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## Examining the Effects of Online Games on The Academic Performance of BPEd Students of Sultan Kudarat State University, Philippines

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### ABSTRACT

During the COVID-19 pandemic, the rise in online gaming and the absence of face-to-face education in schools has raised worries about the effect on students' academic performance. This study aimed to find out the relationship between the level of online learning and the academic performance of BPEd students. It is in this light of this study to assess the level of impact of online games to the: (1) health aspect, (2) social aspect, (3) intellectual aspect, and (4) academic performance of chosen BPEd students at Sultan Kudarat State University Access Campus. The researchers employed a descriptive-evaluative research approach since the study's findings would analyze students' engagement in online gaming applications, and the researchers used Google Forms to collect the data they required. With a total of thirty respondents, the set questionnaires employed will act as a data collection tool. Frequency count and weighted mean were the statistics employed in the investigation. According to the survey, the majority of the respondents are in the 20-year-old age group, with 40% of the respondents coming from the second-year level. It also revealed that the majority of respondents who played online games are men, accounting for 80 percent of the study's respondents. Based on the findings of this study, it can be concluded that playing online games has no substantial association with the respondents' academic success, as evidenced by their Probability-value.

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## 1. INTRODUCTION

Online gaming is one of the most commonly used recreational hobbies of many people (Islam et al., 2020; Beranuy et al., 2013). Some people have said that playing online games has a variety of reasons to play because it can be a stress reliever (Hussain & Griffiths, 2009), a challenge and competition (Hailey et al., 2011), relaxation, fun, social interaction, and even a mental escape from the real world. For most people, online gaming is one of the best past times that have to gain particularly in teenagers and students. According to Kuss and Griffiths (2011) teens who play online games are just having fun. They do not just actually play because of some sort of seriousness, but also because they just want to feel relief most especially students who are stressed out cause after doing school works and studies. The technological advancement of internet connectivity in the Philippines plays a vital role in the academic life of university students. It allows students to access the knowledge portal where vast information is provided by various information service providers. Companies like Google, Yahoo, LinkedIn, and other information and research portals provide tools for students, academicians, and professionals as a resource for work and education-related activities. The internet, as a source of knowledge, plays an important role in improving one's mind and life experiences by producing effective work in classrooms, offices, and even at home. Students in Sultan Kudarat State University ACCESS Campus particularly in BPEd Department spend too much time on online games every week and appear to suffer from diminished learning abilities, attention difficulties, low academic performance, and reduced connections with others. The goal of this study is to define the consequences of online gaming apps for students' academic success.

## 2. METHOD

The method in this study uses a Quantitative study with employed 30 selected Bachelor of Physical Education (BPEd) students out of 182 departments total population who are officially enrolled during the school year 2020 – 2021.

## 3. RESULTS AND DISCUSSION

**Table 1** shows the demographic profile of the respondents in terms of age, gender, and year level. In regards to age, respondents with the age bracket of 18 years old have a frequency of 1 and have a total percentage of 3.3%; respondents with the age bracket of 19 years old has a frequency of 5 and has a total percentage of 16.7%; respondents with the age bracket of 20 years old has a total frequency of 12 and has a total percentage of 40%; the respondents with the age bracket of 21 years old has a frequency of 7 and has a total percentage of 23.3%; the respondents with the age bracket of 22 years old has a frequency of 3 and has a total percentage of 10%; the respondents with the age bracket of 23 years old has a frequency of 1 and has the total percentage of 3.3%; respondents with the age bracket of 24 years old has a frequency of 1 and has a total frequency of 3.3%. The majority of the respondents have an age bracket of 20 years old with a frequency of 12 out of 30 respondents and has a total percentage of 40%. Secondly the demographic profile of the respondents in terms of gender, the male has a frequency of 24 and has a total percentage of 80%; the female has a frequency of 6 and has a total percentage of 20%. Thirdly the demographic profile of the respondents in terms of year level, the 1st year has a frequency of 7 and has a total percentage of 23.33%; the 2nd year has a total frequency of 12 and has a total percentage of 40%; the 3rd year has a frequency of 11 and has a total percentage of 36.67%. The majority

of the respondents are 2nd year with a frequency of 12 out of 30 respondents has a total percentage of 40% out of 100%.

**Table 1.** Demographic profile of the respondents.

	Frequency	Percentage
<b>Age</b>		
18	1	3.30 %
19	5	16.70 %
20	12	40.00 %
21	7	23.30%
22	3	10.00%
23	1	3.30%
24	1	3.30%
<b>Gender</b>		
Male	24	80.00%
Female	6	20.00 %
<b>Year Level</b>		
1 <sup>st</sup> year	7	23.33 %
2 <sup>nd</sup> year	12	40.00 %
3 <sup>rd</sup> year	11	36.67 %

**Table 2** reveals the impact of online gaming on the selected BPED students in terms of health, the respondents suffering from headaches at school due to gaming has a mean of 2.73 which is in line with the moderately agree; respondents suffer from any pain at school because of online gaming has a mean of 2.50 which in line to the moderately agree as well; the respondents who lack sleep because of gaming has a mean of 3.17 which line to the moderately agree as well; respondents whose eyes became blurry at school because of every night online gaming has a mean of 2.78 which in line to the moderately agree; and lastly, the impacts of online gaming to the selected BPED students in terms of health has a total grand mean of 2.78 which in line to moderately agree based on the interpretation of data.

