

The Effects of the World of Warcraft Play on GPA

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Introduction

In our study, we examined various factors of the participants that related to their play time in the game World of Warcraft (WoW), the amount of time they allotted for studying each day, and what their GPAs were in an attempt to determine how such factors related to one another and what, if any influence, they exerted upon the rest. Studies have shown that “whether a student’s roommate brings a videogame to school has a strong causal effect on the student’s grade performance,” (Stinebrickner 2) suggesting a definitive negative correlation between playing video games and GPA. Whereas in Stienbrickner’s case he examined console games, we instead looked at computer games, specifically a massively multiplayer online role-playing game (MMORPG). He was also attempting to determine the casual effect of studying on academic performance, whereas ours was that of WoW’s effect. Admittedly, there are some differences in the types of games in the studies; however, they are similar enough as to be reasonably compared as are the results of the studies. As study time is not a definitive assignment it is viewed by many students as easily exchangeable and is often times sacrificed for other less studious endeavors. Whereas most students are much less apt to neglect assignments that they actually submit, those same students feel no such qualms over something so self-motivated as studying for exams. Study time is one of those rather nebulous and indefinite assignments that many feel is to be done in spare

time rather than a specific task that needs to be done at a certain time and is much more self-motivated. Often, this is why the time that students allot to studying and allot to entertainment often seem interchangeable and why study time is often the first thing to suffer when time for other endeavors, such as playing WoW, is desired. We hypothesized that playing WoW, especially in significant amounts, would have a clear and negative impact on the GPA's of the participants. This theory was arrived at after surveying individuals that specifically attributed their WoW playtime to their poor academic performance. Additionally, we went off of our own personal conceptions and the societal perception that those who play many video or computer games tend to have lower GPA's. Our hypothesis was that playing WoW negatively affects one's GPA.

Method

In order to gather data on our hypothesis, we decided to survey 50 random students at the University of Denver, a private university in Colorado, on what their major was, whether or not they played WoW, how many hours they played during the week and during the weekend, how many hours they studied during the week and during the weekend, what their current GPA was, and whether or not they thought that playing WoW affected one's GPA and why they thought that. We also included a question about gender to see if there were any other non-hypothesized effects. See appendix A for the instrument specifics.

We used GPA and the number of hours a student spent studying versus the number of hours a student spent playing WoW as our units in order to test our hypothesis.

We then compared the number of hours spent studying versus the number of hours spent playing in order to see whether or not playing WoW negatively affected one's GPA.

We began handing out the surveys to the University of Denver's two WoW Write 1133 classes at the beginning of a studio time session in which each of the students is allowed time to work on their assignments for the class. Next, we handed out surveys at various locations around the DU campus such as residency halls and dining halls in order to get a wide range of students who both played and didn't play the game. Finally, we posted our survey on SurveyMonkey and sent the link to current students to fill out.

We organized our data in Microsoft Excel spreadsheets and used the features of Excel to find the averages, standard deviations, correlations, and histograms in order to come to a conclusion about our hypothesis.

Results/Data

In our surveys we had such comments as "WoW is the reason why I failed calc last quarter" and "Playing WoW definitely has lowered my grades" leading us to believe that WoW was indeed a specific example of a factor that contributed to reduced academic performances; however, this turned out not to be the case. There exists a slight correlation between the number of hours played and average GPA; however, this correlation is much less than the correlation between the amount of hours spent studying and average GPA. The correlation between the number of hours spent playing WoW and average GPA was slight ($r = 0.1093$). The correlation between the number of hours spent studying and average GPA was much higher at ($r = 0.3338$). This correlation is not great, but still shows that the amount of hours spent studying does in fact affect one's GPA,

more so than the number of hours spent playing the WoW. Moreover, this shows that while the more hours one spends studying affects one's average GPA positively, the more hours spent playing WoW does not necessarily affect one's average GPA negatively. Overall, students who played WoW for more than 10 hours had a lower GPA than those who played for less than 10 hours. The average GPA for those who played for more than 10 hours was 3.37 ($SD = 0.3337$), while the average GPA for those who played for less than 10 hours was 3.43 ($SD = .3851$) (see table 1 & figure 1).

The average GPA for students who studied for more than 10 hours was higher than for students who studied for less than 10 hours. Students who studied for more than 10 hours had an average GPA of 3.60 ($SD = .3337$), while those students who studied for less than 10 hours had an average GPA of 3.34 ($SD = 2.0380$) (see table 2 & figure 1).

