

Mobile-games: Impact on the academic performance among hospitality management students in Taguig City University

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Abstract

Online gaming can negatively impact students' academic performance. Playing mobile games should be a fun activity for all to enjoy. But like everything else, the amount of time one spends playing needs to be balanced with academic responsibility. Furthermore, this study sought answers on number of hours spent in mobile games, commonly played online mobile games, the attitude of respondents on playing mobile games, and the reasons for playing mobile games, and find out the impact of mobile games to the academic performance among hospitality management students. The researchers collected, analyzed, and interpreted the data using a descriptive design approach and a quantitative form of survey questionnaire distributed to Taguig City University's Hospitality Management students. The technique used is purposive sampling in which only students who play online games are chosen to satisfy the study's population size which is composed of 50 HM 3rd-year students and 50 HM 4th-year students. The findings in this study were based on the computed t- test results of 1.069 which is much lower than the tabular t- value of 3.182 at 0.05 level of significance, shows that there is no significant relationship between the attitudes to the academic performance of the students. Thus, the hypothesis of no significant relationship was accepted. It is concluded that the results based on each student's academic performance throughout the previous three school years are excellent and that there is no significant relationship between the attitudes of students and their academic performance in school.

Keywords: academic performance, mobile games, hospitality management students, gaming attitudes, reasons and impact

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1. Introduction

Mobile games are made for devices that can connect to the Internet. Smartphones, feature phones, smartwatches, pocket PCs, tablets, PDAs, and portable media players are among examples. According to Marcelo, the Philippines has 52.8 million gamers per 2020 data. Mobile gamers are the biggest group (74 percent), while 65 percent are using personal computers (PCs) and 45 percent are users of gaming consoles. In a survey conducted by Rakuten Insight in the Philippines, the majority of respondents among all age groups stated playing online games except for those aged 55 and older as of March 2020. Notably, the share of online gamers decreased as people aged.

In accordance with Chen et al. (2018), participants spent 25.61 73.60 minutes on weekdays and 49.96 128.60 minutes on weekends playing computer games, and 66.07 154.65 minutes on weekdays and 91.82 172.94 minutes on weekends playing mobile games. On weekdays and weekends, students with high interpersonal interactions but low self-efficacy spent a lot of time playing computer games ($p < 0.05$ for all). On weekdays, students with low expectations spent more time playing computer games ($p < 0.05$). On weekdays and weekends, students with high interpersonal ties but low self-efficacy and self-control spent more time playing mobile games ($p < 0.05$ for all).

In the opinion of Aviso (2021), as the generations change, the internet has become more prominent, technology is constantly evolving, and online games, as part of developed technology, have been introduced and are becoming increasingly popular, particularly these days because many students are staying at home during the pandemic. They had a lot of free time to do things to enjoy themselves, such as play online games, which became one of the students' everyday hobbies. Games available on the internet are video games that can be played on some computer smartphones, laptops, computers, and other modern devices technology that connects to the internet or any other network other computer networks are available. Its primary goal is to entertain players, as it is classified as an interactive electronic game. games There are numerous genres of online technological games. First-person shooters, strategy games, and others online role-playing games with a large number of players, such as Dota I or II, Mobile Legends, Wild Rift, League of Legends Player Unknown's Battlegrounds, Vainglory, Dragon Nest, Call of Duty, Rules of Survival, CSGO, CrossFire, and Valorant are just a few of the games available etc.

In accordance with Posso (2016), playing online games is similar to solving arithmetic problems. Because you're using your general skills to solve the puzzles, it shows that playing online games every day can help you enhance your academic performance. When it comes to the internet, according to a study conducted in Australia with 12,000 pupils, students who regularly play online games score higher in all subjects. In the light of Eskasasnanda (2017), students play video games online because they are more modern, practical, realistic, and diversified, according to this survey. Students initially play online video games to relieve stress from schoolwork, but they quickly become addicted and find it difficult to stop. This ailment will have a significant impact on their academic performance.

Adults, teens, and even young toddlers who are still developing their minds like playing online games. Online games have a lot of beneficial and harmful effects on children, which is related to this topic. Addiction, resentment, rudeness, anti-sociality, isolation, and a lack of socializing skills are only a few of the negative effects on social development. Otherwise, the good effects of this online game include instilling in youngsters the values of responsibility, friendliness, vision, self-control, hard effort, and sharing, among others. Online games have an impact on social growth as well.

1.1 Objectives of the study

The purpose of the study is to determine the impact of mobile games to the academic performance of the hospitality management students and to identify the relationship between the students gaming profile and academic performance.

