
- [14] Zul Kamal, N. S., & Wok, S. (2020). the Impact of Online Gaming Addiction on Mental Health Among Iium Students. *International Journal of Heritage, Art and Multimedia*, 3(11), 01–20. <https://doi.org/10.35631/ijham.311001>