

## Conference Paper

# Online Gaming: Impact on the Academic Performance and Social Behavior of the Students in Polytechnic University of the Philippines Laboratory High School

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## Abstract

This study was conducted to assess and find out the impact of on-line gaming on the academic performance and social behavior of the students in the Polytechnic University of the Philippines-Laboratory High School. Furthermore, this study sought answers on the significant relationship between playing on-line games and academic performance and to social behavior of the students.

The study revealed that boys are more of a player compared to girls who often play games that require three or more players like League of Legends, Clash of Clans, Crossfire and many more to mention. It is also stated that those who play online games are around 14-15 years old who are believed to be in the Grade 8 level. These students who often play games have an average weekly allowance of 101 pesos to 500 pesos. Playing online games do not affect their grades badly for they know how to limit themselves. They know that they need to control themselves in order to function well in their class that is why they only play games during vacation and weekends with a lot of time compared when they have classes.

Even though they play online games; they know how to socialize well and they can perform very well when it comes to academic performance. However, it is inevitable not to play even for half an hour especially when they are accustomed to it. Therefore, it is just a matter of discipline.

**Keywords:** On-line Gaming, Social Behavior, Curriculum, Academic Performance.

## 1. Introduction

Internet as a source of information plays an important role in developing one's mind and life experiences by creating productive works in schools, offices, and even at home. Nowadays, this can be a person's most efficient strategic tool for enabling himself to take charge and cope with the fast growing technology.

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The fact that people live in an informative lifestyle where everything is updated, internet became one of the necessities of human beings regardless of age or sex in today's society. However, the influence of this useful machine on youth is undeniably questionable. As to what Rock [1] said, all these technologies are very good at distracting people. In line with this development, online gaming was created to give entertainment to people.

Online gaming is one of the widely used leisure activities by many people. For some people it is said that playing video games has a number of reasons to be played, for it can be a stress reliever, challenge and competition, relaxation, enjoyment, social interaction, and even mentally escaping from the real world.

For most people, on-line gaming is one of the best past time that they acquire specially for teenagers, youngsters and students. According to Kuss & Griffiths [2], 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. During school hours, students tend to feel stressed due to loads of school works and through playing it will relive their stress.

It is undeniably questionable that playing online games provide them something that no one can give. According to some researches it is beneficial. It enables the mind of the players to be more active, especially those puzzle-based games. Furthermore, it helps the player to come up with decisions in tight situations, especially those adventure games that keep the players to be alert, active and strategic.

Students' learning takes place unexpectedly, but the inappropriate usage of playing online games also leads in some problems such as being distracted in school. Further, it is where the attention of the child were divided that even their health and social life is unknowingly affected.

Several studies in psychology have found out that increased time spent on the Internet can lead to negative impact on a person's ability to communicate appropriately face-to-face with friends, peers, family members including parents [3].

Studies revealed that the human brain is easy to destruct and one of the reasons is using technology. The education system tends to go with the flow with this constant change in the society in order to get things relevant with the generations today.

The researchers felt the need to determine the impact of online gaming to students' academic performance and their social behavior. The purpose of this study is to find out the implications of on-line gaming to the academic performance and social behavior of the students.

## 2. Objectives of the Study

The purpose of this study was to find out how online games affect the students' intellectual capacity in relation to their academic performance and social behavior.

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## 3. Materials and Methods

This study used the descriptive – correlation method utilizing a questionnaire to get the needed data for the study. Purposive sampling was used in this study. The participants in this study were high school students of Polytechnic University of the Philippines - Laboratory High School. They were selected through purposive sampling which the persons chosen for the investigation are themselves not expected to be the representatives of the population, but rather they possess the necessary information about the issue being investigated upon. In addition to this, there are only 126 respondents chosen for this study.

## 4. Results and Discussion

The attainment of the objectives of the study was made possible through the utilization of the descriptive method of research. The sampling techniques were made through a purposive sampling, where only those students who played on-line games were the only respondents selected to meet the population size of the study. With a total of 126 respondents coming from PUP-LHS, all of them returned the survey questionnaire – the main instrument of data gathering. Statistical treatment of data was done through the use of percentage, weighted mean, and Pearson r Correlation.

Based on the results of the study, the following salient findings were drawn:

As according to the result, in terms of playing on-line games, the overall weighted mean is 3.08 which lies on the verbal interpretation of "Sometimes". And with the indicators "I play on-line games only on week-ends" and "I repeatedly play on-line games after losing" gathered 3.37 interpreted as "often" got the highest mean.

While the level of assessment of the respondents on playing online games in the aspect of number of hours spent in playing was assessed as 3-5 hours with the weighted mean of 2.75.

On the other hand, in the types of games played, 'League of Legends' got the highest mean which is 3.48 interpreted as "Sometimes". Generally, 2.38 is the computed grand mean of types of games played and considered as "seldom" in verbal interpretation.