2. Methods

Using a descriptive design technique and a quantitative kind of survey questionnaire issued to Taguig City University's Hospitality Management students, the researchers collected, analysed, and interpreted the data. The technique used is purposive sampling in which only students who play online games are chosen to satisfy the study's population size which composed of 50 HM 3rd year students and 50 HM 4th year students. The survey questionnaire is completed by 100 students from Taguig City University, and they all returned it. Because the number of potential respondents in the Hospitality Management Students of Taguig City University is limited, the purposive sampling technique is also appropriate for the study.

Among the hospitality management students, there are 100 students in the hospitality management program. There will be 100 students from Taguig City University who will answer the same questions, which will primarily focus on playing mobile games. These students have a thorough understanding of the study's issue, which helps to explain why they are chosen as the study's responders. They are picked via purposive sampling, which involves selecting and subjecting them to the study as respondents. The instruments used within this research are computers and the collection of data was done through an online survey conducted by the researchers. For the selected students of hospitality management playing mobile games, the researchers performed a survey questionnaire.

3. Results and Discussion

Table 1

Frequency and percentage distribution of profile in terms of age

Age	Number of Respondents	Percentage
19 - 22 Years Old	84	84%
23 - 25 Years Old	15	15%
30 Years Old	1	1%

Presented in Table 1 is the frequency and percentage of profile of respondents in terms of age. It can be noted that 84 or 84 percent of the respondents belonged to the age bracket of 19 to 22 years old. There are 15 or 15 percent had ages 23 to 25 years old; and the rest is 26 to 30 years old. Apparently, most of the student respondents had ages 19 to 22 years old based on the distribution of 84 or 84 percent.

Table 2

Frequency and percentage distribution of profile in terms of gender

Sex	Number of Respondents	Percentage
Male	61	61%
Female	39	39%

In this regard, it can be stated that the profile of the respondents in terms of sex, as indicated in table 1.2. Out of one hundred (100) respondents are 39 or 39% whose sex belongs to female; 61 or 61% belongs to male. Most of the respondents are male.

Table 3*Frequency and percentage distribution of profile in terms of year level*

Year Level	Number of Respondents	Percentage
3 rd Year	50	50%
4 th Year	50	50%

Table 3 indicates the frequency and percentage distribution of the respondents by year level. As indicated in table 3, which consist of 50 or 50% of are respondents is belongs to the 3rd year students and 50 or 50% is from 4th year students and the result is equally distributed.

Table 4*Frequency and percentage distribution of profile in terms of hours spent in online games*

Numbers of Hours Spent in Playing Mobile Games	Number of Respondents	Percentage	Rank
2 Hours Below	65	65%	1
3 Hours to 6 Hours	28	28%	2
7 Hours and Above	7	7%	3

According to the table above, the majority of the respondents in terms of the number of hours spent playing mobile games got 65 or 65% are 2 hours below, while the remaining 28 or 28% belong to 3 hours to 6 hours and 7 or 7% belongs to the 7 hours and above. Most of the respondents spent 2 hours of playing mobile games. In the year 2020, almost 70% of the sample spent more than 2 hours per day on the internet, and roughly 30% spent more than 2 hours per day playing electronic games. Weekday internet users (4 hours per day) were found to have lower reading and numeracy scores, whereas weekend internet users (2–4 hours per day) were found to have greater reading and numeracy scores. Electronic gamers, on the other hand, were 16 percent more likely than non-gamers to have better reading scores on weekdays.

Table 5*Frequency and percentage distribution of profile in terms of commonly played games*

Commonly Played Mobile Games	At School	Rank	At Home	Rank
Among us	4%	6	8%	4
AXIE Infinity	8%	3	9%	3
Call of Duty	16%	2	15%	2
League of Legends Wild Rift	7%	4	7%	5
Minecraft	7%	4	6%	6
Mobile Legends	38%	1	36%	1
Pokemon Go	3%	7	3%	7
PUBG	4%	6	6%	6
Rules of Survival	5%	5	3%	7
Clash of Clans	8%	3	7%	5

It revealed in this table 5 that the frequency and percentage distributed of the respondents according to commonly played mobile games at school. It shows that the majority are 38 or 38% is mobile legends, close to the group are 16 or 16% is call of duty, follow by 8 or 8% are AXIE Infinity/Clash of Clans, while some 7 or 7% is from league of legends wild rift/Minecraft, and there are only few 5 or 5% are rules of survival, 4 or 4% are Among us/PUBG and lastly is the 3 or 3% is belongs to Pokemon Go. It literally means that the commonly played mobile games is Mobile Legends at school. Table 5 shows the commonly played mobile games at home. It shows that the majority of the respondents are 36 or 36% is belongs to mobile legends, belongs to 15 or 15% is Call of Duty, 9 or 9% belongs to AXIE Infinity, 8 or 8% belongs to Among us, 7 or 7% belongs to Clash of Clans/League of legend wild rift, 6 or 6 % belongs to Minecraft/PUBG, and lastly 3 or 3% is belongs to Pokemon go/Rules of survival. The most commonly played mobile games at home is Mobile legends.