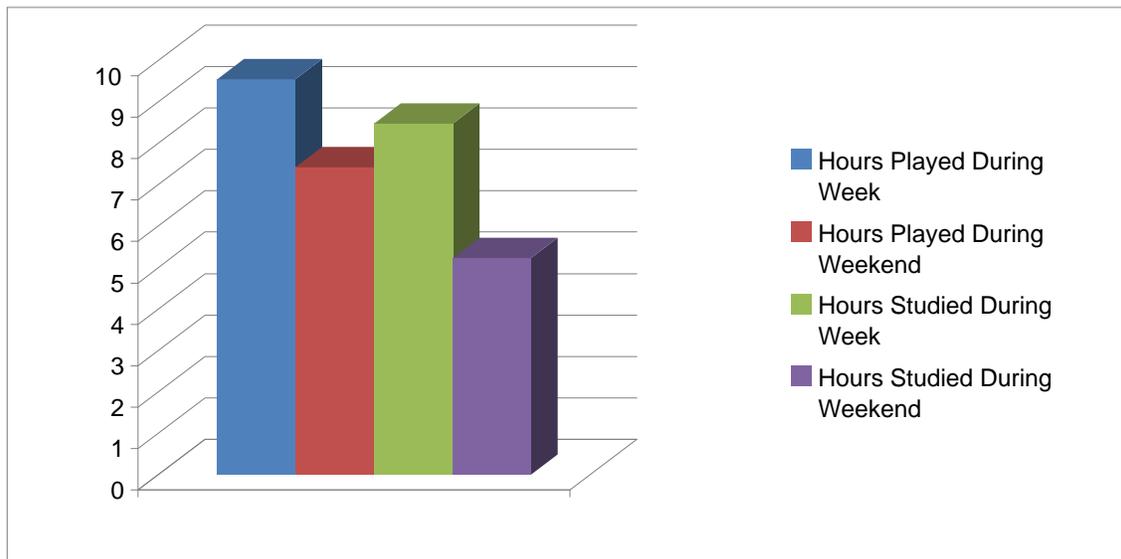
Table 1

Hours Played	Average GPA
10 or More	3.37
Less than 10	3.43

Table 2

Hours Studied	Average GPA
10 or More	3.60
Less than 10	3.34

Figure 1



These results show that the amount of hours spent playing WoW has little effect on a student's average GPA; however, the amount of hours that a student spends studying has a much greater effect on their average GPA. A student's GPA is determined more by the amount of hours spent studying than the amount of hours spent playing the game.

Conclusions/Discussion

One of the main problems with this study was the sample size used. We surveyed 50 students, which is a relatively small sample size. In order to really get conclusive data, we would need a much larger sample size. Additionally, our sample of WoW players was not completely random and did not necessarily constitute the most balanced of samples. Also, it may be rather skewed with the number of new players who may not have had time to succumb to the call of the WoW addiction that so many so people claim to suffer from. The study showed that WoW specifically did not have a negative impact upon the academic performances of the students surveyed; however, this can also be

translated to some extent to massively multiplayer online games (MMOs) and computer games in general. Stinebrickner showed that this might not be the case for console games; therefore, additional research is needed to determine if there is some separating factor between the two. Future research with a broader study base should be conducted to see if there is a trend that exists outside of college students, such as whether playing WoW can affect one's work as well as how it can affect high school and lower level school students. This study demonstrates that computer games are not necessarily a detriment to academic performance as so many have claimed in the past. This is especially important in regard to MMOs in that many have attributed more significant and adverse affects to them, such as hospitalization or even death in extreme cases, than other types of games. Also, we found that there was a positive correlation for study time and GPA. In other words, as the amount of hours one spends studying goes up, so does one's GPA. Even though our results show a very minor correlation, we did not find a major negative correlation. Therefore, playing WoW does not necessarily affect one's GPA negatively, so it is not necessary that one curb the time that they spend playing WoW as long as they still study.

Appendix A

- 1) What is your gender? (M or F) _____.

- 2) What is your major? _____.

- 3) Do you play World of Warcraft? (yes or no) _____.

- 4) If yes, how many hours do you play during the week? (check only if you play)
 0-5 hours 5-10 hours 10-15 hours 15-20 hours
 20-25 hours 25-30 hours more than 30 hours

- 5) How many hours do you play on the weekend? (check only if you play)
 0-5 hours 5-10 hours 10-15 hours 15-20 hours
 20-25 hours 25-30 hours more than 30 hours

- 6) How many hours do you study a week?
 0-5 hours 5-10 hours 10-15 hours 15-20 hours
 20-25 hours 25-30 hours more than 30 hours

- 7) How many hours do you study during the weekend?
 0-5 hours 5-10 hours 10-15 hours 15-20 hours
 20-25 hours 25-30 hours more than 30 hours

8) What is your current GPA? _____.

9) Do you think that playing World of Warcraft affects you, or anyone who plays' study time or GPA? (yes or no) _____.

10) Why or why not?

Work Cited

Stinebrickner, Todd R., and Stinebrickner, Ralph. "The Casual Effect of Studying on Academic Performance," *Frontiers in Economic Analysis and Policy*, Berkeley Electronic Press, forthcoming.