However, the self-assessment of the respondents in playing On-Line Games on their Social Behavior got an overall weighted mean of 3.2 and arrays that the verbal interpretation of all the indicators show that the students from Grade 7- Grade 10 assessed that they all agree doing the listed indicators. This shows that even after playing online games it does not affect their social behavior and it has a positive effect.

As per the academic performance of the respondents the result shows that from the 126 responses, most of the students that plays on-line games obtain a grade ranging from 86-90 interpreted as "Good" that got 68 or 53.97%. Followed by a grade ranging from 81-85 with a description of "satisfactory" got 49 from the respondents or 38.89%. Next is the grade ranging from 91-95 which means "Very Good" got the second to least, which is 7 of the respondents or 5.56%, and lastly, the remaining number which is 2 or 1.59% is the grade ranging from 75-80.

And in terms of the frequency of playing online games and the respondent's social behavior. The indicators 'I play on-line games before going to bed' got a computed p-value of 0.040 and 'I play on-line games only on week-ends' obtained a p-value of 0.002 which is less than the level of significance of 0.05. This means that the null hypothesis is rejected and it is significant in this study. And all remaining variables resulted as "not significant".

On the other hand, the relationship between the number of hours in playing and the social behavior of the respondents does not have significant relationship since all of the p-value are greater than the level of significance of 0.05.

While in terms of types of on-line games being played and its relationship in the social behavior of the students, it reveals that the null hypothesis has been rejected with p-values of Minecraft (0.030), Defense of the Ancient (0.019), Farmville (0.014), Smite (0.014), and Candy Crush (0.004) are lower than the level of significance of 0.05.

And lastly, the frequency of playing on-line games and the academic performance of the respondents the only indicator that has a significance is "I play on-line games only on week-ends" that obtain a p-value of 0.026 lower than the level of significance of 0.05 and indicates that the null hypothesis is rejected. This reflects to the grade of the respondents having good grades even when they play on-line games.

In tenures of the types of on-line games being played by respondents and their academic performance the result of their p-value is higher than the level of significance 0.05 therefore the null hypothesis is accepted.

Likewise, the number of hours playing on-line games and its relation to the academic performance all indicators got p-value higher than the level of significance of 0.05 remarking to not significant. Resulted to its null hypothesis being accepted.

## 5. Conclusion and Recommendation

As the respondents assessed, it can be inferred that Playing On-Line Games results to a positive effect in the social behavior of the respondents. Even if the respondents play online games still the personal interaction with others are not affected. They still do have their friends personally and are able to socialize effectively.

The Academic Performance of the respondents is not affected even if they play online games. Their grades are still good enough even if they spent time for playing. To sum up with the result, the respondents have a good academic performance despite their involvement in playing online games.

There is a significant relationship between the social behavior of the respondents and playing on-line games in terms to its frequency specifically in the item saying: "I play on-line games before going to bed" and "I play on-line games only on week-ends". Also, in the types of on-line games such as Minecraft, Defense of the Ancient, Farmville, Smite, and Candy Crush.

There is a significant relationship between the academic performance of the respondents and playing online games during weekends. Which result to having a good grade while playing online games. This can be interpreted as the trade-off when playing computer games. If the student decides not to play, then there will be no deduction in the grades. Which is true to the researchers' study for the respondents' academic performance is only significant to playing online games during weekend. Weekends are the days when the respondents have their pleasure time for recreational activities.

Meanwhile, since most of the student respondents are male and they are more frequently engaged in playing on-line games, the school administrators and teacher in collaboration of the parents might consider to promote physical health, sportsmanship, camaraderie and pro-social skills to the students instead of getting engaged with online games.

Further, Parents-Teachers Association might consider being functional in all their responsibilities. For example, the teacher might consider to notify the parents about the academic performance and social behavior of the students inside the school facilities. This association can strengthen the home and school partnership to supervise the students' activities.

## Author's Note

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## References

**Strictly follow the numbered format of citation while observing the proper APA style of referencing**

- [1] Rock, Dave. (2009, October 4). Easily distracted: why it's hard to focus, and what to do about it(Blog Post). Retrieved from <https://www.psychologytoday.com/blog/your-brainwork/200910/easily-distracted-why-its-hard-focus-and-what-do-about-it>
- [2] Kuss, Daria J. and Mark D. Griffiths. (2012). Adolescent online gaming addiction. *Education and Health*, 30 (1), 15-17. Retrieved from <https://owl.english.purdue.edu/owl/resource/560/07/>
- [3] Anderson, Janna and Lee Rainie. (2012, February 29). Main findings: Teens, technology, and human potential in 2020 (Blog Post). Retrieved From <http://www.pewinternet.org/2012/02/29/main-findings-teens-technology-and-human-potential-in-2020/>