The most popular online games, as per Kamal et al. (2020), are PlayerUnknown's Battlegrounds (PUBG), Mobile Legend (ML), Call of Duty (COD), Defense of the Ancients (DotA), and Free Fire. IIUM students were

shown to have much lower levels of online gaming addiction and mental health. It was discovered that there was a strong and positive link between online gaming addiction and mental health conditions such as depression, anxiety, and loneliness. All of the assumptions that were established were accepted based on the social cognitive theory that was investigated. Future research should look into the effects of online gaming addiction on academic achievement and physical health, according to this study.

Table 6

Frequency and percentage distribution of profile in terms of reasons for playing mobile games

Reasons for Playing Mobile Games	Respondents Frequency	Respondents Percentage	Rank
Anxiety	8	8%	5
Boredom	10	10%	3
Entertainment	36	36%	1
Get Money	8	8%	5
On Trend	7	7%	6
Personal Interest	6	6%	7
Playing with friends	13	13%	2
Stress Reliever	9	9%	4
Want to Compete	3	3%	8

The result establishes the fact that reasons of playing mobile games is shown in table 6 which consist of 36 or 36% belongs to Entertainment, 13 or 13% belongs to playing with friends, 10 or 10% belongs to Boredom, 9 or 9% belongs to Stress Reliever, 8 or 8% belongs to Anxiety/Get Money, 7 or 7% belongs to On trend, 6 or 6% is belongs to Personal Interest and lastly 3 or 3% is belongs to Want to Compete. It results that the reason of the respondents in playing mobile games is for Entertainment. According to Eskasasnanda (2017), students enjoy video games online because they are more current, practical, realistic, and diverse. After a hard day at school, students like playing online video games to unwind.

Table 7

Mean distribution of attitudes on playing online games

Attitudes on Playing Online Games	Weighted Mean	Verbal Interpretation	Rank
I spent a lot of time playing online mobile games	3.5	Great Extent	4
I get a lot of friends because of playing online mobile games	3.71	Great Extent	3
I play online mobile games as my spiritual sustenance in a time that I am lonely	3.77	Great Extent	2
I play mobile online games to relax because of study pressure	3.94	Great Extent	1
I have less sleep because of playing online mobile games	2.98	Moderate Extent	6
I think playing online mobile has increased my self confidence	3.45	Great Extent	5
I prefer to play online games rather than go out with my classmates to have group study	2.57	Less Extent	7
I cannot do my assignments in school on time because of playing online mobile games	2.08	Less Extent	8
I cannot attend classes on time because of playing online mobile games	1.92	Less Extent	9
I have a low grades and most of my subjects because of playing online mobile games	1.86	Less Extent	10

While the indicators with a “moderate extent”; have less sleep because of playing online mobile games rank no. 6 with mean 2.98. The rest indicators with “less extent” responses are: prefer to play online games rather than go out with my classmates to have group study with mean 2.57; cannot do my assignments in school on time because of playing online mobile games with mean 2.08; cannot attend classes on time because of playing online mobile games with mean 1.92; and have a low grades n most of my subjects because of playing online mobile games with mean 1.86. It is noted that students can actually relax and relieve stress by playing online games, which can also help them improve their concentration and creativity. Additionally, students can use game play to improve their English vocabulary, pronunciation, and expressive skills. Finally, female students prefer an online game with screen captions and real and practical English language practice, but male students believe that playing online games deprives them of sleep and negatively affects their health.

Table 8*Significant difference on the level of attitudes on playing online games in terms of age*

Age	Computed Chi – X ² test	Probability value	Critical Chi X ² test value	Decision
No. of Hours Played	1.925	0.381931	5.991	Not Significant
Common Games Played	6.522	0.68675879	16.919	Not Significant
Reasons for Playing	10.529	0.23	15.51	Not Significant

Table 8 shows the results of the significant difference on the assessment of the respondents on the level of attitudes in playing mobile games when compared to their profile variables in terms of age. There is no significant difference regarding the respondents' assessment on the level of attitudes on playing mobile games when compared to their profile variables in terms of age. The finding was supported by the computed X² – value in terms of numbers of hours played = 1.925; common games played = 6.522; and reasons for playing = 10.529; which is lower than the critical X² – value of 5.99; 16.919 and 15.51 at 0.05 level of significance. To this effect, the hypothesis of no significant difference was accepted.