**Table 2.** Level of impact to the selected BPED students in terms of health.

Parameters	Mean	SD	Description	Interpretation
I am suffering from headaches at school due to gaming	2.73	0.98	Moderately Agree	Moderate
I suffer from any pain at school because of online gaming	2.50	1.01	Moderately Agree	Moderate
I'm lacking of sleep because of gaming	3.17	1.12	Moderately Agree	Moderate
My eyes became blurry at school because of every night online gaming	2.70	1.06	Moderately Agree	Moderate
<b>Grand Mean/SD</b>	<b>2.78</b>	<b>1.04</b>	<b>Moderately Agree</b>	<b>Moderate</b>

**Table 3** reveals the impact of online gaming on the selected BPED students in terms social, the respondents answered that online games affect my school participation has a mean of 2.53 which is in line with the agreement; the respondents answered that my peers influence me to play online games has a mean of 3.73 which in line to agree as well; the respondents answered that online games affect my responsiveness in class has a mean of 2.60 which in line to disagree; the respondents who answered that online games make me socially isolated of the time in the classroom has a mean of 2.50 which in line to disagree; and lastly, the impacts of online gaming to the selected BPED students regarding on social has a total grand mean of 2.84 which is in line to moderately agree based on the interpretation of data.

**Table 3.** Level of impact to the selected BPED students in terms of social.

Parameters	Mean	SD	Description	Interpretation
Online games affect my school participation	2.53	1.11	Moderately	Moderate
My peers influence me to play online games	3.73	1.11	Agree	High
Online games affect my responsiveness in class	2.60	1.19	Disagree	Low
Online games make me socially isolated most of the time in the classroom	2.50	0.97	Disagree	Low
<b>Grand Mean/SD</b>	<b>2.48</b>	<b>2.84</b>	<b>Moderately Agree</b>	<b>Moderate</b>

**Table 4** reveals the impact of online gaming on the selected BPED students in terms of intellectual, the respondents who answered that online games do make my mind process properly during school hours has a mean of 2.53 which is in line to disagree; the respondents answered that they became absent-minded inside the school because of playing too many online games has a mean of 2.33 which in line to disagree as well; the respondents answered that due to gaming, they are having bad memorization skills has a mean of 2.30 which in line to disagree; the respondents answered that computer games make them feel irresponsible in doing school task has a mean of 2.40 which in line to disagree; and lastly, the impacts of online gaming to the selected BPED students have a total grand mean of 2.39 which in line to disagree based on the interpretation of data.

**Table 4.** Level of impact to the selected BPED students in terms of intellectual.

Parameters	Mean	SD	Description	Interpretation
Online games don not make my mind process properly during school hours	2.53	0.94	Moderately	Moderate
I became absent minded inside the school because of playing online games too much	2.33	1.12	Disagree	Low
Due to gaming, I'm having bad memorization skills.	2.30	1.12	Disagree	Low
Computer games make me irresponsible in doing my school tasks	2.40	1.13	Disagree	Low
<b>Grand Mean/SD</b>	<b>2.39</b>	<b>1.08</b>	<b>Disagree</b>	<b>Low</b>

**Table 5** reveals the impact of online gaming on the academic performance of BPED students in terms of attendance; the respondents who answered that I tend not to attend classes just to play online games have a mean of 1.47 which means moderately agree; the respondents answered that I came late in class because of playing online games has a mean of 2.43 which means disagree; the respondents answered that I don't care about how many absences do I have in class has a mean of 1.80 which means very disagree; the respondents answered that I find it hard to attend classes on time has a total mean of 2.90 which means moderately disagree; and lastly, the impacts of online gaming to the academic performance of BPED students in terms of attendance has a total grand mean of 2.15 which means disagree based on the interpretation of data. Findings indicated that online learner participation and patterns of participation were influenced by the following factors: technology and interface characteristics, content-area experience, student roles, instructional tasks, and information overload.

**Table 6** reveals the impact of online gaming on the academic performance of BPED students in terms of oral participation, the respondents answered that they enjoy participating in class discussion has a mean of 4.23 which means strongly agree; the respondents answered that I find oral participation hard to do has a mean of 3.10 which

means moderately agree; the respondents answered that I keep my oral participation active during class discussion has a mean of 3.17 which means moderately agree as well; the respondents answered that I am having a hard time to participate in class has a total mean of 1.30 which means strongly disagree; and lastly, the overall impacts of online gaming to the academic performance of BPED students in terms of oral participation has a total grand mean of 2.95 which means moderately agree based on the verbal interpretation of data.