According to Marcelo, the Philippines has 52.8 million gamers per 2020 data. Mobile gamers are the biggest group (74 percent), while 65 percent are using personal computers (PCs) and 45 percent are users of gaming consoles. In a survey conducted by Rakuten Insight in the Philippines, the majority of respondents among all age groups stated playing online games except for those aged 55 and older as of March 2020. Notably, the share of online gamers decreased as people age.

Table 9*Significant difference on the level of attitudes on playing online games in terms of sex*

Sex	Computed Chi – X ² test	Probability value	Critical Chi X ² test value	Decision
No. of Hours Played	1.537	0.463726	5.991	Not Significant
Common Games Played	19.188	0.02363938	16.919	Significant
Reasons for Playing	14.261	0.07522008	15.507	Not Significant

Presented in Table 9 are the results of the significant difference on the assessment of the respondents on the level of attitudes in playing mobile games when compared to their profile variables in terms of gender. A significant difference was found as regards to the assessments made by the regarding level of attitudes in playing mobile games in terms of “Common games played” when compared to their gender. This finding was inferred from the computed X² – value of 19.188 which is higher than the critical X² – value of 16.919 at 0.05 level of significant. Thus, the hypothesis of no significant difference was not accepted. No significant difference was found on the variables “Number of hours played” with the computed X² value of 1.537 and “Reasons for playing” with computed X² value of 14.261 which is lower than the critical X² – value of 15.507 at 0.05 level of significant. Therefore, the hypothesis of no significant difference was accepted.

As mentioned, boys are more of a player than girls, according to the study, who frequently play games that require three or more players, such as League of Legends, Clash of Clans, Crossfire, and many more. It is also stated that those who play online games are between the ages of 14 and 15, and are in the eighth grade. These students, who frequently play video games, have a weekly allowance ranging from 101 to 500 pesos. Playing online games do not affect their grades badly for they know how to limit themselves. They know that they must maintain self-control in order to function well in class, which is why they only play games during vacations and weekends when they have more free time than when they have classes. Even though they play online games, they know how to socialize and can perform well academically. However, it is unavoidable not to play for more than half an hour, especially if they are used to it. As a result, it is just a matter of self-discipline.

Table 10*Significant difference on the level of attitudes on playing online games in terms of year level*

Year Level	Computed Chi – X ² test	Probability value	Critical Chi X ² test value	Decision
No. of Hours Played	10.556	0.005102	5.991	Significant
Common Games Played	7.101	0.62657224	16.919	Not Significant
Reasons for Playing	6.899	0.54753780	15.507	Not Significant

Shown in Table 10 are the results of the significant difference on the assessment of the student respondents on the level of attitudes on playing mobile games according to year level. On the other hand, a significant difference was found on the level of attitudes on playing mobile games in terms of number of hours played as shown from the computed X² value of 10.556 which is higher than the critical X² value = 5.991 at 0.05 level of significant. The hypothesis of no significant difference was rejected. While no significant difference was found on the variables “Common games played” and “Reasons for playing”. This was supported by the computed X² - value = 7.101 and 6.899 respectively, which is lower than the critical X² value = 16.919 and 15.507 at 0.05 level of significant. Hence, the hypothesis of no significant difference was accepted.

Online gaming is one of the hottest trends nowadays, and it's one of the most popular ways for individuals, especially students, to pass the time. However, it has the potential to be addictive and have a harmful impact on students. This research looked into the experiences of college students who were addicted to internet gaming. It also defined the attitudes, time management, goal setting, class preparation, and exam preparation aspects of college students' study skills and habits. It also looked at the links between a college student's sex and year level and their online gaming experiences, as well as domains of study skills and habits.

Table 11*Students' academic performance for past three years*

Academic Performance	Frequency	Percentage	Interpretation
2.31 and below	0	0	Needs Improvement
1.97 - 2.30	11	11%	Fair
1.61 - 1.96	65	65%	Average
1.26 - 1.60	22	22%	Above Average
1.25 - above	2	2%	Outstanding

As reflected in table 11, the student's academic performance for the last three years are as follows: school year: 2018-2019, 2019-2020, and 2020-2021 rated as 1.97- 2.30 Fair with a frequency and percentage of 11%, and 1.62-1.96 Average with a frequency and percentage of 65%, and 1.26-1.60 Above Average with a frequency and percentage of 22% and 1.25 and above Outstanding with a frequency and percentage of 2% with the overall total of 100%. The overall picture of the students proved to be average in their academic performance as shown from the distribution of 65 or 65% percent. This finding reveals that much can still be done in the area of instruction to improve student's academic performance.

Table 12*Significant relationship between attitude on playing mobile games and the academic performance*

Variables	Computed r - value	Degree of Correlation	Computed t-test	Tabular t-value	Decision
Attitudes on Mobile Games	0.784	low	1.069	3.182	No relationship
Academic Performance		correlation			

A high correlation and no significant relationship existed between the attitudes of playing mobile games when compared to the academic performance of the students. Statistically confirming this finding was the recorded r – value of 0.784 which results to a low correlation. The computed t- test results of 1.069 which is much lower than the tabular t- value of 3.182 at 0.05 level of significance, shows that there is no significant relationship between the attitudes to the academic performance of the students. Thus, the hypothesis of no

significant relationship was accepted. The findings implied that the attitudes of the students in playing mobile games do not correlate to their academic performance. Students were able to balance their time between playing mobile games and time in their studies.

As per Aviso et al. (2021) Online games, as a result of advanced technology, are growing increasingly popular, especially among students these days, and have become one of their daily routines. As it brings various types of behavior that affects players in different ways affecting their academic performance, online games have presented many challenges from student's behaviors striking their academic behavior to constantly change positively or negatively their personality, as it brings various types of behavior that affects players in different ways affecting their academic performance. Our assigned findings in addition, depression, anxiety, and loneliness reveal that the majority of students can handle themselves and that their academic performance is unaffected. Furthermore, the majority of the students were enlightened by this study since many of them saw significant improvements in their talents and skills, as well as emotional and social benefits.

4. Conclusions and Recommendations

Playing online games is an obsessive hobby that might have a negative impact on students' grades. It is commonly stated that playing games makes us so pleased that we find it difficult to stop. However, it is linked, and once the game has begun, there is no turning back. Playing mobile games should be a pleasurable experience for everyone. However, like with everything else, the amount of time spent playing must be matched with academic obligations. This study was conducted to assess and find out the mobile-games: impact on the academic performance among hospitality management students in the Taguig City University. It is concluded that the majority of answers from the College of Hospitality Management Students were male, according to the findings. Moreover, the average amount of hours spent playing mobile games is around two hours, according to the respondents. Furthermore, mobile legends are the most popular mobile game at home and at school. According to the ranking, the respondents' primary motivation for playing mobile games is for entertainment.

Generally, the attitudes of respondents toward online mobile games are described as "to a moderate extent." These conclusions were supported by the aggregate weighted mean. As a matter of fact, when compared to their profile factors in terms of age, there is no significant difference in the respondent's judgment of the level of attitudes toward playing mobile games. Similarly, when compared to their gender, there was a substantial difference in how they rated their views toward playing mobile games in terms of "frequently played mobile games." The hypothesis of no significant difference was accepted since no significant difference was discovered in the variables "Number of hours played." And in terms of the number of hours spent playing mobile games, there was a significant difference in attitudes, hence the hypothesis of no significant difference was rejected. In addition, the variables "Common games played" and "Reasons for playing" did not show any significant differences. As a result, the assumption that there was no significant difference was accepted.

To sum up, the results based on each student's academic performance throughout the previous three school years are excellent. An Additional, the hypothesis of no significant relationship between the attitudes of students and their academic performance has been accepted. According to the computed t- test findings, which are significantly lower than the tabular t-value level of significance, there is no significant relationship between attitudes and academic performance. It is recommended, that the student can play online games in the future, particularly for academic purposes, to reduce the risk of becoming hooked on mobile games and improve their academic performance. It is also suggested, other than smartphone gaming, students need to find other activities to engage in. It is also indicated, that the students are aware that mobile games are not simply for entertainment; they may also provide them with valuable information that they can employ in their daily life.

It is advised that the teachers persuaded their students to manage their time while playing mobile games, as well participate in educational activities to improve their academic achievement. And teacher might consider informing the parents about the students' academic performance and social behavior while they are in school.

This collaboration between home and school might be strengthened in order to supervise the activities of the students. It is also commendable, that instead of engaging in online games, school officials and teachers, in partnership with parents, can explore promoting physical fitness, sportsmanship, camaraderie, and pro-social skills to children. It is proposed, that they can conduct further research into the impact of mobile gaming on students' academic performance. And in order to incorporate the most recent developments in online mobile gaming into a future study, the researchers need to be informed of the most recent changes in the field. It is also highly recommended, to concentrate on the potential consequences of mobile games that are played over the internet. And for future research that may be conducted similar to the study, it is recommended to conduct further study about effects of mobile games to the mental health of the students.

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