**Table 5.** Academic performance of BPED students in terms of attendance.

Parameters	Mean	SD	Description	Interpretation
I tend not to attend classes just to play online games during school hours.	1.47	0.51	Strongly	Disagree
I came late in class.	2.33	1.12	Disagree	Low
I do not care about how many absences do I have in class.	1.80	0.41	Strongly Agree	Disagree
I find it hard to attend classes on time.	2.90	0.71	Moderately Agree	Moderate
<b>Grand Mean/SD</b>	<b>2.15</b>	<b>0.67</b>	<b>Disagree</b>	<b>Low</b>

**Table 6.** Academic performance of BPED students in terms of oral participation.

Parameters	Mean	SD	Description	Interpretation
I enjoy participating in class discussion	4.23	0.43	Strongly Agree	Very High
I find oral participation hard to do	3.10	0.48	Moderately Agree	Moderate
I keep my oral participation active during class discussion	3.17	0.38	Moderately Agree	Moderate
I am having a hard time to participate in class	1.30	0.47	Strongly Disagree	Disagree
<b>Grand Mean/SD</b>	<b>2.15</b>	<b>0.67</b>	<b>Disagree</b>	<b>Low</b>

**Table 7** reveals the impact of online gaming on the academic performance of BPED students in terms of performance, the respondents who answered I actively participate in the class activities had a total mean of 4.83 which means strongly agree; the respondents answered that I accept wholeheartedly the task given by the researchers has a mean of 3.47 which means agree; the respondents answered that I decrease my interactions to the class performance because of online games has a mean of 1.47 which means strongly agree; the respondents answered that I missed some performance task activities due to the distraction of online games; and lastly, the overall impacts of online gaming to the academic performance of BPED students in terms of oral participation has a total grand mean of 3.23 which means moderately agree based on the verbal interpretation of data.

**Table 7.** Academic performance of BPED students in terms of performance task/demo.

Parameters	Mean	SD	Description	Interpretation
I actively participate to the class activities	4.83	0.38	Strongly Agree	Very High
I accept wholeheartedly the task given by the teachers	3.47	0.51	Agree	High
I decrease my interactions to the class of online games	1.47	0.51	Strongly Agree	Disagree
I missed some performance task activities due to the distraction of online games	3.13	0.86	Moderately Agree	Moderate
<b>Grand Mean/SD</b>	<b>3.23</b>	<b>0.56</b>	<b>Moderately</b>	<b>Moderate</b>

**Table 8** shows the testing of the relationship between levels of impact of online games on the academic performance of BPED students. Thus, the table justifies that there is no

significant relationship between the level of impact of online games on the academic performance of BPED students since the  $P > 0.05$  level of significance as implied by the Pearson Correlation test. It also implies a slight correlation or relationship with a Pearson Correlation Coefficient of  $-0.28$ . This is a very dependable relationship.

**Table 8.** Testing the relationship between level of impact of online games to academic performance of BPED students.

Sources of Variation	n	Pearson	Sig-2 tall	Interpretation
Level of impact of online games and academic performance of BPED students.	30	-0.25	0.14	Not significant

Level of significance,  $\alpha 0.05$

#### 4. CONCLUSION

Based on the data gathered by the researchers and as the respondents being assessed, it is clear that the Academic Performance of the students is affected when they played online gaming. It affects their academic performance in terms of attendance, oral participation, and performance task. To sum up, with the result, the respondents' academic performance in terms of attendance affects the most with the total grand mean of 2.15 which means "poor" in the verbal interpretation. On the other hand, the oral participation and performance task of the respondents got "fair" in the verbal interpretation which is not most likely affected despite their involvement in playing online games.

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#### 6. AUTHORS' NOTE

The authors declare that there is no conflict of interest regarding the publication of this article. Authors confirmed that the paper was free of plagiarism.

#### 7. REFERENCES

- Beranuy , M., Carbonell , X., and Griffiths , M. D. (2013 ). A qualitative analysis of online gaming addicts in treatment . *International Journal of Mental Health and Addiction* , 11, 149-161.
- Hainey, T., Connolly, T., Stansfield, M., and Boyle, E. (2011). The differences in motivations of online game players and offline game players: A combined analysis of three studies at higher education level. *Computers and Education* , 57(4), 2197-2211.
- Hussain, Z., and Griffiths, M. D. (2009). Excessive use of massively multi-player online role -playing games: A pilot study. *International Journal of Mental Health and Addiction* , 7(4 ), 563-571.
- Islam, M. S., Sujan, M. S. H., Tasnim, R., Ferdous, M. Z., Masud, J. H. B., Kundu, S., Mosaddek , A. S. Md ., and Griffiths , M. D. (2020). Problematic internet use among young and adult population in Bangladesh : Correlates with lifestyle and online activities during the COVID-19 pandemic. *Addictive Behaviors Reports* , 12, 100311.
- Kuss, D. J., and Griffiths, M. D. (2011). Online social networking and addiction. A review of the psychological literature. *International Journal of Environmental Research and Public Health* , 8(9), 3528-3552.